



Title Attitudes towards Food Safety within Selected
Countries of the European Hotel Industry

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Attitudes towards Food Safety within Selected Countries of The European
Hotel Industry

by

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A thesis submitted in partial fulfilment for the degree of Doctor of
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Abstract

This thesis examines the important and topical issue of food safety among member states of the European Union.

After tracing the development of related legislation, a review of the literature focuses on its management within the European hotel industry.

In attempting to account for differences in attitudes and practice towards food safety, the study explores the respective application of two opposing theoretical positions. The first, known as divergence theory, which tends to equate culture with nationality, maintains that variation is attributable to inter-country differences in norms and values. The second, convergence theory, argues that culture is more appropriately understood in the organisational sense as functioning at the corporate level of the hotel. Hence, under the latter perspective, an explanation of variance is more likely to be derived from differences in type or ethos of hotel (whether chain or independent) and the ways that they are structured according to mode of operation, size and hierarchy.

After outlining the methodological difficulties of carrying out a comparative study capable of resolving the foregoing dilemma, the empirical section takes place in two major stages: (1) a canvassing of expert opinion, with a view to filling gaps in knowledge of the legislation and its implementation; and (2) the conducting of a sample survey among hotel personnel in a number of EU member states (this stage being preceded by a small, two-phase pilot investigation).

In order to contrast the rival theories statistically, the data from the survey are analysed by a series of relevant independent variables and tested for significance. Although there are acknowledged limitations on the degree of generalisation that can be claimed, by and large the convergence theory is upheld.

A summary of the findings is provided and a number of implications for the future of food safety legislation in the EU are highlighted.

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CHAPTER 1

Attitudes towards Food Safety within Selected Countries of the European Hotel Industry

Introduction

As a cross national inquiry, the principal topic of this investigation is attitudes towards food safety within the European hotel industry, a matter which has grown in importance in recent years with a number of high profile food poisoning outbreaks (Knowles, 1994; Govern Balear, 1992; Italian Ministry, 1994; Leible and Losing, 1993). The European Union (EU) is the research base for this comparative study with the aim to discover patterns and relationships and to account for any inter-country variation that may exist. However, since this comparative approach also raises a number of problems, these issues will be explored in the following chapters.

The study's central concern revolves around two main questions:-

1. Are hotel firms all over the EU converging, so that their cultural and attitudinal differences towards food safety are becoming less and less important?
2. Are there differences in the management and organisation of food safety in hotel firms within and between member states of the EU and, if so, are these differences significant?

Given the competitive conditions within the European hotel industry, it could be argued that it is necessary for firms, (particularly those that are international), to adapt their policies to match the dynamic, volatile and complex conditions of their operating

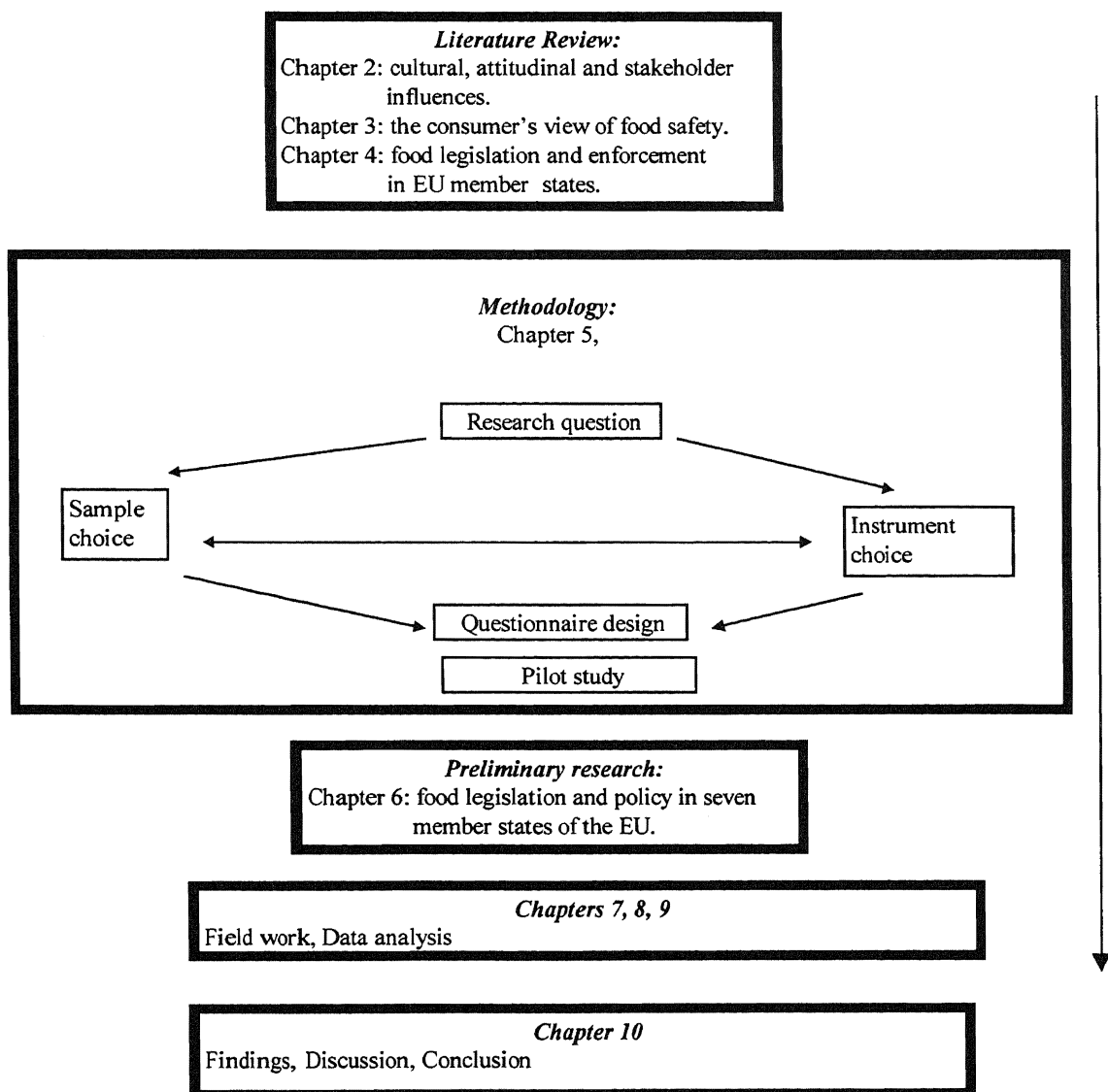
environments (Pannell Kerr Forster, 1997; Arthur Anderson, 1997). However, it should also be noted that a high percentage of hotels (80 - 95%) are small (less than 50 rooms), independent, family run concerns, and are not multinational in their location, structure and ownership patterns (EUROSTAT, 1996). In acknowledging these characteristics of the industry, this study will take account of the many theoretical and methodological issues implicit in comparative research, not least the availability of data, access to appropriate networks and the need for appropriate linguistic support.

The structure of this investigation, illustrated in figure 1.1, shows how the thesis develops. In chapter two a literature review is undertaken on the subjects of culture, attitudes and the influence of interested groups or stakeholders. The question of food safety legislation is also outlined. In chapters three and four these legislative issues are explored in greater detail, both at a European Union (EU) level and within member states. In charting the development of food safety legislation, a continuation of the literature review examines its management and organisation in the hotel industry, within and between member states of the EU (see WTO, 1992 for an international perspective). The discussion treats attitudes towards food safety from three perspectives: legislation, industry and consumers, and the justification for the approach adopted is contained within chapter five on the study's methodology. Chapters six, seven, eight and nine present the results of primary research from two questionnaires. The first (chapter six) is more factual and, by seeking expert appraisal of the situation, highlights common practice. The second (chapters seven, eight and nine) focuses on the hotel industry's attitudes towards food safety within selected countries of the EU. Finally, chapter ten draws together comments on the data presented, and additionally pinpoints some of the

weaknesses contained within the EU legislative framework.

Since food safety legislation is continually evolving throughout the EU, and in order to give sufficient time to write up the results of the research, this study reflects the law as of the 1st May 1998. Reference to the European Union (EU) postdates 1987. Prior to that time the text refers to the European Community (EC).

Figure 1.1 Diagrammatic Presentation of Research into Attitudes concerning Food Safety within the European Hotel Industry



LITERATURE REVIEW

Chapter 2: Cultural and Attitudinal Influences: Implications for the Formulation and Implementation of Food Safety legislation and Policy within the European Hotel industry.

Chapter 3: Consequences of European Foodstuffs Law from the Consumer's Point of View

Chapter 4: Food Legislation and Enforcement in EU Member States

CHAPTER 2

Cultural and Attitudinal Influences: Implications for the Formulation and Implementation of Food Safety Legislation and Policy within the European Hotel Industry

Context

In this chapter, cultural and attitudinal influences on food safety by hotel firms and their personnel are contextualised within the legal framework of the EU and its member states. Thus, the following discussion regards the implementation of food safety law as an intervening variable affecting and being affected by other factors, including culture attitudes and nationality. Making comparisons in an EU context predicated predominantly on Napoleonic law is more difficult than in a situation largely based on jurisprudence, since countless variables that characterise the social framework within which food safety law operates add innumerable methodological problems.

One area of concern to this study is the whole question of globalisation, summed up by Hoogvelt (1997:131) as “essentially a social phenomenon that drives cross border economic integration”, a situation not dissimilar from the guiding principles of the EU. Such a view is developed further by Dunning who identifies this trend “as the cross border interchange of people, goods, assets, ideas and cultures which become the norm, rather than the exception, so that our planet is beginning to take on the characteristics of a global village” (1993:315). Emerging from these theoretical underpinnings, a paradox arises, since, as Dunning also notes, in the face of power blocs, such as the EU, there is

increasing nationalism, fragmentation and polarisation. Therefore in the context of this research, a conflict may be developing between the following pairs of opposites: niche markets versus globalisation or indeed regionalisation; customisation versus standardisation; national versus EU food safety law.

The essential problem with the concept of globalisation is the implicit or explicit assertion, that it is equivalent to the notion of global homogenisation (Robertson, 1992). Yet, whereas there is some degree of isomorphism with respect to institutional arrangements across societies, such a situation does not in itself constitute global sameness (Burns and Holden, 1995). What is rather involved is the interpenetration of universalism and particularism. However, much of the contemporary view of globalisation reduces this process to universalistic homogeneity producing trends, and then uses the particularistic variety producing trends as points of departure for attacking the first part of the equation. In contrast, and emerging from the literature, it would seem that there are four, empirically, overlapping types of globalisation (Robertson and Khondker, 1998). First, there is the level of regional or civilisational clusters. Second, there is economic globalisation. Third, there is the ideology of globalisation, and fourth there are shifting female and male discourses on globalisation.

The globalisation thesis contends that peoples of today now live in a world economy dominated by transnational corporations that invest wherever they please. According to Ohmae (1993:78), the nation state has become an unnatural, even a dysfunctional, unit for organising human activity and managing economic behaviour in a borderless world. Globalisation as a concept seems to symbolise the view of making the world a “single place”, although such optimism of globalisation theorists tends to ignore the unevenness

of economic development. Yet, from subsequent debate, it emerges that such a “single place” is not a cohesive entity. Indeed, the evidence suggests that there is a variety of discourses on globalisation.

The foregoing argument is further refined by Crawford - Welch (1991), who maintains that to adopt a regiocentric approach in Europe is tantamount to ignoring the fundamental cultural, social, perceptual and economic differences within the 15 member states of the EU. By contrast, his polycentric view takes into account such differences between European countries and adapts accordingly. With the latter approach, the EU becomes in effect subordinate to any given individual member state and, in this context, the notion of subsidiarity within the EU plays a major part. The concept of “subsidiarity”, developed over a number of years within the EU, may be characterised as the principle with “several faces”, whereby there is an avoidance of conflicting national interests. However, in regarding the mechanisms of the EU as being of lesser importance, subsidiarity does not take into account any overlap between countries, (a particular problem for international hotel firms), the methodological implications of comparative research, or indeed the concept of a “single market” (Docksey and Williams, 1994).

Problems of Comparison

At the heart of this discussion are the problems of comparison which can be set within a framework of either vertical or horizontal analysis. Vertical comparison deals with social contexts displaying very different levels of economic and technological development. On the other hand, horizontal comparison is concerned with social contexts sharing

relatively similar levels of economic and technological development, production, organisation, political regime and other relevant characteristics. Both approaches are problematic for this study. Whereas the concept of food safety law remains the fundamental issue, in each EU country legal systems have developed on the basis of differing cultures, traditions, power organisations and interpretations. It is therefore clear that methodological difficulties will be encountered in this socio-legal food safety comparison of hotels in EU member states. As Øyen (1990) recognises, whilst there may be theoretical poverty in comparative study, this weakness should not be regarded as an obstacle to the pursuit of advancing knowledge in industry-specific, cross-national research.

The debate can be focused further on one key element: the comparison of legally recognised countries (as opposed to less specific nationalities). Whereas a country has a significant claim to autonomy and indeed sovereignty, nationality, referring to birth, assumes several dimensions including the linguistic, social, cultural and political. For instance, the so-called post 1945 “new world order” reflected a dominant US view (Americanisation) which inevitably brought with it biases that could undermine EU country comparisons. The point being advanced is that individuals may place more importance on national identity than on country of origin. A timely example of this situation could include the former Yugoslavia and its break-up into individual states. In this case there was probably a greater variance within the country than with other countries. Whilst one aim of this study is to translate variance into general categories or general relationships, the spread of people territorially, along with their culture and ideas, inevitably complicates the analysis. Today, any comparison of countries must take

international, regional and global systems into account and consider the vulnerability of countries to penetration from transnational human organisations as well as the world environment. In this study, the use of a standardized questionnaire may be one approach to making comparisons between countries, (for example attitudinal comparisons on food safety). Even so, there are problems associated with the employment of such a research instrument. First, there is the assumption is that individuals are differentiated, that they are separate from the group or system and have acquired values, attitudes and attributes that differ from others. This point can be disputed. Values, for example, are often not acquired characteristics of individuals that influence their behaviour, but rather emanate from a given system or situation. Second, it is likely that social development or a specific culture determines individual differentiation which, in turn, helps define the “normal” distribution of individual characteristics found in many countries.

Having thus explored a number of caveats to this discussion on culture, countries and nationality, one can now address the central issue of convergence / divergence.

Convergence / Divergence

Two opposing views can be identified advanced which are relevant to food safety and the EU hotel industry:

1. The *convergence thesis* points to the logic of industrialism, the transfer of technology, the ramifications of global organisations and the way in which multinational corporations have become the main force of economic and social development. In short, this approach suggests that differences between countries are becoming less important.

2. *Culturalists*, on the other hand, maintain that social differences based on national history and geography provide organisations with their key values, while the basic processes and structures of organisations depend for their success on the skills and capabilities generated by *national* educational and class systems. This perspective is known as the *divergence thesis* (Pugh and Hickson, 1976).

Essentially, what needs to be resolved in discussing culture is commonly labelled as the convergence / divergence dichotomy. Scholars ask whether organisations world-wide are becoming more and more similar, (convergence), or are maintaining their culturally based dissimilarity, (divergence). The comments so far concerning the field of cross cultural management research highlight a strict division between these two schools of thought (Peters and Waterman, 1982; Deal and Kennedy, 1982; Schein, 1985; Hofstede, 1984b; Laurent, 1983).

The idea of convergence presupposes that social processes are common to all, and that the concept of progress leads to universal attitudes about work, regardless of national context. On the other hand, the assumption that idiosyncratic values and belief systems produce significant differences in employees' expectations sustains the argument for divergence. Researchers supporting the convergence hypothesis maintain that individuals, irrespective of country of residence, are obliged to adopt universal attitudes in order to comply with the global imperative of development. Applied to this study, the question is to discover whether or not attitudes of individuals towards food safety policies and practices are converging throughout the countries represented in the European hotel industry. This specific field of comparative and cross-cultural

management thus addresses five central issues:

1. Does organisational behaviour vary across cultures?
2. If differences are observed, can they be attributed to cultural determinants?
3. Is the variance, if any, in organisational EU-wide behaviour increasing, decreasing or remaining the same?
4. How can organisations be best managed within cultures other than their own?
5. How can organisations effectively handle cultural diversity, including diversity as an organisational resource?

In exploring this theme of convergence / divergence, variations have emerged in the literature, with Child (1981), for example, discovering evidence of convergence at the organisational level, but divergence at the personal level. This apparent dissonance implies that some organisational design principles are culture-free, while others may be specifically modified to fit a particular culture if the organisation is to be successful. The related issue in the present study is: in which of these two categories does food safety reside, if at all? Whereas the skills and abilities to perform a given job may be quite similar from one culture to another, the criteria for evaluating how well the incumbent is performing a task are both culture and context bound. Child's (1981) research, looked at from a different perspective, examined a variety of cross cultural investigations and observed that those inquiries dealing with macro-level variables identified few differences that could be attributed to culture, whereas those studies focusing on micro factors found many significant differences. Thus, it is possible that organisational structure and technology converge, whereas the behaviour and attitudes of individuals

within organisations diverge. It may therefore be that variation between EU countries on food safety cannot be attributed to culture, but that differences within hotel firms, (chain and independent), and their employees may be so associated (Marshall and McLean, 1986).

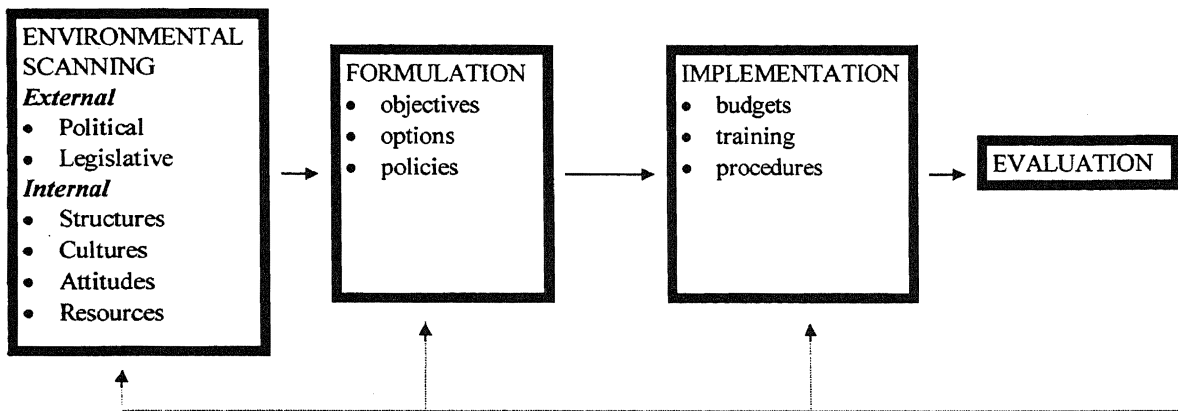
In summarising these views, to formulate policies concerning food safety around the notion of a single Europe could, if these arguments are to be accepted, be almost as limited as focusing on a single country (Crawford - Welch, 1991). Indeed, as food safety legislation is enshrined within the Single European Act (1986), three important questions can be posed:

1. Will the range of hotel firms, along with cultural and attitudinal factors within the member states of the EU, mitigate against effective implementation of food safety policies to the detriment of consumers, employees and firms?
2. Will this diversity of member states be reflected in a creeping incrementalism of legislative food safety mediocrity - a response to the range of cultures, attitudes, employees, enforcement practices and hotel firms?
3. To what extent does the range of interested groups, (later in this chapter defined as stakeholders), influence implementation of food safety policies?

From the standpoint of the hotel manager, the implication of these three questions is their effect on the formulation and implementation of food safety policies (Hedley, 1977; Hofer *et al*, 1978; Olsen, 1991). However, this state of affairs, can be adversely affected by the hotel firm operating in an increasingly volatile environment (Henderson, 1979). Figure 2.1 illustrates some of the factors, both internal and external to the hotel, that

influence the development of a food safety policy. Superimposed on a regional basis, it may be regarded as either appropriate or inappropriate for EU wide hotel firms to differ significantly from country to country, or indeed from firm to firm.

Figure 2.1 Management Model on Food Safety Policies



Stakeholders

A further approach to this study can be explored in characterising an hotel organisation, the way it operates and the environment in which it exists, by analysing the stakeholders influencing it. Such a perspective has been recognised as an important way of visualising an organisation and the effect individuals or groups have on it (Mitroff and Bennis, 1990). As Freeman (1984) notes, stakeholders are any group or individual who can affect or are affected by the achievement of an organisation’s purpose - externally or internally. This view is supported by Mitroff and Bennis (1990), who state that a

stakeholder is any single individual, group, organisation or social entity that either affects or is, in turn, affected by the policies of an organisation, industry or social entity. The dilemma for such analysis, within the context of this study, is summed up by Payne (1987), who notes that organisations are reducible to individual human acts. Yet they are lawful, and in part understandable, only at the level of collective behaviour. This interpretation suggests that separating the influence of stakeholders is problematic. It also tends to treat hotel organisations as if they are the same when patently there is more than one type. Whether they are figuratively inside or outside the firm, stakeholders have a direct interest in its activities and policies. The essential purpose of this discussion on stakeholders is to determine which partner organisations influence the hotel firm and what are their aims, objectives and motivations. One feature worthy of note is the type of power that stakeholders can wield over the hotel firm. Three types can be identified. The first is formal power to control the actions of the organisation. The second is economic power to influence the organisation through the markets in which they operate, and the final type is political power generated by the stakeholders' ability to influence an organisation through legislation and regulation.

Stakeholder Models

In furthering this discussion on stakeholders, there are two main models that reflect how firms can cope with the diversity of interests of a variety of groups. The first of these is the autocratic model, which suggests that power and the right to lead are placed in a single organisation. The second is the networker model, an interpretation which suggests that the right to power and govern an organisation or channel is vested among

many stakeholders and sub-groups. The firm, as a networker, attempts to balance the conflicting aims and objectives, and hence weave a path through the conflicting influences on the organisation. The networker model clearly illustrates the multi-faceted relationship between the firm and each of the stakeholders. It also shows the interaction among the different stakeholders and their power positions relative to the organisation.

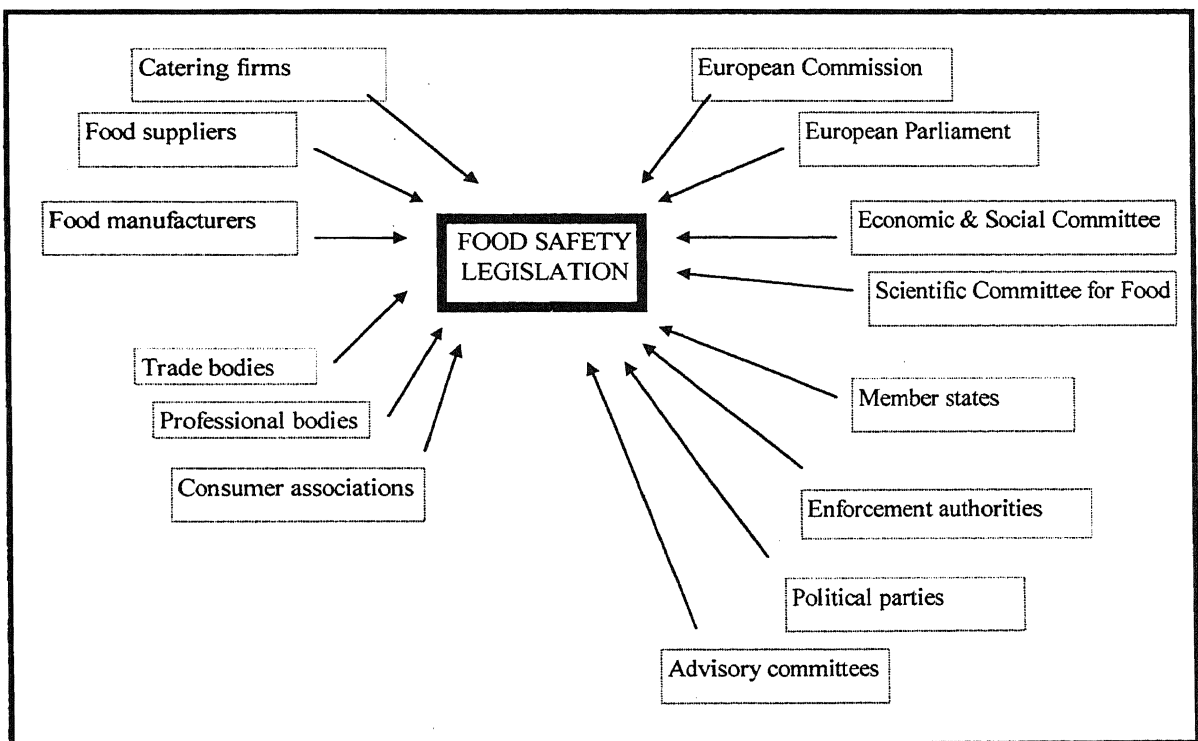
Stakeholder Analysis

In terms of food safety and the networker model, anything an hotel organisation does is influenced by a multitude of stakeholders, both internal and external. These parties vary in number, variety and complexity, to the extent that no one can be precisely sure as to who they are or how they will behave (Chilingirian, 1994; Shrivastava, 1992). Relating such analysis to the development and implementation of food safety legislation and policy in the European hotel industry, a wide range of stakeholders can be identified, (as shown in figure 2.2). It is this figure that builds on comments made so far about the analysis of the general and task environment, and the discussion on stakeholder models (illustrated in figure 2.1).

A further perspective on this analysis can be related to comments made on environmental scanning, by Jain, (1985), and in particular, the classic analysis of competitive forces by Porter (1980). The stakeholder influences on European food safety legislation can be seen as a way of linking Porter's (1980) five industry forces, to which Freeman (1984) supplies a sixth. Freeman's addition of a further force to Porter's list includes a variety of stakeholder groups, including governments, unions and trade associations. Whereas Porter contends that such additional groups can be included in his

five forces, Freeman believes that government, for instance, deserves special mention because of its unique power to affect all industries. While Freeman (1984) does adopt a matrix approach by highlighting three elements: formal power, economic power and political power, he also points out that, by showing its dominant role, the firm is in a better position to gauge the influence of each stakeholder group.

Figure 2.2 Stakeholders Involved in Food Safety Legislation: the European Context.



Hotel Networker Model

The development of a networker model or map in a food safety context reflects the complex web of relationships that all hotel firms display. Such a map also suggests that the focus organisation operates within a dynamic system of interacting organisations. Owing to the relative power positions of stakeholders, particular stakeholder networks focus upon functional activities and so have priority over others, or are perceived as more important than certain other networks. This situation suggests that certain organisations and individuals within each network may have disproportionate levels of power and influence. In addition, a stakeholder network can be identified which in turn can be subdivided into two major sub networks: performance and supplier networks. It should be noted that these two sub networks are not mutually exclusive. Indeed, they are interdependent and interactive, although for analytical purposes it is better to treat them separately.

Applicability to the EU

Turning to Europe, one very important stakeholder within the hotel industry context is the EU. This multinational entity, along with its various constituent bodies, was established in 1957 by the signing of the Treaty of Rome. It was the Second World War and its immediate aftermath that was the catalyst for a democratic European Union. The 1948 Benelux Union grew into the EC of six member states and the signing of the Treaty of Rome (Owen *et al*, 1992). Since then, modifications have been made to the

Treaty, for instance, by the signing of the Single European Act in 1987 (SEA) (EC Commission 1986) and the Maastricht Treaty (EC Commission, 1996). The SEA inserted a new article 8A to the Treaty of Rome that established the Single European market, effective from 1 January 1993. As Article 8A states:

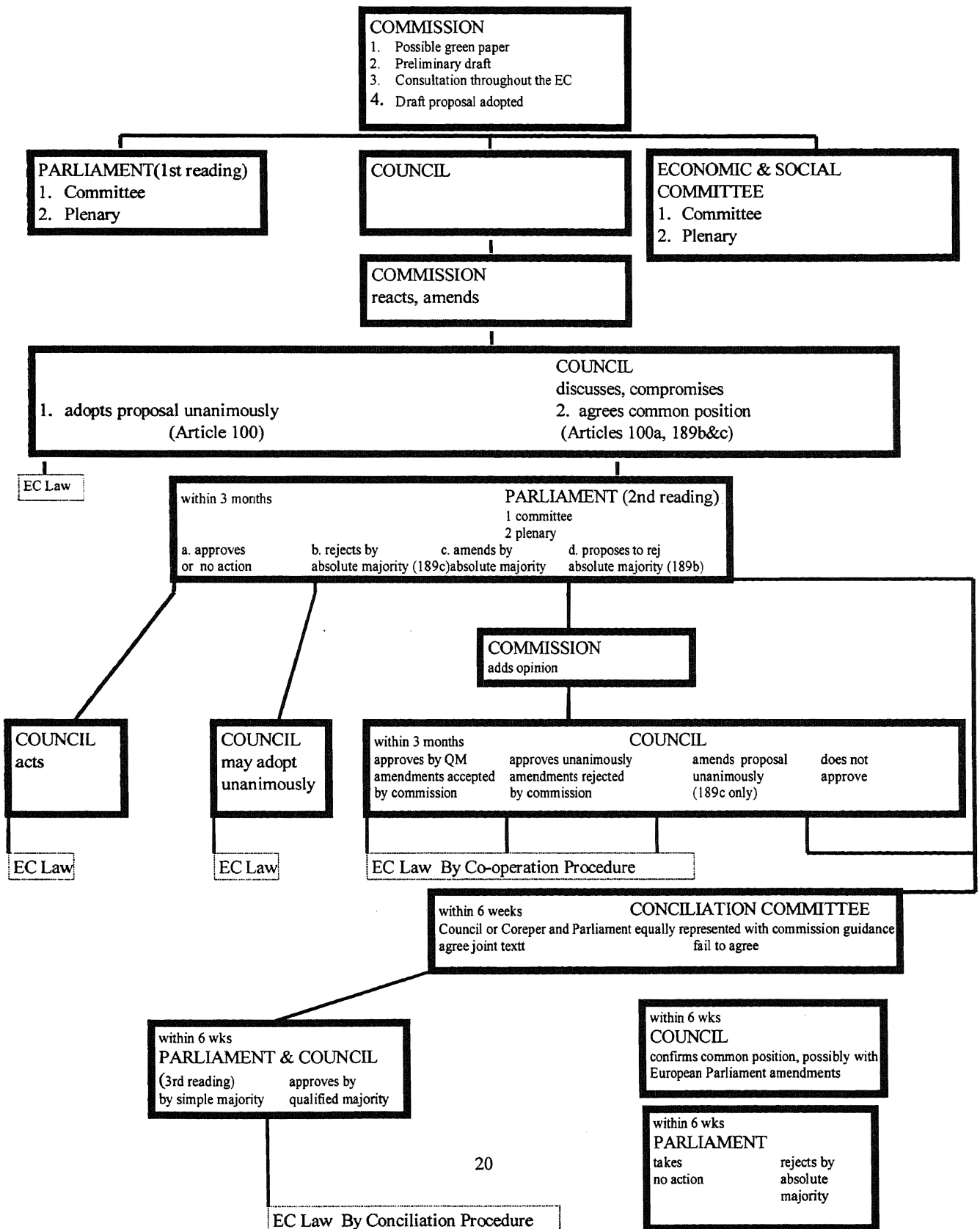
“The community shall adopt measures with the aim of progressively establishing an internal market over a period expiring on the 31st December 1992. The internal market shall comprise an area in which free movement of goods, persons, services and capital are ensured in accordance with the provisions of this treaty”.

Until the adoption of the SEA, the usual procedure to bring about the approximation of national law was enunciated in article 100. This article required the unanimous agreement of member states. To help ensure that the required measures under the SEA were adopted, it was accepted that article 100 required modification. A new article 100A was therefore inserted after article 100 and, in addition to providing the possibility of qualified majority voting, the new article involved *co-operation* with the European Parliament, as distinct from article 100's mere consultation. An opinion also had to be sought from the Economic and Social Committee (Mathijsen, 1990; Middlekauff and Shubik, 1989).

Single Act measures are thus now part of the progress towards the single market. They are subject to qualified majority voting and, under the SEA, have two readings in the EU Parliament. If the latter rejects the proposed legislation, it can be only adopted by a unanimous vote of the Council of Ministers. If the Parliament tables amendments to a proposal, the Council can adopt them by qualified majority only when the Commission

has endorsed them. In this discussion a number of stakeholders are emerging at European Union level, including: the Council of Ministers, the European Parliament, the Economic and Social Committee, and the European Commission, with specialist advice coming from the Scientific Committee for Food. The relationships between many of these parties are illustrated in figure 2.2. Food legislation is hence part of the progress towards the single European market, and this complex decision making process is shown in figure 2.3.

Figure 2.3 EU Legislative Approach



Additional stakeholders at both national and EU levels are the expert committees that exist to advise politicians. For instance, in the UK, the Food Advisory Committee advises both the Department of Health (DoH) and the Ministry of Agriculture, Fisheries and Food (MAFF) on matters pertinent to the safety and wholesomeness of food. The UK government places a high value on this advice and frequently incorporates it into legislation. During 1999 / 2000, responsibility for these matters will pass to the independent Food Standards Agency that will report principally to the DoH.

A similar relationship exists at the European Union level, the Scientific Committee for Food (SCF) being the principal body for supplying the European Commission with scientific advice in the preparation of proposals for food legislation. Established in 1974 and answerable to the commission, the SCF meets about four times a year in Brussels and provides independent advice on questions of public health related to the consumption of food. The work of the SCF during its early days tended to focus on food additives but, as single market legislation in the area of food has increased considerably, so too has the scope, importance and work of the SCF. It has to be stressed that the SCF's work is limited either to problems presented by the Commission or those which it considers should be drawn to the attention of the Commission. The EU Council of Ministers, in recognising the important role played by the SCF, regularly requires the Commission to consult it about provisions that may have an effect on public health.

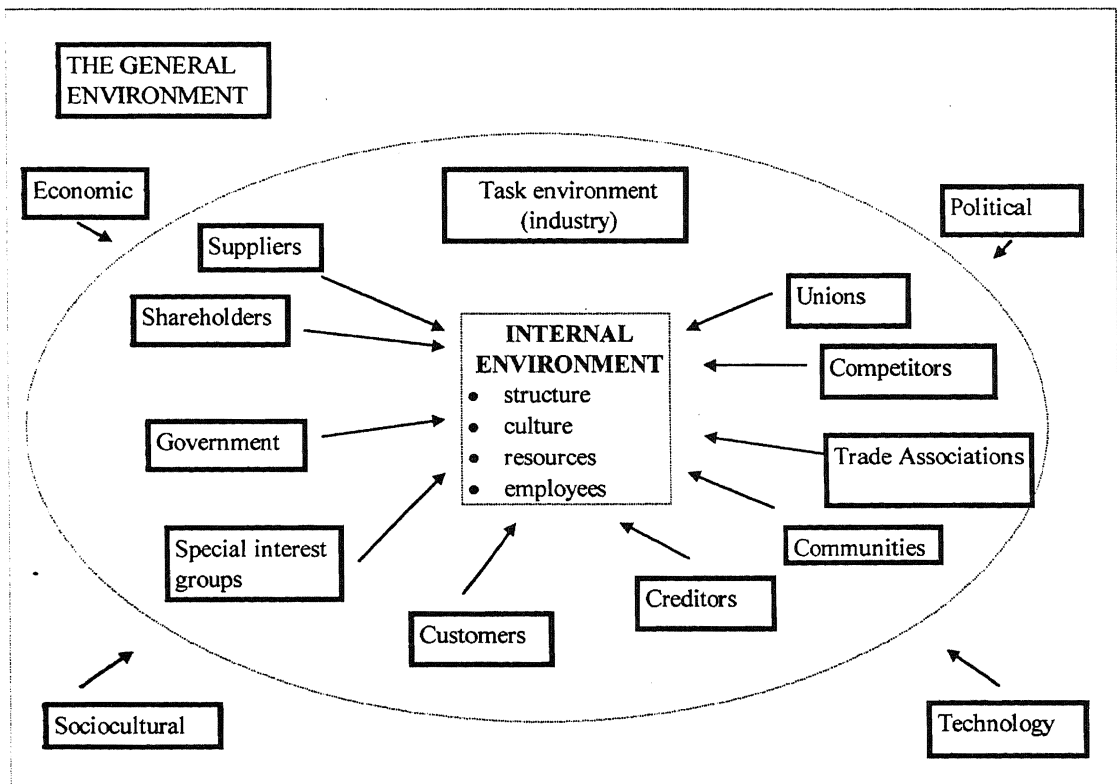
Originally established with 14 members, the SCF was expanded to 18 members in 1986.

It is now broken down into 8 working groups in order to deal with the wide range of complex food legislation issues.

Stakeholders' Influence in Hotels

It has already been noted that the attractiveness of a food safety policy alternative is constrained by the politico-legislative environment, specifically within the parameters of various national and EU influences (see figure 2.4).

Figure 2.4 The General and Task Environment of the Hotel Firm



However, policy implementation, and ultimately effectiveness, will be affected by perceived compatibility with the principal stakeholders in an hotel firm's task and internal environment. As Rowe *et al* (1994) point out, the first stage in identifying the influence of stakeholders is to position them on a map identifying their primary relationships and patterns of interdependence. However, Rowe *et al* (1994) sound a note of caution by suggesting that the present status of the organisation, is at best, only a temporary balance of opposing forces. Some of these forces provide resources and support to the organisation, while others serve as barriers and constraints. These forces are generated by stakeholders in the course of pursuing their own interests, goals and objectives (Fredrickson *et al*, 1989). In this respect, management, employees (kitchen and restaurant) and enforcement authorities are three key groups that will now be considered.

1. Management, in its desire to maintain and enhance the effectiveness of the hotel's food safety policies, must evaluate the pressures, (including attitudes, expectations and influence), from all stakeholders, but particularly employees and enforcement authorities, when weighing the range of alternatives at the implementation stage. Equally, the approach adopted, (if the culturist, as opposed to convergence thesis is accepted), should be compatible with the national, corporate and individual culture within whichever country the hotel unit is located (Freeman, 1984). What is deemed to be accepted best practice in the UK may be different from what occurs in France, Germany or Italy. At the corporate level, differences may emerge between international chains, such as Holiday Inn or Accor, compared with small independent

hotels, and another factor relates to the hotel's hierarchy and the groups within the hotel's food and beverage division.

2. The attitudes of employees within the hotel firm may be strongly influenced by this national and corporate cultural context. Hofstede (1984a, 1984b, 1993) argues that differences in attitudes and values can be related to cultural differences, rather than organisational ones. The alternative view, expressed by Pugh and Hickson (1976), through their studies initiated at the University of Aston, Birmingham in the 1960's, is that there is organisational convergence internationally. An individual's influence on food policy is likely to occur because (s)he shares expectations with others by being part of an interested group. In order to be a member of such a group, persons need to identify with its aims and ideals, and this identification may occur within departments, organisations, at various geographical locations or at different levels in the hierarchy. Most individuals belong to more than one such group since shared interests tend to arise as a result of events.
3. Equally important are the external stakeholders of the organisation, one group specifically addressed here being enforcement authorities. Often they seek to influence food safety policy through their links with internal stakeholders. Even if these external stakeholders are passive, they may represent real constraints on the development of new food safety policies (Johnson and Scholes, 1993).

Understanding these three categories of stakeholders and how they are likely to influence food safety is a very important part of any analysis of such policy.

Since the expectations of the stakeholder groups just identified are likely to differ, it is

quite normal for conflict to exist within and outside organisations regarding the importance and / or desirability of many aspects of food safety. While there is a fixity in the legislation once enacted, in most situations a compromise, because of interpretation, needs to be reached between expectations which cannot be achieved simultaneously, and those issues which have to be tackled where the development of one part of food safety policy may be at the expense of another. Such negotiation frequently occurs between member states on the formulation of EU food safety legislation at the international level, and between management, food production staff and enforcement authorities at the national level. Within the hotel unit, there may be conflict between kitchen personnel and, for instance, restaurant staff or management. What emerges is the need to understand the expectations of different interested parties in influencing food safety and to weigh these expectations in terms of the power they exercise.

When analysing stakeholders, the formal structure of an organisation may not be the only basis for identification. It may also be necessary to identify informal groups and assess their importance, a point that is relevant to food safety policy when considering senior and junior staff within the kitchen. Individuals tend to belong to more than one group dependent on the task at hand. Assessing the importance of stakeholder expectations is a significant part of any analysis in the formulation and implementation of food safety policy. It consists of making judgements on three issues:

1. How likely each group will be able to satisfy its expectations?
2. Whether or not it has the means, (i.e.power), to do so.
3. The likely impact of the group's expectations.

Stakeholder Mapping in Hotels

Mapping out the various attitudes towards food safety, including the expectations and influences of stakeholders, (both internal and external), and where they conflict, may contribute significantly to an understanding of the application of policy within firms of the European hotel industry. However, the debate between the pre-eminence of national vs. corporate culture may complicate this human resource management issue (Schneider, 1988) and, in respect of this study, it could be that different environments require different food safety policies. Others note that more attention needs to be paid to the possible clash of assumptions underlying national and corporate culture (Laurent, 1986). Having identified this convergence / divergence dichotomy as a limiting factor, an assessment of a power structure through a mapping process is necessary in order to evaluate future policies in relation to their appropriateness within an hotel firm at both national and European wide levels. Such a process may help judge how easy or difficult it is to change a food safety policy. Two perspectives can assist by way of explanation:-

1. the power / dynamism matrix
2. the power / interest matrix

Specifically, the power / dynamism matrix is a useful way of assessing where “political” efforts should be channelled for the most effective development of new food safety policies. The attitudes of stakeholders, both external and internal, can be related to possible changes in food safety. The point of this appraisal is that new policies need to

be tested before an irrevocable position is established. In adopting this perspective, a relationship between predictability and power becomes established.

The power / interest matrix adds to the power / dynamism perspective in that groups can be classified, not only in relation to the power they hold, but also according to the extent that they show interest in a particular food policy direction. The central value of this second type of mapping lies in the ability to assess whether a given political and cultural situation is likely to undermine a particular policy approach. Such a direction can evaluate the cultural fit of policy even on a European-wide basis. These sources of power are reviewed elsewhere in French and Raven's classic study of the 1950's and 60's, quoted by Pugh and Hickson (1976), where they identify five bases of power: rewards, coercion, expertise, legitimate and reference bases.

Implications for Food Safety

In developing stakeholder mapping related to food safety, important elements are those government agencies that oversee the industrial and social infrastructure. They are, therefore, stakeholders in two respects, in so much as they provide both regulatory and monitoring services. The UK government, for instance, views its objective in terms of promulgating legislative standards. These standards lay down what the consumer has a right to expect, how those expectations are to be met, and what penalties to impose when they do not reach the necessary requirements. Failure to perform these tasks will threaten the government's legitimacy and may create a political liability (MAFF, 1989). In protecting its legitimacy, the government does not always serve the public interest. It

additionally acts in self-defence to retain its legitimacy and power. An alternative approach, suggested by North (1996), is that government could regard failure as leading to improved safety, since it is the flow of data on food safety which will help pinpoint the underlying causes for such failure. In this respect, the paucity of information can be regarded as reducing the effectiveness of food safety policies (Wildavasky, 1988; 83 quoted by North, 1996). Other stakeholders with respect to food safety legislation are the public and public interest groups, since it is principally through the latter that consumers' views are articulated.

A significant group, although not one of the primary stakeholders, comprises the media, which also play an important role in communicating food safety stories. In the case of high profile food poisoning outbreaks, the media not only influence public opinion, but also act as a catalyst for political / legislative initiatives. When a triggering food safety event occurs, (usually published by the media), spontaneous reactions by already identified different groups help solve some of the immediate food safety problems, (an example being the E.Coli food poisoning outbreak in Lanarkshire, Scotland 1996 and the subsequent Pennington Report, 1997). However, descriptions of what takes place vary tremendously among these interested parties and there are differences in their frames of reference. While these contrasting perspectives differ, they all have a narrow shared outlook, dependent on their views, attitudes and beliefs, and it is an analysis of these three factors that would be useful in relating them to food safety. If these groups could see and understand each other's points of view they might, (subject to their power levels), be able and willing to work together to achieve the ultimate goal of protecting the consumer through the provision of safe food (Pennington Report, 1997).

It is also important to note that these groups compete against each other in order to have only their opinions accepted as the *truth*. The establishment of a single view as more valid than the others is essentially a power-game that involves adopting a set of partial solutions that benefit just one stakeholder group. To appreciate this power game it is necessary to reach a multiple understanding. Here, multi-perspective analysis involves comprehending and describing occurrences from the standpoint of all key stakeholder groups that take an interest in food safety. This goal is achieved by acknowledging that outcomes are subject to pluriform conflicting and disparate interests, assumptions, values and interpretations, and then using them as a basis for building an understanding *of events*.

One key analytical tool for appreciating any food safety issue is identifying *frames of reference* i.e., the methods that people or organisations utilise in order to select and process information. They reflect their biases, attitudes and ways of making judgements. They are the lenses through which an individual or organisation views the world. Organisations and managers suffer from unrealistic perceptions and deficiencies in perceptual capabilities. Frames of reference thus differ, since each can be broken down into two component parts, both of which have to do with the processing and filtering of information on food safety. They include:

1. Data elements, basic assumptions, concepts or units of information on food safety.
2. Cognitive maps.

Every person or organisation has a particular way of arranging information into cause / effect relationships. This process helps make sense of that information and reach

meaningful conclusions. Cognitive maps can thus be regarded as conceptual schemes for carrying out this ordering. An extension of this procedure is reality testing - a method by which persons or organisations validate the information they discover, the inquiries they make or the cognitive maps they create. They do so by finding and articulating a legitimising connection among these three elements and critical social and cultural expediencies. The domain of inquiry delineates the boundaries of concern, the relevance of particular variables and alternative frames of reference. For the most part, frames of reference are taken for granted. However, the extent to which they are articulated varies. Legislative bodies concerned with food safety, for instance, may thus respond effectively to rapid environmental development, but also may fail to adapt to or recognise slow changes (Handy, 1990).

There is a difference here between listening to the analysis and not hearing it. Environmental forces are continually reshaping the way the legislative body runs things and how it forges a niche that is crucial to surviving or thriving (Large, 1992). Organisations, in formulating food safety policies, can become cut off by mental walls from their environment, and think in terms of inside / outside world terms. It follows, therefore, that comments from the environment will be filtered, ignored and jettisoned if they do not fit with the accepted mind set. Stakeholders in a food safety context operate on false maps of the environment, i.e., of the market, and those socio-political contexts, which may once have been useful but are now outdated.

The complex networks of relationships that link an hotel to its environment can also be charted, and thereby help with the formulation and effective fulfilment of food safety

policies.

It has already been shown that in most cases power will be unequally shared between the various parties in the development and implementation of food safety policies, to the extent that one group or faction may dominate. Power in this context can be seen as the degree to which individuals and groups are able to persuade, induce or coerce others into following certain courses of action. This variation in force is the mechanism by which one set of expectations will either dominate or seek a compromise with others.

European Hotel Environment

It is clear from the discussion so far that one notable issue concerning this review of the literature is the relationship between the hotel firm and its environment. In this respect, the positioning and relationship of the organisation to its environment (including socio-cultural factors) will ensure the former's continued success. In most hotels, food is a vital component of the product, and thus food safety can be regarded as an important element of the management process. As people's tastes change and are influenced by media reports, as the economy moves through the business cycle, thereby affecting consumers' disposable income, and as national governments and EU policy change, a clear awareness of environmental forces aids in the development of food safety policy.

Organisations produce goods and services for the benefit of their various interested parties, be they consumers, investors or employees, all of whom can be categorised as stakeholders. Hence, the objective of the hotel organisation is to balance the demands placed on it by these different groups, (see Gluck *et al* 1982; Gluck, 1985; Gilbert *et al*,

1988; Mintzberg and Quinn, 1991).

It has been previously noted that the environment in which an organisation operates is continually changing. For European-wide hotel firms, the problem of co-ordinating many hotel units concerning environmental scanning, and more specifically the issue of food safety, becomes ever more complex (Olsen, 1991; Porter, 1991; Wheelen and Hunger, 1987; 1995).

A further management issue is acquiring an understanding of the cultural context and the influence of various interested parties - aspects that affect planning, formulation and implementation (Pizam, 1993). Taking all the points made so far, and relating them to food safety, it is possible to highlight differences between member states of the EU (Knowles, 1994). Such variation, it is suggested, has had, and is having, organisational and cost implications for the European hotel industry.

In this research, focus is placed principally on political, legal and sociocultural forces. A consideration of the interested parties, (already referred to as stakeholders), within these categories, is undertaken in order to make a link with the development and implementation of food safety legislation and policies.

For example, food safety at one level is part of the political / legislative environment within which European hotel firms operate. The complexity of this scenario is inevitably exacerbated by the political and legislative decision making processes at both national and EU levels. One only has to consider the comments of a UK government minister's views on salmonella in eggs regarding the level of infection within British poultry, (the political environment) to see the effects it had on the development and enactment of the

Food Safety Act 1990, (the legislative environment). Other examples might include the BSE crisis and a serious outbreak of E. Coli in Scotland, 1996 investigated in the Pennington Report (1997), both of which affected the legislative environment in which hotel firms operate (see Knowles 1992, 1994).

The task or industry environment, includes the elements or groups (stakeholders) that directly affect the hotel firm and, in turn, are affected by it. These groups include governments, local communities, suppliers, competitors, customers, creditors, employees, labour unions, special interest groups and trade associations. This environment is the industry within which the firm operates and includes many variables that may block the way to establishing comparable general concepts. For instance, variation already exists on an EU, national and, in many cases, intra national basis. In the UK, significant nationality differences exist between England and Wales, and Scotland. In Spain, there are a number of regional identities, to the extent that many Spaniards do not regard themselves as Spanish, but as Catalanian or Basque, for example. A similar comment can be passed on the Federal States of Germany. Hence for an effective co-ordination of food safety policy European wide, it is necessary to take into account all these considerations. The danger in this situation is that any concepts emanating from this study may be so all embracing that they conceal any relevant difference, and with it, the reality itself which should be disclosed. Thus, general concepts, accurately drawn up for a heuristic purpose, should be regarded as simply a way to facilitate communication. However, once stated, it should also be recognised that food safety law is differently shaped in individual countries of the EU.

Although the question has already been posed as to whether national, or indeed intra

national culture will have an influence on food safety policies, a consideration that has not been introduced so far is that of attitude. The attitudes of both individuals and groups, constitute an important element in this investigation, and it may be reasonable to assume that they also vary. To what extent, if any, they influence food safety policy is explored in this and other chapters. Whereas the stakeholders have been identified, it is the mapping of their attitudes towards food safety that is an issue, so much so that conflicts between groups may emerge. Even within the hotel firm, the group “employees” cannot be regarded as homogeneous since there can be very real differences between management, restaurant staff and food production staff. How this myriad of views can be drawn together will now be explored.

Culture

The difficulty in establishing one view on food safety, either nationally or Europe-wide is clearly problematic, and this lack of consensus introduces, to a greater or lesser extent, the influence of culture.

In a European context, the point being raised is whether cultural diversity is a determinant in affecting the implementation of food safety policies within the industry, or whether a range of other factors is involved. While there are countless definitions of culture, the following seems to capture its essence:

The pattern of all those arrangements, material or behavioural, which have been adopted by a society (corporation, group, team) as the traditional ways of solving the problems of its members; culture includes all the institutionalised ways and the implicit

cultural beliefs, norms, values and premises which underlie and govern behaviour (Payne,1991).

As far as its English usage is concerned, culture is a relatively recent concept, employed in an anthropological sense to refer broadly to civilisation and social heritage. This meaning of the term did not feature in the English dictionary until the 1920s. Its presence within the German language is somewhat older, having made an appearance by 1800. Its increasing use within the social sciences has led to definitions of varying generalisability. Kroeber and Kluckhohn (1952), quoted by Morgan (1986), in their classic work on the meaning and role of “culture” within the social sciences, claim to have identified almost 300 definitions, even though they provide a detailed analysis of only 164!

In considering these various definitions, Kroeber and Kluckhohn indicate that the expression “culture” can apply to any size of social unit that has had the opportunity to stabilise its view of itself and the environment around it - a factor that can be superimposed on the stakeholder mapping process discussed earlier in this chapter. At the broadest level, there are civilisations, and reference is relatedly made to western or eastern cultures. Then there are nation states with sufficient mainstream ethnic commonality to permit reference to French or Mexican culture, for example. Even so, it is readily acknowledged that within each country there are various ethnic groups, each having its own culture. More specifically, there is type of employment, and the allied notions of professional or occupational communities. If such groups can be defined as stable units, with a shared history of common experiences, they will also have developed their own particular cultures. Finally, one reaches the individual, and with him or her,

the sharing of cultural norms and values with like-minded persons (Johnson, 1991; Johnson *et al.*, 1992).

A Tale of Two Cultures

The expression “culture” can also be applied to an organisation. Thus, focusing on the international hotel firm, corporate culture can be regarded as a means for headquarters to exert power over subsidiaries. According to this view, corporate culture serves as a behavioural control, instilling norms and values throughout the length and breadth of the organisation. Corporate culture is in part exercised through human resource management practices. Some of these practices, however, may not be appropriate, given the beliefs, values and norms of the local environment, i.e., the national culture wherein the individual hotel is located. Problems arise in transmitting corporate culture through these subsidiaries, in an effort to achieve globalisation, or indeed regionalisation, throughout the EU. This situation means that more attention needs to be paid to the possible clash of assumptions underlying national and corporate cultures.

The fundamental problem in comparing countries and hotel organisations within the EU is the necessity to have confidence that the components and associated properties being compared are the same, or at least indicate something “equivalent” that has been subject to a variance reducing scheme. However, achieving credible equivalence is difficult, as “meaning” is always contextual.

One such variance reducing scheme specific to culture is the framework model developed by Schein (1985), which helps to organise the pieces of this culture puzzle.

According to this model, culture is represented at three levels:

1. Behaviour and artefacts.
2. Beliefs and values.
3. Underlying assumptions.

These levels are arranged according to their visibility. Thus behaviour and artefacts are the easiest to observe, while underlying assumptions need to be inferred. The latter prescribe and proscribe ways of perceiving, thinking and evaluating the world, self and others. However, the problem lies with specified variables which, although having general theoretical validity, may be less robust at the national level.

These differences described above have implications for human resource policies that are developed at headquarters and reflect, not only the corporate culture, but also the national culture of the firm and the countries wherein its hotels are located. Companies can choose from a menu of human resource practices that concern planning and staffing, appraisal and compensation, selection and socialisation. Within this selection, there are several options that need to be in harmony with the overall corporate culture. Firms also should take into account differences in the national cultures of the subsidiaries where such options are to be implemented.

The extent to which corporate culture can override national cultural differences in order to create a regional hotel company is a crucial issue to consider in this research. In the case of western European practices, care must be taken so that the regiocentric / ethnocentric distinction, remains sensitive to the need for differentiation (Schneider,1988). As far as the local dimension is concerned, it means determining what

needs to be done differently in the context of requirements for integration. Homogenised food safety policies may weaken competitive advantage and effectiveness by trying to ignore or minimise cultural differences instead of trying to benefit from them (Schneider, 1988).

Certain cultures, both national and corporate, that value conformity over individuality, e.g., *Disneyland Paris*, may be better able to utilise corporate culture as a mechanism for control, but will probably lose the advantage of individual initiative. Relatedly Hofstede (1980) demonstrates that, even within a large multinational firm, renowned for its strong culture and socialisation efforts, national culture continues to be an important factor in differentiating work values. His conclusion highlights the paradox that national culture may dominate a strong corporate culture.

The Work of Hofstede and Others

It has already been noted that a major contribution to the debate over culture can be found in the work of Hofstede (1991, 1993), and Hofstede and Bond (1988). Hence a link in this thesis is established between cultural values, management practices and power, elements already explored in earlier parts of this chapter. In a study of 50 different national cultures, Hofstede discovered that he could predict the success or failure of certain management practices on the basis of four cultural opposites: individualism vs. collectivism, power vs. distance, uncertainty vs. avoidance and masculinity vs. femininity. He found that people varied a great deal and, in so noting, threatened to undermine the conventional wisdom of western management theory.

One such dimension was the power / distance dichotomy, the extent to which a society accepts an unequal distribution of power in organisations. People in those countries scoring high on this dimension tend to prefer autocratic to more democratic managers.

In contributing to the discussion Kale (1991) makes reference to Hofstede's cultural dichotomies, one of which is *Uncertainty Avoidance(UA)*. This dimension reflects how a society deals with the future. Weak UA cultures accept uncertainty whilst strong UA societies foster the need to forecast, i.e., they are proactive rather than reactive. This distinction may well have implications for food safety policies, in so much that end food product testing can be contrasted with preventative hygiene procedures.

One of the ways in which societies create a feeling of security is through laws, rules and a reliance on the opinion of experts to protect against the vagaries of human behaviour, (see also Hofstede, 1984a). Contrasts in food safety can be identified between the self-regulatory approach of the UK as opposed to the prescriptive measures of France and Italy. Because uncertainty avoidance (Hofstede, 1980) varies between nations, it is possible to hypothesise that mechanisms of subsidiary control, (as an extension of the responsiveness of subsidiaries to the local environment), may vary between international hotel firms of different parent nationalities.

The argument being advanced is that certain management functions in food safety are facilitated and others are inhibited in certain cultures (Triandis, 1982). For instance, the definition of goals is likely to be facilitated in cultures in which mastery of the environment is valued and to be inhibited in cultures in which subjugation to nature is valued.

Planning is likely to be facilitated by an orientation towards the future, and to be inhibited by an orientation towards the past or the present. When power - distance is low and uncertainty avoidance is high, planning is effective. When power - distance is high, there is too little trust to make planning effective.

In the context of hotel organisational culture, power can be derived in a number of ways, one of which is hierarchy. Hierarchy provides people at the top with control over subordinates and is one method of influencing food safety policy, even though such formal power can be limited. Influence can also be an important source of power and may arise from personal qualities or because of a high level of consensus. Individuals associated with core beliefs are likely to accrue power, although this situation can be influenced by a number of factors, including access to the channels of communication. Control of strategic resources is a major source of power, even though such importance can vary over time or according to circumstance. Individuals within a food and beverage department can also derive power from specialist knowledge and skills. It has already been demonstrated that the wider environment affects performance and that control of the environment can thus be a source of power. Some hotel stakeholders have significantly more knowledge of, or contact with and influence over the environment, than others. Finally, exercising discretion is a significant source of power, particularly if individuals are involved in the decision making process. Personal discretion can influence interpretation and execution.

As with internal groups, people and organisations, the external environment can affect an organisation. Dependence on resources for both buyers and suppliers is an important source of power, either in the short or long term. Involvement in implementation

through linkages within the value system may be regarded as a vital source of power for suppliers, buyers and channels. Specifically, distribution companies can develop trends in consumer tastes that, in turn, can influence manufacturers. Such a point may be enhanced if the appropriate knowledge and skills are critical to the success of the organisation.

Since there are many different sources of power, and each is dependent on circumstances, one way of approaching this complex situation is by identifying relevant indicators. The status of an individual or group may be related to both hierarchy and reputation. Another approach to such an assessment is to measure a group's claim on resources, for instance, in terms of a budget and number of employees. In particular, trends in the proportion of resources claimed by that group may be a useful indicator of the extent to which its power is waxing or waning. A useful comparison can be made with similar groups in like organisations. Representation in powerful positions, for instance, on salient committees, could be an important measure, although individual status should also be taken into consideration.

It should be pointed out that no single indicator is likely to reveal a power structure although, when several are taken together, it may be possible to identify which people or groups appear to be influential. It can therefore be emphasised that, alongside an internal assessment of power, a similar analysis of external stakeholders needs to be carried out.

In the context of this research on food safety it is relevant to consider if this link between cultural attitudes, values, management practices, hierarchy and power also applies within the European hotel industry.

National versus Hotel Culture: Critical Implications for EU Food Safety

In what has been previously described as “a tale of two cultures” the core argument of Hofstede seems to be characterised as “a farewell to ethnocentrism”, an opinion which conveniently returns full circle to the discussion on page seven by Crawford - Welch (1991). Hofstede (1984) was clearly aware of the difficulty presented by the unit of analysis - the nation - in his study of culture. He acknowledged that modern nations may be too complex and subculturally heterogeneous to possess a single national culture. Exploring subcultural differences is theoretically interesting, in that it seeks to break down a generalised description of people into more meaningful sub-units. In terms of food safety and the hotel industry, such sub-units may exist at an intra-national level. Examples include Scottish legislation within a UK context, contrasts in organisational culture between chain and independent hotels, and finally between managers and operational staff. Whilst Hofstede’s views may present a useful framework, they are certainly more problematic for the drawing of generalisable conclusions. In this sense it is reasonable to argue that the nation state may be a spurious variable (Dann, 1993), particularly in the context of this study, and that more attention should be drawn towards organisational type and hierarchy.

Continuing this critique, within the overarching concept of an hotel organisational culture, it is sensible to recognise the possibility and likelihood of distinct subcultures existing among managerial teams, occupational groups, members of different social classes and so on, many of which might transcend organisational boundaries, or indeed national boundaries. In fact, the industry is well known for its multi-national workforce which may add another perspective to this discussion. As a limiting case, these

subcultures may be isomorphic; more commonly, they may only partially overlap. Moreover, cultures in organisations are not independent of their social context. They are interpenetrated by wider systems of thought, interacting with other organisations and social institutions, both importing and exporting values, beliefs and knowledge.

In the earlier part of this chapter, ethnocentricity was found to be explicit within the requirements of the EU and the Single European Act 1987, (notwithstanding the concept of subsidiarity), and should not be dismissed as inapplicable or irrelevant to this study on food safety within the European hotel industry. It would seem that from the evidence of the literature so far, it is not time to bid farewell to ethnocentrism.

An additional comment on the literature can be advanced in that this study has also included a critical discussion of EU socio-legal concepts. However, such concepts cannot be divorced from the fact that their semiotic contents are in fact variables. An appreciation of this point leads to the conclusion that all meanings are highly dependent upon decisions, about which little is known except for their being affected by power relationships amongst the stakeholders identified earlier in this chapter. The dilemma is therefore: if a phenomenon can be defined in a relatively easy way, it can give rise to a good research study which may be described as centralistic, since it adopts the same basic notions and gathers empirical evidence on variables which are considered as homogeneous by making an *a priori* reference to theory. Alternatively, once the phenomenon increases in complexity and becomes less definable through higher range theorising, the tendency toward federalism, of the diagnostic type, becomes more pronounced. In this sense, not only contexts but also basic concepts may be difficult to reduce to elementary common characteristics.

Another aspect of Hofstede's work relates to what has been termed the theoretical poverty of comparative research. For instance, if it is accepted that comparative research, whether carried out as cross national studies or as comparisons on a lower level, has as its major aim to verify theory, then attention is directed to the present state of theory. However, much of this work is formulated in such a way that it makes empirical verifications of hypotheses difficult or even impossible. This situation suggests that the major building block for conducting comparative research is missing and may mean there is a gap between what the comparativists purport to do and what they are actually carrying out. Thus, in the light of this chapter, theory does not constitute the point of departure but the intent of the research. The essential problem in exploring Hofstede's work is that he translated a concept from one cultural context to another. However, at the same time, he ran the risk of distorting the content and meaning of the concept and therefore lost valuable and characteristic information through the act of translation.

The comments made so far on the work of Hofstede can be extended to food safety in the EU hotel industry. This application is appropriate because, ever since the early work of Haire, Ghiselli and Porter (1966), scholars active in the field of international management have sought to determine the extent of similarity between managers, and indeed the management of different cultures. This situation reigns, despite the fact that the results of their initiatives have lent a degree of support to the schools of convergence theory, managerial universality and cultural specificity. The majority of investigations during the last two decades have assumed the former position. The focus here is the extent to which there are similarities between hotel managers of different cultures with

respect to attitudes on food safety.

The fundamental difficulty with Hofstede's position is its prescriptive nature. For example, many theorists argue that theory y is better than theory x. Such prescriptive propositions are likely to be problematic. The major point of these comments is that there are a number of cultural variables that need to be taken into account. Theory x may be better in some cultures than theory y. Theory z may be fine in some countries, but it is not clear that it can be effective elsewhere. What is likely to be most effective in one culture is often different to that which is effective in another culture (Norburn, Birley, Dunn and Payne, 1989).

Equally, functions having to do with selecting, training and controlling people, are likely to be predicated on the kinds of differences that are emphasised by culture, age, sex, in-group and out-group behaviour. There will be some facilitation in selection, in élitist, high power, distance culture, and there will be more effort at controlling in cultures where human nature is conceived as manicheistically evil. Controlling others through criticism is likely to be inhibited and ineffective in cultures where individuals have very high or very low self-esteem. A highly democratic pattern is more likely to emerge in cultures in which power distance is low. Where subordinates have a powerful self-concept and human nature is viewed as intrinsically good, there is an orientation towards the future and little evidence of a superordinate action pattern among those in authority. In highly individualistic cultures decisions are likely to be taken by vote. In collectivist cultures there is often more discussion until everyone is convinced about a particular course of action.

Clearly the complexity of the topic suggests that the culture variable alone cannot be relied upon as a determinant of food safety management within the EU hotel industry.

Diversity in Hotel Types

One aspect of this study that adds to the discussion on culture is the diversity of hotel type. Thus, turning to the industry, each organisational model, from the bureaucratic to the organic, assumes its own conception of human nature (Pugh and Hickson, 1976). These writers examine how the cultures of different societies in the world influence management and what is common and unique to different societies. In the context of this study they usefully look at different global areas, develop a discussion of multinational organizations and whether there is any convergence of management techniques worldwide (Pugh and Hickson, 1995).

It has to be stated that common denominators do exist among all societies in the character of their hotel organisations and in the reactions of their personnel. Furthermore, cross-cultural organisational psychology introduces principles that may transcend national culture. For example, the evidence suggests that people who have, or feel that they have, influence in their work situation, will experience a corresponding sense of responsibility, and will therefore be motivated to perform well in the organisation. Hence, the nature and type of hotel may transcend, for better or worse, the effects of national cultural factors. However, it does not follow that the organisational arrangements that enhance the influence of members, or that contribute to the feeling of their influence in one culture, will necessarily do so in another culture. General versus

close supervision and other techniques of human relations may be culture specific in this sense, effective in some countries but not in others.

However, those who attempt to transfer the experience with these human resource management techniques from one society to another, would do well to distinguish between the principles which are general to these societies and the procedures that are specific to each society. Cross-cultural psychology can provide some help in making this distinction.

One way to conceptualise food safety in the European hotel industry is to stimulate research through an expectancy value framework. Specifically, such a model views the likelihood of any hotel manager generally choosing an influence tactic, as dependent upon the expectation that it will lead to a particular outcome and the value associated with that result. This point becomes more complex when one appreciates the hierarchy within the food service department of an hotel. The relevant outcomes in influence situations could, for instance, include the possibilities of compliance or responsive sanctions. Depending on the direction of the influence attempt, and the hotel manager's culture and gender, the relative cost advantage of different influence tactics may vary across these expected outcomes (Schermerhorn *et al*, 1979).

Organisational Culture in Hotels

Notwithstanding the diversity of hotel type, within an organisation, some common meanings suggested by writers on culture include the following (Schein, 1985):

- Observed behaviour regularities when people interact, such as the language used and

the rituals surrounding deference and demeanour.

- The norms that are involved in working groups.
- The dominant values espoused by an hotel.
- The philosophy that guides an hotel's policies towards employees and / or customers.

These varieties show that organisational culture is an umbrella concept that encompasses a whole set of widely shared beliefs, traditions, values and expectations that characterise a particular group of people within an hotel. In these senses, culture can identify the uniqueness of an hotel, its values and beliefs - a relationship that can be extended to attitudes towards food safety. Hotel organisational culture in this context:

- can be found in any fairly stable social unit of any size, as long as it has a reasonable history i.e., that it endures over time;
- is shared by some significant proportion of members and is largely taken for granted by them i.e., it is a common frame of reference;
- is socially learned and transmitted by members and provides them with the rules for organisational behaviour i.e., it is acquired and governs;
- denotes an hotel's uniqueness and contributes to its identity i.e., it supplies a common psychology;
- is manifested in observable behaviour such as language and gesture i.e., it is symbolic;
- is at its core, composed of a pattern of values and assumptions i.e., is typically invisible and determinate;

- is modifiable, but not easily so (Lundberg and Woods, 1981)

Whereas all these meanings, and many others, reflect an hotel organisation's culture, none of them exclusively represents the essence of culture. It can be argued that the term "culture" should be reserved for a deeper level of basic assumptions and beliefs that are shared by members of an hotel firm. They operate unconsciously, and define in a basic *take it for granted fashion* an hotel's view of itself and its environment. These issues can be extended to the subject of food safety from the formulation of policies to their implementation within hotel firms, along with the attitudes and values of individuals towards them.

Hotel organisational cultures are essentially about the control of people's behaviour and beliefs, especially the former. The value of a strong culture lies in the fact that social action is directed by the members themselves. These deeply held assumptions guide and shape what the participant members of a group do, say and think.

European Hotel Convergence or Divergence

Having explored the elements of national and organisational culture, this section of the literature review focuses on exploring the pressures surrounding organisational convergence within the EU, and the degree to which hotels follow this trend on a European-wide basis with respect to food safety.

There have been a number of studies into how national cultural influences affect

organisational structure, and some conclude that individual countries are markedly different from each other, e.g. Payne (1991).

At a time when cultural diversity and the international dimensions of hotel management throughout the EU are of growing significance, there is a need for expanded research into the cross cultural aspects of managerial influence processes, specifically in this case, towards food safety policies. Among the requisite skills and competencies of the EU hotel manager is the ability to exercise influence in culturally mixed interpersonal networks, since the industry is well known for employing a wide range of nationalities. However, while the enactment of influence between superordinate and subordinate is among those aspects of hotel organisations that can be considered relatively durable across cultures, the ways in which power is exercised within such pairs may be more culture specific, as illustrated by some countries outside Europe (Ali, Al-Shakhis and Nataraj, 1991; Woods, 1989).

Central to the topic of convergence/divergence are the considerable number of differences in the functioning of hotels and the behaviour of food and beverage staff in different EU countries. Three questions can be addressed:

1. How important are these differences?
2. Are they fortuitous, or how far do they reflect the national cultural differences in which the organisations operate?
3. Can these differences be systematically related to enduring factors in current societies?

In exploring matters relevant to food safety, what is being considered is a process of

reality construction that allows people to see and understand particular events, actions, objects, utterances or situations in distinctive ways. These patterns of understanding also provide a basis for making individual behaviour sensible and meaningful. Shared meaning, empathy and a sense of creativity are all various ways of describing culture. Equally, an important strength of culture is the contribution that it makes towards comprehending organisational change. Traditionally, the change process has been conceptualised as a problem of evolving technologies, structures, and the abilities and motivations of employees. While this understanding is in part correct, effective change also depends on modification in the images and values that are to guide action. Attitudes and values that provide a recipe for success in one situation can be quite a hindrance in another. Since hotel organisations ultimately reside in the minds of the people involved, effective organisational change with respect to food safety implies cultural change.

Like organisational structure, culture is often viewed as a set of distinct variables, such as beliefs, norms and rituals that somehow form a whole. The argument presented here is that such a view is unduly mechanistic, leading to the idea that culture can be manipulated in an instrumental way. It is this kind of attitude that underlies many perspectives advocating the management of culture. Managers can influence the evolution of culture by being aware of the symbolic consequences of their actions and by attempting to foster desired values, but they can never control culture in the way that many management writers advocate.

In a sense, it can be said that people working in the European hotel industry belong to the same industrial culture. It can thus be argued that it is more useful to talk about the culture of an industrial society rather than of industrial societies. Many of the major

cultural similarities and differences are occupational, (i.e., managers, chefs and waiters), rather than national.

Just as individuals in a culture can have different personalities while sharing so much in common, so it is also with groups and organisations. Organisations are mini-societies that have their own distinctive patterns of culture and sub-culture.

At the international hotel management level, it can be suggested that contributions to theoretical development have emanated from three different and potentially overlapping perspectives: contextual, behavioural and environmental. This consensus is a direction remarkably similar to the three leadership theories of situation, trait and style.

Within the first international management category, one has to consider the danger in assuming cultural specificity, considering such factors as corporate size, location and market complexity to be at least equal to, if not more important than, national culture.

Within the second category, a behavioural approach is adopted which contends that managerial attitudes, values and beliefs are functions of national culture, a view supported by Hofstede's (1980) empirical investigation into employee attitudes within a single giant multinational corporation across 50 countries.

Within the third category, it can be emphasised that constraints upon managerial influence act according to socio-economic, political, legal and technological factors. Managerial practices are thus seen as a function of external forces.

Hotel Organisational Structure and Context

It has already been shown that the field of comparative management has developed to

increase an understanding of world-wide business and has paralleled the internationalisation of the hotel firm. Today, corporate structures are no longer primarily multi-domestic, but truly global or regional in their strategy, structure, markets and resource bases. Cross-cultural management research has attempted to inform people working in organisations whose employees and clients span more than one culture. It studies the management and behaviour of persons interacting within and between organisations around the world. In so doing, it describes and compares organisational behaviour across cultures and, perhaps most importantly for managers, seeks to understand and improve the effectiveness of people interacting with colleagues from different cultures. Cross-cultural management thus expands domestic management knowledge and practices to encompass international, regional, global and multi-cultural fields (Golembiewski, 1991).

Distinctions can be drawn here between macro-and micro-variables. For instance, organisations in different macro-cultures can have similar characteristics on account of being at the same phase of development and having similar histories. Likewise, organisations in very similar macro-cultures may have different micro-issues, due to demographic effects, socio-economic differences and so on, which can be affected by cultural determinants (Golembiewski, 1991).

Hotel Cultural Integration

Having explored the meaning of hotel organisational culture, it is important to integrate this topic nationally, at levels that link them to food safety issues. The importance in taking this approach is to investigate if there is a relationship with the knowledge,

attitudes and beliefs of people, organisations and nationalities with respect to food safety.

Consideration of a national culture reveals similarities and differences between countries, and may have implications for the development and implementation of food safety within the EU (Tannenbaum,1980). While it is often dangerous to stereotype nations, two extreme cases can nevertheless be identified:

- A culture where uncertainty in food safety matters is managed by attempting to reduce such ambiguity, where hotels are seen as having control and being proactive, and where the hierarchy, the individual and work tasks are stressed.
- The adaptive model of management is more likely to be found in cultures where uncertainty in food safety matters is accepted as given, where the hotel has less control and is reactive, and where the orientation is towards group and social concerns.

These external cultural influences include the values of society within members of the EU. Societies vary in their prevalence or otherwise of complex hotel organisations, and people recruited are likely to have habits, skills and cognitive styles appropriate to the type of hotel (Tannenbaum, 1980). Societies also differ in people's prevailing needs, to the extent that they have direct relevance to their behaviour in organisations, such as the needs for achievement, affiliation, security and self-actualisation. Hence, the motivation of members to belong, to work and to advance in the hotel may be quite dissimilar in different European countries, and the problem of motivating members in terms of food safety may vary from one society to another.

Societies can differ, too, as to norms about social control and the attitude of individuals towards authorities, both within the hotel, as also towards government and law enforcement agencies. Hence, reactions of members to supervision and to the social control mechanisms that are inherent in hotel organisations may be expected to differ within European member states. Furthermore, some of these norms may be expressed as official ideologies, and even as laws, which provide a basis for expecting differences in societies, in the character of hotels and in the nature of the adjustment of members. Such variations insofar as they occur, do not, however, minimise the importance of similarities that are also apparent among all hotel organisations throughout the EU.

Differences between hotel companies and management's endorsement of approaches towards food safety, presumably reflect variations between cultures and prevailing values concerning authority. In addition, differences in attitudes towards government authority and enforcement officers between countries, have led some researchers to conclude that participatory procedures *in food safety* which might be effective in some countries, would be inappropriate and ineffective in others. Participation in food safety is not the only possible feature of an hotel organisation that conflicts with cultural norms in a particular country. All forms of complex hotel organisations entail inconsistencies with prevailing norms and values in societies. Bureaucratic values, for example, that are quite normal and taken for granted in one country, deviate sharply from norms in other societies.

At the individual level, work motivation is generally defined as a series of energising forces that originates from both within and beyond an individual's self. These forces initiate work related behaviour and determine the nature, direction, intensity and the

duration of a person's behaviour. Motivation to work can be understood through two basic types of explanation: content theories and process theories. Content theories are concerned with what energises behaviour, while process theories relate to how behaviour is energised. Maslow (1948) makes a significant contribution to this debate. According to him, higher order needs, such as the need for autonomy or for self-actualisation, are important when lower order needs, such as the need for physical security, are met. If so, psychological support would not be relevant in economically disadvantaged societies, where lower level needs are not fulfilled. Support in such places would have meaning only in terms of actions that contribute directly to the economic and physical well-being of the organisation's members.

In furthering this discussion on motivation, it is important to note that, although cultural economic and political differences exist among European countries, a dominant need is the need to control. In developing an effective strategy on food safety, hotel management should not only study the needs profile, but also investigate how the various culturally biased needs hierarchies interact (Alpander and Carter, 1991).

Research by Haire *et al* (1966) is not entirely consistent with the Maslovian scheme and introduces what Alpander and Carter (1991) refer to as "an interaction of culturally-biased needs hierarchies". For example, managers in the Anglo-American cluster, compared to managers in other clusters, indicate relatively low fulfilment in the higher needs of the Maslow hierarchy. Yet they ascribe relatively little importance to these lower needs. According to Maslow's model, managers should attach moderately high importance to needs that are not fulfilled very well. Only among the Nordic European group do managers attribute scant importance to the needs that they report as highly

fulfilled. With this commentary on clusters of countries with similarities, it could emerge that such clusters exist within the EU, a point highly relevant to this specific research.

In addition to the twin issues of culture and motivation just discussed, a third can be added, namely hierarchy within the hotel firm. Rank and attitude research generally demonstrates that measures of positive adjustment in the work situation increase directly with hierarchical ascent, i.e., chefs vs. food and beverage managers (Maanen and Kunda, 1989). Individuals at higher levels in an organisation feel more satisfied with their job, express greater interest in their work and have more favourable attitudes towards their organisation than do people at lower levels. Attitudes, therefore, towards food safety vary, not by hierarchical ascent within the hotel firm.

Attitudinal Differences within EU Hotels

It has already been shown that when one starts to look specifically at the cross cultural aspects of managerial style, the literature indicates that there are two discernible main themes - convergence and cultural specificity (Johnson, 1991).

The former view is that the managerial style a society adopts is decided in the main by the stage of development that it has reached. In contrast, the latter view asserts that it is the culture of the society itself that is the dominant factor and that management retains its own cultural identity, even as a given society passes through various stages of development.

From experience with diverse cultures, attitudes that are mentioned and vary in priority with each culture are seniority, age, privacy, directness, formality, freedom, time, authority, material possessions and spiritual enlightenment. However, in order for

people from one culture to communicate with and manage people within an hotel environment from other cultural backgrounds, they must first understand how their own values may conflict with the values of another culture.

Without previously understanding other people's values, many workers and managers tend to explain everyone's behaviour according to their own cultural values. Such ethnocentrism can be a significant source of cultural clash.

At an operational level, Stening and Hammer (1992) note that a number of writers have identified that cross-cultural difficulties can inhibit successful overseas managerial performance. Presumably, such performance encompasses policies and procedures concerning food safety, specifically in terms of expatriate managers. One issue that perhaps needs to be explored is the relative importance of the characteristics of the host culture *vis à vis* the cultural background of the expatriate hotel managers themselves. One of the conclusions identified by Stening and Hammer is the specific need for cross-cultural training.

The reason why culture has attracted attention is because researchers have found a relationship between a company's corporate culture and its success. Conversely, culture can also stand in the way of such achievement since people become so attached to the way things have always been done. These issues may additionally be related to hierarchy as people at the upper levels of an hotel organisation generally have more authority and influence over important decisions than those at lower levels. This hierarchical distribution of control represents a further possible explanation for differences in job satisfaction and for favourable attitudes that occur within a company's ranking system

(Tannenbaum, 1980). Social status, or prestige, represents a further correlate of rank that would seem to explain more positive reactions of members at higher levels compared to those at lower levels. The respect and recognition that are accorded to people in prestigious roles undoubtedly contribute to a sense of self-esteem and satisfaction, and therefore to positive adjustment in a work situation. The ranking of occupations according to their social status is remarkably similar in many societies, even though they may differ in terms of their cultural and political systems.

Values, Beliefs and Assumptions

Finally, there are the internal influences on an hotel organisation's culture, which can be related to values, beliefs and assumptions. Whereas values on food safety are easy to identify, since they are usually written down, they also tend to be vague. Beliefs on food safety are more specific, even though they are issues which can become modified through discussion. More importantly, assumptions on food safety are at the real core of an hotel organisation's culture within the food and beverage department. They are the features of organisational life which are taken for granted and which people find difficult to identify and explain.

All hotel organisations have cultures, but most just evolve, unintentionally, inadvertently and, sometimes detrimentally, to all concerned. Many start with the beliefs of the original founders. Some develop strong adversarial counter-cultures within a larger culture. Others become lethargic, sloppy and resistant to new ideas. Corporate culture is pervasive and encompassing. Every move an hotel manager makes communicates and

carries the culture along. Each tells people what really is valued here, who is really believed and what is really expected. If those elements are internalised by the members of the hotel organisation, then that firm's culture has been established (Leavitt and Bahrami, 1988).

In exploring this issue further, Triandis (1982) notes that culture is the human made part of the (hotel) environment. It consists of both objective and subjective norms, and values. Its significance for an hotel organisation's behaviour is that it operates at such a deep level that people are not aware of its influences. Additionally, it results in unexamined patterns of thought which seem so commonplace that most theorists of social behaviour fail to take them into account. As a consequence, many aspects of organisational theory produced in one culture may be inappropriate for others. Equally, policies to do with food safety may be adequate in one culture but inadequate in another. In summary, some 30 dimensions have been suggested by various theorists (Triandis, 1982), as being relevant for description of culture at an organisational level. Yet, making sense of so many distinctions is extremely difficult.

At a fundamental level, organisational culture is also a system that controls the behaviour of its members, specifically here with respect to food safety (Leavitt and Bahrami, 1988). As noted earlier, some writers distinguish between explicit culture, by which they mean the typical and distinctive patterns of behaviour of a people, the typical and distinctive artefacts they produce, and implicit culture, which refers to the total set of cultural beliefs, values, norms and premises which underlie and determine the observed regularities in behaviour that constitute explicit culture.

Others emphasise the point that cultures are marked by shared symbols, rituals and myths (Fineman and Mangham, 1987). The implications of this symbolic approach for organisational change depend almost entirely upon the strength of particular corporate cultures. Hotel companies which have developed strong beliefs, ideologies, symbols, rituals, ceremonies, myths and the like, will be highly resistant to change, a point which can presumably extend to food safety matters as they have evolved significantly in recent years (Deal and Kennedy, 1982; Marshall and McLean, 1985; Pugh, 1985; Schein, 1985).

By successfully socialising people into a desired corporate culture, hotel managers can accomplish two important results (Leavitt and Bahrami, 1988):

- They can establish a base of shared attitudes, beliefs and values throughout the hotel, thereby fostering a sense of unity, common purpose and mutual commitment; and
- They can also create a sense of common fate, a feeling shared by worker and manager alike, that what is good for any individual is good for everyone.

Organisational culture is not a novel concept, but it is a powerful controller of human behaviour. It works largely unconsciously. It teaches employees how to conduct themselves and, in relation to this research, how to behave with respect to food safety.

This discussion has shown that organisational culture can be seen as a system of meanings that accompanies the myriad of behaviours and practices which is recognised as a distinct way of life. Thus, an important quality of this culture is its pervasive character, in so much as it permits comprehension of an infinitely varied range of symbols within a consistent framework. This system of shared meanings is socially

created and sustained.

Diagnosing an hotel organisation's existing culture requires the identification of what are the tangible and intangible manifestations of such a culture. Another approach, towards appreciating an organisation's culture, is to identify the "recipes" it uses regularly. This culture can be regarded as a major explanation of the perpetuation of order within an hotel organisation, especially at times of uncertainty or crisis when radical change may seem imperative.

Through the perspectives offered by systematic theorists, analytical emphasis can be shifted from one which concentrates exclusively on change towards a balance of what might be termed *appropriate change* and *necessary stability*, a situation sometimes referred to as incrementalism. This approach recognises and affirms the importance of the organisation's culture, and sees the management of change as a natural process of growth, one which can be interpreted and short-circuited by attempts to manage it by force.

Relevance to the Study

This study takes as its base the comparison of countries within the EU, focusing specifically on food safety within the hotel industry. However, generalisable conclusions regarding country may not be drawn due to the heterogeneous nature of national culture. In a nutshell, since the unit of analysis in many comparative cultural studies, the nation state, creates theoretical problems for this investigation, a more fruitful avenue may be hotel organisational type. In this sense, attention is moving away from what have

been characterised as macro-variables towards a micro-perspective. The self-evident complexity of the culture variable at both national and firm level, with the additional influence of a variety of stakeholders, serves to emphasise the exploratory nature of this thesis. It is clear that whilst comparative research is an important area for investigation it is not without its methodological problems. Thus, making comparisons will encounter difficulties because of the countless variables involved. Whilst this study is not dismissing the problems identified in the preceding discussion, the way forward would seem to lie in some sort of “variance reducing scheme” directed at the hotel organisational level in which the variables are more easily identified and investigated. In what has been described as a “tale of two cultures” the choice, on the basis of the literature so far, would suggest that the hotel organisation is a more fruitful avenue to pursue in the context of researching attitudes towards food safety within selected countries of the European hotel industry.

Summary

The focus of this chapter has been on three main areas, namely: stakeholder analysis, culture and attitudes. The discussion of this section of the literature review has noted that there may be differences in the legislative approach with regard to food safety legislation and policy in the EU and within member states. These specific differences are investigated further in the following chapters. Initial consideration of this legislative topic suggests that a number of groups are highly influential in the formulation and implementation of such legislation and, as part of a management planning perspective, it is relevant to consider a stakeholder analysis of these groups. Many factors may be at work in defining their relative importance and power, one of which could be a cultural

influence at the national or organisational level. It is the relative importance of these stakeholders *vis à vis* the formulation and implementation of food safety legislation and policy that is still to be explored.

Chapter 3

Consequences of European Foodstuffs Law from the Consumer's Point of View

Background

It was noted in chapter two that on 1 January 1993 the *Single European Internal Market* was established within the European Union (EU). The focus of this and the following chapter is on how the literature views common foodstuffs law within the EU's internal market, the enforcement practices within individual member states and the implications the internal market has had, or will have, for both the consumer and the hotel firm (Freidhof, 1991; Fallows 1988, 1991).

In the ensuing discussion the five following key areas are considered:

1. Current legal environment and enforcement in the EU and individual countries.
2. Food safety in the foodstuffs industry.
3. Supply / distribution.
4. Effects on the hotel industry.
5. Opinions of the consumer.

It is the last point on this list that is the initial focus of attention in this chapter. In identifying the general adopted framework, the specific objectives of this and the following chapter are:

- to investigate the role of the EU foodstuffs law;

- to consider the different food law and enforcement practices in the EU;
- to analyse the law's influence on the foodstuffs industry and supply within the internal market;
- to focus particularly on the law's influence within the hotel industry;
- to identify relevant aspects that affect the consumer; and
- to identify the extent to which the law fulfils its function towards the consumer.

Harmonisation

While the background to both the EU and SEA was discussed in chapter two, the practical basis of the SEA was that moves to harmonise EC standards and practices during the 1960s and 70s had come up against the obstacle of national protectionism, and there was a need for mutual recognition of each other's standards. This situation culminated in the famous *Cassis de Dijon* ruling after a celebrated case in the European Court of Justice in 1979. The case arose when a German firm found that it was prevented from importing *Cassis de Dijon* because it allegedly did not conform to German standards for liqueurs. The court ruled that the Germans could only prevent importation if they could prove that the liquid was harmful to health or contravened tax or consumer protection laws - which it did not. In *Cassis de Dijon*, the Court of Justice took a very pragmatic approach to EC food law and the free movement of goods in general. In essence, the court held that member states should recognise that other member states had already regulated health and safety for food products sold on their markets. Importing member states should not therefore have used differing health and safety standards to prohibit the free movement of those goods into their territories. The

community legislature reacted to the *Cassis doctrine* by adopting a horizontal, rather than a vertical, approach to food law. The legislature reasoned that, with mutual recognition, there was no need for common recipe standards for each product. Rather, it was necessary to set common health and safety standards so that member states and consumers would be confident in mutual recognition. Since then, many exceptions to the *Cassis principle* have been litigated, and the EC Commission has provided its interpretation of some of these cases, including the issue of goods produced and marketed in the same country (Lister, 1992; O'Connor, 1993).

Within this *Cassis Principle*, it was recognised, therefore, that some supranational way was required in which to achieve harmonisation of standards. Hence the need for the SEA (O'Connor, 1993).

Another matter, introduced in chapter two and worthy of further comment here, is qualified majority voting. Each member state is given a number of votes, approximately consonant with its size and importance in the EU. The question of this voting system regarding internal market issues is sensitive as it strikes at the heart of a member state's national veto. However, it only takes two or three of the larger countries in the EU to muster enough votes in order to block a decision.

Another factor within the SEA is what is known as the democratic deficit *vis à vis* the European Parliament's influence on the EU Commission. This situation existed to a great extent prior to the SEA, but was reduced in 1987, a process which has continued to some extent with the ratified Maastricht Treaty.

The entry into force of the Maastricht Treaty on 1 November 1993 increased the powers of the European Parliament in a way which will have important implications for key

pieces of food legislation (Agra Europe, 1993; Jackson, 1990), all of which are part of the progress towards a Single European market (Saunders, 1991).

EEA Food Law

An extension of EU food law can be seen within the European Economic Area (EEA) which brings together the member states of the EU and three from the European Free Trade Association (EFTA). The EEA is an improved free trade area, rather than a customs union. Whereas the EU member states have transferred sovereign powers to the EU, they and the EFTA countries have not yielded those rights to the EEA. Thus, the mechanisms by which the EFTA countries adopt EEA laws differ from those of the EU institutions, and only certain areas of existing EU laws and principles have been adopted (Inglis *et al*, 1994). The bulk of existing EU legislation on food is extended by the EEA agreement to cover the EFTA states. This legislation includes not only specific food legislation, but also certain measures concerning consumer protection. The EU keeps its decision making processes intact and includes the EFTA states only in measures that have an EEA relevance. The EFTA states play a role which is far weaker than their EU counterparts, in that they may only express their own views. Indeed, they cannot actually influence the decisions of EU members regarding the adoption of legislation applicable in the EU, but may only prevent their application by means of suspension of that legislation in the EFTA states. Where they suspend a measure from application in the EEA, the dispute must be subject to arbitration.

With the proposed accession of EFTA member states to the EU, (with the exception of Iceland), the disparities in the representation of the EFTA states in the legislative process should be resolved. Nevertheless, the practicalities of juggling national opt outs,

likely to be attached at their entry, as there have been in the Maastricht treaty, provide the EEA states with a considerable challenge if an enlarged EU is to be workable (Roberts, 1991; 1992).

The Need for Foodstuffs Law

The comments so far serve as a background for discussing the need for foodstuffs law. Such a requirement is best understood by viewing its historical development, closely linked to the evolution of consumer habits and practices.

When looking at the consumer habits of primitive, (hunter and gatherer), societies, a direct link between the foodstuffs supplier and their consumers can be observed. Within these specialisations, (supplier and consumer), a further development within the 18th and 19th centuries was that one group concentrated on arable or pastoral farming, in order to exchange the food products with the intermediate supplier / distributor, and finally to the consumer (Freidhof,1991). It is in this respect that the separation widened between the producer and the consumer, a trend that continues today.

Over time, a market developed which was characterised by the different interests of consumers and suppliers, one that can be set within the context of a price-value relationship. The interest of the suppliers, i.e. high price per provided unit of value, stands in contrast to the consumer's interest, i.e. low price per unit of value. This conflict of interest, it is suggested, could disadvantage consumers, since the price-value relationship may be influenced by suppliers to their benefit. The price for a food product can easily be seen by the consumer; the value unit cannot. Thus, the producer can vary

the value per unit without the consumer's knowledge. It is precisely this conflict that resulted in a demand for foodstuffs legislation.

Historical Development

The historical development of food legislation, is discussed in greater depth in the following chapters but, by way of illustration, it is useful at this point to consider such issues within a UK context.

Before the latter part of the 19th century, there was little national legislation to control the adulteration of food. It was not until 1860 that the Adulteration of Food and Drink Act was passed by the UK Parliament, legislation that was concerned with weight and quantity measures. The Act made it illegal to sell food that was not of the nature, substance or quality demanded by the consumer (Roberts, 1993a, 1993b), as for instance, the problem of dilution could arise, e.g., the addition of water to wine (Jukes,1991). In the latter case, the transparency of the price - value relationship would be revealed, by determining the quality and quantity of the value unit, with the objective of such an approach being to guarantee the consumer standardisation and consistency. Statutory control originally focused on bread and other basic products i.e., consumer protection (Act, 1860; Act, 1872; Act, 1938). During the 20th century further refinements have seen food law initiatives considered under the subheadings of either *Food Safety* or *Consumer Protection*. This distinction focuses on two elements, namely: the protection of the health of the consumer and the prevention of fraud. It was only with the Food and Drugs Act 1938 that these twin themes were consolidated and further developed after World War II (Act, 1955; Act, 1956; Act, 1984). Such an approach has continued today in the UK with the Food Safety Act 1990 (Act, 1990a; MAFF, 1976).

The argument so far has been that, in the Middle Ages, a foodstuff was relatively easy to identify, and hence its quality easy to estimate, since it was usually in its original form (Jukes,1991). In the 20th century, food processing of agricultural raw products has created new problems. Given that the products undergo a variety of technical changes before they finally reach the consumer, the real composition of the value unit cannot be clearly identified. It is within this resulting uncertainty that the buyer can be misled by the producer. Consequently, such a source of uncertainty has to be eliminated by the legislative authorities.

These changes of processing methods in agriculture represent a further risk for consumers. Since they must not be neglected, legislation becomes necessary.

Taking into account all these reasons, foodstuffs law has been built up over a time, on a country by country basis, and is of interest to producer, retailer and consumer. Such legislation imposes duties, that can be summarised under the four following aspects, namely:

1. Protection of consumer health,
2. Protection from deception and fraud,
3. Producer protection, and
4. Integrity of trade.

The central focus of foodstuffs law is to guarantee the health of the consumer. Additionally, however, a very important function has been the standardisation and definition of foodstuffs, their production, distribution and sale - particularly at the European level. Only products that comply with these requirements should enter the

market and, in so doing, a level playing field is established. This situation ensures a transparency of the price-value relationship for all the products on the market, (particularly important with the Single Market), and protects the consumer from deception and fraud. At the same time, foodstuffs law provides the producer with the integrity to trade, and hence engenders consumer confidence.

This historical development of food legislation throughout the EU, and within member states, can today be captured within seven categories (Jukes, 1993). These categories have been classified by this writer, as shown in table 3.1:

Table 3.1 Categorisation of EU Food Legislation

Food Hygiene	Consumer Protection	Common Processes for Control
Hygiene, health and microbiology	Compositional standards	Primary legislation
	Additives	Regulations / statutory instruments
	Contaminants	Enforcement structure
	Processing and packaging	EU legislative dimension
	Labelling	
	Weights and measures	

The differences and similarities in these categories are considered in this and subsequent chapters, both on an EU basis and within individual member states.

Foodstuffs Law in the Internal Market and its Implications

Purpose

The purpose of internal market foodstuffs law is that it attempts to unify foodstuff producers, food service firms and up to 340 million consumers in one market. It is in

this respect that the EU Commission seeks to ensure that economic resources are used where they are of greatest need, (optimal resource allocation). This situation was not possible before 1992 because of the separation of the market from the consumer, a dislocation that created the burden of additional cost. According to research by the Commission, these expenses of the *Non-EU* amounted to 500-1000 million ECU for the European food industry (Cecchini,1989). The report showed that the removal of trade barriers within the single market would intensify competition, extend trade and cause a structural adaptation at all levels of production and commercialisation. The consumer would benefit from comparable prices and products at the same quality levels. Intensified competition would oblige firms to produce at a lower cost, and the consumer would enjoy both lower prices and a greater variety in supply (Cecchini, 1989).

This report has been criticised as it is only based on figures from the seven highly industrialised northern EU-countries. It should therefore be regarded with caution. Arguably, the report is biased in a way which suits EC officials who, understandably, wish the single market plan to succeed.

Costs and Benefits; Single Internal Market

On the positive side, the Cecchini report does give an indication of some of the benefits to be gained from a single internal market. Costs, it is suggested, will be saved through the creation of an internal market with the following effects:

1. The direct savings effect

- diminishing the additional costs of export through the elimination of physical barriers, i.e., no bureaucratic procedures at borders, no waiting time at frontiers, reduced transport costs.
- reducing the extra costs of transforming production to comply with the regulations of production in the import country. This situation especially relates to national vertical regulations which deal with production methods, raw materials, labelling, packaging, etc.
- the possibility of using cheap raw materials: less rigid regulations of other member states are expected to be applied on the national level of each country.

2. Indirect savings effect

- with increasing competition between businesses, it will be in the interest of firms to minimise production costs.
- competition will eliminate inefficient businesses, which will then be absorbed by more efficient businesses. This savings effect may lead to a reduction in price.

So far, only cost savings have been analysed. To make a judgement on the economic use of the internal market, one issue that needs to be examined is: if the single internal market imposes additional costs, which of these costs will outweigh the savings effect just identified? New costs can arise if, for example, national regulations require additional labelling of goods. Moreover, further costs will arise because firms will require an efficient marketing strategy in order to survive in the emergent fierce competition. It also can be suggested that the quality, and not the quantity, of the

marketing is of importance, and therefore additional costs may arise, all of which may have price implications for the consumer.

Costs and Benefits for the Hotel Industry

This approach to analysing costs and benefits in the single market can also be applied to the hotel industry. A resulting savings effect may arise due to less rigid raw food material regulations, with the consumer basically receiving lower quality but benefiting from low prices. Adding to this debate, it is often suggested that consumers ask for high quality food products, so that in a free market, only producers of high quality goods can survive. This push / pull tendency between price and quality may be an appropriate explanation in times of economic expansion, but might change during a period of recession. In the latter case, the consumer will be price sensitive and will usually tolerate a decrease in quality. It can therefore be questioned whether foodstuffs law should be allowed to endure such fluctuations in the price/quality relationship, and whether it should always set the lowest common denominator in terms of standards (Freidhof,1991).

In order to achieve integrity of trade within the food industry, there will need to be transparency in the price - value relationship. In ensuring this balance, all products of a similar kind have to be issued to the market under the same legislative benchmarks so that their transparency will be evident to the consumer. It is this specific line of argument that is central to the development of EU food legislation.

EU Foodstuffs Legislative Framework

While a more detailed discussion of EU legislation occurs later in this chapter, at this stage it should be pointed out that the EU-Commission classifies its foodstuffs law into two main categories:

1. Horizontal directives.
2. Vertical directives.

All EU Directives have to be translated into national law before they can become effective, (the usual timetable being 30 months from adoption).

Horizontal Directives

The horizontal directives deal with aspects that concern all foodstuffs and industry sectors. It is the EU Council of Ministers that ratifies directives, a requirement which is conducive to a harmonisation of all national foodstuffs legislation. This stipulation provides regulations concerning all questions regarding health and consumer protection. They refer specifically to additives, hygiene, labelling and nutritional information, etc. The issue of food labelling and the caterer is considered in greater detail by other writers (Clarke, 1993; Morris, 1991; CECG, 1987).

Vertical Directives

Adoption of vertical directives takes a product specific approach, i.e., meat, meat products, milk, milk products and fish. In the case of the principle of mutual acknowledgement, each country of the EU has the obligation, following the *Cassis de Dijon* judgement, to allow sale of an imported product if it has been legally produced

and issued in another member state (Anonymous, 1990). On the other hand, with domestic production, the national foodstuffs law is fully applied. An example of this approach can be seen in Germany's beer legislation, where that country's beer has to conform to strict purity criteria, whereas beers imported into Germany do not (Anonymous, 1990).

Development of Community Law

If imported goods do not comply with product specific regulations, there is a danger of confusion, a situation that can, to some extent, be eliminated by using adequate labelling. It may be seen from this last point that there is a strong relationship between the consumer and the foodstuffs industry. As for the marketing oriented business, knowledge of the needs, wants and characteristics of the consumer is vital to ensure that the four elements of the marketing mix, (Product, Price, Promotion, Place) can be effectively applied. For the consumer it is essential to know what effects the common foodstuffs laws have on the market and its products, since demand is directly influenced by both supply and the legislative framework.

The initial approach of the Commission to food law was based on the concept that a national law needed a Community law in order to ensure the free circulation of goods. For many years, Community food legislation pursued the path dictated by this approach, using article 100 of the EEC Treaty which called for unanimity. However, the unanimity rule was not the main obstacle to progress. Although food law in member states had common objectives, the approach and structure were rooted historically in the culinary traditions of member states. The diversity of climate and agriculture in the EC meant that the nutritional needs of the different populations were met in a number of ways and,

even in areas having access to the same raw materials, methods of preparation of food varied widely. As labelling was only in its infancy, the interests of consumers and also producers were served by using a food name to inform the consumer by way of specification or recipe. It was inevitable that the ideas of *good beer*, *good sausages* and *good bread*, should conflict, in a “society” as diverse as the Community. Early attempts to legislate were focused on the harmonisation of product specifications. They met with little success since they were perceived as a direct assault by bureaucrats on long hallowed traditions. It took some time to understand that the root of the problem lay in the realisation that, if recipes were embodied in law, then the point of attack should be on the law not on the food.

In the Communication of 8 November 1985 (EC Commission, 1985a), the Commission stated that the legislative approach followed in the past needed to be revised by drawing a distinction. On the one hand there were matters which, by their very nature, should continue to be the subject of legislation. On the other, were those items whose characteristics were such that they did not need to be regulated. The communication went on to state that it was neither possible nor desirable to confine in a legislative straitjacket the culinary riches of the (*twelve*) European countries. The Communication from the EC Commission (1985a) argued that it was not a case of applying minimum rules, but of applying the necessary rules more strictly. This division of responsibilities between the Community and the member states contained within the 1985 communication was a direct application of the principle of subsidiarity to food law making. In pursuit of this policy, the Commission proposed a number of framework directives dealing with the essential requirements (Gray, 1993).

Consumer Protection

The protection of consumers from fraud and deception is ensured when there is no danger that the consumer will confuse two food products because of their similarity, e.g., in packaging and labelling, processes that essentially focus on the origin of food products (Anonymous, 1992e; Painter, 1991; MAFF, 1993a). One approach through EU foodstuffs law to avoid the danger of confusion is the use of adequate labelling, a point addressed in its original directive on the Labelling, Presentation and Advertising of Foodstuffs 1979, as amended. It has to be questioned, however, if this solution is adequate and applicable in order to attain its objectives.

If confusion arises, it is surely because the consumer is either unable or unwilling to identify differences between two similar products. The latter case would result in an attitude which would cause difficulty for the market, partially resolvable, perhaps, through education. Reasons for the former situation might be lack of understanding or perceptual difficulties. Whereas the labelling of additives using E-numbers on food products might be understood by a foodstuffs technologist, it is far less likely to be comprehended by a consumer who, in most cases, does not appreciate or understand their significance, the actual number and often their full names. This situation is problematic for the consumer to make an objective choice, a state-of-affairs that blurs the boundaries between fraud / deception and knowledge / education. The initial thought that adequate information will suffice to eliminate the danger of confusion is put in serious jeopardy when consumer behaviour is taken into account. The decision to buy is made quickly and allows little room to assimilate information, to analyse it and act accordingly. The decision process is also hindered by difficulties that might arise when

confronted with labelling in a language other than the mother tongue, a problem of particular importance in the single market.

In conclusion it can be said that the intention of the EU-Commission to eliminate deception and fraud of the consumer regarding food is to be commended. However, in reality, the principles for tackling the situation are inadequate (LACOTS, 1991a; 1991b).

Food Safety

The protection of the health of the consumer through food safety measures is ensured through both horizontal and vertical directives adopted by the EU Council, an example being the Official Control of Foodstuffs Directive (Anderson, 1991). This aspect of food safety legislation will be expanded further in this chapter, with a link being established to the hotel industry.

Additionally, the Council is advised by an independent Scientific Foodstuffs Committee (CECG, 1991b) and, in this way, bias can be avoided. For instance, a particular piece of foodstuffs legislation supporting national economic interests may not have much in common with health protection, e.g. the regulation that only milk fat should be the fat component of ice cream to support the German milk industry. Hence, a committee that takes into consideration scientific research as a basis for its judgement, is an ideal partner for the development of health protection in the internal market.

Each legislative act is only as good as its control, and it can be said that with common foodstuffs law all products in the internal market will have the same level of health protection. It is then up to consumers to choose what products they wish to buy. Being

an internal market issue, it is solely the task of the EU authorities to ensure that the health of consumers will be protected irrespective of their decisions (CECG, 1991c).

Applicability to the Hotel Industry

The trend in traditional purchases from a food retailer, while still important, has to be balanced in foodstuffs law by the fact that more and more meals are taken away from home. In terms of the protection of health, theoretically no difficulties should arise, since naturally all products have to comply with the food safety directives of the EU. Problems concerning deception, fraud and food safety, however, may occur through enforcement and control within individual member states (Eckert,1991). Another example, within Germany is the issue of whether consumers are made aware that the beer they are drinking in a restaurant has been brewed according to that country's brewing regulations (*Reinheitsgebot*) or has been imported from other member states.

The Commission has noted within its *free trade of foodstuffs in the community principle* that the issue of adequate labelling can also be applied to restaurants. The information can, for example, be conveyed through labelling items on a menu. One criticism is that this system is not feasible in reality, for reasons of menu space and the complexity of the catering product, points that have been taken into consideration by the UK Government (Anonymous, 1992a). Equally this approach could lead to information overload and thus irritate the consumer. Conversely, it should be noted that a lack of information often occurs where, due to a restricted budget, ingredients of inferior quality are being used and in such a situation consumers may be willing to trade quality for price.

EU consumers in 1998 are faced with situations of uncertainty, and while they have opportunities to find guidance in foodstuffs laws of the internal market, realistically they cannot be expected to do this. It is more likely that they will prefer domestic products and known brands. National producers and catering retailers will benefit from the realisation that a domestic product will usually be preferred to an unknown foreign product, because consumers know what they can expect (sometimes referred to as the halo effect). International producers and retailers will have to intensify their brand policy to compensate for the preference to buy a national product.

Foreign producers will only survive in international markets with an effective usage of the marketing mix and, in particular, their communications policy. This point is particularly pertinent whenever a wide range of products is launched into the market under the same name which used to be reserved for a specific item, for example, cheese from a region other than the area indicated in the name. The political and legal enforcement authorities will have an important new role in ensuring that the consumer is fully informed, not only as to the geographical origin of foodstuffs on the market, but about their composition as well.

Besides the labelling and compositional issues just discussed, 1993 / 1994 saw the EU Commission starting to apply EU-wide directives to the subject of food safety.

Food Safety in the European Union

Developments in European food legislation affecting the hotel industry during the 1990's have been determined mostly by the requirements of the Single European Act 1987 (EC Commission, 1986).

While EU legislation provides the broad framework in which member countries must operate, for a number of reasons, different inspection systems for food safety have been in operation in member states. An inspection system tends to be determined by the overall organisational structure of the relevant enforcement authorities and, to this extent, the UK seems to differ considerably from its European partners, a point explored in the following chapters. Issues, such as size of inspectorate, number of inspections and effectiveness all seem to vary and impinge on the enforcement process, (a high profile issue being the meat enforcement controls on BSE). The question of sanctions against breaches of food legislation and how they are applied can be related back to measuring the effectiveness of the inspectorate. Perhaps one such effectiveness measure would be the number of reported food poisoning outbreaks, an issue which would raise doubts as to how such statistics are gathered and categorised. These and other areas will be explored, along with a study of both food legislation and enforcement within a number of the EU's member states, in chapters four and six of this presentation. The focus of this chapter, by contrast, is on the broader EU picture.

Consumerist Approach

With the implementation of the internal market (1 January 1993), national foodstuff laws are now subject to EU wide regulation. The first steps in the direction of this essentially consumerist policy took place in 1973, with the establishment of an EU department for environmental and consumer protection. This department was later transformed into the Consulting Consumer Council (CCC) with the mandate to represent the consumer's

interests at the EU (Anonymous, 1990). Its first programme was submitted in 1975, and the need to promote five issues was identified:

- the right to protection of health and security,
- the right to protection of economic interests,
- the right to compensation,
- the right to instruction and enlightenment, and
- the right to representation.

This programme was continued in 1981, 1983 and 1984. The positive consequences of this consumer oriented policy clearly find expression in a number of guidelines, e.g. in aspects of food, cosmetics, medicine, advertising and product liability. Many of these guidelines have already been incorporated into national law. In 1979 and in the 1980's, for example, the duty of labelling food was introduced. However, it has to be pointed out that the evolution of consumer oriented policies, as identified in the 2nd Consumer Programme of 1981, progressed very slowly.

The possibilities for consumer associations to advance consumer oriented policies at a European level are limited. Since 1973, the existing Consumer Consulting Council (CCC) has had the task of providing statements on EU-draft directives. It can also issue statements on its own initiative. Since late 1989, this Council was given a new statute, which brought about its renaming as the Consumer Consultative Council (Conseil Consultatif des Consommateurs). It is composed of 39 members appointed by the EU Commission. There are 6 experts and 4 representatives from each of the four major consumer organisations, the BEUC (European Consumer Association), COFACE (EU

Committee of Family Association), Euro Co op (European Co-operation of Consumer Associations) and the EGB (European Union Association). Additionally, there are 17 representatives of national consumer organisations, i.e. two from Germany, Spain, France, Italy, Great Britain, and one from Belgium, Denmark, Greece, Luxembourg, Ireland, the Netherlands and Portugal.

Development of EU Food Legislation

In the context of food safety, the harmonisation process has taken two directions, namely: horizontal measures across a wide range of foods and industry sectors, and vertical measures applying to specific food categories (Fallows,1991). Within the European Community, the mid 1980s saw the establishment of five framework directives (Saunders,1991), which were introduced on a range of food matters (EC Commission, 1985a). These directives included the following three main ones of relevance to the hotel industry:

1. Official Control of Foodstuffs Directive (EC Commission, 1989a),
2. Materials in Contact with Food Directive (EC Commission, 1989b), and
3. Food Labelling Directive (EC Commission, 1979),

thus establishing general principles and controls.

While the issue of labelling has already been discussed, it is important to set the topic within an overall EU framework. Since 1985, work has progressed on some of the *daughter directives* under this approach. Such directives have generally taken a vertical, or product specific approach, and have governed such areas as: game meat (EC Commission, 1991a), fresh meat (EC Commission, 1991c), poultry (EC Commission,

1971a), meat products (EC Commission, 1977), fish (EC Commission, 1991d), milk (EC Commission, 1971b), along with many others, and have been, or are gradually being, adopted by the European Union (EC Commission, 1962; 1977; 1991b). What these directives are essentially doing is introducing rules into the marketplace, rules that are supplemented by decisions in the European Court (Roberts,1991).

Another key issue identified within these directives is seen in Article 13 of the Official Control of Foodstuffs (Anderson,1991). This article focuses on the system of education for food control officers, and identifies the requirement to define the number of officers and their competence. Also in need of consideration is equivalence of enforcement and the training needs of officials. This matter has already been addressed in the UK. With all such EC directives, legislation is required at the national level in order to bring them into force in each member state.

In addition to the five main framework directives established in the 1980s, a range of food measures was identified as having priorities towards the end of the 1980's. These measures are being introduced gradually, and cover such subjects as labelling (EC Commission, 1990a), additives (EC Commission, 1989c), food hygiene (EC Commission, 1991b;1993a) and food quality (EC Commission, 1993b). Indeed, with such an interest in food matters, it is perhaps only a matter of time, or even inevitable, that a community food inspectorate will be created (Painter, 1991).

EU Food Hygiene Legislation and the Hotel Industry

One significant directive that has implications for the hotel industry is the Directive on the Hygiene of Foodstuffs. Adopted in June 1993 by the EU, member states had 30 months in which to introduce its requirements into national legislation.

Directive on the Hygiene of Foodstuffs

This directive was originally published in draft form in January 1992, and debated with the EU for over a year. It was finally adopted and published in the EU Official Journal in June 1993 (EC Commission, 1993a). Directorate General III, is responsible for this internal market and issued this horizontal directive under article 100A of the Treaty of Rome. It was therefore subject to qualified majority voting. The nature of this horizontal directive is that it is wide ranging in content, and covers *all* sectors of the food industry. The final stages of this draft directive's legislative process, i. e., its second reading in the EU Parliament, took place in April 1993. It was adopted two months later.

Content

This Food Hygiene directive has had wide ranging implications for the hotel industry. The often used sector by sector approach, covered by vertical directives, focusing on some foods or stages in the food chain, has created inconsistencies. This directive applies to all food products from the farm gate to the consumer. In taking this horizontal approach, reference is made to the principles of Hazard Analysis Critical Control Point (HACCP). Such principles recognise that what is applicable to manufacturing and cook - chill methods and products, needs modification for smaller catering outlets. It is Article 3 of this directive that requires all stages of production to be carried out hygienically,

with hazard assessment and control procedures being implemented by food business operators to ensure that adequate food safety is obtained (Fogden, 1995a;1995b). The control procedures must be developed and applied in accordance with the principles used to develop the HACCP system, although that system is not required to be employed, nor will such a formal approach be appropriate or necessary to ensure hygiene in most food businesses. A related issue to HACCP is the importance of EN 29000, the European equivalent of the ISO 9000 series. Most of the European food industry has not chosen such a system, and its influence in the hotel industry is minimal (Gorny,1992). This lack of enthusiasm is evident despite the fact that the directive allows member states to recommend its use.

Article 3 (3) requires specific annexed positions to be met and implements a very broad protection, following a precedent found to work effectively in British legislation, using words to the effect that “actions should be taken against any contamination likely to render the food unfit for human consumption, injurious to health or contaminated in such a way that it would be unreasonable to expect it to be consumed in that state” (EC Commission, 1993a). Chapter IX of the annex continues this theme by requiring *appropriate* temperature controls to be implemented to guard against microbiological hazards and the formation of toxins. Fogden (1995b) comments that pragmatic but safe regulatory provisions are generally more welcome than a rigid approach. However, the problem is that they may not be easy to enforce.

Implications

Another area of interest within the directive is the requirement that member states encourage the development of *Guides to Good Hygiene Practice* that may be used

voluntarily by food businesses as a guide to compliance. This requirement could, (the directive recognises), be the precursor for developing European-wide Codes if agreement is reached and co-ordinated by the European standards making body - Community European Normalisation (CEN). What the directive in actuality is proposing is a hierarchy of codes at national and European levels within the general framework of the codex document *General Principles of Food Hygiene* (Codex, 1985). Such codes could, by default, effectively become law, as they will probably be regarded by enforcement authorities as acceptable and routine ways of achieving food hygiene standards.

Apart from a reference to food hygiene training within the directive's annex, the directive also prompts an interesting question about Europe - wide temperature control regulations. While the horizontal directive does not specify temperatures, the vertical directives, (already referred to), are often quite specific on this issue. These inconsistencies between the vertical and horizontal approach to EU legislation, along with differences throughout the EU and pressures from the Food Industry, led to a review of temperature controls (DOH, 1993 c; d; e; f). The UK and the Netherlands have chosen to go it alone in introducing new temperature regulations. It remains to be seen whether these regulations will be superseded at the EU level.

Food businesses are put under varying obligations in each of the directives just discussed. They are intended to give assurances that the foods they produce are processed hygienically and in accordance with the provisions made in the relevant legislation, with sufficient monitoring being undertaken to assure this conformity. These provisions may be part of, or accompany, critical control point systems. In these and

other directives, operators are placed under duties generally or specifically, or as an explicit or implied condition of approval of the premises and activities therein. The ultimate responsibility for the safety aspects of food under their control always lies with operators, not with the competent authority that monitors and permits those activities. The authority's responsibility resides in directly ensuring that public health is not put at risk, and only in directly in the practical aspects of the control measures effected in individual premises to achieve this outcome. However, this distinction is subtle and there is a very large overlap of interest.

Common Food Law: Problems and Issues

The food industry is one of the few sectors that directly affects all citizens of the Union, and the risk is that directives adopted through qualified majority voting may be adjusted to the lowest common denominator. Consequently, the quality and safety of food will be affected.

It can also be observed that the transformation of EU directives into national legislation is accorded different priority levels within each member state. While the nature of the Union is that common interests have to be taken into consideration, unnecessary directives have to be omitted and necessary directives have to be improved. The central questions in this point are whether or not a directive is necessary for a particular country, and whether or not the concept of subsidiarity applies. When assessing the success of EU food policy, the legislator needs to think in terms of *positive* or *negative* harmonisation. Negative harmonisation occurs if European changes cause a significant

disadvantage or decline in existing standards. Examples of positive harmonisation are highlighted below.

Positive Harmonisation: Additives

One area of common food law regarded as positive harmonisation, which also has implications for the protection of health, is the topic of additives. When processing food, a variety of additives is used, and four reasons can be identified:

- to protect the nutritional value of food,
- to improve the consistency of food,
- to guarantee the safety of food, i.e., to prevent the growth of micro-organisms, and
- to improve the flavour, colour and taste of food.

In this respect, food additives serve both the consumer's and the producer's interest. The life of food can be extended, and therefore the production costs of food can be minimised. Additionally, the consumer can profit from a lower price and the longer durability of food. However, an absolute guarantee that food additives, in combination with other ingredients, are harmless cannot be given. This topic requires an intensive control of the regulations dealing with the application and admission of such additives into the food chain. Directives have already been adopted that control the quantity, labelling and purpose of the additives. It is, however, possible that certain additives that are not permitted in, for instance, Germany, may be imported. Therefore, an EU Directive passed in 1988 directs the use of additives for the internal market. Additives will only be admitted if:

- their use does not affect health,

- a technological need can be proved,
- the objective aimed at cannot be reached without the use of certain additives, and
- the information provided to the consumer has to be scientifically confirmed.

Additionally, maximum quantities, scope of application and purity criteria are regulated within the EU. The harmonisation of the directive on additives is seen necessary to guarantee a free trade of food. Products that do not comply with one country's regulation may comply with that of another. They can therefore be imported, as long as a danger to health cannot be proved.

Positive Harmonisation: The Role of Labelling

The issues just discussed concerning additives play an important role in the protection of the customer and any solution should not be to find a compromise at the lowest level, but to act in the interest of the consumer's health.

Concerning the internal market, clear labelling will minimise deception of the consumer and, at the same time, achieve competition based on quality and consumer protection. Only with clear labelling of all products has the consumer the opportunity to choose the right product. To achieve an objective comparison, the consumer has to be informed of all ingredients, their composition and quantity. This information applies to national products as well as to imported goods. It is also essential to be informed about the country of origin. The naming of the packager is not sufficient.

However, and even though the over-informed consumer is often irritated by a surfeit of information, only a clearly regulated labelling policy can assist in achieving maximum consumer protection.

Food labelling has also become a central task for the internal market. The aim in this respect is to allow the consumer to identify all supplied products, to make an appropriate choice and to use the products satisfactorily.

To tackle one of the main causes of death, heart disease, within the Union, distinctive labelling of some components, such as energy, fat, sugar and salt is required on all foods. The European guidelines, established in 1990, provide for only voluntary labelling in a standard mandatory format in case a nutritional claim is made. If a product has nutrient characteristics, such as energy, fat, proteins or, low sodium, the labelling in most cases must be presented in the required format.

Future Trends in Harmonisation

A clear distinction can be drawn between two principal types of legislated controls on the hygienic production of food. Traditionally, but only for the production of foodstuffs of animal origin, prescriptive requirements have been laid down in considerable detail to ensure that all stages are closely regulated. This listing resulted in a wealth of provisions that were not always appropriate, or necessary, in particular establishments and, to this extent, can be considered as being disproportionate or over-regulatory. Steps should be taken to eliminate such excesses, where practicable. More recently, it has become acceptable to rely on the operators of businesses, approved and monitored appropriately by the competent authority, and to provide adequate hygiene controls within a framework of varying complexity, often based on critical control points. Almost inevitably at this early stage in the development of this type of control system, member states have felt obliged to supplement its sophisticated elements with a limited number of basic obligations. Thus, limited, detailed rules are to be found connected to provisions

based on generalities, routine monitoring is associated with irregular auditing, and flexibility is surrounded by historic rigidity. The next generation, it is hoped, will be able to rely on a greater degree of audited self-regulation and less on specific fundamental discipline. As developments continue, the opportunity must be taken at each phase to challenge every rule, and to eliminate provisions that can be safely left to be applied flexibly by responsible businesses, while ensuring that the process can be monitored and controlled by the competent authority.

Within this context, it is suggested that, while there is a useful trend towards adopting risk assessment and monitoring controls based on critical control point techniques, uniformity could be improved. A reference in individual directives to common provisions would achieve this goal. Also, ensuring safety in production leads naturally to the next stage - controls on finished products (Fogden, 1995b).

Many of the hygiene controls on finished products are similar in principle, suggesting that common basic legislative provisions should be achievable, although there are certainly differences in detail and presentation. In general, foodstuffs are required to be handled, stored and transported hygienically, and with due attention to the maintenance of temperature and time controls. Some of the latter are introduced definitively into the legislation, while others are to be established by the person responsible (manager) for the food and / or the manufacturer. In some cases, restrictions are applied to the means by which such temperatures must be achieved, but generally cooling must be performed as quickly as is reasonably practicable. The diversity of the temperature maxima indicates, no doubt, that the hygiene circumstances resulting from the potential for microbial activity vary significantly between food types. Perhaps more correctly, such

diversity suggests that measures have been introduced in this way for reasons other than technical need. It would be an exaggeration to imply that these maxima have been adopted arbitrarily, but certainly several of them would be difficult to justify in the context of a logical hygiene policy based on scientific evidence. The relationship of these maxima to time controls is not clear sometimes, and these factors should ordinarily be considered together. It may also be questioned whether it would not be more appropriate in some, if not all cases, to apply more flexible risk based systems. As has already been noted, the latest legislation has an overall tendency to introduce requirements leading to the introduction and implementation of appropriate risk assessment and control procedures. These criteria are generally intended to be developed taking the principles of the HACCP system into consideration, although this stipulation does not always include the documentation procedures of that system. This observation applies most notably in the case of the general hygiene directive, where it can be argued most strongly that a legislated necessity for the application of rigid and formal risk assessment procedures would be disproportionate to the desired outcome.

Vertical vs Horizontal?

In summary, numerous differences are to be found with complex circumstances existing sometimes at the interfaces between provisions in the vertical directives and those in the horizontal rules. However, in general, the principles that are applied are shared; it is the precise legislative form or the practical detail that varies.

With the completion of the internal market, the protection and the health of the consumer should have the highest priority, with all other achievements subordinated to

this principle. In order to achieve this aim, consumer representatives have to uphold the following issues:

- clear and distinctive labelling of food,
- sufficient identification of products with non-corresponding ingredients from other member states and naming of the country of origin,
- EU-unified quality assurance of basic food supplies and processed foods,
- encouragement of an environmental-friendly production and processing of food,
- better organisation, standardisation, intensification of national and Europe-wide food supervision,
- guaranteed product security by the manufacturers of food, and
- introduction of EU-wide maximum quantity of contaminants.

The protection of the health of consumers is already provided by various EU directives, but clearly these regulations can only be deemed successful if they are followed. Hormones found in meat, or deteriorated ingredients in convenience food, can only be investigated with an effective supervision of food. However, variations in laboratory testing methods, different educational systems and language problems complicate this Europe-wide co-operation. Furthermore, the legal action of the public authorities differs significantly throughout member states. This state-of-affairs has also been recognised by the EU. The purpose of directives emanating from Brussels is to establish corresponding regulations for all member states. Random tests will need to be carried out by all member states at all levels, i.e. from the producer to the consumer, and should cover

raw materials, additives and technical resources, as well as internal reports of the businesses, recipes, and hygiene training of staff.

The opening of the trade barriers in 1993 leaves many consumers uncertain about food and essential commodities that have been imported without the necessary national control. The consumer has to rely on the controls of the producing country, and therefore a reliable basis between the member states has to be developed. This interest has occurred at the same time as intensified publicity in the field of food supervision. Food supervision reports have to be published by the authorities responsible for these controls. Additionally, the EU Commission and the governments of all member states will need to bring their food supervision up to a EU-wide level. This requirement implies that the staff dealing with these controls should have the same level of education, standardised analysing methods and regulations dealing with best laboratory practice.

An effective food supervision programme is an essential requirement for a future internal market with all its implications regarding an enlarged supply of food products.

Summary

The initial approach of the EU Commission to food law was based on the concept that a national law needed a community law to ensure the free circulation of goods. For many years, community food legislation pursued a path dictated by this approach, using article 100 of the EEC Treaty which called for unanimity. However, the unanimity rule was not the main obstacle to progress. Although food law in member states had common objectives, its approach and structure were rooted historically in the culinary and cultural traditions of member states. The diversity of climate and agriculture in the EC

meant that the nutritional needs of a given population were met in a variety of ways and, even in areas having access to the same raw materials, methods of preparation of food varied widely. As labelling was only in its infancy, the interests of consumers and also producers were served by using a food name or denomination based on these traditions. This method both informed the consumer and legally reserved the name for a particular specification or recipe. While early attempts to legislate were focused on the harmonisation of product specifications, they met with little success. It took some time to understand that the root of the problem lay in the fact that, if recipes were embodied in law, the point of attack should be on the law not on the food.

It was for this reason that there was a shift away from product-specific directives towards general horizontal directives, an example being the EU Directive on the Hygiene of Foodstuffs 1993.

The problems of consistent enforcement of this directive are ongoing throughout the EU, and can be related to the structure of the national authorities - matters that are considered in greater detail in chapters four five and six.

These are the differences in enforcement that make it difficult to introduce EU directives into national legislation. It could be argued that there is a need for a transparent and simpler EU food policy with a preference for horizontal legislation and only limited vertical legislation. Accordingly, it is argued that deregulation and subsidiarity should be the leading principles, in such a way that the EU regulates the main issues clearly and with one voice, and that member states are responsible for the application and more detailed provisions. Another aspect is the use of instruments, regulations and directives. One view is that regulations should be considered more often, firstly, because a

regulation does not need to be transposed into national law, and secondly, because a regulation promotes a more unified application of community rules in the EU, especially where community legislation does not leave any discretionary power to member states.

In considering the implementation of food law, its enforcement and effects on both the hotelier and the consumer, an obvious first step is to consider the legislative environment. This analysis of legislation can be considered at two levels, namely the EU and its member states. This chapter has considered the need for foodstuffs legislation. Both vertical and horizontal EU directives were discussed and their relevance to the hotel industry was highlighted. Implications for the consumer within the legislative environment were also explored.

CHAPTER 4

Food Legislation and Enforcement in EU Member States

Introduction

The framework and reasons for EU foodstuffs legislation have already been discussed in chapter three. There the consumer's view was highlighted and a link was established with the hotel industry. The focus in this chapter is on how the related literature views food legislation and enforcement *existing* in member states. The countries considered here are the United Kingdom, Germany, France, Denmark and the Netherlands. The purpose for choosing these countries is that they are key players in influencing the development of food safety within the community. It will also become self evident that each country approaches the subjects of food safety, consumer protection and enforcement in different ways, while at the same time seeking to ensure the provision of safe food. Further discussion of these issues is presented in chapters five and six.

The United Kingdom

Background

In the UK, the 1980s witnessed a rising trend in the number of reported food poisoning cases, with evidence from the Communicable Disease Surveillance Centre suggesting that food poisoning caused by caterers was greater than in any other sector of the food industry (Shepard *et al.*, 1990). Industry views during this period (Crawford, 1987; Kapila *et al.*, 1986) revealed apparent weaknesses within the legislation of the day. The topic of food hygiene training, while generating much discussion within the wider hotel

sector, is not new to industry specialists, and was identified by the UK government in the mid 1980s as an area that needed attention. Present day issues, such as registration of food premises and the powers of environmental health officers, were also debated around that time, along with the need to bring statutory defences into line with other consumer protection legislation i.e. section 24, Trades Descriptions Act 1968 - *the due diligence defence* (Act, 1968). It was, however, the wider political and media environment that provided the impetus for government to act. Concern over a minister's (Edwina Currie) comments on Salmonella in eggs (Sherman, 1988), listeria contamination of chilled foods (in particular unpasteurised soft cheeses and pâté), meat products and BSE, and an outbreak of botulism associated with hazelnut yoghurt, created the tense atmosphere within which the government issued its white paper, *Food Safety: Protecting the Consumer* (MAFF, 1989). Soon after, the Food Safety Act 1990 was passed (Aston and Tiffney, 1993; Jukes, 1988a,b, 1989, 1991). The rise in food poisoning since the 1990 Act must be regarded as a legitimate cause for consumer concern. While the figures show that there has been an increase in food poisoning, alternatively this trend could be due to a greater level of reporting by GPs or even the growing popularity of eating out. Consequently a clear reason for the escalation in food poisoning has not been determined. Notwithstanding this confusion, the *Steering Group on the Microbiological Safety of Food*, established since the Richmond Committee's Report on the Microbiological Safety of Food (1989), conducted a study during the period 1994 / 95 in order to establish how many people visited their doctors on a food-related complaint (Jukes, 1993).

Enforcement

Enforcement of health and hygiene issues is generally undertaken by Environmental Health Officers (EHOs) and fraudulent trading practices are the concern of Trading Standards Officers (TSOs). This division is discussed in greater detail within the Code of Practice No1 issued under section 40 of the Food Safety Act 1990 (Code of Practice, 1990a). The work of both the TSO and EHO is considered within the Ministry of Agriculture Fisheries and Food's (MAFF) Food Safety Directorate (FSD) and its monthly bulletin (FSD, 1993a; FSD, 1993b), a situation which may change in 1999 with the establishment of the Food Standards Agency (MAFF, 1998). The appointment of such *authorised officers* is a statutory requirement under the Food Safety Act 1990 s.5. Specialist advice is available from the Public Analyst and the Laboratory of the Government Chemist (FSD, 1993c; FSDd, 1993e; Jukes, 1988b). Regulations prescribing the qualifications of these specialists have been enacted (Regulation, 1990a). Much of the legislation generated by either the EU or Whitehall, and directed at the hotel, catering or food - service industries, overlaps with the wider food industry, and this overlap is reflected in the duties of both EHOs and TSOs. The link with EU legislation is contained within section 17 of the Food Safety Act 1990. This section empowers ministers to make regulations for the implementation of EU directives.

Principal Legislation

The Food Safety Act 1990

Despite the steady stream of criticisms, some misinformed, (Booker, 1993; Toner, 1993) directed at one or two seemingly over zealous environmental health officers, the Food

Safety Act 1990 has generally been regarded as focusing caterers' minds on their central responsibility to provide safe food and, in that sense, it has created an awareness of food safety issues.

In terms of definition, (Act, 1990a: s1 and 2), most *offences* within the Act refer to sale or supply, possession for sale, offer or exposure for sale and advertisement for sale. The term *business* is also defined to include any undertaking or activity carried out by a public or local authority, with or without profit. The Act now extends to crown premises. *Food* is defined as including drink, as well as articles and substances of no nutritional value that are used for human consumption. Following on from this definition, the term *human consumption* is important, as the Act is concerned with food that has been sold or is intended for sale. It encompasses food during preparation and food ingredients.

The Act repeals most of the Food Act 1984 and introduces the idea of a food safety requirement (Act, 1984). It encompasses requirements as to food rendered injurious to human health and food that is unfit for human consumption, and speaks of a new principle of contaminated food (Act, 1990a: s 8). Section 8 creates the umbrella offence of selling food that does not comply with food safety requirements and is similar to the general requirement of the Consumer Protection Act 1987 (Act, 1987). The term "unfitness" in this context brings within the offence most occurrences which might deter the ordinary consumer from eating a food, (*David Grieg v Goldfinch*, 1961). The wide application of section 14, (basic to the successful control of food), is evident; offences of substance or quality may be an alternative to proceedings under section 8. One key element in section 14 is sale, referring to retail sale. This aspect explains why authorised

officers purchase goods before commencing sampling procedures, an approach which contrasts with that of some European countries.

Section 15 of the Act covers the offence of selling or displaying food with a label which is false, or one that is likely to mislead as to the nature, substance or quality of the food in question. Section 1 of the Trades Descriptions Act 1968 (Act, 1968) is frequently used as an alternative to proceedings under this section. For instance, to describe a menu item as vegetarian, when clearly it has a meat ingredient within it, would result in prosecution under this section. Any false or misleading statement as to food for human consumption, however given, is an offence. There is within this section a difference between “false” and “likely to mislead”, the former being a stronger expression, and hence more difficult to prove. In the latter case, it is possible to be factually correct and still mislead. An example is “Scottish Smoked Salmon” and “Smoked Scottish Salmon”. The latter product comes from Scotland while the former is only smoked there. The offences contained within section 14 and 15 are mainly consumer protection offences that are enforced by Trading Standards Officers.

Besides the sometimes high level of fines (Anonymous, 1992a; 1992b), authorised officers have a range of enforcement powers contained within sections 9, 10, 11 and 12 of the Act. These powers cover such subjects as inspection and seizure of suspected food, improvement notices, prohibition notices and emergency prohibition notices. If food fails to comply with food safety requirements (Section 9), it may be seized with the issue of a prescribed notice (Regulation, 1990b). Referral to a Justice of the Peace is normally within two days of seizure (Code of Practice No 4,1990b). The purpose of improvement notices, as detailed in section 10 of the Act, is to deal with situations

where there is a breach of the relevant regulations, (Code of Practice No 6, 1990d). Improvement notices can be issued against processes, equipment or treatments, and are modelled on section 21 of the Health and Safety at Work Act 1974 (Act, 1974a). Examples of circumstances where use of an improvement notice would be appropriate are considered in Code of Practice No5 (Code of Practice, 1990c). The contents and nature are to be in the prescribed form (Regulation, 1991a) and a person who is aggrieved may appeal to the Magistrates Court under section 37 of the Act.

Under section 11 of the Act, the courts are empowered to make prohibition orders of two classes. The court, before which the proprietor has been convicted, can prohibit the use of premises, processes or equipment, if it is satisfied that the health risk condition is fulfilled regarding that business. Also, the courts under this section have the power to prohibit any proprietor or manager from participating in the management of a food business.

In the case of emergency prohibition notices, (Section 12 of the Act), the authorised officer has the power in certain circumstances to close a business immediately and confirm that notice, within three days, by an order before a magistrate's court. In these circumstances the health risk condition has to be imminent (not immediate), although no definition is available as to what precisely is meant by the term.

One continuing problem of enforcement is that of consistency in interpretation throughout the UK. Attempts have been made to resolve this difficulty through the issue of section 40 codes of practice (under the Food Safety Act 1990), which can be regarded as guides to enforcement practices; 21 so far have been issued. Authorised Officers are required to have regard to these codes and ministers are empowered to

direct food authorities to take specific steps to comply with a code through *mandamus* (Act, 1990a: s42). The revision of Codes of Practice 5 & 9 (DOH, 1993a) emphasises the distinction between *good hygienic practice* and a *legal requirement* which aids this consistency approach. In particular, the revision of code of practice No 9, *Food Hygiene Inspections*, reflects the requirements of the EC Directive on the Hygiene of Foodstuffs, a point discussed in the previous chapter (EC Commission, 1991b; EC Parliament, 1992; EC Presidency, 1992; Economic and Social Committee, 1992; EC Commission, 1992). The mission of the Local Authority Co-ordinating Body on Trading Standards (LACOTS 1990), the co-ordinator of the *Home Authority* principle, will also promote consistency and uniformity in interpretation (FSD, 1993a; IEHO, 1992). During January 1996 a draft copy of Code of Practice No 10; *Enforcement of the Temperature Control requirements of Food Hygiene Regulations*, was issued for comment (DOH,1996). It was noted by the Department of Health that a review of all codes of practice issued under the Food Safety Act 1990 was under consideration. It is possible that this general review will result in further changes to code of practice No 10.

The seriousness with which the courts view the enforcement of Food Safety legislation can be judged, to some extent, by the level of fines imposed on catering premises. Penalties in excess of £10,000 are not uncommon, with the record to date being some £44,000 imposed on a take-away catering outlet, (later reduced on appeal to the Crown Court) (Anonymous, 1992b; Anonymous, 1992c). Even when offences are not proven, as in the case of a hamburger outlet in Preston after the outbreak of food poisoning caused by *E. Coli* (FSD, 1993e), the resultant bad publicity, (in that particular incident) inevitably focused the minds of catering managers.

The Food Safety Act 1990 contains enabling powers throughout, linked with the main provisions to which they relate. The main enabling powers are contained in sections 16-19 of the Act. Regulations already issued cover such topics as the registration of food premises (Regulation, 1991b) and food irradiation (Regulation, 1990c,e). Section 16 of the Act gives powers to issue regulations on food hygiene training. The 1992 - 1997 Conservative government committed itself to the wording regarding training, taken within the EC Directive on the Hygiene of Foodstuffs (DOH, 1993b), an approach that was introduced into legislation in September 1995. Training is an important element of the defence of *due diligence* identified in section 21 of the Act.

The concept of *Due Diligence and all Reasonable Precautions* lies at the heart of the Act, and examples can be seen of this defence in other statutes, such as section 24 of the Trades Description Act 1968. It was because absolute or strict liability offences are anathema to most lawyers, since they are regarded as oppressive, that the concept of due diligence was introduced into food safety law (Roberts, 1994).

It is an hotelier's responsibility to ensure that a safe and efficient system of food handling exists and that all reasonable precautions are taken to avoid food contamination during handling. Hoteliers have little to fear from food safety law if they can show that the due diligence system is effective in operation, and that it can withstand the critical scrutiny of the enforcement authorities. The type of due diligence system in an establishment must be geared to the size and type of the particular operation.

The objective contained within section 21 of the Food Safety Act was to modernise the system of defences and bring it into line with other consumer protection legislation. In legal terms, offences of absolute liability are employed in trading legislation. Similarly, it

would be virtually impossible to secure a conviction if the prosecutor were obliged to prove guilty intent in every case. However, ever aware that absolute liability could bear down harshly on traders, a series of statutory defences has been introduced over the years which would, subject to proof that the criteria in each case had been fulfilled, enable a court to acquit a trader, even though an offence had been committed. Statutory defences have evolved over time, and the Food Safety Act 1990 (Act, 1990a) brought those relating to food offences up to date.

Such a defence can be extended to persons who neither prepare nor import the food, and who are accused under sections 8, 14 or 15. Within this offence, the objective is to place responsibility for the quality and safety of food upon those persons who have the greatest influence over the product.

Nobody can escape conviction simply by producing a warranty from a supplier. There is, however, a difference between guarantees and written assurances from suppliers. It is the duty of a food business to seek written statements from suppliers that the products being supplied comply with all legal requirements. Such assurances are an essential first step in the establishment of a due diligence system, but are not warranties as defined within the Food Act 1984 (Act, 1984). Such assurances should not go beyond the competence of the supplier.

The burden of proof rests with the defendant. While there is no requirement for a due diligence system, it is, however, *recommended good practice* that every food business should establish and maintain an adequate due diligence system. A control system which is not written down, and not recorded, creates great difficulties of proof in court, no matter how comprehensive it may be.

While the decision of the courts cannot be predicted, case law on due diligence under other consumer protection legislation provides some clues. First, past experience has shown that the courts have expected defendants to prove that they have *actively* taken some steps. The amount of checking necessary has depended on the size and nature of the business. It was not until 1994, some three years after the Food Safety Act came into force, that a law report was published on the due diligence defence, namely *Carrick District Council v Taunton Vale Meat Traders Ltd 1994* (Food Hygiene Briefing, 1994). The case reached the High Court in London. The key point in this decision was that the company relied on a meat inspector's inspection without having a separate system of checking. The court found that the company's claim of due diligence was proven. While going against the trend of previous case law on due diligence, this decision may also affect an officer's willingness to give specific advice to caterers, since such willingness to give advice may eventually be used in a due diligence case.

The development of quality control systems to satisfy the test of due diligence will probably be one main consequence of the Food Safety Act 1990. Businesses are likely to pay greater attention to the quality of their supplies and to the quality control systems of their suppliers. If so, enforcement officers will need to do the same, and this diligence could have significant effects. Interestingly, there is a case in which the food manufacturers and distributors in question had obtained British Standard 5750 - Quality Management Systems (now referred to as ISO9000 series, the European equivalent being EN29000), yet were still not successful in claiming a due diligence defence in a prosecution on a food safety matter (*Anonymous, 1992d*). The court, in treating a case which introduces the concept of due diligence, is trying to balance the interests of the

consumer against the business. What is being considered by the court is not the whole system but rather the element that relates to the offence in question. All too often the courts lean significantly towards the consumer, thus making the claim of a due diligence defence extremely difficult.

Food Hygiene Regulations

Whereas the Food Safety Act 1990 is a relatively recent issue within the topic of Food legislation, other related regulations have a much longer history.

A central plank of food safety law, up to September 1995, was contained within the Food Hygiene General Regulations 1970, as amended, which applied to all food premises (Regulation, 1970, 1990d, 1991c). These regulations were reviewed and consolidated in 1995 with the implementation of the EC Directive on the Hygiene of Foodstuffs, under the DOH's copy out principle.

An examination of the 1970 regulations shows them to be non-specific, in using words such as "sufficient", "suitable" and "adequate", (not dissimilar from the Directive on the Hygiene of Foodstuffs). Both the 1970 and 1995 regulations relate to premises and equipment, food handling practices, personal hygiene, construction, repair and maintenance of premises, water supply and washing facilities, waste disposal and temperature control of certain foods. There is a clear link between the 1990 Act and the 1995 regulations; a breach of these latter regulations could result in the enforcement authorities' taking action.

As part of its proposals for the implementation of the EC Food Hygiene Directive, the UK Government issued the Food Safety (General Food Hygiene) Regulations 1995

(Regulation, 1995a). These regulations apply equally to England, Wales and Scotland, and repeal the bulk of the existing sets of regulations. The only exceptions are those requirements relating to temperature control, which will be discussed later in this section.

The layout of the regulations follows that of the EC Food Hygiene Directive very closely.

The definition of terms, such as food business and hygiene, are included in Regulation 2 and illustrate that the regulations cover both private and public businesses. In terms of application, these stipulations do not apply to those food businesses that are covered by rules made under “vertical” directives. However, the training requirement of these regulations applies if the “vertical” regulation contains no such training condition.

There is a general requirement in regulation 4 that proprietors of food businesses should ensure that all food handling operations are carried out in a hygienic manner. The following regulation goes on to give details necessary to the structure of the premises, (a link here being made with the schedules within the regulations).

Subsequent regulations require the identification and control of potential food hazards based on the principles set out in Schedule 2, thus introducing the principles of hazard analysis critical control point (HACCP). Provided within the legislation is the need for food handlers suffering from certain infections to notify the appropriate local authority. In this respect, it is unchanged from the similar requirement in the existing legislation. Contravention of the regulations can incur in some cases a fine (unlimited), or imprisonment for not more than two years, or both. A final point to note is that the enforcement authorities must have due regard to any relevant Industry Guide to Good

Hygiene Practice when enforcing these regulations, a topic that has already been introduced in chapter three.

Temperature control, while not included in the just discussed regulations, also has a long history of development in the UK. The Food Hygiene (Amendment) Regulations 1990 took effect on 1 April 1991 and specified temperature controls for certain foods (Regulation, 1990d). Further amending regulations, the Food Hygiene (Amendment) Regulations 1991, came into force on 5 July 1991 (Regulation, 1991c). Similar temperature controls apply to foods in transit and to catering operations using temporary or mobile facilities, as covered in the Food Hygiene Market Stalls and Delivery Vehicles Regulations 1966 (Regulation, 1966). The amendments produced a complex set of controls for storage temperatures of prepared foods. Foods defined within the regulations were divided into categories, some of which had to be kept at 8°C or less and some that were to be kept at 5°C or colder. Many regarded this approach as creating a *temperature jungle*.

Further to these amendments, on 23 February 1993 the UK government announced (DOH, 1993b) its intention to review statutory temperature controls, in order to identify how they might be simplified and rationalised without compromising public health. It considered options, looking both at domestic legislation and legislation that resulted from European Community directives or international agreements. The Government issued proposals on this subject for public consultation in October 1993 (DOH, 1993d), and the results of the consultation were made available in the Spring of 1994. In essence, the outcome of the discussions was that the two tier temperature control system would be abandoned and a single temperature requirement of 8°C would be introduced in

September 1995. Such a temperature contrasts with France's 3°C and the Netherlands' 7°C. It is this inconsistency in temperature control within member states that will eventually have to be resolved on a European-wide basis. This discrepancy also means that the UK's 8°C within the 1995 regulations may be subject to change in the medium term, although it can be argued that this anomaly should be regarded as a subsidiarity issue.

When the British Government initially issued the Food Safety (General Food Hygiene) Regulations 1995, it omitted to include reference to temperature control provisions, as these were still under consideration by the European Commission (Regulation, 1995a). The standard period for the European Commission to consider these temperature control provisions expired in August 1995 and so the regulations were made on 23 August, and came into force on 15 September 1995, the same day as the Food Safety (General Food Hygiene) Regulations 1995 (Regulation, 1995a). These regulations implement paragraphs 4 and 5 of chapter 9 of the Annex to the Food Hygiene Directive issued in June 1993, as well as containing certain national provisions relating to food temperature control (EC Commission, 1993a). The regulations are divided into four parts, with some requirements applying to England and Wales and others applying to Scotland.

The Regulations, in so much as they apply to all stages of food production, except primary production and fishery products, still contain differences between the vertical or product specific directives and the horizontal or industry wide directives.

Food which needs to be kept chilled, because it is likely to support the growth of pathogenic micro-organisms or the formation of toxins, is required to be kept either at

or below 8°C. This stipulation does not apply to mail order food, which is subject to a separate offence within these regulations. There are certain exemptions to this general requirement.

A provision can be introduced which allows for the upward variation of the standard temperature of 8°C in appropriate circumstances. Any such variation must, however, be based on a well-founded scientific assessment of the safety of the food at the new temperature, (the relevant code of practice helps define what is meant by *well-founded scientific assessment*).

Other parts of the legislation allow for chill holding tolerance periods, and state that there are defences that relate to the tolerance periods for which food may be held outside temperature control. For instance, it is not an offence to keep food for service or on display for sale for a period of less than four hours and above the 8°C temperature requirement. It is, however, not allowable for such food to be displayed on more than one occasion. Equally, if food has been transferred to a vehicle, or there has been a temporary breakdown of equipment, it is again a defence to keep food above the 8°C temperature ceiling.

Hot holding requirements are also referred to, and the legislation notes that food that has been cooked or reheated should not be kept below 63°C. This stipulation is in order to control the growth of pathogenic micro-organisms or the formation of toxins. There are defences which allow for downward variation of this minimum 63°C temperature in appropriate circumstances, and for a tolerance period of two hours.

Regulation 10 adds a new general temperature control requirement which prohibits keeping perishable foodstuffs at temperatures which could result in a risk to health. For

instance, even if food is kept at or below 8°C, there still could be a breach of food safety legislation under this general requirement contained within Regulation 10. High risk food processes, such as *sous vide* would presumably be covered by this requirement.

Different requirements apply in Scotland and these are covered in Regulation 13 - 16. They re-enact, with minor and drafting modifications, the food temperature control requirements previously contained in the Food Hygiene Scotland Regulations 1959.

1990 (Regulation, 1959).

Unlike previous food temperature control regulations, these regulations do not list specific foods which should be held under temperature control conditions. The businesses themselves need to consider which food needs to be held under temperature control. There is a clear link between these regulations and the Food Safety (General Food Hygiene) Regulations 1995 and the topic of hazard analysis (Regulation, 1995a).

The temperature control requirements should be understood in the general context of the hazard analysis requirement contained in Regulation 4 of the Food Safety (General Food Hygiene) Regulations 1995.

Some other aspects of food legislation

In addition to the mainly food safety measures just mentioned, a range of additional legislation has also been introduced, or is about to be introduced, all of which has implications for the food service industry, (see, Thomas, 1993 on food premises registration). Whereas such legislation is treated separately in the UK, such a division is not so clear cut within other member states.

The MAFF issued guidelines on voluntary nutrition labelling issued in 1987, and revised in 1988, which take into account the Codex Alimentarius Commission's guidelines on the subject (Anonymous, 1992e), and have now been overtaken by the EU Directive of 24 September 1990 on Nutrition Labelling for Foodstuffs (Morris, 1991). These changes have seen a move away from compositional standards. The complex topic of nutrition labelling became considerably clearer in 1994 with the issue by the Ministry of Agriculture Fisheries and Food (MAFF) of revised guidelines. The Directive, as adopted, applies to all foods delivered as such to the ultimate consumer and foods supplied to catering establishments. It will remain voluntary except in those cases where a nutrition claim is made. Before the Directive only a few member states (UK, Germany, Denmark and the Netherlands) had any sort of nutrition labelling system in place and problems did arise, as identified by Saunders (1991).

A regulation entitled Food Labelling (Amendment) Regulation 1994 came into effect on 1 March 1995 (MAFF, 1993b), and provided manufacturers with a standard mandatory format for labelling. The relevance of this stipulation to the hotel industry is that the UK Government does not believe it would be appropriate to impose the full requirements on caterers, since it would be largely impractical for them to give information in the form the directive requires. The central objective of these amendment regulations is to help consumers compare the nutritional content of different foods, and make informed choices as to their purchase. In addition, they will help industry in providing standard rules on product labelling. They will be, however, of limited relevance to non-pre-packed food sold at a catering establishment, a point identified under 37(5) of the 1984 regulations (within regulation five of the 1994 Regulations). Non-pre-packed food sold

at a catering establishment does not need to carry any nutrition labelling, even if a claim is made.

Food Labelling regulations date from 1984 and have often been amended in accordance with legislation at the European Union level. During 1994, MAFF issued draft regulations in order to consolidate legislation on this topic. They were implemented in 1996. The central aim of this consolidation exercise was to produce regulations that were clear and understandable. The proposals sought to move away from the term *immediate consumption*, and focus on food sold specifically in catering establishments. A considerable amount of work has also been done by the Food Advisory Committee in its published review of food labelling. Furthermore, there has been consultation by the Food Advisory Committee(FAC) on the use of graphical representations of nutritional information (MAFF, 1993c; Thomas, 1992), along with the UK Government's response to the FAC on consumer research, undertaken by the National Consumer Council, on consumers' views on food labelling in catering establishments (MAFF, 1993d). A concise summary of this National Consumer Council research is contained in an article by Clarke (1993). It is likely that the trend for the future can be predicted from the USA, where compulsory labelling in some detail is required (Smith and Drandfield, 1991). Such an attitude may influence legislation within the European Union.

The UK: A European Perspective

A significant issue for the UK Catering Industry in September 1995 was the implementation of this EU Directive on the Hygiene of Foodstuffs, the regulations being brought into force 12 months later. During February of that year, the Department of

Health (DOH) circulated to interested parties a major consultation document covering three main areas:

1. the Food Safety (General Food Hygiene) Regulations 1995,
2. a revision of the Food Safety Act Code of Practice No 9, and
3. a draft template on the development of voluntary Industry Guides to Good Hygiene Practice (DOH, 1993d).

The implementing regulations in September of that year followed closely the EU Directive on the Hygiene of Foodstuffs, and in effect repealed the bulk of the 11 regulations in force up to 1995. A single set of general food hygiene regulations was made for England, Wales and Scotland for the first time. Provisions on food temperature controls were also implemented within these regulations, as a result of a DOH consultation exercise in October 1993.

Following the 1995 regulations, for the first time in UK catering law there is a general requirement for the training of food handlers in food hygiene. Prior to 1995, there had been much discussion over food hygiene training, and many major companies had already detailed policies on this topic. Equally, it was considered by these companies that food hygiene training was an important element in the defence of due diligence identified in Section 21 of the Food Safety Act 1990. An indication of what is now regarded as recommended practice can be seen in the revised Code of Practice No 9 on Food Hygiene Inspections, published in 1994 (DOH, 1992a; 1992b).

Another aspect new to UK catering law, and identified in the regulations, was the duty of food businesses to identify and control potential food hazards. Whereas such an

approach is similar to Hazard Analysis and Critical Control Point (HACCP), it does not require a fully-documented system. This requirement for a modified approach to HACCP led to the development of Assured Safe Catering (ASC) (HMSO, 1993) in the UK. ASC was developed within the catering working group at the Campden Food and Drink Research Association, with the co-operation of both the Department of Health and the Ministry of Agriculture, Fisheries and Food. It should be regarded as an effective response in most catering units to the requirements of the directive. ASC provides a framework for the proprietor of a catering establishment to assess, control and monitor hygiene standards. It involves looking at the catering operation in sequence from the selection of ingredients right through to the service of food to the customer. It identifies any hazards that need to be controlled in order for the food to be safe, and helps prevent, rather than cure, safety problems. Whereas HACCP proceeds on an individual food basis, identifying specific critical control points, ASC identifies generic critical control points. Consideration of schedule two of the 1995 regulations shows an emphasis on activities crucial to food safety. This schedule requires an analysis of the potential food hazards in a food business operation. Following on from this analysis, there is a need to identify points in the operation where food hazards may occur. Critical points within the system with respect to food safety should be identified, and correct monitoring procedures should be used within the operation. Again, this topic is discussed in more detail within Code of Practice No 9 and should be read in conjunction with the DOH's Assured Safe Catering document. In general terms, the degree of sophistication contained within the control system should be related to the size and nature of the business.

The final new aspect of the 1995 regulations was that food authorities are required to give due consideration to relevant UK or EU voluntary Industry Guides to Good Hygiene Practice. The importance of these guides is that they help in a consistent application of food safety law, irrespective of the industry sector. A template, or formula, was published by the DOH. If any UK guides are to have official government recognition, they will be subject to scrutiny from a advisory panel, comprising representatives from industry, consumers and enforcers. The panel is chaired by a senior civil servant. The DOH provides the co-ordination point between business sectors in the UK on this issue. Otherwise, of course, this development could lead to a proliferation of documents (Joint Hospitality Industry Congress, 1994). The DOH has taken a clear responsibility on this matter by providing advice on the compilation of these guides, as well as on their aim, scope, structure, status and development procedures. As for hygiene standards, these guides introduce an element of flexibility into a wide and diverse catering industry. One important question is the status of these guides. Because of the recognition process, they can be used with confidence as a practical *vade mecum* for compliance with relevant regulations. It would always remain open to industry to display compliance with the objectives of the regulations by means other than those set out in the guides.

Germany

Background

The western part of the united Germany is divided into nine Bundesländer with the eastern Bundesland divided for geographical purposes. Two ministries have general responsibility for matters of food law enforcement:

- The Ministry of Health, and
- The Ministry of Nutrition, Agriculture and Forestry.

The principal aims of food law in Germany have been the same since the first codification in 1879:- the protection of human health and the protection of the general public against misleading practices (Agra Europe, 1992).

It was in 1958 that the German food code was established within the framework of the first food legislation reform after World War II. The approach to food law in Germany is that it contains general prohibitions backed up with practical provisions contained within a code. The German Food Code Commission identifies criteria for evaluating the composition and properties of given foods, or food groups, and combines them to form guiding principles that, on publication, constitute the German Food Code.

Food law in Germany is a complicated network of hundreds of acts and decrees with interconnections to many other areas of legislation. The main act is *the Lebensmittel - und Bedarfsgegenstandegesetz* of 15 August 1974 which covers tobacco, cosmetic products and consumer goods (Act,1974b). This law on Foods and Commodities, 15 August 1974 maintains the Food Code Commission (Act, 1974a). The foundations of this approach are expert opinions containing the views of all parties involved in the food

trade. The guiding principles are published by the Federal Minister for Health, acting in agreement with other Ministers, and are based on the work of a range of expert committees (Deutsches Lebensmittelbuch,1992). The *Bund für Lebensmittelrecht und Lebensmittelkunde* (BLL) represents the food industry and works with the government in the preparation of both food law and standards. The BLL produces guidelines, definitions etc., which are accepted as self-regulatory by government.

Enforcement

It is the Veterinary Office within the Bundesländer which carries out the policies of the two ministries, the head of the department being the Veterinary Doctor. The control of food safety is under the direction of veterinarians, and a significant element of their training focuses on food hygiene. Within this office, one section is devoted to Food Control (WHO,1988).The food control section enforces all food quality, labelling, safety and hygiene legislation in all sectors of the trade, and inspection is required to be undertaken by trained personnel. If there is a danger of delay, police officers are also regarded as authorised officers in enforcing food law, a clear difference from the UK and a number of other European Countries, where police officers do not have such powers. The food control section handles all routine inspections, sampling and investigations.

A full inspection includes the enforcement of all legislation governing:

- the hygiene of food preparation, storage, display and sale areas, and personnel, and
- the safety, quality and labelling of all food and other products, and substances that come into contact with the body in daily life.

In short, this one department enforces all legislation concerning food from producer to consumer. The only aspect outside its control is the trading standards issue of weights and measures (LACOTS,1989). Enforcement officers are allowed to enter premises, close them down if necessary, seize, detain and dispose, inspect and sample ingredients during normal working hours. Outside these times, they are allowed to enter if there is an immediate danger to health. There is an obligation to permit entry by these officers and to cooperate in their investigations. In particular, personnel should obey the inspector's instructions to indicate the relevant rooms, equipment and apparatus, to open rooms and containers and to facilitate the taking of samples. All restaurants and similar establishments where food is prepared and sold for human consumption must be licensed, (a significant distinction from the UK), by another department. However, the veterinary office can veto the granting of that licence. This veto can be exercised, if from the inspection of the plans and arrangements, the hygiene requirements will not be met (Wittekindt, 1991). Another aspect to the food enforcement service in Germany is that it actively uses the media if it does not gain the co-operation it requires.

Principal Food Legislation

Foodstuffs and Commodities Act 1974 as amended

A framework Act governing purity of foods and commodities is contained within the Act of 1974 (Act, 1974b), entitled *An Act to Record and Clarify the Law on Trade in Foodstuffs, Tobacco Products, Cosmetics and certain necessities*. This Act was amended in 1990, 1991 and 1992 in order to comply with EU Legislation. It now provides that any foodstuff produced and marketed legally in another member state may

be imported into Germany, even if it does not meet the requirements laid down under German law.

Foodstuffs within German law are defined as substances which are intended for human consumption in an unchanged or prepared state. Equally, the coatings and casings of foodstuffs that are intended to be consumed, or might be consumed, are also regarded as foodstuffs.

The Act also encompasses additives, and defines them as substances that are added to foodstuffs to influence their characteristics or to obtain specific properties or effects. The Federal Minister of Health is empowered to include further substances within the definition of an *additive*. In this respect the Minister is supported by expert judgement and, in some cases, is required to accept the additive, if required, by the EU. The definitions are further extended by the term *necessities*, and include articles that may come into contact with foodstuffs e.g., cling film. Consumers comprise not only individuals that use foodstuffs and necessities for their personal use, but also restaurants and other commercial catering outlets.

Offences under the 1974 act with respect to foodstuffs can be considered under four areas:

- Protection of health,
- Additives and labelling,
- Protection against deception and fraud, and
- Trade in necessities.

It is prohibited to produce or treat foodstuffs in such a manner that their consumption constitutes a danger to health. In this respect, the Federal Minister can make regulations to prohibit or restrict the use of certain substances, articles and processes. The Minister may also place requirements on the producer, processor or marketer of certain foodstuffs.

Focusing specifically on hygiene specifications, regulations can be issued that prevent decomposition or other disadvantageous effects on foodstuffs. Specifically, these rules cover micro-organisms, contamination, odours, temperature, treatment or pre-preparation processes. Authority for these regulations can be transferred to the county regions or Länder, thereby indicating a decentralisation of power.

The general requirement in terms of additives is that in order to be allowable they should be on the permitted list. The key condition for what is permitted is taken with due reference to technological, nutritional and dietetic factors, and the protection of the consumer. Regulations are also issued with respect to the maximum quantities of additives permitted, their reactions within the product and their purity criteria. The production, treatment and marketing of additives are also controlled.

There is a requirement to use proper labelling when using additives, and the manner in which they are declared is regulated. In recent years, milk and meat substitutes have been introduced into German superstores with an application, flavour and appearance similar to *real* milk and meat products, while differing in composition. They contain animal and vegetable additives, e.g. soya bean, that can be regarded as an acknowledged substitute for meat or milk. Until 1989, no vegetable fats were permitted in dairy products. The meat regulation did not allow the production of meat products with soya

bean proteins. The addition of other vegetables, such as potatoes or greens, was also not permitted.

In continuation of the *Cassis de Dijon* judgement, (discussed in chapter three), the German regulation concerning the production of meat and milk products was annulled, the prevailing view being that the consumer could be protected by using a distinctive labelling of products. This new stipulation implied that substitutes could now be issued in Germany if produced according to the labelling requirements. The new rule does not allow substitutes to carry the name as the equivalent cheese, butter or yoghurt, since they are only allowed for the *real* products. A similar regulation still has to be established for meat products. The name *soya bean sausage* is forbidden.

Food labelling requirements are set out in the *lebensmittel-kennzeichnungsverordnung*, as amended. A fifth amendment was debated in 1992 (Euromonitor, 1993). Recently, harmonisation has been enacted in areas of EU legislation, including additives, articles in contact with foodstuffs and foods for particular nutritional uses (Euromonitor, 1993).

A comparison in German law can be made with section 14 of the Food Safety Act 1990, in terms of nature, substance and quality. German food law creates the concept that the purchaser is entitled to buy food based on the name and description of the product. Hence, a steaklette would imply a small steak (LACOTS, 1990). Misleading presentation, designation, declaration or advertising is not permitted. It is prohibited to market foodstuffs that are unfit for human consumption or that have been adulterated. Also banned are foodstuffs whose appearance gives the impression that their properties are better than they really are. Detailed provisions are available in terms of labelling in order to protect against deception. The packaging should have specific information as to

the contents, producer or whoever markets the product. The date of manufacture and shelf life should also be given, along with the required storage conditions (Bohl,1991).

Necessities with respect to German Food Law include materials and articles in contact with food. Such items should not contain toxic substances which would migrate into the foodstuffs or their surfaces, except for technically unavoidable quantities that are unobjectionable from health, odour and flavour aspects. Authorisation is required to use specific substances within these materials, either individually, in groups or in mixtures. Both maximum quantities and purity criteria are prescribed.

Enforcement personnel are authorised to take or demand representative samples of their choice for the purpose of examination. The sampling activities of the service are the result of a planned programme, and minimum sampling rates are stipulated by statute. Thus, enforcement practices in these respects differ from those of the UK. For a given geographical area, this requirement is based on a certain number of samples of food per 1000 of population. Further monitoring programmes are drawn up by the analyst. All sampling is programmed by laboratory staff on a quarterly basis with regard to the legal minimum samples required. All results are published, and hence available to the public at large (LACOTS,1990).

The department or any enforcement officer can impose an administrative fine up to a certain level, as indeed can the courts. A penalty of 3 years (maximum) imprisonment, in certain circumstances, can also be handed down if a breach of the regulations is proven. Fines of up to 25,000DM can be levied. The enforcement officer has considerable discretion over what penalty can be imposed and as to who is considered responsible. In terms of the penalty procedure, the format is standardised. In addition to fines, the

offender is also charged any administrative costs. Minor objections are referred to the courts. More serious matters are also referred to the courts and to the public prosecutor (Act, 1974b).

Germany: An EU Perspective

The EU's directive on the hygiene of foodstuffs is not dissimilar from a 1991 proposal made by the Council Protecting Public Health (*Rat zum Schutz der öffentlichen Gesundheit*). This proposal centred on the satisfactory state of food and the observance of hygiene principles during the production, processing and issuing of food. The directive contains many elements that are already part of today's hygiene regulations in some of the Länder, and have also been components of the drafts for an uniform hygiene regulation for all the Länder (Freidhof, 1991; Dauer, 1991).

All food businesses in Germany have to exercise a quality control system in their operations in order to determine whether or not the established hygiene principles have been followed, thereby ensuring that food corresponds with the statutory requirement concerning the *satisfactory nature of food*. Businesses have to report to the authorities about their control assurance procedures. Additionally, it has been determined that the food control authorities have to regulate the businesses, and any deficiencies need to be submitted in a written report by enforcement officers, with the resulting consequences having to be followed up by the business.

The Food Hygiene Principles just mentioned apply to the whole food chain: cultivation, harvest, processing, production, packaging, distribution and retail sale of food, the central objective being the guarantee of satisfactory nature. In using the term "food

hygiene”, actions are required to guarantee harmlessness, satisfactory nature and suitability of food during all steps, from cultivation and production to the final consumer. General hygiene regulations, product-specific hygiene regulations, as well as guidelines regarding the type and range of self-control, have been established within the German legislative system.

Such detailed requirements extend to the construction and equipment of the facilities where food is handled. They include sanitary facilities, the water supply, effluent and waste disposal. Finally, hygiene is regulated through the maintenance of buildings and equipment, the cleaning and disinfection of buildings, and the storage and disposal of wastage.

Every business is also required to establish a *standard cleaning and disinfection programme*. The responsibility for hygiene has to be transferred to an identified individual, who preferably controls the business and who must take responsibility for production.

France

Background

The Ministry of Economy and Finance and the Ministry of Agriculture are jointly responsible for food control services in France, covering all aspects of the food chain. Control is centrally based and the degree of local autonomy is restricted. Control by central government constitutes the essential difference between the French and UK systems of enforcement. While there are considerable advantages in having a centrally administered enforcement service, it is in practice not much better than the *home*

authority principle operating in the UK. Such a devolvement of enforcement power within the UK, through the *home authority principle*, tends to achieve the same levels of consistency as the centrally controlled approach of the French system.

Control of food quality and hygiene in France is the responsibility of the Ministry of Agriculture. The organisation of this Ministry, together with its duties and responsibilities, are contained within the decree 87.38, of February 1987 (Euromonitor, 1993). The Ministry is specifically charged with the supervision of food supplies, training and research. In effect, authority is given to the Ministry to introduce food control regulations, set standards for production, prepare and display food (Euromonitor, 1993).

Quality and safety of other foods are principally the concern of the *Direction Générale de la Concurrence de la Consommation et de la Repression des Fraudes* (DGCCRF).

Its work is mainly performed by two services of the directorate, namely:

1. the service for the prevention of fraud and control of quality, and
2. the veterinary food hygiene service.

Food of animal origin is the responsibility of the veterinary services, specifically with regard to hygiene and quality.

The DGCCRF at national level is organised into three main services:-

1. consumer safety and quality,
2. free market competition, and
3. supervision of production and of markets.

Sub-directorates deal with more specific areas (WHO,1988). The directorate is principally concerned with enforcing legislation relating to food quality and safety. This legislation is contained in the Act of 1 August 1905 (Act, 1905), which relates to fraud and falsification, and the Act of 21 July 1983, which concerns the safety of consumers (Act, 1983). DGCCRF responsibilities are the equivalent of the UK's Trading Standards Officers.

The Veterinary service is a directorate of the Ministry of Agriculture and has two basic functions:

1. animal health, and
2. the hygiene of foodstuffs of animal origin.

Its general, organisational structure is similar to that of the DGCCRF (LACOTS,1990). The service has a central directorate, with a chief and section heads, departmental inspectorates and a network of departmental veterinary laboratories co-ordinated by a central food hygiene laboratory. The departmental inspectorates were set up by a decree of 31 March 1967, which demarcated divisions for the veterinary inspectorate in each department of the country. There are four national laboratories, one of which specialises in catering. The principal role of the service is to monitor and enforce good hygiene practices at all stages of production, processing, storage, distribution, preparation and service of high risk foods. It includes hotels and restaurants (Dehove, 1986).

Enforcement

The principal method of control is the inspection of premises. In setting priorities for inspection frequency, the following criteria are used:

- the inherent risk associated with a particular food or process,
- the effectiveness of food hygiene policies related to the relevant legislation,
- the size of the business, amount produced and the potential scale of the consequences in case of a control breakdown, and
- whether the products are for the domestic or export markets. (Here an assessment is made on the attitudes and capability of the operator, based on past history).

A system of registration is in operation in France which can be seen as an aid to the planning of enforcement activities. Within one month of opening for business, operators must inform the service as to the nature of the business, types of food involved, number of meals and methods of production. Once the registration process is complete, the premises are inspected and an assessment is made of their potential risk category. Matters such as design, maintenance and cleanliness of premises, equipment and fittings, personal hygiene facilities, level of management and housekeeping are all considered. Premises are thereafter inspected on a flexible basis according to their risk category. It would seem that the fundamental difference between France and the UK is that the latter relies on the Codes of Practice issued under the Food Safety Act 1990 to guide the enforcement authorities, whereas the former does not adopt such an informal approach.

Every year, in the summer, the food inspection service mounts an operation known as “operation holiday food”, that is essentially an extension of the routine hygiene and quality monitoring. Checks are made on all retail shops, including caterers and, in so doing, it is possible to establish a measure of improvement or decline in overall standards (Euromonitor, 1993).

If products are recognised as being falsified, contaminated or toxic, the goods may be seized and, in some cases, without a court order. Officials may enter premises by day and, occasionally by night, in order to investigate and report on any infringements of the law. Enforcement officers have the power to request a court to mandate goods that breach the legislation to be confiscated and destroyed at the cost of the sentenced person (Act, 1905).

The legal enforcement system is similar to the Scottish method, whereby infringements are formally reported to the Procurat, the equivalent of the Procurator Fiscal in Scotland, who decides whether or not to prosecute. Whereas litigation is reserved for serious cases, other routes may include advice or a written warning. Such sanctions are similar to those operating in the UK. Where legal action is deemed necessary, the matter is referred to the legal section of either the DGCCRF or the Veterinary Service, as appropriate.

In addition to any fines incurred on conviction, the individual will be ordered to pay the costs of any court reports, samples and analysis undertaken in order to investigate the infringement. An inclusive amount of 175 French francs is set for each sample taken and 115 French francs for any investigation report.

Contravention of the 1905 Act is punishable with at least 3 months, and no longer than 2 years, imprisonment, and a fine of at least 1,000, and no more than 250,000, French francs, or only one of these punishments. If the offence is considered an aggravating offence, these “maximum” penalties can be doubled. The 1905 Act provides for the publication of judgements in newspapers, and for the same information to be displayed at the entrance to the business - not dissimilar from the UK situation. The judgement

may be published in its entirety, or in extract form, with the costs being borne by the convicted person. Where such an order is made, the size and type of the notice is determined by the court. It is an offence to remove such a notice, which must be displayed for no longer than 7 days. Furthermore, the obligatory health mark required by some businesses can be withdrawn, effectively closing the premises (LACOTS,1990). Without prejudice to the 1905 Act, infringements of the 1980 food hygiene regulations can incur a fine of between 200 to 2,000 French francs, and a second offence could lead to a sentence of between 10 days to 2 months imprisonment.

Principal Legislation

Law of 1st August 1905: Fraud and Attempted Fraud

Under the 1905 Act, the executive is empowered by virtue of article II (Act, 1905) to issue decrees relating to:

- inspection and analysis,
- composition, labelling and advertising, and
- cleanliness of premises and the state of health of persons working on those premises.

These powers have allowed government, as of 1993, to issue over 100 regulations relating to food products and conditions relating to sale. Regulations may also be made by prefects and mayors concerning public order, safety and health, although they tend to be guided by the relevant Ministry.

The 1905 Act makes it an offence for anyone to deceive, or attempt to deceive, a contracting party by any means or procedure, either directly, or by an intermediary or

third party. Regulations under this Act reduce the risk of unfair practices and protect the consumer. The DGCCRF monitors products at all stages for falsification and deception. Specifically the offences relate to:

- either the nature, type, origin, substantial qualities and composition of the product, or
- to the quantity of items or their identity, or
- to the suitability for use or their inherent risks in use.

These general offences are extended to cover *aggravating practices, falsifications with respect to contaminated foodstuffs and illegal detention*. Aggravating practices are described as those relating to goods that are dangerous to the health of human beings or animals. They also include weights and measures offences and, if convicted under this section, the penalties are doubled. Even if the falsification of foodstuffs is known to the buyer or consumer, it is still an offence to display or sell falsified, contaminated or toxic foodstuffs. This offence extends to the use of advertising or other promotional literature, points covered in section 15 of the UK's Food Safety Act 1990. If a business is found to hold falsified, contaminated or toxic foodstuffs, the proprietor is also guilty of an offence, described as *illegal detention*.

Law of 21 July 1983: Consumer Safety

The 1983 Act deals with product safety and obliges businesses to produce reliable products and services (Act, 1983). Products and services must be sold or supplied within the normal conditions of use, or in conditions that can reasonably be foreseen to provide for a level of safety. Safety in these terms must be *as can legitimately be expected* and must not be harmful to health. It is the *Consumer Safety Commission* that

issues opinions for improving risk prevention as regards product or service safety. Decrees of the Conseil d'Etat are issued after taking into consideration the views of the *Consumer Safety Commission* and can cover labelling and packaging, hygiene and cleanliness. Products or services that do not comply with the provisions of this Act are prohibited. Such products and services may only be put back on the market when the Minister of Consumer Affairs deems that they have conformed with current regulations (Dehove,1986). The Minister has the option to consult with the business proprietor and, if necessary, with approved national consumer associations.

The central idea is therefore to make certain that either businesses take the necessary measures to ensure their products or that services do not present any danger to consumers. A proactive, as well as reactive, approach is taken by the directorate, as it is concerned with preventative measures. Inspections are carried out on a routine basis and control relies principally on sampling (LACOTS,1990). Nine categories of qualified authorities are identified that are empowered to carry out examinations of products and services. They have a statutory right of entry to premises and must follow clear procedures at the examination stage. Results of investigations and proposals for measures to be taken should be communicated to the state representative within the *departement* and a decision made within 15 days. The case is communicated to the relevant Minister in charge. There are provisions for action in the case of serious or immediate danger to the public. The examining judge or court may, once infringements have been referred to them, order a provisional suspension of the sale of the product or service concerned. The option of appeal to a higher court is anticipated.

Law of 26 September 1980: Food Hygiene Regulations

The principal regulation concerning food hygiene in catering establishments is contained within the decree of 26 September 1980 (Regulation,1980). Whereas the text covers, in broad terms, the same areas as the UK's (amended) Food Hygiene General Regulations 1970 and the Food Hygiene General Regulations 1995 (Regulation, 1995a), it is however considerably more prescriptive.

The regulation covers catering of all types, including mobile food counters and vending machines, whether of a social or commercial character. The catering establishment has to be registered within one month of opening, a requirement that was introduced into French law some 11 years prior to similar regulations being introduced in the UK. The registration must be renewed following any change of ownership and consequent upon any significant alterations to the physical structure of the premises or any change of equipment.

The main offence contained within the regulations is that premises must not constitute a risk of rendering foodstuffs injurious to health. The regulations go on to identify various features in the hygienic design of kitchens. Such aspects include requirements with respect to floors, walls and ceilings and, in addition, the separation of certain food processes to be carried out in areas distinctly allocated for the purpose. Both hot and cold potable water needs to be provided, along with sufficient sanitary facilities for staff. Article 10 states that the establishment must have one or more refrigerators, and Article 21 identifies the relevant temperature at which food must be maintained. For most food categories the relevant temperature is +3°C, considerably lower than that required in both the UK and the Netherlands. It would seem that these regulations have created a

temperature labyrinth that ranges from +2°C for fish up to + 15°C for cooked pork, meat products, cheeses with rind and eggs. A similar range of temperatures is identified for frozen foods. Chapter V of the regulations covers hygiene requirements for mobile food counters, and chapter VI is concerned with vending machines. Other requirements, such as the cleaning, washing, and disinfection of floors at least once a day, confirm the view that this is entirely prescriptive legislation. Finally, examples of this Napoleonic approach include cold dishes that must be retrieved from the refrigerator less than one hour prior to service to the customer. It would be interesting to speculate on how such legislation can be effectively enforced.

Other Legislation

An opinion aimed at foodstuff professionals, relating to hygiene good practice guidelines, was published on 24 November 1993. According to the provisions of the 1993 directive on the hygiene of foodstuffs, the Ministers in charge of Agriculture, Consumer Affairs and Health, should encourage all organisations of foodstuff professionals to establish hygiene good practice guidelines. These recommendations are approved by the French Administration after obtaining the opinion of the Superior Council for French Public Hygiene. They are also presented to the National Council for Consumer Affairs. The approval of the guidelines is published in the Official Journal.

AFNOR, the French standards body, is now producing standards in the foodstuffs area. Related activities include codes of practice on food safety and the development of analysis methods. France publishes a positive list of additives which has to be approved by the Conseil Supérieur de l'Hygiène Publique de France. During the period 1991-

1993, EU legislation on additive use was implemented. It includes labelling rules for both the wholesale and retail trade (Euromonitor, 1993; Act, 1990b).

France: A European Perspective

Clear differences have emerged in France's approach, which takes a prescriptive stance towards legislation, and Germany that relies heavily on codes of practice which have legal force. Food legislation within France is the responsibility of more than one government department, with the influence of the veterinary service also in evidence. With an emphasis on sampling, a reactive, rather than proactive, approach is taken.

Denmark

Background

Food legislation in Denmark has a long history. A list of approved food colours was issued by the Chief of the Copenhagen Police Force on 21 December 1836 - one of the first positive lists of food additives in the world (WHO, 1988). Other regulations extend further back in time to the end of the sixteenth century. The first general food law was passed in 1903. Food matters in Denmark are the responsibility of two ministries, namely:

- The Ministry of Agriculture, and
- The Ministry of Health.

The Danish Veterinary Service has a supervisory function regarding foodstuffs. Its particular sphere of influence relates to microbiological issues. The Consumer Agency,

Forbrugerstyrelsen, is responsible for regulations concerning labelling, displaying, advertising prices on foodstuffs and packaging. The organisation of food control is identified in table 4.1 below.

Table 4.1 Organisation of Food Control in Denmark

<p>Ministry of Health National Food Agency, Foodstuffs in general, Additives, Retail trade.</p>	<p>Ministry of Agriculture Danish Veterinary Service, Milk & milk products, Egg & egg products, Exports, Meat etc, Domestic market & EEC.</p>	<p>Ministry of Fisheries Plant Directorate, Quality Control, Fish Products, EEC control, EEC directives.</p>
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The Food Act is within the purview of the Ministry of Health and the central administrative tasks are dealt with by the National Food Agency. Under a 1992 decree, the National Food Agency (NFA) for Foodstuffs is responsible for policy concerning the sale and marketing of foodstuffs (Euromonitor, 1993). This policy also includes legislation aimed at protecting the consumer from health risks and misleading claims when purchasing a food product (Euromonitor, 1993). Whereas food control is decentralised, the NFA provides an appeal procedure against municipality decisions. Denmark has a decentralised food control system. The municipalities are responsible for enforcing regulations for the retail sale of foodstuffs and delegate all or part of their duties to local municipal food control units. Control and inspection are delegated to 278 municipal authorities which, in practice, have these duties carried out by municipal food control units. There are 32 units that undertake inspections and take samples. The inspectors are mostly veterinarians or locally trained technicians. As a rule, inspections are carried out by the local food control units. Indeed, this practice is always the case at

the retail level. The units deal only with food hygiene and compositional matters, and qualified staff tend to be veterinarians (WHO,1988). Decisions made by the local authorities against proprietors can be appealed to the National Food Agency, which has the final administrative say in a number of areas. Decisions made by the National Food Agency can, in turn, be appealed to the Ministry of Health, if the matter is of major importance.

Enforcement

The enforcement officers of the Food Inspection Unit within the area of the Local Council have a statutory right of access to food premises. The officer has the power to demand a wide range of information from the business proprietor and can request the supply of samples free of charge. Any expenses incurred can be charged to the proprietor concerned.

Food control in Denmark is financed by fees payable by the enterprises for approval, inspection and control. The fee system differs somewhat from law to law. Regarding Food Law, the approval fee is a one-off fee and is decided centrally. The inspection fee is determined locally on the basis of the schedule for the control activity, so that control is carried out as required. The inspection fee reflects the actual costs connected with the control of individual enterprises, so that each business knows for what it is paying. This approach encourages enterprises to improve their auto control. Thus well-run firms pay less than those requiring much control. Furthermore, the size of the inspection fee reflects the firm's efficiency in these matters. If additional control is required, the enterprises may be charged extra fees. Businesses may also be charged more for the analysis of additional samples, etc.

The officer is required to provide proof of identity. Any decisions of the supervising authorities need to be communicated in writing and, if they include an order or a prohibition, a time limit for compliance will be stated. In the case of serious violations, the authority can lay down an immediate prohibition on the retail sale or food preparation in question, with a time limit attached. An appeal procedure is available to the proprietor.

The Act takes a prescriptive view of sampling, in so much as a plan for each municipality is devised. The plan contains the number of units and their functions, with a view to the effective utilisation of laboratory facilities in the area. This provision ensures proper laboratory cover. Once approved by the Minister, it is binding on the Council. It is the Minister of Environmental Protection who may make decisions on the nature and extent of the control of food and drinking water, etc. to be carried out by the food inspection units. Restaurants, on written request from the appropriate authority, may be requested to supply samples free of charge, if a breach of the order is suspected. If the samples are taken in connection with a routine sampling control, it is usual for a payment to be made.

The control authorities have access to all buildings, premises or means of transport where food is manufactured, stored, transported or handled. The authorities have the right to obtain any kind of information regarding, for example, production processes, raw material recipes, accounts and other material which may be of importance for control in earlier or later links of the distribution chain. In connection with approval, inspection or other control activities, the authorities have the right to collect samples, order the enterprises to have automated control, order the businesses to change

production processes, prohibit sale or production, reduce the range of products, confiscate illegal foodstuffs and have them destroyed.

Regulations issued according to the provisions of this act are punishable with a fine and / or prison sentence of up to one year.

Principal Legislation

Food Act, 6 th June 1973

In 1973, food legislation was modernised and the various fields of legislation and ministries / authorities were clearly defined. It was decided to maintain a general law, the Food Act, which would cover the whole field, supplemented by a number of special laws on certain foodstuffs. Today, there are eight laws administered by three ministries. In 1990, a law was adopted by the Danish Parliament authorising the Government to establish the rules that were required for the implementation or application of community laws, in cases where the Food Act or the special laws did not contain adequate provisions. The foregoing laws are enabling acts, signifying that the majority of rules are found in orders issued by the relevant minister (Fredsted *et al*, 1995).

Food products legislation is contained in a law of 1973, *Levnedsmiddelloven*, from which further decrees and orders have been derived. The laws on food production and sale are very detailed and are enforced by the inspection of outlets.

The 1973 Act applies as a minimum standard to which all foodstuffs must comply (Act, 1973). The Act itself is worded in broad terms and is merely a statement of intent, with

the detail to be found in regulations made under the Act. The provisions within the Act cover the following 5 main areas:

- designations of, and information about, food,
- packing and marking of pre-packed food,
- the composition and nutritive contents of food,
- the extent to which residues of pesticides, medicaments and other contaminants may be found in food, and
- the sale of food which is assumed to have been exposed to radioactivity or pollution, medical examination and other health control of persons who are occupied with the treatment of food, and general staff hygiene in the food industry.

The purpose of the Food Act is threefold:

1. To protect consumers against health risks,
2. To protect consumers against deception, and
3. To ensure equal conditions for the trade.

The main emphasis of the law is placed on horizontal regulation i.e., one set of rules covering all foodstuffs.

Section 12 deals with the principle that all food sold must be fit for human consumption.

The assumption here is that, if the food is to be used in the normal manner, it must not cause disease or food poisoning; otherwise, it must be deemed to be unfit. Sections 13 and 14 cover the issues of additives and contaminants, and provide for ministers to issue regulations on their nature, content and purity. In terms of the sale of food, persons who

are sufferers or carriers of disease are banned from employment in the sale of food (section 19).

Section 23 deals with the principle that the consumer must not be misled with regard to the product in terms of its origin, time of manufacture, nature, quantity, composition, treatment, qualities and effects. These requirements relate very closely to sections 14 and 15 of the UK's Food Safety Act 1990. These Danish conditions contained within Part 4 of the Act go into greater detail with respect to packaging and labelling, and the information provided to the consumer - points addressed in the UK's Food Labelling Regulations.

The central part of the Act is that the production, sale or storage of foodstuffs are prohibited, unless the authorities have given their permission. Danish legislation, within section 34, provides for a system of registration or approval of retail food businesses by local councils prior to their opening. In seeking approval, the local council may issue orders or prohibitions so that the business complies with the requirements of the Act. Approval must be sought again if there have been:

- important changes in the building,
- important changes in the arrangement of the concern, and
- important changes in the production or the range of products.

Thus, an authorisation is needed for premises, equipment and conditions for production before manufacture or sale can take place. The rules apply to all stages from production to retailing. All enterprises are subject to inspection by the control authorities. The local

council has the option to withdraw approval if any of its requirements, particularly those relating to hygiene, are not met.

Under the 1973 Act, section 42, one duty of the National Food Agency is to advise the relevant minister, specifically the Ministry of Environmental Protection. This advice could be on toxicology and food hygiene in general, or on chemical substances and pollutants in food and drinking water.

On the 9 June 1993, an Act amending the 1973 Act on Foodstuffs etc was introduced into Danish Law (Act, 1993). It allows for the relevant Minister to set an annual fee paid by businesses, to meet all or part of the costs incurred by the authorities in their supervision and inspection duties. This statutory fee can be extended to include what is described as “any extraordinary supervision and analysis”.

Promulgation order on Retail Sale of Food Products 28 th March 1980

The retail trade in food, including restaurants and vending machines, is subject to the provisions of order 121, 28 March 1980. This particular Order covers retail sales, including those pertaining to the preparation and serving of food products (Order, 1980). It is within the definitions of this Order, section 3, that restaurants, vending machines and mobile food premises are specifically mentioned as coming under the terms of the legislation.

Food may not be retailed without the written authority of the local authority. Approval is also required on the layout of an establishment. The local supervising authority has the power to state which food products and other goods may be sold and which food

products may be prepared. If the details contained within the approval are not complied with or are sub-standard in any way, approval to operate can be revoked.

The Order also contains detailed provisions, within chapters 3, 4 and 5, to ensure hygienic conditions of the premises, and in particular, the health of food handling staff.

In essence, the Order specifies detailed rules to be observed so that the premises are arranged in such a way that the preparation, storage and retail sale of food products can be carried out in a proper hygienic manner. In terms of the premises, a restaurant or similar establishment shall comprise:

- a sales room, possibly with a special service area separated from the customers area by a counter,
- a food preparation room,
- a storage area,
- the necessary refrigerating and freezing facilities,
- suitable space, possibly in the form of separate rooms for service, cleaning equipment, cleaners and disinfectants, and for empty packaging,
- an eating area and cloakroom for personnel,
- toilet facilities for personnel, and
- toilet facilities for guests, specifically within restaurants and hotels.

The floors, walls and ceilings are to be designed so that they are of a material that is easily cleanable. Regarding doors, rooms in restaurants may not be so close to other rooms that their proximity will have a deleterious effect on food products or yield

objectionable odours. Doors to preparation rooms must be smooth and washable. Rooms in restaurants are required to be adequately lit with artificial lighting, and the premises need to be effectively ventilated, for example, by means of mechanical ventilation. Any open windows are to be fitted with a fine mesh net. The requirements for fittings, equipment, machinery and containers in restaurants are contained within sections 25 and 26. They are to be of a design and material that is suitable for the purpose and easily cleanable. Unlike common practice within the UK, hard wood chopping boards are specifically allowed in Denmark.

It is the local supervising authority that decides which foods may be sold in a restaurant. The authority can also lay down requirements as to storage of the range of goods, including requirements as to the storage of refrigerated and frozen foods. It is the veterinary directorate that prepares the necessary instructions.

Responsibility, both on reception and during use, of foods of a fresh and sound nature rests with the person responsible for the enterprise, i.e. the tenant, owner or manager. Foods to be served hot should be cooked to a temperature of 75°C throughout. The relevant chill temperature is 5°C for heat-treated easily perishable foods. In cooling foods, the temperature interval of 65°C to 10°C should be achieved within 3 hours.

Chapter 7, section 45, requires all rooms within retail enterprises to be kept in good order, clean, well maintained and well ventilated. Measures must be instituted to avoid pest infestation.

Sections 43 to 51 consider the hygiene and health of personnel working within the operation. Unlike the UK, which in 1995 introduced a general requirement for food hygiene training, such a requirement has existed in Denmark with the implementation of

this order. It is the veterinary directorate, in co-operation with the public health board, that issues instructions on the hygiene of personnel. There are also requirements for the notification of personnel carrying infectious diseases to inform the local supervising authority.

Other Legislation

On November 22 1993 the Minister of Health published three new decrees including implementation of Bill No 351, introducing changes in the levy and control system within the food sector (Agra Europe, 1994). They were adopted on 9 June 1993. One such decree concerns the retail sale of foodstuffs, and entered into force on 1 January 1994. The new decrees implement a simplification and rationalisation of the control of foodstuffs, along with the new levy system contained within the Bill. According to the decrees, the Danish Food Agency becomes the authorising authority, and decisions made by the Agency can be appealed to the Minister of Health. The control and application of the decrees are conferred upon the local food authority with appeal to the Food Agency (Agra Europe, 1994).

Denmark: A European Perspective

During the 1990's the legislative focus was related to efforts towards creating a legal basis for the EU. Practically all new legislation in Denmark is based on the EU Acts issued by the Council of Ministers and the Commission. With the purpose of maintaining parliamentary control, and ensuring efficient national co-ordination, a specific decision-making procedure has been established to handle Danish participation in the EU legislative process. The main elements in this process are that:

- a number of interest groups are involved,
- the decisions are co-ordinated between the relevant ministries, and
- Parliament is involved.

Before the Danish Government can give its vote on a directive in a council meeting, the government position must be approved by the standing parliamentary committee on EU questions. This condition means that the government cannot take a specific position on a directive if a majority of this committee is against it. When an EU directive has been issued, it is implemented into Danish legislation by a ministerial order.

Another aspect to consider is that, since it is rare that cases involving foodstuffs are taken to court, there are extremely few judgements. Court practice has therefore not contributed substantially to the interpretation or solution of matters of dispute. This situation has not changed since Denmark joined the EU. As far as is known, no case has been taken to a Danish court where the question of compatibility with EU law has been involved, or where there have been matters prejudicial to the European Court (Fredsted *et al*, 1995).

One area of interest is that Denmark allows the relevant authorities to levy a charge for the official sampling of foodstuffs. Another difference is that there is a system of prior approval or licensing before a catering establishment can open, a contrast to the UK's approach in these matters. In granting prior approval, the legislation is very specific in what is required in the catering establishment.

The Netherlands

Background

The Netherlands are the largest net exporter of foodstuffs in the EU and have a wide network of quality standards. The Dutch Food Inspection Service comprises 13 regional food inspection services controlled by the Ministry of Welfare, Public Health and Culture. Each regional service serves a population of approximately one million people. Until 1986, the service was the responsibility of 16 local authorities until it was transferred to central government. The National Institute of Public Health and Environmental Hygiene is part of the Ministry, and contributes to food control at the request of the Public Health Inspectorate for Foodstuffs and the Veterinary Public Health Inspectorate (WHO,1988). Each individual regional service has a director, usually a chemist, who controls a laboratory and a team of food inspectors. Every laboratory has at least one specialist section, e.g. meat and meat products. Each laboratory also has a microbiological section that analyses food samples for bacterial contamination, investigates food complaints and may also specialise in the same area as the chemists. There is a long history of legislation on foodstuffs in the Netherlands. At the end of the last century, the local authorities started to promulgate legislation to prevent the sale of suspect foodstuffs. During this period the first foodstuffs' inspection department was established in 1893 in Rotterdam, followed in 1896 in Amsterdam and in 1901 in Leiden.

Enforcement

Compliance with the main Commodities Act is principally the responsibility of the Public Health Inspectorate (PHI), which has the objective to monitor and promote the correct observance of provisions laid down in this Act. The PHI is referred to by its traditional name - The Foodstuffs Inspection Department. Although the title suggests that inspections are carried out, the PHI has only monitoring and criminal investigative powers. These foodstuffs inspection departments have two main objectives. One is to combat fraud, in other words, to promote fair competition. The other is to protect public health.

In 1986, centralisation of the then existing 16 foodstuffs inspection departments took place, and their number was reduced to 13 under the newly named Public Health Inspectorate. The consequences of this reorganisation were uniformity in penalties and in examination frequency. Thus the policies regarding the investigative powers of the different departments became more attuned to each other. The activities of the PHI are mainly repressive in nature. Not all goods are systematically tested before entering the market; sometimes spot checks are done. In 1994, 165,131 companies were visited where 265,333 samples were taken, of which 14.3 per cent did not meet all requirements. The PHI issued 21,557 warnings and 9,402 (3.5 per cent) police reports were made (Lugt, 1994; 1995)

As soon as a PHI official discovers an infringement against relevant legislation, the monitoring phase ends and a criminal investigation begins. Officials with criminal investigative powers can give a warning for less serious violations instead of a full police

report. Generally, a warning is accompanied by an advice, a preventative measure to forestall a violation.

The Dutch system is not strictly comparable with the UK, as it is integrated in terms of its inspectorate and analysts. Co-ordination is the key consideration, and the 13 regions work closely with each other. Moreover, formal links ensure that expertise and specialities are shared. The weakness in this approach is that the lines of communication are longer, and there is no direct influence by individual services on financial control and the funds available to the service.

In general, the Dutch food inspection service encounters the same food hygiene problems and scares as the UK. Hence, surveys are carried out for listeria in cheese and salads, and foodstuffs suspected of food poisoning are investigated for campylobacter and salmonella. Enforcement is much easier than in the UK because limits for the quantity of bacteria in food are set out in the regulations. This situation is reflected in the number of successful prosecutions for microbiological related offences. Pathogenic micro-organisms, in quantities which may be damaging to health, must be absent from food and drink products, and specific limits are set within article 4. For instance, the counts of *Clostridium Perfringens* which can be cultivated must not be more than 100,000 organisms per cfu.

In general terms, the sampling rate is equivalent to 20 samples per 1000 head of population per year (LACOTS,1990). The methods of examination that are laid down in order to determine whether there has been a breach of the requirements are microbiological research methods, chromatographic, organoleptic determination methods and other separation methods.

Penalties for violation of the Commodities Act are not provided in the Act itself, but in the Economic Offences Act (EOA), which contains provisions on investigation, prosecution and punishment in relation to economic crimes (Lugt, 1994). The basic assumption of this Act is that general criminal law and the law of criminal procedures are applicable to economic offences, unless the EOA determines otherwise.

Principal Legislation

Food and Drugs Act, 1 August 1988

There is no comprehensive Act on food related issues. Food law has thus been codified in several acts, the most frequently used being the Commodities Act. In 1919, the first Commodities Act was promulgated, with the twin objectives of serving the interests of public health and fair competition. The Act has been amended several times and the last considerable change took place in 1988, principally to adapt to European legislation. The Act is applicable to all movable goods, including foodstuffs (Lugt, 1994).

Generally, the law provides that a producer is responsible for providing food of the requisite standard, and does not need prior approval, except where laid down. This provision is unlike that of Denmark, which does require permission unless exemptions are laid down (Act, 1988). Several decrees and regulations which follow on from this Act include requirements with regard to hygiene for the preparation of food products on the premises. The requirements will be eventually replaced by stipulations based on the new Food and Drugs Act (Statute Book, 1988:360 see Euromonitor, 1993). The Decree Preparation and Treatment of Food Products (Act, 1992) is based on the above mentioned *new* Food and Drugs Act.

This 1988 Act is in essence an enabling piece of legislation backed up by more specific regulations. The main offence with respect to food safety is contained within article 18 of the 1988 Act, which prohibits the trade in food and drink products which, due to their inferiority, may endanger the health and safety of the consumer. This offence extends to both the preparation of products using inferior raw materials and to products which, it can reasonably be presumed, would be unsafe. Consumer protection offences are contained in article 20, which prohibits misleading labelling, text or illustrations.

Food and Drugs Act Preparation and Treatment of Food Products 10 December 1992

This Act aims to include in one piece of legislation all general aspects with regard to the proper preparation and treatment of food and drink products (Act, 1992). Section 1 of the Act identifies a range of general stipulations, including a number of definitions.

Article 3 provides for general matters of hygiene and makes it an offence to sell food which is contaminated, or which allows organisms or toxins to multiply, to the extent that they constitute a danger to health. Another feature of this section is that there is provision for regulations to be issued with respect to premises, equipment, preparation, transport and personnel. Whereas it would be possible within this section to lay down prescriptive requirements as to premises and preparation areas, it has not been the government's intention to take this approach.

The government decided to take an essentially deregulatory stance. It called on the relevant sectors in industry in 1987 to draw up hygiene codes in which each sector indicates ways in which the food and drink products in question may be prepared hygienically. This approach, implemented during 1993, incorporates codes of practice

from different industry sectors on the hygienic preparation of products (Euromonitor, 1993).

These codes were submitted to the Advisory Committee on Aspects of the Food and Drugs Act (*Adviescommissie Warenwet* or ACWW). The codes are regarded by government and enforcement officers as a general guide to compliance with the Act, unless there is evidence to the contrary. This approach follows in broad terms article 5 of the EC Directive on the Official Control of Foodstuffs. More specifically, it is in agreement with the position taken by the EC Directive on the Hygiene of Foodstuffs adopted in June 1993. The preference within the Netherlands is in shifting the responsibility to industry, although if no code is issued for a sector, the government will draw up regulations in order to protect public health. As a basis, the codes draw heavily on the General Principles of Food Hygiene issued by the Codex Alimentarius Commission. Microbiological target values are required to be included within the code. Breach of such target values will probably result in legal action by the enforcement authorities. Such values relate closely to the Codex Alimentarius General Principles for the Establishment and Application of Microbiological Criteria for Foods. Different values are adopted, dependent on whether the matter is at the production or distribution stage. It is recognised that it is not entirely possible to avoid a limited increase in micro-organisms during distribution due to the intrinsic properties of the food. At the end of 1992, eight codes had been drawn up, including a hygiene code for hotels, restaurants and catering firms.

Besides delegation to ministers, the Commodities Act also contains provisions which delegate powers to Public Industrial Organisations. By Order in

Council, the administration of a *Public Industrial Organisation* can be obliged, or can have the competence to issue, more detailed rules, or to take other decisions. A regulation by such an organisation must be approved by the Minister. Although the Advisory Committee on the Commodities Act cannot itself issue legislation on foodstuffs, it plays an important role in the field of food law, and advises ministers on proposals for legislation. The committee consists of two sections, food and non-food, each having 15 members. The influence of the ACCA in the field of food law is considerable since, despite its diverse composition, its advice is generally unanimous.

Requirements for the storage and transport of foodstuffs in 1992 took a different approach from that of other countries. Food and drink products are expected to be stored in cool conditions in order to prevent micro-biological deterioration or the growth of pathogenic bacteria. If the manufacturer has not indicated a specific storage temperature, the food must be kept at a temperature of 7°C or less.

In addition, the food and drink product must carry a storage label which indicates, among other things, that the product must be consumed within a fixed number of days after purchase. Also, the packaging of products must be such that the material is separate from the product. This Act took effect in March 1993.

Food and Drugs Act, Food Hygiene Regulations 19th February 1993

As with the 1992 Act just discussed, this regulation implements much of the requirements of the Directive on the Hygiene of Foodstuffs adopted in June 1993

(Regulation, 1993). It was based, to some extent, on the recommendations from the Advisory Committee on aspects of the Food and Drugs Act of 9 October 1991. Articles 1 and 2 sum up the general requirements for the hygienic design of premises engaged in the preparation of food products. Article 3 indicates that only ceilings, walls, work surfaces and equipment, that are all easily cleanable, shall be used. Various infections and contagious illnesses prevent persons taking part in the preparation of food, a point detailed in article 6. This regulation took effect in March 1993.

Other Legislation

Under the Labelling (Food) Decree 1991, any transaction of food or drink not in accordance with these regulations is prohibited (Euromonitor, 1993). This Food and Drugs (Amendment) Decree implemented EU legislation concerning the labelling and presentation of foodstuffs for the consumer (Euromonitor, 1993).

The Netherlands: A European Perspective

On 12 December 1994, the Commodities Act Order on the Hygiene of Foodstuffs (*Warenwetregeling Hygiene van Levensmiddelen*) was issued to implement the Directive on the Hygiene of Foodstuffs 1993 (Lugt, 1994,1995). It entered into force in December 1995. Article 1 of the Dutch Order implements the definitions of hygiene and of food businesses (Article 2 Directive) by adopting the copy out principle including no European definition of food.

An important difference between the HACCP principles contained within the directive, and the codex guidelines for the application of the HACCP system, is that the Community principles do not contain the obligation to establish documentation

concerning all procedures and records related to HACCP principles and their application. Although this record-keeping requirement had been proposed by the European Parliament (1992), it has not been included in the Directive itself. An important additional obligation for the Dutch is that article 30 section 2 obliges businesses to keep records of their HACCP system and to make these available to supervising officials. This will require inspectors to have a capacity to monitor.

Article 5 of the directive contains provisions concerning both so-called “national” and “European” guides to good hygiene practice. Article 31 of the Dutch Order implements the community provisions on national guides. Since 1987, the Dutch government has stimulated the drafting of guides to good hygiene practice. At present, there are some 15 Dutch guides to good hygiene practice, many (but not all) of which contain several elements of the HACCP principles. The use of the guides raises several questions in Dutch Law. A first issue concerns the way in which the guides will be viewed by the monitoring authorities. Article 32 requires the authorities to take proper account of the guides. A second question deals with the fulfilment of the HACCP requirements by the application of a hygiene guide. One issue concerns the nature of the relationship between national and European guides. Must the contents of the national guides be in accordance with the contents of the European guides?

The Directive also gives member states a great deal of freedom to decide on the organisation of the national monitoring and enforcement system. In the Netherlands, the Inspectorate for Health Protection is the main authority for food monitoring (Order, 1990).

The hygiene directive allows member states to designate their own system of penalties, whether the offence be of a criminal, civil or administrative nature. In the Netherlands, violations against food legislation come under criminal law, and the relevant authorities have similar investigative powers.

An area highlighted in the Netherlands is the use of micro-biological criteria which is written into legislation, an approach rejected by the UK government. Another feature is the organisation structure of food law enforcement, in which expertise and specialities are shared between the regions of the country.

In summary, therefore, the implementation of the hygiene directive in the Dutch Commodities Act Order on the Hygiene of Foodstuffs does not cause any major difficulties. However, some Dutch interpretations could be problematic.

During 1994, the Dutch Government sent a memorandum on the future of food policy in the EU to the Commission (Agra Europe, 1994). The memorandum argued for a transparent and simpler EU food policy with a preference for horizontal legislation and only limited vertical legislation. According to the Dutch government, deregulation and subsidiarity should be the leading principles, in such a way that the EU regulates the main issues clearly and with one voice, and that member states are responsible for the application and more detailed provisions. Another aspect of the memorandum is the use of instruments, regulation and directive. In the Dutch government's view, in addition to directives, regulations should be considered more often.

From the description of food law in the Netherlands and the agencies monitoring the law, it is clear that the system is highly complicated. Moreover, the ministries involved disagree on the division of powers. This lack of consensus has resulted in discussions on

what form legislation should take and on the division of powers concerning the monitoring of such legislation. It is perhaps inevitable that all government institutions will be brought together into one Dutch Control Agency of Foodstuffs.

Summary

It can be seen from this chapter that the topic of food legislation is complex and will continue to evolve over the next few years. While the framework of European legislation is well established, the detail would seem to vary within individual countries, a number of differences are listed below (see table 4.2).

The Enforcement Structure in member states can be categorised as either centralised or decentralised, clearly having implications for the lines of communication between government and enforcing authorities. The UK takes a deregulatory approach in enforcement and has its unique system of TSO's and EHO's. The Veterinary service assumes a key role in enforcement in many member states. This difference also raises the issue of the professional qualifications of enforcement officers and the provisions for ongoing training. Another aspect is the level of financial support and commitment given by different governments to individual authorities.

Legal Systems vary between member states with Scotland being more similar to France than to England and Wales. Discretion in enforcement powers prior to a case coming to court seems to be considerably wider in mainland European countries. Equally, the enforcing powers of individual officers vary throughout Europe, particularly with respect to the penalties they can impose, which may influence a proprietor's awareness of legislation. The legal status of a range of codes of practice relating to food legislation

varies from the German Food Commission to the section 40 codes of the Food Safety Act 1990, and the Industry Guides to Good Hygiene Practice contained within the EC Directive on the Hygiene of Foodstuffs.

Table 4.2 Food Safety: Differences and Similarities between Five Countries

	<i>UK</i>	<i>Germany</i>	<i>France</i>	<i>Denmark</i>	<i>Netherlands</i>
Principle Legislation	Food Safety Act 1990	Foodstuffs & Commodities Act 1974	Law 1st August 1905 Fraud & Attempted Fraud	Food Act etc 6th June 1973	Food & Drugs Act 1988
Enforcement Structure	Department of Health, Ministry of Agriculture, Fisheries & Food	Ministry of Health. Ministry of Nutrition, Agriculture & Forestry	Ministry of Economy & Finance. Ministry of Agriculture	Ministry of Agriculture. Ministry of Health	Ministry of Welfare Public Health & Culture
Enforcement	Environmental Health Officers. Trading Standards Officers	Veterinary Office within each Bundeslând also Police Officers	Direction Générale de la Concurrence de la Consommation et de la Répression des Fraudes	Danish Veterinary Service The Consumer Agency The National Food Agency	Public Health Inspectorate Veterinarians or Chemists
Legal System	Legislation developed centrally, enforced locally Home Authority Principle	Legislation developed centrally & to some extent regionally	Controlled centrally	Legislation developed centrally, food control is decentralised. Food control financed by fees	Legislation developed centrally, enforced locally
Registration & Licensing	Registration	Licensed	Registration	Prior approval / licensing including establishment layout	No, deregulatory approach
Codes of Practice	Voluntary with no legal force	Regarded as self regulatory and have legal force	Regarded as self regulatory	Voluntary	Voluntary
Temperature Control	+8°C	Not Known	+3°C	+5°C	+7°C
Microbiological Criteria	No except in restricted food manufactured products	No	Yes	Not Known	Yes

The Registration and Licensing of food businesses represent a key difference within member states. Some countries take a prescriptive view on what is required before opening a food business. Such prior approval, or a licensing approach, contrasts with the registration procedure in operation within the UK. The UK's view is that there are already sufficient powers to close businesses that pose a danger to health, and therefore licensing would be an unacceptable additional burden.

Temperature Controls vary between member states and indeed, up until September 1995, vary significantly between England and Wales, and Scotland. The range is from +3°C in France to +7°C in Netherlands to +8°C in the UK. These differences will have to be resolved on a EU - wide basis, which may see amendments to the UK's presently enforced temperature control regulations. From a food safety point of view, 3°C would seem to be the best figure. Yet the question has to be raised whether it is enforceable. Equally, food quality would suffer at that temperature, and certain open chill display cabinets would not be a suitable method of storage. It could be argued that this is a matter in which subsidiarity should apply, with the EU only getting involved with inter-EU trade.

Microbiological Criteria are already written into the legislation of some European countries, an approach that follows closely the views of the Codex Alimentarius Commission. The UK is fiercely opposed to this position, not least because such criteria would have to vary between the various stages of the food chain, from the farm gate to the ultimate consumer.

The influence of the European Union's single market will mean that considerably more of the UK's legislation will originate from Brussels, and will inevitably be subject to qualified majority voting as a single market measure. It is therefore important to consider the effectiveness of an individual country's approach to food law enforcement, and whether a link can be established with trends in the number of reported food poisoning outbreaks. Effectiveness can also be considered in terms of the national resources devoted to food law enforcement and the awareness of food safety issues by catering proprietors.

The development of an internal market is a continuing process that was not complete at the end of 1992. In the course of this development, the structure of supply of the internal foodstuffs market will change, not only in terms of quantity, but also in terms of quality. It is expected that with the completion of the internal market more additives than currently allowed in, for instance, Germany, will enter the market. Furthermore, it is expected that new technologies, for example, *food irradiation*, which some countries support, others closely regulate and still others fiercely oppose, will be introduced on an EU-wide basis. On the other hand, there are number of improvements in food law that would not have been achieved in, for example, Germany, without the aid and impetus of the EU Commission. There are, for instance, issues of labelling, (e.g. the labelling of nutrients and of alcohol content, and the labelling regulation relating to organic products) as well as drinking-water guidelines, various hygiene regulations regarding animal products.

A clear distinction can be drawn between two principal types of legislated controls on the hygienic production of food. Traditionally, though only for the production of

foodstuffs of animal origin, prescriptive requirements have been laid down in considerable detail to ensure that all stages are closely regulated. This situation resulted in a wealth of provisions which were not always appropriate, or necessary, in particular establishments and, to this extent, can be considered as being disproportionate or over-regulatory. Steps should be taken to eliminate such excesses where practicable. More recently, it has become acceptable to rely upon the operators of businesses, approved and monitored appropriately by the competent authority, to provide adequate hygiene controls within a framework of varying complexity, often based on critical control points. Almost inevitably at this early stage in the development of this type of control system, member states have felt obliged to supplement their sophisticated elements with a limited number of basic obligations.

The differences between member states exist and, if harmonisation of food law is to be achieved, further changes are to be expected in the years to come. The decision for the regulators is how these differences are to be resolved, which member state approach should be adopted, the method of enforcement employed and their implications for hotel businesses and consumers.

Chapter 5

Methodology

Introduction

This chapter discusses the methodological issues pertaining to the measurement of attitudes towards food safety within selected countries of the European hotel industry. More specifically, it seeks to ascertain if there are any differences between countries, hotel type or individuals, issues that have been theoretically explored in chapter two.

Research at the trans-national and trans-societal level spans a wide range of attitudes. At one extreme of the continuum are those researchers for whom all societies can be compared by testing them against universalistic explanations. At the other end are those who claim that since each society is culturally and historically unique, there is no gain in understanding by comparing it with others. Additionally, the comparative tradition of European studies that takes the region as a specific unit of analysis has changed over time. This midway position implies a methodology that not only draws on universal classifications but also needs to create its own categories. In a nutshell, if between EU country variances are less than within country variations, the former can hardly constitute explanations.

Connection with the Research Problem

Emerging out of the literature review, this study attempted to tackle a fundamental research problem, namely whether there were convergence or divergence in attitudes towards food safety within selected countries of the European hotel industry. If

assumptions regarding nation, hotel type and / or hierarchical differences were confirmed as major reasons for divergence, this research could provide guidelines for the western European hotel industry concerning issues to do with the management of food safety matters. In expanding the elements of this research problem, the following six aims were identified.

1. To update data on food safety legislation (as a complement to those outlined in chapter four),
2. To collect and compare up-dated information about attitudes towards food safety within a number of hotels located in selected member states of the EU,
3. To conduct a survey of attitudes towards food safety at different levels of the firms' hierarchy taking into account the concept of stakeholders,
4. To integrate the socio-cultural and legal aspects of food safety in order to see whether or not there were differences between countries,
5. To investigate differences, if any, in attitudes towards food safety between chain hotels and independents, especially since the latter dominated the market, and
6. To investigate differences, if any, between between selected stakeholder groups.

As previously noted, this study aimed to elicit differences, if any, in attitudes towards food safety within the European hotel industry. It has already been stated in chapter two that food safety is subject to qualified majority voting as part of the Single European Act 1987 and, on that structural basis, the four main countries were chosen. Taking all these points together, it was possible to state the research problem, as follows:

Within the European Union, what is the relationship of attitudes of hotel catering personnel, key stakeholders, towards food safety at varying levels of the firm's

hierarchy and in different hotel types, as exemplified by the UK, Germany, France and Italy?

While the focus of the inquiry had been selected, this aim in itself was not sufficient to establish whether the intended area of research were feasible. Selection of innovative research questions is not a single act or decision but a process - a way of thinking. At this stage it was necessary to state the exact nature of research concerning food safety. The choice of items within the research design which evolves out of a problem is often non-linear and involves considerable uncertainty and intuition. The research questions below can be described as constituting a tentative hypothesis as to what was going on in this particular situation, and thus provide a useful bridge or framework for the overall design. In the event, the stated research problem led this study to examine the following four questions:

1. To what extent are food and beverage personnel's attitudes towards food safety bound by the country in which they are located?,
2. Are food and beverage personnel's attitudes towards food safety dependent on the hierarchical position they occupy within the hotel firm?,
3. Do attitudes towards food safety vary by selected stakeholder groups?, and
4. Are food and beverage personnel's attitudes toward food safety a reflection of the type of hotel firm, chain or independent, in which they work?

The importance of establishing these four questions was that they assisted in operationalising the planning process, so that the data collected would actually address the issues as stated. This approach informed the research design from the outset. A range of topics was identified within these four questions which could be used to set specific objectives for the research design. The research objectives were to identify:

- if the review of the literature on food safety legislation in selected European countries could be explored further.
- the inter-relationship of attitudes towards food safety in various units and countries,
- if attitudes towards food safety varied between the countries of the UK, France, Germany and Italy,
- if hotel type influenced individual attitudes towards food safety,
- if there were differences in attitudes to food safety within the hotel's hierarchy i.e. the influence of selected stakeholders.

The constant units of the research were hotels located in capital cities of selected European countries, hotels that were categorised as either small, medium or large in terms of room size. Because the research focused on food safety, the only operational requirement was that these hotels should provide food and beverage facilities. The justification for these three hotel categories and their city locations was to investigate differences between independent and chain hotels. The latter tended to be large in room size and were centrally located in major cities in order to generate year round demand. Although smaller independent hotels were also found in major cities, they were not in central locations.

On the basis of the EU's qualified majority voting structure, the main countries chosen were: UK, Germany, France and Italy. Even though a wider range of countries was examined in the literature review, the final choice for the survey was based on key differences in terms of: national culture, enforcement structure, legal systems,

registration and licensing, temperature controls and microbiological criteria. Furthermore, the anticipated sample size for each selected country had to be sufficiently large for statistical analysis. Following the data presented in chapter six, it was decided to include Italy since it satisfied these criteria, in addition to the matter of voting. All four chosen countries exhibited clear contrasts in these seven areas and, in terms of industry size, they collectively represented the majority of EU hotel room stock. The two major categories of staff approached were management, (those exercising one or more of the four functions of planning, organising, motivating and controlling operational staff), and operational staff, (those staff within the food and beverage department that carried out on a day to day basis the duties defined by food and beverage managers). The term “attitude” was defined as a mental disposition towards a particular aspect of the environment, in this instance, food safety. A key factor in considering attitudes, was the assumption that, notwithstanding instances of cognitive dissonance, they might permit an understanding of behaviour. A related question, not investigated by this research, was whether attitudes towards food safety could be used to predict overt behaviour. The term “culture”, as explored in chapter two, was defined as a configuration of learned behaviour and results of behaviour, whose components were shared and transmitted by members of a particular group with like goals and interests. Culture, it was therefore argued, could exist at national, organisational and individual levels. The expression “food safety” encompassed all measures necessary to ensure the safety and wholesomeness of food during the carrying out of any operation within the food and beverage department of an hotel.

Having operationalised the variables, the question of measurement drew on the distinction developed by Stevens (1946) between nominal, ordinal and interval levels. Nominal measures were used, particularly in relation to non-quantifiable demographic data whose only requirements were mutual exclusivity and exhaustiveness. As regards ordinal level measures, while the assumptions of mutual exclusivity and exhaustiveness also applied, the major difference was that now the categories themselves could be rank ordered with reference to some external criteria, so that inclusion in one category could be regarded as having more or less of some underlying quality when compared with cases in another category. Attitudes towards food safety are all constructs that vary in degree between individuals, and hence allow ordinal measurement. However, there is a trend in the direction of a more liberal recognition of multiple item scales as having the qualities of interval variables. In this regard, Labovitz (1970) suggests that almost all ordinal variables can and should be treated as interval variables. He argues that the amount of error that can occur is minimal, especially in relation to the considerable advantages that can accrue from using more powerful quantitative techniques such as correlation and regression. Additionally, he points out that the analysis is investigating numbers, not the meaning behind them. Even so, the more conservative stance adopted by this research was to regard attitudinal variables as ordinal measures using as wide a range of statistical analysis as possible.

Problems and Limitations of the Literature

Studies on differences regarding attitudes towards food safety have been limited to member states of the EU, both separately and at a regional level. Investigations showed

that there had been an *ad hoc* approach to research on this topic, and a number of shortcomings in the existing secondary data were identified. The first drawback was the lack of relevant, comparative information, especially concerning inspection results and food legislation in the EU and its members. This problem of comparability arises out of the different ways in which the food control services of member states operate, and the lack of common quality control standards in the laboratories and methods of analysis. While, in theory, food safety legislation is a *single market issue* contained within the Single Market Act 1987, in practice significant variation exists, particularly in the implementation of legislation between member states and, to some extent, within them (EC Commission, 1986). This point is reflected in the comments contained in chapter four. This dilemma is further reinforced in the difficulties the Commission has experienced in compiling the inspection results required under Article 14 of the Official Control of Foodstuffs Directive 1989 (EC Commission, 1989a). Where limited statistics are available, researchers have not reached the stage of investigating the issues surrounding the implementation of food safety policies, let alone establishing a viable framework of food safety attitudes within member states of the EU and, more specifically, the hotel industry. Indeed, even setting aside the problems of linguistic ambiguity, the literature and information, which are contained within the secondary data from Western Europe, are limited and fraught with difficulties of interpretation.

The essential problems encountered in the literature review were the different legal systems and the idiosyncratic enforcement of food law in EU member states. This disparity in evidence before 1989 has continued, since the Official Control of Foodstuffs Directive only harmonised, rather than standardised, the general principles of food

control. In fact, the laws and regulations on foodstuffs belong to some of the oldest legislation in society, and probably explain why the statistics received from member states are difficult to compare. In elaborating this point, if one considers for instance the incidence of infringements identified in previous chapters, almost every member state has a comparable pattern of lawbreaking in the fields of hygiene, additives, contaminants, composition, labelling and presentation. However, with enforcement, the prominence of hygiene may reflect how member states have placed greater emphasis on this issue. Equally, there is a problem of definition, for instance, with microbiological contamination. Differences could be explained thus: it appears that some member states include undesirable substances, such as foreign bodies, dead insects, etc., in this category. Also member states use different interpretations of the basic concepts underpinning their statistics, as for instance, the nature of infringement. Sometimes legal requirements lead to an oral warning by the competent authorities. To member states such warnings may have formal meanings and, consequently they are reported in the statistics. Yet, in other instances, warnings are treated in a more cavalier fashion, and hence go unrecorded.

A further weakness in the literature review is that the studies covered were too discipline-specific. Some considered cross-cultural management, while others relied on food safety law or food science. For example, sociologists investigated basic concepts and beliefs about cross-cultural management, but they did not extend their inquiries to subsequent attitudes and behaviour towards food safety. The fact that these studies were not interdisciplinary in nature, or lacked cross-cultural comparisons specific to food safety within the hospitality industry, raises the question of whether the result would be

the same if these studies of each area of interest were combined and administered to national industry-specific subject groups.

The above-mentioned shortcomings of existing secondary data led this study to filling the information gaps via expert opinion. The results of this first stage of data gathered are reported in chapter six. Following a second stage in which a pilot study was conducted, a third stage of data collection was also required in order to complement the factual information with attitudinal data. This second stage of the study is explored later in this chapter, with the data from the third stage presented in chapters seven, eight and nine.

Theoretical Research Context

The comments contained within chapter two and the earlier part of this chapter illustrate that, while there are cross national differences and similarities, the actual factors explaining differences are primarily not national but cultural. What is clear is the fact that differences regarding, for example, Protestant or Catholic influences, involve an explanation that cuts across the administrative boundaries of nation states. Countries such as Germany, for instance, with pronounced work ethic differences between north and south, offer an opportunity to establish which factor is the stronger: cultural or national. The problem remains that while a nation state, culture or society may be too large a unit for a causal attribution, it may also be too vague a context to account for observed differences, since in its most ideological form a nation state assumes a basic sameness among its citizens. However, all industrial societies are pluralistic and, if material well being and the political system permit, they are often so pluralistic that within country differences are greater than between country differences. It is therefore

recognised that data from comparative survey research are more difficult to analyse and interpret than experimental data. Whereas a nation state often constitutes a geographical sampling unit, cross-cultural and cross-societal comparisons will still remain a substantive issue. It is also important to note that modern nations may be too complex and subculturally heterogeneous to possess a national culture. It is therefore the *main research problem* of this study that helps determine the adopted design with a focus directed towards the hotel organisation. Continuing this theoretical perspective, within the overarching concept of an hotel organisational culture, it is sensible to recognise the possibility and likelihood of distinct subcultures existing among managerial teams, occupational groups, members of different social classes and so on, many of which transcend national boundaries. However, cultures in hotel organisations are not independent of their social context, thus introducing the interplay of macro and micro variables. Encountering diversity in this investigation will only serve to heighten awareness of the problems of equivalence in analysing the data.

Research Alternatives

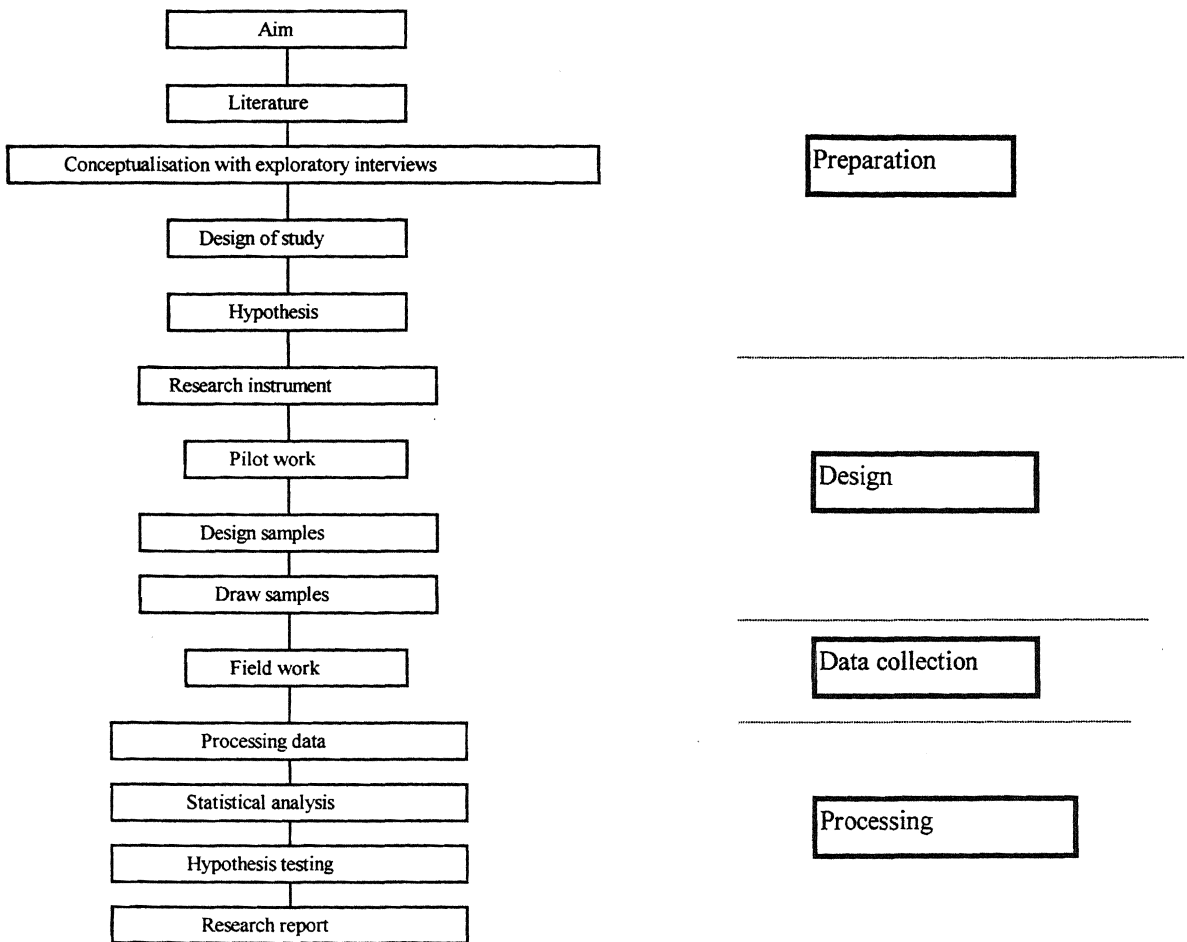
Further to the above discussion is the realisation that choices have to be made from a range of methods that draw on the distinction between positivist and interpretative paradigms. Whilst the former's qualities reside in a supposed greater objectivity and the furtherance of general explanatory theory, they also tend to treat social behaviour as an inanimate phenomenon. By contrast, while an observational study of small groups may not be representative of the population at large, within its operational framework it may be perfectly valid and reliable. Thus, the search for answers in considering these two traditions (positivism and interpretivism) reaches beyond the realms of ideology in a

quest for basic patterns of human behaviour. The only logical terminal point for such a journey would be the discovery of all embracing social laws which may portray fundamental humanistic behaviour. It could well be that in the context of this study, the comparative nature of this research will require a shift in emphasis from seeking uniformity amongst variety to a consideration of uniqueness amongst homogeneity.

Research Process

As an appropriate methodological framework for this study, Oppenheim's stages of the research process (see figure 5.1) have been collapsed to those of: preparation, design, data collection and processing. Since preparation, (Oppenheim's first five stages), has already been carried out in the first four chapters, the remainder of this chapter focuses on design and data collection, including also an assessment of the study's limitations. Processing is initially explored in this chapter and in greater detail subsequently.

Figure 5.1 Oppenheim's Outline of the Research Process - Grouped into Four Stages



Source: Oppenheim, 1992.

Design

Design comprises Oppenheim's steps' six to nine, namely, research instrument, pilot work, sampling design and drawing the sample. After consideration of the population's familiarity with the instruments available, a questionnaire was chosen as the survey instrument, since it was cost and time effective, could reach a widely dispersed sample, and relied on standardised stimuli that could provide comparative data. Co-present

methods, such as observation, conversation analysis and interviewing were rejected due to the complications of interactivity, language and financial cost, as well as the difficulties in maintaining standardisation and comparability.

Once the instrument was selected, the items were constructed. They were designed with a great deal of care as to their comprehensibility and user friendliness since it was financially impossible for the researcher to return to respondents in order to collect missing information.

The questionnaire combined the research aims and anticipated data analysis techniques (de Vaus, 1986). It involved the preparation of a preliminary draft and its subsequent testing through pilot work (Barrett, 1995).

While not all social research employs attitude scaling, the measurement of attitudes was central to this investigation. Attitude scaling is considered "a formalised version of an everyday process" (de Vaus, 1986:94); it is a composite measure of a multi-faceted concept. It was judged desirable to prepare a set of items focusing on one key idea in order that its complexity and degree of adherence could be tapped and respondents hence differentiated. Although there are several widely used scaling methods available, it was decided that the most suitable type for this particular enquiry was the Likert variety.

The principle adopted concerning measurement of this scaling approach was as follows:

Uni-dimensionality or homogeneity: The scale was about one topic at a time, uniformity, internal coherence and measuring the same underlying concept. (Oppenheim, 1992; de Vaus, 1986).

Data Collection

The actual gathering of the data was conducted in three stages:

1. Supplementing the shortfall in the literature review by obtaining relevant factual data from Government and enforcement officials.
2. Carrying out a pilot study to prepare and test a draft questionnaire
3. Gathering knowledge and attitude data by way of a sample survey of European hotels.

Preliminary Research on Food Legislation: First Stage

It has already been stated that a weakness in the literature review is the incompleteness of the commentary on food safety legislation contained in chapter four. A key objective of this study, was to build on that review by extending the comparative analysis of food inspection legislation and policy in selected EU member states.

To fill this information void, a questionnaire on specific aspects of legislation was sent to thirty-seven named government officials (cf. appendix, one; appendix, two), in the following countries: Denmark, Italy, Netherlands, Spain, United Kingdom, Germany and France. These countries were chosen because of the paucity of literature available on the topic of food safety, particularly in English. This fact-finding questionnaire was developed first by identifying gaps in the literature, (highlighted in chapter four), and then by targeting specialist academics in the field, environmental officers and officials within the relevant ministries. A list of thirty-seven contact names of potential

respondents within these countries was compiled (appendix two). The questionnaire was professionally translated into the appropriate language.

The objective of this preliminary research was to determine the development of food safety legislation and policy in member states, with particular reference to two central pieces of EU food legislation relevant to the hotel industry:

1. EC Official Control of Foodstuffs Directive June 1989 (EC Commission, 1989a), and
2. EC Directive on the Hygiene of Foodstuffs June 1993 (EC Commission, 1993a).

The reason for using these two directives as a base was that they provided a framework for the development of food safety directed principally, (although not exclusively), at the hotel industry throughout the EU. Not only did the directives provide a structure for food safety and consumer protection; they also related to enforcement. In adopting this approach, the aim was to identify specific differences in policy, procedure and legislation among and within member states since the literature review so far had indicated that some overall variation did exist. Having identified these features, it was then possible to relate food inspection procedures within member states to hotel premises.

At this stage, the industry sector considered was set deliberately wider than hotels, and encompassed retail catering establishments, either commercial or non-profit making. The reason for this broader approach was that the hotel industry tended to become subsumed within this wider retail catering sector and was not, in EU legislative terms, regarded as a separate industry. Included within this preliminary questionnaire was a request for food control statistics relevant to retail catering premises. Most of this information was contained in the returns required under Article 14 of the Official Control of Foodstuffs Directive 1989 which had to be supplied to the EU Commission. The difficulty in asking

for such details was that, apart from the UK, member states regarded their Article 14 returns as confidential and, as only limited statistics were available from other publications of the EU (COMM 97, 1997b), responses were generally low. Moreover these figures had to be treated with extreme caution as definitions, policies and practices varied between countries, and hence these “comparative” statistics did not compare like with like.

The results of this questionnaire are presented in chapter six, along with comments on Article 14 of the Official Control of Foodstuffs Directive 1989, an article which was of direct relevance to this part of the study. Relatedly, and in the summary of chapter six, there is further commentary about the limited amount of official food control statistics throughout the EU.

Pilot Study: Second Stage

The pilot work which tested the draft questionnaire prior to the main survey was conducted among a smaller group of subjects. It took place in the UK in order to avoid the linguistic and financial problems of an international pre-test.

The purpose of the pilot study was to identify the domains and range of the research, i.e., what exactly was being measured and the possible responses. Whilst the researcher had an *a priori* idea, though broad and vague, of the domain facets, these needed to be more precise. A two-phase pilot study was conducted.

First Phase: This phase was carried out in April, 1995 among 25 food and beverage personnel in the UK. Its purpose was to narrow down the problem areas as much as possible. To this end, the group was given a combination of sorting tasks and word-

associations. Statements were derived to yield a questionnaire, which was administered to the same respondents.

Second Phase: The pilot study was extensively altered as a result of the first phase. Although the length of the questionnaire was reduced by more than half, there were many outstanding points still to be probed. The aims of this stage were (1) to narrow down the problem areas further, (2) to find an easily understandable format and phraseology, (3) to highlight possible differences which needed further investigation. This phase was conducted August - September 1995 among the same 25 personnel.

It is not the purpose of this section to provide detailed findings from the pilot study, though they were essential for the preparation of the final questionnaire to be used in the main survey. A summary of the results was as follows:

(1) Level of awareness: There were no problematic issues which were unknown to the majority of the respondents.

(2) Significance of Food Safety Issues: Levels of concern varied with hierarchy and hotel type.

(3) Concepts of Food Safety: There was a good overall understanding of the elements and practices concerning food safety.

(4) Perception of Food Safety: Respondents' perceptions varied with educational background.

(5) Level of Responsibility: Views on food safety varied according to position in the hierarchy.

Attitude Survey of European Hotel Personnel: Third Stage

As regards to the third stage of data collection a postal survey was chosen over more expensive co-present measures (Wax, 1971). To this end, self-administered questionnaires were mailed out, with a covering letter and pre-paid return envelope (Dillman, 1978). The covering letter introduced the aims of the survey. It also promised confidentiality and aimed to motivate respondents to co-operate. Even so, it was recognised that the approach adopted had a number of weaknesses.

First, it was acknowledged that cultural assumptions about the target countries could have affected the interpretation of the results, especially if the researcher were to unwittingly impose his ethnocentric values on them (Pick and Pick, 1978). Second, idiomatic difficulties were encountered on a country by country basis and, to some extent even within a given country (Pick and Pick, 1978). While employing translation facilities minimised such a problem, there was still the risk of adding translator bias to the process. Third, the nature of the research and the data requested could have affected the type and amount of information obtained, particularly as some companies and individuals regarded food safety as a “sensitive” issue. Anonymity guarantees sought to reduce this difficulty.

Other potential pitfalls could be classified as respondent based. For instance, the choice of respondents within selected hotels was based on their availability. Thus the resultant sample did not necessarily represent the population at large (Pick and Pick, 1978). The focus of this study was on hotels in gateway city locations. Therefore, a danger of over-generalisation of the findings always existed. Another problem was respondent bias (Pick and Pick, 1978) to the extent that some respondents could have offered replies

which they considered to be desirable by the researcher. An allied difficulty was the danger of respondent contamination whereby replies might not have represented individual views as much as attitudes derived from conversation with others.

Although the above mentioned hazards could be reduced via neutral stimuli and random external checking, unlike 100 per cent controlled experimental settings, they could not be entirely eliminated in a sample survey supervised from a distance.

Sampling

An important consideration for the main study was sampling, which Fife-Schaw (1995b) regards as the search for typicality within a population, a condition that satisfies the classical criteria of adequacy and representativeness. As regards the sampling unit, the World Tourism Organisation (WTO) provides an exact definition of what is constituted by “hotels and other similar establishments”. These:

“are typified as being arranged in rooms, in number exceeding a specified minimum; as coming under a common management; as providing certain services, including room service, daily bed making and cleaning of sanitary facilities; as grouped in classes and categories according to the facilities and services provided; and not falling in to the category of specialised establishments” (EIU, 1995: 7)

However, the interpretation and methods of collection of hotel data, when translated at the European level, vary considerably. Indeed, in many countries no systems are in place that could even attempt to fulfil this WTO definition. Such a limitation means that comparisons of the hotel profiles of different European destinations must be treated with extreme caution. Table 5.1 lists hotel rooms by country.

Table 5.1 Hotel Rooms by Country

UK	500,000
Italy	942,000
Germany	744,000
France	589,000

Source: EIU, 1995

Additionally, there is no comprehensive breakdown of hotel capacity by grade. In some countries there is a nationally imposed system of grading; in others it is set by hotel associations. In some there is a voluntary rating scheme; in others no scheme exists at all. Even such classification schemes that are in operation are clouded by, and within, individual country interpretations of what various star ratings signify. Among the countries listed, most of the accommodation exists at the 3 and 2 star level. Table 5.2 lists hotel grading by country in percentage terms.

Table 5.2 Hotel Grading by Country (%)

Star Rating	Unclassified	1	2	3	4	5
UK	0	21.1	43.6	26.1	8.2	1
France	0.5	25.7	46.3	22.8	4.5	0.1
Germany	0	18.0	21.0	32.0	28.0	1.0
Italy	0	20.8	28.5	37.4	12.1	1.1

Source: EIU, 1995, Author's Estimates.

Thus, the task of estimating the size of the European hotel sector and identifying common characteristics from its different features, is complicated by a variety of factors. Across Europe, hotels range from small privately run family businesses to large complexes owned by major international chains. In practice, there is no precise meaning

as to what constitutes an hotel. Equally there is no internationally accepted grading system, and countries vary considerably in the accuracy with which they record their data. Within such diversity, the WTO, from information supplied by individual countries, provides annual estimates of the total size of the market. However, while the WTO's figures represent the best available data on the European hotel stock, they should only be regarded as tentative in nature.

Good sampling is required if inferential statistics are to be used. Many commonly used statistical tests assume that the researcher has drawn random samples, and use probability theory to estimate the significance of any effects found.

The sample selected for this study depended on a number of factors, including type of measurement, the nature of the population, the complexity of the survey design and the resources available. It was recognised that the first stage in this process was to define the population from which the sample should be drawn, as illustrated in table 5.1 and 5.2. Optimally, the sampling strategy needed an up-to-date and reliable sampling frame. However, such a requirement was logistically difficult, prohibitively expensive and, in the case of the UK, quite impossible.

Since a number of countries were involved in this research, and given that there was a large total population within the four main countries selected, multi - stage cluster sampling was adopted. This approach overcame the difficulties of travelling, along with the distance and costs associated with more established techniques, first by selecting a smaller number of clustering units i.e. major cities, and then drawing a sample from within these units. One major advantage to this adopted procedure was that geographically large areas could be studied. In the context of the European hotel

industry, this was a particularly crucial consideration where a sampling frame for all units was not readily available. The disadvantage of this approach was that hotels within a given cluster tended to be more like one another than hotels in different clusters. In strict terms, statistical generalisation had to be limited to the population of hotels represented by selected clusters, since the approach should be classified as convenience rather than strict probability sampling.

One or more major cities within each of the four main countries was selected. First, the sample areas were chosen and then the variable of hotel size according to rooms was used. The total number of hotel personnel targeted was 1,923 and a response rate of 27.8 per cent was achieved. This percentage was realised after attempts were made to maximise response by repeated re-contacts. Care was taken not to obscure non-response bias when reporting the results. Of the hotels contacted, the objective was to gain a balance between food and beverage management and operative staff, and between chain and independent hotels.

The questionnaire was designed in German, French, Italian and English and was distributed from September 1995 to January 1996. All groups were supplied with an address in Britain for submitting their returns.

Main Survey

In order to distribute the questionnaire, local contacts, tourist board personnel, hotel guides and representatives of hotel companies' head offices were co-opted. The use of these persons enabled the survey to be completed smoothly. Difficulties that arose could be tackled in the language of the respondent.

However, and in spite of their noted advantages, one weakness of using a questionnaire to gain an insight into attitudes on food safety was that, while it allowed the collection of a large amount of data, it was often at the expense of more detailed insights into the complex, and often contradictory, ways that people might think and reflect about this issue. For instance, it was known from research identified in chapter two, that cognitive dissonance can characterise differences in attitudes and behaviour. Added to this difficulty was the realisation that attitudes towards food safety were being defined by the researcher rather than the respondent.

Questionnaire Design

Information gleaned from the questionnaire was variously categorised. Background and demographic data were asked for in section A, and although many questionnaires ask for these data at the end of the exercise, the pilot study, since it encountered no instances of non-response, suggested a change in this convention.

Sections B and C considered attitudes regarding food safety. The procedure adopted here was to present a statement and ask people to rate on a five point Likert scale how much they agreed or disagreed with it. An alternative to this approach was the forced choice design where two opposing statements are presented and the respondent must endorse one or the other. This procedure was rejected since it does not give information about the strength of agreement or disagreement. Even so, the weakness of a five point rating scale is that it can sometimes suffer from over reliance on the neutral response.

Another issue was questionnaire layout. It was recognised that there was a trade off between better presentation, and thus better quality data, and a higher response rate and

hence increased cost. An introductory letter for both the hotel's General Manager and the respondent was included. It was felt important that, since the researcher could not be present at the administration, explanatory notes should be provided in order to foster respondent motivation. These notes explained the broad aims of the study and why the individual's co-operation was important. Confidentiality was also emphasised, along with stressing the value of complete responses. Issues to do with question density, both typeface and size, were regarded as important in the design of the questionnaire.

Questionnaire Content

Turning to the questionnaire's content, after Section A had dealt with personal background and demographic data, the purpose of question four was to identify the intentions of respondents regarding their working at the hotel. The aim of question seven was to investigate their formal education, and hence to establish if there were a correlation with their attitudes towards food safety. Because this section dealt with many factual types of responses, in most cases respondent were simply asked to circle numbers.

Section B measured respondents' attitudes towards food safety legislation and towards the policies and practices at the hotel. The procedure adopted was to present a statement and ask them to rate it on a five point Likert scale.

In Section C, question fifteen investigated attitudes towards elements of food safety at the hotel, thus adopting a different emphasis from Section B. Questions sixteen and seventeen asked whether there were specific policies being implemented at the hotel on food safety matters, as these could influence the respondent behaviour. Question

eighteen identified attitudes towards five food safety practices. Question nineteen measured the degree of communication between management and operational staff on food safety matters. Question twenty measured the degree of formal food safety monitoring at the hotel and whether it influenced policies and procedures.

Response rates

There are few consistent guidelines for response rates, since they tend to vary by topic, length of survey and types of target groups (Fife-Schaw, 1995c). A total of 1923 questionnaires were posted out to hotels in eight countries throughout the EU, namely: Austria, Belgium, Eire, France, Germany, Italy, Switzerland and UK. A total of 534 responses were received from eighteen cities giving a response rate of 27.8 per cent. The cities were as follows; Berlin, Bologna, Brussels, Dresden, Dublin, Frankfurt, Geneva, Hamburg, London, Milan, Munich, Mainz, Naples, Paris, Rome and Vienna. Because a wide range of cities within the chosen countries was targeted it was recognised that intra country differences could emerge, even though drawing any such conclusion would require a substantially larger sample which satisfied all criteria within the stated research objectives. The questionnaires sent out and received were as follows (see table 5.3):

Table 5.3 Survey Response Rates

	Sent Out	Received	Response Rate (%)
UK	450	211	46.9
France	450	87	19.3
Italy	450	74	16.4
Germany	450	122	27.1
Eire	100	17	17.0
Switzerland	8	8	100.0
Austria	9	9	100.0
Belgium	6	6	100.0
	1923	534	27.8

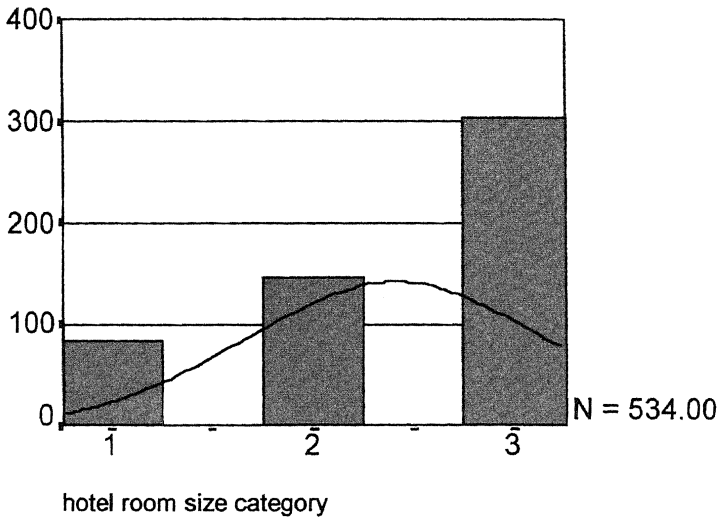
NOTE: For reasons of statistical analysis and the achievement of the research objectives, from table 7.6 onwards solely the UK, France, Italy and Germany are analysed. Thus the need to delete Eire, Switzerland, Austria and Belgium, and recast the table with a total n = 494. The latter four countries were included at the request of one major hotel company that supported distribution of the questionnaire.

Initially hotels were categorised by room size and then on the basis whether they were chain or independent hotels. Over 84 per cent of hotels had 100 or more rooms and 74 per cent were described by respondents as being part of a hotel chain. This bias towards chain hotels is reflected by Slattery *et al* (1995) in their review of quoted hotel companies.

As a total, the types of rooms were skewed towards the larger hotels, as shown below (figure 5.2), although there were variations within countries which will be explored later in this chapter. This bias towards larger hotels was not surprising, as it is only within the major gateway cities that both investment and an all year round demand for hotels could be justified. Differences on both a country and city basis reflected the maturity of the hotel market in those locations. This maturity was further reflected in the number of hotel chains responding (74 per cent of the total), the remaining 26 per cent being described as independent family owned businesses. Even within the latter category, the

ownership of a number of 5 star trophy hotels, (above 100 rooms in size), often rested with wealthy individuals, which contrasted starkly with hotels with less than 100 rooms yet still independent family owned. Over 83 per cent of hotels were either at 4 or 5 star market level, a clear reflection of the type of hotels found in these cities, the overall majority of which were traditionally owned, controlled, managed or franchised by hotel chains. The largest single category was 4 star hotels with a total of 287 or 53 per cent. The sample reflected industry wide data on both ownership and market level. The difference in supply profile indicated a difference in demand patterns (Slattery *et al*, 1995). The London profile was more suited to a higher level of business demand due to the higher proportion of full feature high market hotels controlled by chains. The Paris profile was more suited to leisure travellers. The average room size of chain hotels in Germany's major cities was 179 and was a function of their concentration in primary cities and at the mid and upper levels of the market. Some 64 per cent of chain hotels were located in the 10 major cities of Germany. In Italy, chain hotels were concentrated in the primary cities where 60 per cent of the room stock is based. Some 49 per cent of Italian hotels were at the medium level and 35 per cent at the high market level, with some 95 per cent being at 100 rooms or more. Individuals completing the questionnaire illustrated a strong male over representation within the food and beverage department of hotels, with 82 per cent being male and 338 being either managers, head chefs or chefs.

Figure 5.2 Hotels by Room Size Category



Horizontal scale : 1=<100, 2=100 - 199, 3= 200 + rooms

Overall, the sample hotels relied on a majority of business demand, a normal situation for city centre hotels at the 4 and 5 star level. Indeed it could have been the case, although this could not be demonstrated from the data, that a substantial amount of local demand was from the business community (see figure 5.3).

The responses illustrated the type of people working in the industry in terms of age, formal education and practical experience. Of the total sample, 74 per cent were 39 years or less in age, 76 per cent had received 2 or more years formal education, and 96 per cent had 2 or more years practical experience within the industry. Only 10 per cent were found to have received no formal hotel and catering education. Twenty-seven nationalities were represented, (many from outside the EU), which, with further investigation, could illustrate a nationality as opposed to country bias in the results. Figure 5.4 shows that over 220 respondents had been in their present position for less than one year.

Figure 5.3 Overall Business Mix

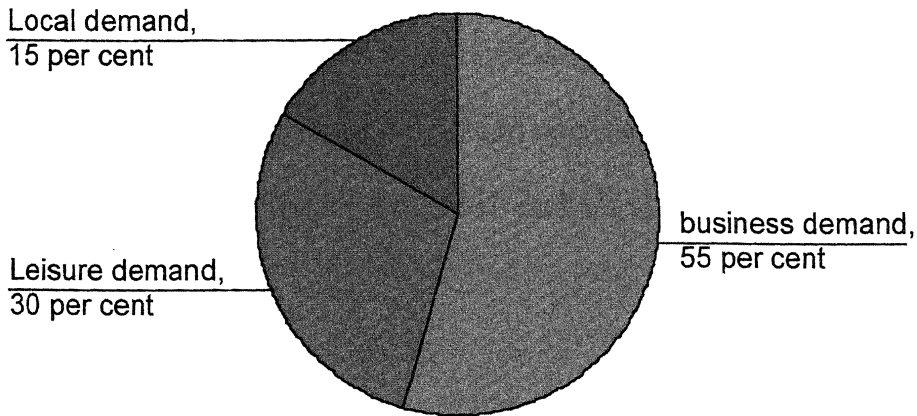
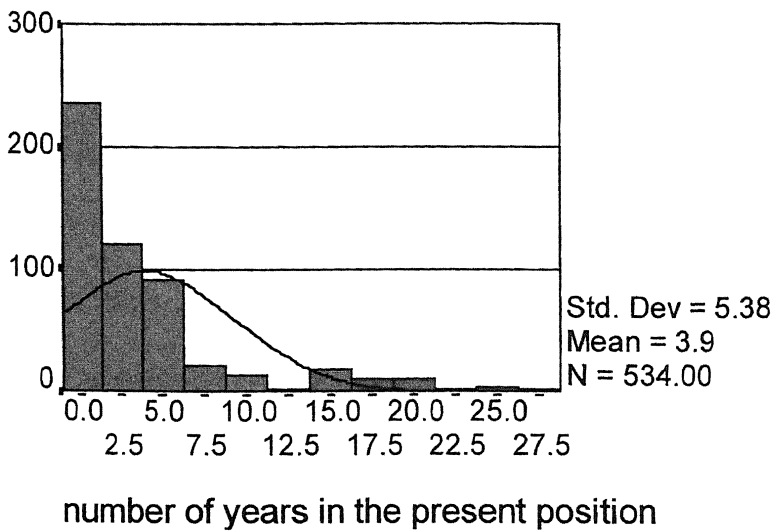


Figure 5.4 Number of Years in Present Position (Sample Respondents)



Processing

The fourth phase of Oppenheim's (1992) research methodology is the processing stage, a topic postponed to the following chapters, along with a discussion of independent and dependent variables. The importance of identifying the variables, considered initially at

the design stage, is that it assisted in establishing whether univariate, bivariate or multivariate analysis techniques should be used.

The analysis of collected data was pre-determined by the pilot study. However, as the main survey mostly employed ordinal and nominal data, it was decided to use Analysis of Variance (ANOVA) for statistical analysis, along with a range of descriptive statistics.

Problems and Limitations of the Methodology

Whilst this discussion of the methodology has been thorough, it is useful at this stage to draw together comments that evaluate the success or otherwise of the approach adopted. The uniqueness of this study centres on the fact that it is interdisciplinary, it draws together research from a number of disparate sources, is original in terms of the subject covered and is multi-national in nature. The emphasis of this thesis rests on the comparability of data and less with generalisable conclusions because of the already stated problems of sampling and statistical analysis.

One area commented upon in chapter two was the topic of culture, both at the national and organisational level. Relatedly, the hotel industry is well known for attracting an expatriate workforce, (in this survey 27 nationalities were represented), with this added factor possibly “muddying” the cultural map. At an organisational level, the central distinction was made between chain and independent hotels. Taking the example of the former, it is recognised that organisational culture can differ within this variable. Yet it could only be measured by a more “in depth” co-present research design that would be limited in terms of sample size, linguistic problems and substantially increased costs.

Development of the chosen research instrument at the pilot stage was limited by its being tested in only one country with the resultant design possibly not reflecting all countries within the final sample. Additionally, whilst the questionnaire was translated by professionals, ambiguity may have crept in as languages do vary within regions of the countries surveyed. Perhaps the biggest problem encountered concerned the issue of sampling. Setting aside definitional issues concerning what constitutes an hotel, throughout the countries surveyed there was no complete record of hotel establishments or indeed consistency in record keeping between countries. This situation meant that the sample chosen was non-probabilistic. Hence it would be statistically unjustifiable to draw generalisable conclusions on the European wide hotel industry from this survey. Additionally, despite repeated contacts with hotels, sufficient coverage of all the variables, (particularly job categories within independent units), was not possible. As a final point, time required to complete the questionnaire had to be kept to a minimum in order to encourage response. Yet this aim was at the expense of a more comprehensive set of questions which could have better addressed some of the weaknesses already identified.

Returning to the research objectives established here, the literature on food safety legislation in selected EU countries will be further explored in the following chapter, even though the topic is evolving on an almost month by month basis. Attitudes were measured by country, hotel type and position, (notwithstanding the methodological weaknesses of such a design), thus identifying both contrasts and similarities. The influence of other stakeholders, specifically enforcement officers and government departments, through questions on inspection frequency and the nature of codes of practice achieved important elements of the objectives. In totality, and in spite of the

discussed limitations the methodology adopted addressed the objectives set within the earlier part of this chapter.

Summary

As shown in this chapter, the research, having revealed shortfalls in the literature review, adopted a methodological framework from Oppenheim (1992) in order to fill these gaps. To this end, emphasis was placed on a pilot study upon which the main survey was based. Subsequently, there was a general outline of the survey research design, with an emphasis on cultural differences, attitudes, influence of stakeholders and linguistic ambiguity. In this light, sampling, questionnaire design and distribution were explored. The research instrument was revised many times before the fieldwork was actually conducted.

Taking the exploratory nature of this study into consideration, a range of analytical techniques was used once the data were collected. In the following four chapters, the findings of the research will be presented, with conclusions and recommendations contained within chapter ten.

CHAPTER 6

Food Legislation and Policy in Seven Member States of the European Union - Views from the Experts

Introduction

As the first stage of the data gathering process, a questionnaire (appendix one) on specific factual aspects of legislation was sent to forty named government and enforcement officials. Their initial addresses were obtained from the UK's; Local Authority Co-ordinating Body on Trading Standards, (see LACOTS, 1989; LACOTS, 1990; LACOTS, 1991a; LACOTS, 1991b). With the use of a professional translator, up-to-date details of the relevant officials' names and addresses were obtained (appendix two).

Questionnaire Results: Food Legislation and Policy in a number of EU Member States

Background

The results of this questionnaire, presented in the following pages, are sectionalised into ten areas. Each section discusses food safety legislation, policies and enforcement practices within the seven countries surveyed.

The areas of interest, developed from the framework established and explored in chapter four, and developed in chapter five, were as follows:

1. National Legislation
2. Hygiene Inspection.
3. European Union Legislation.
4. The Inspectorate and it's Powers.

5. Food Hygiene Training.
6. Licensing of Retail Catering Premises.
7. Microbiological Sampling.
8. Hazard Analysis.
9. Temperature Control.
10. Food Control Statistics.

National Legislation.

Food and beverage facilities within the European hotel industry can be considered a component of the broader retail catering sector, and it was evident within all the countries surveyed that a wide range of sub sectors existed. Of the seven areas identified in question one, none was exempt from food safety legislation. This was an important issue to address in order to identify if member states had an equivalent to the UK's now defunct crown immunity system, where some outlets were exempt from food safety legislation.

In the review carried out in chapter four, it was shown that a number of government departments were responsible for food safety and that this organisational structure varied from country to country. Within the wide topic of food safety, three main areas were identified: food hygiene, composition and labelling. The purpose of questions two and three was, to determine the government organisation(s) responsible for these three separate areas, and to discover whether or not there was devolution by region. Here it was found from the questionnaire that in Denmark, Netherlands and the UK, control in the latter two categories rested with one government organisation, and while responsibility for inspection was devolved by region, legislation could not be determined by region. In the UK, food hygiene matters were dealt with by a separate government organisation, the Department of Health, (although the whole structure of food safety

enforcement will change in 1999 with the UK's Food Standards Agency). Detailed comments on the Italian situation gave information in particular on the amount and frequency of control divided by region. The EU Directive on the Hygiene of Foodstuff June 1993, (EC Commission, 1993a), was introduced within that country's legal system during 1995. Italian food legislation was highly complex and difficult to interpret, and much had become outdated as the country's cumbersome legislative process had failed to keep up with the need for change as a member of the EU. This situation was partly a result of a post war constitution concerned with establishing safeguards against the arbitrary abuse of power, but it had made it more difficult for Italy to implement EU legislation.

Similar complexity was found from responses relating to Spanish food law, based on the *Codigo Alimentario*, enacted in 1967, but not coming into force until 1974. The *Codigo Alimentario* contained a description of the regulatory aims and scope of the legislation, definitions of the most fundamental concepts of food law, and a list of the persons and organisations affected by the regulations. It was supplemented by a host of decrees, ministerial orders, product standards and sanitary regulations. The responsibility for food control was divided between central government, the *comunidades autonomas* and the local authorities. In Spain, food safety legislation was decided upon by region, although there were close similarities throughout the regions. However, with such devolvement came the problems of consistency within Spain and the directives issued by Brussels. Within that member state, food safety legislation aimed specifically at the retail catering sector was based on a 1983 decree entitled "*Vigilance, Control and Hygienic Sanitary Inspection of Collective Dining Rooms*". This decree included both public and

private institutions and covered all aspects of the hotel, catering and restaurant industry. Equally, it comprised those establishments serving meals and drinks during particular periods of the year. The *Ministerio De Sanidad y Consumo* dealt with the inspection of food sold to the ultimate consumer. The *Ministerio De Agricultura, Pesca y Alimentacion* was responsible for food products other than those sold to the ultimate consumer, (a similar distinction was found in the UK's DoH and MAFF). Monitoring developments in Spanish food law was a difficult task, since there was no uniform definition of the topics covered by the term. Food issues were regulated by a number of ministries and, unless competence could be clearly imputed to one of them, *The Committee for the Regulation of Food Matters* would intervene. This organisation coordinated any action taken in this field by the different ministries. Spanish food law was made even more complicated by the fact that agriculture and public health were not exclusive competencies of the central administration, but were shared by the autonomous communities.

Hygiene Inspection.

The responses from the fact finding questionnaire showed that the UK allocated food hygiene inspection to a second government department - DoH. Yet Denmark and the Netherlands located the responsibility of food composition, food labelling and food hygiene inspection within one government department. In all three countries, while hygiene inspection was devolved by region, legislation was the function of central government as illustrated in the replies to question four. Centralisation was the norm in Italy where all the major duties for decision making in food safety and hygiene legislation were enacted by the Health Ministry in Rome. Devolution at the regional

level was strictly limited to the organisation, control and inspection fieldwork, as well as the evaluation of results. Italian regions could not determine their own legislation on these matters, a situation which meant that only the operational implementation of the EU Directive took place through the involvement of regional authorities. These regions used as their operational arm the *Local National Health Units*. Decree enforcement applied to the whole country, except for two provincial areas - Trento and Bolzano. Here the provincial authorities were in charge of making decisions for the enforcement of EU Directives. Hence consistency within Italy as a whole had not always been achieved.

An important element of the enforcement process was sampling and, while the EU had in recent years moved away from “end product sampling” towards preventative measures, sampling still featured highly within the national legislation of the countries surveyed. In considering this matter further, question five investigated the topic of statistical sampling. While such an approach was not employed in either Denmark or the UK, it was prevalent in the Netherlands and Italy. However, according to respondents, the Netherlands did not incorporate such sampling into legislation. Instead, samples were selected on the basis of risk compared to other foodstuffs. In Denmark, the UK, the Netherlands and Italy, inspection frequency of retail catering premises was on the basis of categorising food safety risk. Such an approach was formalised in legislation within Denmark, and it was contained within informal codes of practice or general policy in the UK and the Netherlands. Contrasts were found in Italy. The minimum frequencies and number of samples to be taken for the control of retailing catering organisations operating in Italy were as follows:

- welfare and care treatment institutions, colleges, children and infant assistance institutions, at least every 6 months,
- school, hospital and charity canteens, at least every 9 months,
- hotels, restaurants, snack-bar, factory canteen, small outlets such as *trattorie* and *rosticcerie*, pubs, wine bars and other similar places, at least every 12 months, and
- ambulant and seasonal outlets, according to the local regional authorities.

The minimum number of samples to be taken from retail catering premises varied within Italy's regional areas. However, on a national basis there were at least 30,000 samples divided on a 50 / 50 ratio, between organisations operating in both the public and private sectors. According to Italian legislation, along with the general rules stated for foodstuffs, each year the following numbers of samples had to be taken for the following items used for foodstuff preparation: additives 1,000; flavouring 1,500; materials and objects which came in contact with food 2,000. This sampling could be taken at production locations. The Italian approach contrasted with that of Spain where managers, owners or their representatives had a responsibility to comply with every aspect of the legislation, adopting all necessary measures to maintain proper hygienic conditions. All such catering establishments in the country were obliged to have a visit book in order to record hygienic control and inspection. If the inspection visit were favourable, meaning that the establishment fulfilled all aspects determined by the legislation, a summary of the visit would be written by the inspector in the visit book noting the results. If the visit were not favourable, meaning some deficiencies had been found, then the inspector could apply the sanction of a fine, or temporarily close the establishment until the next inspection, at which time the defaults would be checked

again. Finally, there was the option to revoke the authorisation to trade which would close the establishment. Inspection visits were made every three months and always summarised in the visit book. No statistical based sampling was used in Spain. Each *Comunidad Autonoma* examined all establishments every year.

European Union Legislation.

Not surprisingly, many, but not all, countries had seen changes to national legislation since 1989 with the adoption of the EC Official Control of Foodstuffs Directive, as identified in question ten. The clear contrast in this section of the questionnaire was between those countries who had implemented measures before or after the directive, with the responses to questions 10a and 10b eliciting a wide range of responses. Whereas the Netherlands and the UK saw change to food safety enforcement practices as a result of the 1989 directive, Denmark did not, except for Article 14 returns. For instance, on 29 March 1980, Denmark introduced food safety risk assessment for catering premises, along with registration and prior approval of food premises. The recommended use of EN29000 was introduced on 9 June 1983, and the compilation of national food enforcement statistics on 20 June 1991. In the UK, the compilation of national food enforcement statistics was introduced on 1 January 1991 as a result of the directive, along with changes to temperature control in 1990 / 1991, (further changed in 1995), and registration of food premises in 1991. The Netherlands saw changes to temperature control in 1993, even though there was no European-wide agreement on the subject. The introduction into national legislation of the new requirements of the EC Directive on the Hygiene of Foodstuffs (1993a) was not implemented until December 1995 in Denmark, and specifically Industry Guides to Good Hygiene Practice, along

with food hygiene training, were introduced in the same year within the UK. The EU Directive on the Hygiene of Foodstuffs June 1993, was at March 1994 not formed in Italian law, although it was eventually introduced within that country's legislative system in 1995.

In Spain's national legislation, both differences and similarities reflected the UK's approach. Since 1983, Spanish catering establishments had needed to be authorised and registered by the competent authority. Having identified a clear difference, there were, however, many aspects of the legislation that were similar to the UK's Food Hygiene Regulations. Categories similar to the UK within Spain's legislation included a premise's structure, kitchen and equipment. Reference was also made to personnel in terms of cleanliness. Spanish food safety legislation before 1989 anticipated all aspects of the Official Control of Foodstuffs Directive, and so no legislative changes were made.

The Inspectorate and it's Powers.

Success in the effectiveness of food safety matters was seen to be dependent, in a large part, on a given country's food safety inspectorate and its powers. This was the matter addressed in question twelve concerning the size of the inspectorate. The results were incomplete, as the response from the UK was that the government did not have these statistics. Denmark noted a figure of 2500 employees within both the central and decentralised authorities, and the Netherlands a lower figure of 2000. The maximum criminal sanctions available to the enforcement authorities in Denmark were both a fine and imprisonment of up to one year, while only a fine of 10,000 guilders could be handed down in the Netherlands. In the UK, a combination of a fine of £5,000 and 3 month's imprisonment was available. No information was forthcoming in the Italian

response. The maximum level in Spain was 100.000.000 pesetas. Question fourteen focused on food enforcement sanctions available, with the UK, Denmark and the Netherlands all having the powers to enforce the improvement, prohibition and / or closure of retail catering premises. An appeals procedure existed in all three countries and could be exercised at the national level. In Spain, a fine could be imposed, as an alternative to temporary closure or the revocation of a license to trade.

Food Hygiene Training.

It is noteworthy that while respondents from the UK and the Netherlands saw compulsory food hygiene training introduced in 1995, as a result of the 1993 Food Hygiene Directive, those from Denmark noted that it had introduced such compulsory training since 28.03.1980. While the level and content of food hygiene training in Denmark were not determined by legislation, the question of hygiene did extend to staff who did not directly handle food, a point of difference with the UK. Requirements for training in the UK were enforced by a range of codes of practice, including section 40 codes under the Food Safety Act 1990 (Act, 1990a) and Industry Guides to Good Hygiene Practice. As of 1994, there was no requirement for food hygiene training in Spain.

Licensing of Retail Catering Premises.

Another area of food legislation in which Denmark was well developed was the licensing of retail catering premises. The system was written into legislation on 6 March 1973 and the structure, fixtures, fittings and equipment of such premises were determined by legislation, rather than by non statutory codes of practice. While the UK did not have a

system of licensing, it did have one of registration. A system of licensing was also not present in the Netherlands, although there were plans to introduce a non statutory code of practice in order to determine the structure, fixture, fittings and equipment of retail catering premises. In Spain, since 1983, there had been a requirement for catering establishments to have the appropriate authorisation to trade. Such authorisation could be withdrawn if breaches of the legislation occurred.

Microbiological Sampling.

Microbiological standards, (as opposed to sampling), defined as compulsory microbiological levels laid down in statute, had existed for many years in the legislation of the seven countries surveyed, except for the UK, (in most cases), and Denmark. However, the UK, Netherlands, Italy and Denmark had introduced microbiological sampling of foodstuffs into legislation. In the UK, the enforcement of the microbiological safety of food did not rely on the routine examination of samples as a central feature. Before the implementation of EU directives, there were very few microbiological standards in UK food legislation e.g. UHT milk. Microbiological criteria did have a useful role within the industry, although expressed only in terms of guidelines. The focus on this issue had been to move away from “end product sampling” to the verification of HACCP procedures. UK food hygiene law was generally based on a preventative approach, and the implementation of the 1993 Food Hygiene Directive was welcomed by the UK authorities as generally supporting their approach to enforcement.

Although UK legislation had introduced such a microbiological sampling requirement before 1984, it did not identify specific pathogenic organisms or legislative standards.

Denmark had introduced such a requirement on 1 November 1984, and identified the following four pathogenic organisms: salmonella, staphylococcus aureus, listeria monocytogenes and bacillus cereus. The Netherlands had also introduced microbiological sampling into legislation during the period 1970 - 1980. Legislation in the Netherlands identified six specific pathogenic organisms, namely: salmonella, campylobacter jejuni, staphylococcus aureus, bacillus cereus, clostridium perfringens and listeria monocytogenes. In March 1993, the Netherlands had introduced new standards, applying at the point of sale to foods that were to receive no further treatment before consumption. The same levels for six pathogenic micro-organisms were applied to "ready to go foods". Levels were set on the basis of industry-wide data on microbiological loads, covering all "ready to eat foods" produced under hygienic conditions. The levels set, therefore, were intended to be readily achievable, rather than onerous. Foods found to exceed given levels were legally required to be withdrawn from sale. The new standards represented a considerable simplification compared with previous standards. They were introduced in the context of new temperature controls, which also came into force in March 1993. These controls allowed food businesses, in some circumstances, to vary from the required chill temperatures, provided that shelf life were also adjusted. The microbiological standards were intended to be used as benchmarks by businesses setting time / temperature combinations.

In Italy, microbiological standards had existed in food legislation for some years. The standards in this country had played a role in food safety inspection and enforcement, and a legal role in the withdrawal of unfit food. The Italian authorities seemed wedded to this approach, and had expressed concern that inspectors would not be able to secure

the court's agreement to withdrawal or seizure of unfit food in the absence of such standards. They were concerned that they might not have powers to secure withdrawal of unfit foods traded from other EU member states if preventative measures were extended, and would like to see wider microbiological standards in EU legislation. Due to centralisation of the responsibility for the major food safety issues at the health ministry, Italian legislation on microbiological analysis had set standards for the whole country. The analysis and controls to be executed in laboratories on samples taken during production, packaging, distribution and sale of foodstuffs are carried out, as stated by the hygiene and safety parameters contained within the legislation. The most important microbiological analysis and control contained within Italian legislation referred to the following: salmonella; staphylococcus aureus enterotoxic; coliforms; total bacterial count; escherchia coli enteropathogenic; brucellosis; clostridium botulinum; clostridium perfringens; shigella; listeria monocytogenes; vibrio cholerae; vibrio parahaemolyticus and bacillus cereus. According to Italian legislation, analysis was to be regarded as a microbiological control to be made on foodstuffs, especially those which were to be consumed raw and uncooked.

In France, there were 67 microbiological standards covering the presence of pathogenic micro-organisms in products of animal origin, (decree of 21.12.1979). The decree included standardised sampling plans and laboratory methods. French producers were required to send samples regularly, (monthly or weekly), to approved laboratories, and to take action, (including possible withdrawal from sale), if the results exceeded the legal criteria, a situation referred to as "auto contrôlée". Inspectors could inspect the laboratory results obtained by the business and themselves take samples. The costs of

regular sampling and testing by producers were high, and so the French government during 1993 reviewed the legislation. The report of an independent advisory group which proposed some simplification and took greater account of the HACCP based approach, was published in 1993.

Germany had statutory provisions relating to the microbiological nature of milk, egg products, dietary foodstuffs and, in some federal states, ice cream. No such statutory provisions existed for other foodstuffs. Assessment schemes with guide and warning levels, (which were not legally binding), had been specifically drawn up for several groups of foodstuffs not covered by statutory provisions. They were intended as guidance for assessing in-house quality control and to aid consistent, objective enforcement in individual federal states. The schemes assumed good manufacturing practice and were continually adjusted to take account of new knowledge.

It was a requirement within Spanish legislation that food served could never contain any substance that represented a danger to human health. Microbiological tolerances were set for food consumed cool, warm and frozen.

Hazard Analysis.

The EC Directive on the Hygiene of Foodstuffs 1993 (EC Commission, 1993a) implemented, for the first time, into the community a general requirement to introduce the principles of Hazard Analysis Critical Control Point (HACCP). It was this requirement that had prompted both the UK and the Netherlands to insert the principles of Hazard Analysis into legislation during 1995, a point initially developed by the DoH's publication of Assured Safe Catering (HMSO,1993). In contrast, Denmark had

introduced such a requirement into legislation on the 28 March 1980. The control activities on Italian retail catering premises aimed at verifying the correct preparation and storage of foodstuffs. Priority was given to ready-made dishes, particularly as there might be a long time gap between production, sale and consumption. Control also extended to those items which were subject to further preparation after cooking, such as roast beef, steamed or roast meat, food which needed added sauce garnishes, salads and meat, or dishes which were based on egg recipes.

Temperature Control.

Considerable variations in temperature control could be seen in all the countries surveyed. The UK on 5 July 1991 had introduced two categories of chill temperature - 5°C and 8°C - dependent on foodstuffs. The requirement was changed during 1995 to bring in a single requirement of 8°C, with a number of qualifications and exemptions dependent on circumstances. The minimum hot-holding temperature for foods to be served hot and kept on retail catering premises in the UK was 63°C, a requirement introduced prior to 1960, (differences still existed in Scotland). The chill temperature for perishable foods in Denmark was 5°C and had been written into legislation on 27 June 1974. The hot-holding temperature for foods to be served hot was also written into legislation in 1974 and was fixed at 65°C. A third set of temperatures was in operation in the Netherlands; during 1993 a chill temperature of 7°C along with a minimum hot holding temperature of 60°C was introduced. The temperature control activities on Italian retail catering premises, in terms of perishables, varied according to type of foodstuff. It was as follows:

- 4 Celsius for perishable foodstuffs, and

- 10 Celsius for cooked perishable foodstuffs to be eaten cold.

Food taken from the refrigerator for cooking had to be heated to a temperature of 70°C or above, and had to be consumed on the same day of cooking. Cook chill or cook freeze food had to be maintained at either 3°C or -18°C respectively. Cook chill food could be kept for a maximum of 5 days. Refrigerated or frozen food, which needed to be regenerated before consumption, had to be defrosted and cooked within the time period of 2 hours and to a temperature of 70°C. Its consumption had to take place within 24 hours of being processed. Self service catering food to be consumed cool by consumers, had to be placed on refrigerated plates of a temperature not above 12°C. Food to be served warm had to be kept at a temperature of 65°C or above.

The responses to questions eight and nine concerning inspection of delivery notes and batch numbers on packaging, along with access to recipes, (their composition and formulation), located no such process within the inspection activity. Such results were qualified by the response from the Netherlands, namely that inspection of documents only occurred in special cases.

Food Control Statistics.

In the case of the UK, the questionnaire data in table 6.1 shows that approximately 72 per cent of the total establishments for the sector had been visited. It is noteworthy that the size of the inspectorate on a national basis compared with the number of visits made in each country. Such figures give an indication of the level of investment in personnel each country attached to matters of food. In Italy all data were transmitted from

regional authorities to the central ministry offices in Rome, where they were processed and incorporated into national statistics.

Table 6.1 Total Number of Food Safety Inspection Visits on Retail Catering Establishments (Including Multiple Visits)

Total Food Inspection Visits	1991	1992	1993
Denmark	84,108	85,299	85,985
Netherlands	98,000	108,000	95,000
United Kingdom	232,180	232,751	251,301

The data from the questionnaire contained within table 6.2 detail the number of prosecutions for food safety related offences and a clear disparity can be seen between the UK and the Netherlands on the one hand, and Denmark on the other. While the former two countries undertook substantially more visits than Denmark, they reported significantly fewer prosecutions for food safety related offences. One reason, perhaps, for this clear difference may be the nature and structure of food safety legislation in Denmark, which would seem to be highly detailed and prescriptive. It appeared that Denmark had avoided the approach taken in the UK of issuing codes of practice, a situation which introduced an element of flexibility, although possibly at the expense of consistency in the application of national legislation. Issues, such as microbiological sampling, the principles of hazard analysis and temperature control, all appeared to be particularly stringent in Denmark. This severity, coupled with a detailed licensing of retail catering premises, including their nature, content and structure, would seem to make commission of a food safety offence clear cut and less open to interpretation. Of the total number of prosecutions noted in the UK for 1993, approximately 71 per cent were for hygiene matters, e.g., handling procedures, condition of premises or

equipment, temperature requirements, substantially higher than the figures community wide presented in the 1994 data towards the end of this chapter. Another point to note is that, particularly in the UK, enforcement authorities had the option of issuing informal warnings, which would fall short of being regarded as a prosecution.

Table 6.2 Total Number of Prosecutions for a Food Safety related offence in Retail Catering Establishments

Total Food Safety Prosecutions	1991	1992	1993
Denmark	3,488	1,837	2,451
Netherlands	819	823	628
United Kingdom	744	709	557

It is perhaps surprising that only the UK had figures available for total immediate closures of catering premises for food safety reasons, contained within the Article 14 returns. In enacting the Food Safety Act 1990, the argument put forward by the UK government was that, with such a power to close premises, there was no need for the prior approval, or licensing of food premises. The substantial drop in UK figures from 507 in 1991 to 179 in 1993 suggests the influence of the Food Safety Act 1990 (Act, 1990a) in its first year of operation (1991). Such an approach to food law enforcement was seen as an alternative to the more prescriptive regulatory approach taken by countries such as Denmark. It would seem that both Denmark and the Netherlands relied on penalties for food business proprietors, short of immediate closure.

Summary

This chapter has illustrated some of the difficulties in charting the differences between member states, in terms of food safety practices and the dearth of food statistics

published by individual countries. It has to be noted that for many years, the Commission had recognised this problem and, in consultation with member states, attempted to harmonise the way Article 14 individual returns were communicated, so that the inspection results were obtained in a comparable manner.

It is obvious from the comments presented here that caution must be used when these results are compared, not only because of the different ways in which the food control service in member states operates, but also because of the absence of common quality control standards in the laboratories and methods of analysis. While, in theory, food safety legislation is a *single market issue*, in practice, significant differences exist in the legislation between member states of the EU. This discrepancy is born out in the difficulties the Commission has experienced in compiling inspection results.

However an indication of the results can be found from 1994 data. Results of the Official Control on Foodstuffs, community-wide, for the year 1994 were published in 1997 (COM, 1997a) and are presented below (see tables 6.3, 6.4, 6.5). These figures assist in filling the obvious lack in response obtained from this preliminary questionnaire.

Table 6.3 Total number of samples 1994

Total number of samples	1,790,146
Violatives samples	153,104
Regular samples	1,637,042

Table 6.4 Distribution of samples with infringement 1994

	Microbiological contamination.	Chemical contamination	Composition	Label present.	Other
Violative samples	56,208	21,535	23,732	37,966	28,631
Percentage	36.71	14.06	15.50	24.79	18.70

Number of visited establishments	2,282,817
Number of establishments with infringements	482,206
Percentage	21.12

Source: COM / 1997a

Since June 1990, a working group of experts from the member states has advised the Commission on the format of statistical returns. The format now used provides an overall view of the official control activities. The statistics comprise categories of infringement and some analysis by categories of products, including the total number of sample infringements, (see table 6.5 below). Results of this reporting structure from 1991 and 1992 were examined during meetings with member states in a working group. This discussion was to evaluate general trends and to provide an exchange of information, with the objective to improve the control system in each member state. The communication of standardised information on food control results has required a great deal of effort from member states since they have had to adapt their reporting systems. This adaptation has not always been easy, especially when this aspect of control is executed by independent organisations or local authorities. Nevertheless, all member states now send information on the results of their official food control by using the required Commission format, and some attach comments, providing additional information which make the results easier to understand.

With the improvements implemented, it has now been possible to draw some conclusions from the results received by the Commission, although comments cannot be made on individual member states in any great depth.

For instance, those member states that returned completed forms, included a percentage of the actual number of visited establishments throughout the year, as compared to the total number of outlets. The number of establishments eligible for food inspection and actually visited was more or less comparable at over 70 per cent. Furthermore, it turned out that the number of inspections on average was about twice as high as the number of visited establishments, at approximately twice a year. So far as the incidence of infringements was concerned, almost every member state had a comparable pattern of infringements in the field of hygiene, followed by additives, contaminants, composition and, finally, labelling and presentation. This trend may reflect that member states had placed great emphasis on food hygiene. It became clear that some apparent discrepancies could be identified, such as the number of infringements mentioned under the heading "microbiological contamination". This finding can be explained as follows. It appears that some member states had included undesirable substances, such as foreign bodies, dead insects, etc., in this category. Also member states had used different interpretations of the basic concepts of these statistics like, for instance, the nature of the infringement. Sometimes legal requirements had led to an oral warning by the competent authorities. To some member states such a warning had a formal meaning, and consequently was reported in the statistics. Yet, with others, this was not the case.

Table 6.5 Distribution of infringements 1994

	General hygiene	Hygiene of personnel	Composition	Contamination other than micro	Labelling and present	Others	Total
NUMBER OF INFRINGEMENTS	232,553	114,627	25,816	22,506	61,496	57,234	514,232
PERCENTAGE	45	22	5	4	12	11	

Progr.	Products	Samples with Infringements	Microbiological contamination.	Other contamination	Composition	Labelling and Presentation	Others	Total number
1	Dairy products	22369	8758	2497	2333	3528	2952	348859
2	Eggs	2316	659	122	110	1301	587	22963
3	Meat	40860	13878	5192	6771	9661	5141	349778
4	Fish	10370	2816	2275	1007	2063	1495	133068
5	Fats	6641	793	1342	2251	380	626	76227
6	Soups	3621	1579	696	313	716	471	43848
7	Cereals	24224	7256	2293	1414	2759	3291	113339
8	Fruits	12160	973	2013	874	1848	1709	119933
9	Herbs	1770	153	501	252	998	256	20571
10	Non alcohol	5745	604	402	525	2024	1570	38313
11	Wine	8005	9	461	2675	920	1142	69288
12	Alcohol drinks	4680	490	346	1149	2515	462	38481
13	Ice	10102	5238	177	703	911	2301	71472
14	Cocoa	1423	103	246	160	593	129	14269
15	Confectio - nary.	2668	201	191	406	1116	422	22473
16	Nuts	1340	126	348	188	397	86	11906
17	Prepared dish	18946	8016	880	814	799	1869	105081
18	Nutritional. uses	2456	192	299	287	1205	349	20419
19	Additives	1885	64	393	61	251	92	7447
20	Materials	4015	1855	222	775	597	266	37623
21	Others	9011	2445	639	664	3384	3415	72206
TOTAL		194,607	56,208	21,535	23,732	37,966	28,631	1,737,564

Source: COM/1997a

Enforcement of food law in the European Union is basically a matter for member states, since the Official Control of Foodstuffs Directive only harmonised the general principles of food control. The preamble to the directive identifies it as a necessity for member states to formulate their inspection programme. This requirement should be with appropriate criteria arranged within coordinative programmes at EU level, with a view to completion and operation within the internal market. Despite the long-standing traditions of food law enforcement, there is a strong and growing consensus between

member states and the Commission on how to arrive at recommendations for a co-ordinating programme of inspections. The format agreed upon by member states and the Commission is aimed at the uniform representation of inspection results. However, despite their rather detailed structure, member states use different interpretations on concepts like infringements, inspections and sampling.

At the end of 1994, the Commission recognised these problems of interpretation and stated that it would prepare a report which would try to harmonise these concepts. Furthermore, each member state would be asked to add to the next explanatory memorandum on the statistics, in order to describe in more detail what these concepts meant. As already mentioned in the introduction, the absence of common quality control standards, both in the laboratories and methods of analysis used, gives enough reason why individual statistics are difficult to interpret. In 1993, the European Council adopted specific provisions to further approximate national legislation regarding the official control of foodstuffs (EC Commission, 1993a). Specifically, Articles 3 and 4 refer to these quality control standards, and member states had 16 months after the adoption of the Directive to bring them into force. As a final comment, it is important to recognise that the results of the inspection programmes and the coordinative programmes are not yet mutually comparable. However, table 6.6 seeks to summarise the data presented in the main body of this chapter.

Table 6.6 Food Legislation and Policy - A Summary of Views from the Experts

National Legislation	With the three topics of food hygiene, composition and labelling, division of responsibility was with more than one government department. Devolvement of responsibility in implementing policy was on a regional basis. A complex situation was found in Italy and Spain where in part decisions were made on a regional basis.
Hygiene Inspection	Denmark and the Netherlands allocated responsibility for food inspection to one government department. Inspection in the UK was divided between two - DoH and MAFF. The situation in Italy was highly centralised. Inspection frequency was based on food safety risk, and was written very prescriptively into law.
EU	Whereas the Netherlands and the UK saw change to food safety enforcement practices as a result of the 1989 Official Controls Directive, Denmark did not, except for Article 14 returns. The latter country seemed proactive in many aspects of food legislation. Spanish food safety legislation before 1989 contemplated all aspects of this Directive, and so no legislative changes were made.
Inspectorate	The data from this section of the survey were incomplete as not all countries surveyed provided details regarding the size of their inspectorate. Varying criminal and administrative penalties were available to authorised officers, including - improvement, prohibition and closure notices.
Training	Whereas the UK and the Netherlands saw compulsory food hygiene training introduced in 1995, as a result of the 1993 Food Hygiene Directive, Denmark had introduced such compulsory training since 28.03.1980. While the level and content of food hygiene training in Denmark was not determined by legislation, it did extend to staff who did not directly handle food, a point of difference with the UK. At the time the study was conducted, there was no requirement for food hygiene training in Spain.
Licensing	Denmark had a well developed system of licensing written into legislation on 6 March 1973 and the structure, fixtures, fittings and equipment of such premises were determined by legislation, rather than by non statutory codes of practice. While the UK did not have a system of licensing, it did have one of registration. A system of licensing was also not present in the Netherlands, although there were plans to introduce a non statutory code of practice in order to determine the structure, fixture, fittings and equipment of retail catering premises. In Spain, since 1983, there had been a requirement for catering establishments to have the appropriate authorisation to trade.
Microbiological Sampling	Microbiological standards, (as opposed to sampling), defined as compulsory microbiological levels laid down in statute, had existed for many years in the legislation of the countries surveyed, except for the UK (in most cases) and Denmark. However, the UK, Netherlands, Italy and Denmark, had introduced microbiological sampling of foodstuffs into legislation. UK legislation had introduced such a microbiological sampling requirement before 1984. Denmark had introduced such a requirement on 1 November 1984. The Netherlands had also introduced microbiological sampling into legislation during the period 1970 - 1980. In March 1993, the Netherlands had introduced new standards, applying at the point of sale to foods that were to receive no further treatment before consumption. In Italy, microbiological standards had existed in food legislation for some years. The standards in this country had played a role in food safety inspection and enforcement, and a legal role in the withdrawal of unfit food. In France, there were 67 microbiological standards covering the presence of pathogenic micro-organisms in products of animal origin (decree of 21.12.1979). Germany had statutory provisions relating to the microbiological nature of milk, egg products, dietary foodstuffs and, in some federal states, ice cream. No such statutory provisions existed for other foodstuffs. Within Spanish legislation, food served could never contain any substance that represented a danger to human health. Microbiological tolerances were set for food consumed cool, warm and frozen.
HACCP	Following the 1993 directive, the UK and the Netherlands inserted the principles of Hazard Analysis into legislation during 1995. In contrast, Denmark had introduced such a requirement into legislation on the 28 March 1980. The control activities on Italian retail catering premises aimed at verifying the correct preparation and storage of foodstuffs. The survey found them wedded to end product sampling.
Temperature Control	Considerable variations in temperature control could be seen in all the countries surveyed - the range for chill temperatures in the countries surveyed ranged from 3° C up to 10° C.
Food Statistics	Incomplete data were obtained on food hygiene statistics from the survey. Limited data were obtained from a 1997 EU publication regarding 1994 food hygiene statistics.

Chapter 7

Summarising the Data: Attitudes towards Food Safety

Introduction

Having described and justified the variables of the main questionnaire, the next stage in this investigation was to analyse the responses of those participating in the sample survey to the range of attitudinal questions presented to them. Their replies were broken down by country, position and hotel type, independent variables which were highlighted as important in the pilot study. However, it should be noted that even though responses from Eire, Switzerland, Austria and Belgium are included at this stage of the analysis, their numbers are small, and therefore the main focus of comparison is on the UK, France, Italy and Germany. From table 7.6 onwards, the replies from Eire, Switzerland, Austria and Belgium were deleted from further analysis, in order to make meaningful comparisons. Thus, even though results from those countries are included in figures 7.2 to 7.18, hence forward, the sample was reduced from 534 to 494 cases, comprising the UK, France, Italy and Germany (see table 5.3).

Sample Responses

The first area investigated was national food safety legislation. Set within a five point Likert scale, (one being negative, five being a positive attitude), analysis in this section was directed towards overall responses from all countries within the sample. A ranking by mean, standard deviation and variance is presented in table 7.1 and, within this initial

question covering five separate variables, the results can be compared, in part, with overall EU data contained within the previous chapter (see tables 6.3, 6.4 and 6.5).

The data showed overwhelming agreement that such legislation prevented food poisoning, (94 per cent of the sample), with the mode and median being at the value label of strongly agree. Standard variation in responses was 0.81 and variance 0.66 which, overall, illustrated the importance above other food safety issues, attached to the prevention of food poisoning. In contrast, prevention of food contamination was ranked third, with differences emerging between the mode and the median. The median as a measure of central tendency registered at the agree value label, whereas the mode resulted at strongly agree. Both standard deviation and variance increased to 0.93 and 0.86 respectively and showed that respondents regarded contamination as being of lesser importance than food poisoning, suggesting the focus on enforcement and the establishment of awareness being placed on the latter. As with the example of contamination, the mode and median remained the same for the subject of misleading labelling and advertising. Yet, both standard deviation and variance increased to 1.07 and 1.14 respectively, indicating a greater degree of uncertainty regarding this topic's importance in contributing towards food safety standards.

A considerable amount of legislation and media comment, as illustrated in earlier chapters, have, over the past four years been directed towards these consumer protection measures. Yet, the data from this study suggested that respondents were, at best, unsure about these measures. There was strong agreement that food safety legislation encouraged awareness, with both mode and median being at the level of strongly agree. Standard deviation and variance were minimal at 0.84 and 0.71,

emphasising that the sample was familiar with the subject. The implication from this finding was that respondents were knowledgeable about the topic. Yet the data did not indicate the strength of this attitude or, more pertinently, whether it translated into appropriate behaviour. Such familiarity did not, it seems, extend towards enhancing a country's hotel industry, ranked number five, with the median at the agree label and mode at the strongly agree label. Standard deviation and variance increased to 1.09 and 1.18 respectively, suggesting the sample's view that a continuing emphasis of food poisoning and awareness could be damaging to the industry's reputation, with a possible loss of business. Awareness thus translated into a negative effect on the industry's reputation.

Table 7.1 Sample Responses Concerning National Legislation

Variable	Mean	Standard deviation	Variance
Food Poisoning	4.48	0.81	0.66
Food Safety Awareness	4.34	0.84	0.71
Contamination	4.23	0.93	0.86
Labelling	4.07	1.07	1.14
Industry Reputation	4.05	1.09	1.18

The investigation continued with the five variables of table 7.1 and asked respondents to relate their views on these issues to the hotel at which they worked. The results, contained in table 7.2, showed a contrast to the national responses of table 7.1, with ranking presented according to the mean of the variable. In reply to the question of an hotel's policies and procedures preventing food poisoning, further analysis of the data illustrated some 96 per cent of respondents strongly agreed with the statement, 2 per

cent greater than nationally. Standard deviation and variance were measured at 0.60 and 0.36 respectively, showing a stronger and more consistent support on these matters than the national perspective. While the median and the mode remained the same at strongly agree for the issue of food contamination, standard deviation and variance registered at 0.82 and 0.67 respectively. It would seem that whilst ranking of this consumer protection measure was the same as nationally, the data suggested a stronger consistency in terms of rating at the hotel level. Policies regarding inadequate labelling generated a wider response than others in this question, with the median being at the agree label and the mode at the strongly agree label. It would seem that hotels rated labelling as a lesser concern and, with standard deviation and variance increasing to 1.03 and 1.06 respectively, there was a wider range of opinion on this matter than for the other variables. There was strong agreement that policies and procedures created an awareness of food safety, with the consequent standard deviation and variance being 0.76 and 0.57, which established that employees at the hotel level attached greater importance to these matters than nationally. Equally, there was strong agreement that such policies enhanced the reputation of the hotel, with standard deviation and variance being at 0.83 and 0.70, giving a ranking of four, as opposed to five nationally.

Table 7.2 Sample Responses Concerning Hotel Policies

Variable	Mean	Standard deviation	Variance
Food Poisoning	4.62	0.60	0.36
Food Safety Awareness	4.45	0.76	0.57
Contamination	4.41	0.82	0.67
Industry Reputation	4.39	0.83	0.70
Labelling	4.12	1.03	1.06

Whereas the previous two questions concentrated on legislation, hotel policies and procedures, the next asked individuals to rank on a five point Likert scale the level of importance attached to various practices required in achieving a safe food operation. Relating this matter to the hotel in question, practices covered included: temperature control, personal hygiene, kitchen premises structure, staff washing facilities, food hygiene training, purchasing and stock control. Table 7.3 illustrates that the first five practices rated very highly with them being viewed as very important. Standard deviation and variance for these issues were low, as shown in the table below. Further analysis of the data showed that ranking by mean seemed to be related to what were the most visible and simplistic of food safety issues, such as personal hygiene, and not according to the most effective and relevant, namely temperature control. Regarding purchasing, the median was rated as important and mode very important. The standard deviation was 1.09 and the variance 1.18, indicating a divergence of views and suggesting uncertainty. The issue of stock control also produced contrasting results from the first five topics. Both the median and mode produced a value label of very important. The standard deviation was 0.99 and the variance was 0.98, figures significantly higher than the first five topics in this question. Both stock control and purchasing are central to the implementation of HACCP principles, as illustrated in previous chapters, the latter now written into law. Yet they were regarded as lesser importance by the respondents. The conclusion is that enforcement authorities need to place greater monitoring and control emphasis on these two issues during the inspection process.

Table 7.3 Individual Ranking of Food Safety Matters

Variable	Mean	Standard deviation	Variance
Personal hygiene	4.87	0.42	0.18
Hygiene training	4.78	0.48	0.23
Temperature control	4.77	0.55	0.30
Washing facilities	4.60	0.66	0.44
Kitchen premises	4.46	0.68	0.47
Stock control	4.31	0.99	0.99
Purchasing	4.19	1.09	1.18

An important first step in implementing appropriate procedures on food safety is the establishment of a policy for the hotel and, while not written into law, effective HACCP principles should not be carried out without one. UK codes of practice issued under Section 40 of the Food Safety Act 1990 recommend documentary evidence, but stop short of making this requirement obligatory. Other countries are more prescriptive in these matters and, in time, such a requirement may be implemented in the UK. Yet, no matter what legislative procedures are in force, documentary evidence will be crucial in determining the level of food safety risk at a particular establishment and the frequency of visitation by enforcement officers.

The issue of policy was investigated in question fifteen, with the objective of determining if certain aspects of food safety had been established, whether they were written, unwritten or did not exist. Areas addressed included: food temperature control, personal hygiene, kitchen premises structure, staff washing facilities, staff training in food hygiene. In these five areas, the number of respondents identifying a written policy ranged from 53 per cent with kitchen premises structure through to 67 per cent for food

hygiene training. Ranking according to mean showed the following sequence in descending order: personal hygiene, hygiene training, temperature control, washing facilities and kitchen premises. The fact that temperature control ranked third is surprising, as regular monitoring of food temperature and its recording is an important part of effective food safety, and indeed HACCP. Additionally, this question did not test awareness as to whether such policies existed, but the individual had not been informed. While in all cases median and mode responses were firmly established in the written value label, standard deviation approximated to 0.51 / 0.67 and variance to 0.26 / 0.45. The obvious lack of written policy in some establishments on these five issues implied a lack of planning in these matters.

The theme of policy was developed further in the following question with the inquiry investigating whether there were a government or national code of practice on five issues, namely: food temperature control, personal hygiene, kitchen premises structure, staff washing facilities and staff training in food hygiene, within the country. Additionally, the question was posed as to whether such a code of practice was legally enforceable. Within the five elements of the question, between 80 - 90 per cent responded that there was a code of practice, and between 60 - 70 per cent replied that it was legally enforceable. The median and mode in all cases indicated the "yes" value label. The measures of variability, namely standard deviation and variance were negligible. These results illustrated differences in the responses between codes that were in existence within the country, (identified in previous chapters), and whether individuals were aware of their existence and, indeed, their enforceability. In terms of ranking mean responses, temperature control was first and training was number five for both the

existence of a code of practice and the fact that it was legally enforceable. The conclusion from this response is that while importance was attached to training this had to some extent not been backed up by a code of practice which was legally enforceable. Equally since a percentage of respondents, (10 - 30 per cent), disagreed with the majority view, this finding led to the conclusion that not everyone was fully aware of individual obligations.

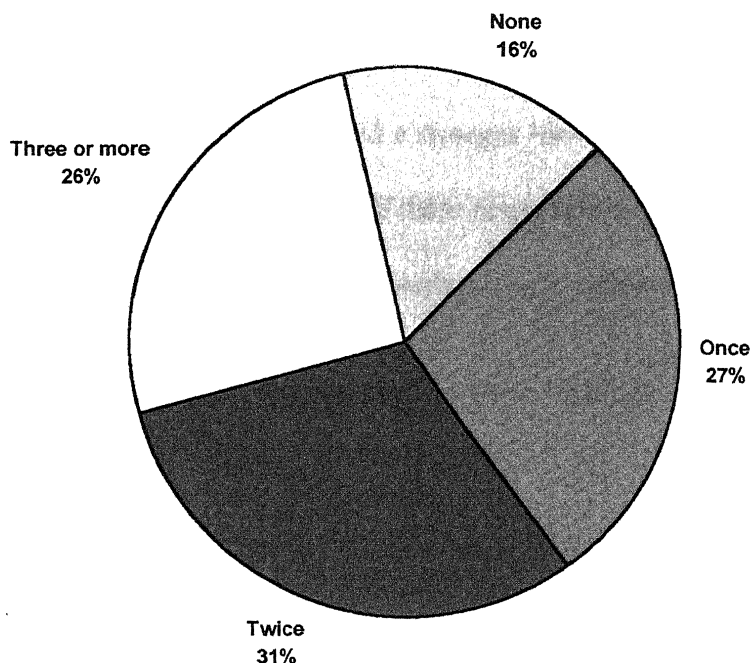
Respondents' views as to which five areas had the potential to lead to food poisoning were explored in question seventeen. The five areas, illustrated in table 7.4, were: inadequate temperature control, inadequate hygiene training, cross contamination, inadequate personal hygiene, inadequate cleaning and disinfection. Both the median and mode for all five areas were measured at the strongly agree label. Over 90 per cent of respondents in all the five areas either agreed or strongly agreed with the five statements. In this respect, the evidence illustrated a high awareness of the causes of food poisoning, although the ranking of responses did reveal differences of emphasis. The data showed that respondents attached a lesser importance to cross contamination than to cleaning, yet it is the former that has a greater potential to cause serious food poisoning outbreaks, as witnessed by the *Ecoli* incident in Scotland November 1996. The overall results also showed a low importance attached to food hygiene training, even though it is only when personnel have adequate knowledge on these matters that attempts can then be made to influence appropriate behaviour. It would seem that respondents to this question rated highest the most visible aspect of food safety, namely cleaning, yet ranked fifth the least visible - cross contamination.

Table 7.4 Potential to lead to Food Poisoning

Variable	Mean	Standard deviation	Variance
Cleaning	4.73	0.65	0.42
Temperature control	4.66	0.69	0.48
Personal hygiene	4.62	0.75	0.56
Hygiene training	4.59	0.82	0.67
Cross contamination	4.55	0.83	0.68

An essential part of effective food safety policies is enforcement or monitoring to ensure that the rules in place are being applied. The UK approach is based on codes of practice which lay down criteria for risk assessment of units, which, in turn, determine the frequency of inspection. These enforcement matters were addressed in three parts, with the first directed at management, by asking how often was the hotel visited by the food enforcement authorities in the past 12 months. In total, 101 establishments were visited once, 114 twice, 94 three or more times and 59 none at all. The data contained in figure 7.1 illustrated that 16 per cent of the hotels in the sample had not been visited by enforcement officers during the previous 12 months, which can be regarded as a considerable weakness in this essential monitoring and control issue.

Figure 7.1 Frequency of Enforcement Authority Visits



The second part to this question sought a response from individuals in an operational role, and asked whether they were aware of the visits by food enforcement authorities. Of those operational staff who expressed a view, 220 said “yes” and 31 said “no”. As a large percentage of operational staff were aware of these enforcement visits, it was deemed important to investigate if the results of the visit were communicated to them. The data indicated that there was a high level of communication between management and operational staff, with 185 always being informed, 46 sometimes and 20 never.

The development of effective food safety policies, particularly concerning the principles of HACCP now written into law, is in part dependent on record keeping. The final two items focused on this topic. The first of these questions asked on which of the following did the hotel keep written records, namely: food temperature, staff training, cleaning and disinfection. The second question asked if the keeping of such records had led to a change in procedures within the hotel over the past 12 months. The evidence presented

in table 7.5 showed that between 20 - 28 per cent of hotels in the sample did not keep records on these three areas of food safety, a situation which can be regarded a matter of concern. The results also indicated a stronger bias towards keeping cleaning records, as opposed to temperature control. Of those responses that were positive, approximately 60 per cent had seen changes in the records over the previous 12 months.

Table 7.5 Record Keeping Related to Food Safety

	Records				Changes over previous 12 months	
	Yes	%	No	%	Yes%	No %
Temperature control	327	72	125	28	57	43
Staff training	398	78	111	22	63	37
Cleaning	414	80	103	20	61	39

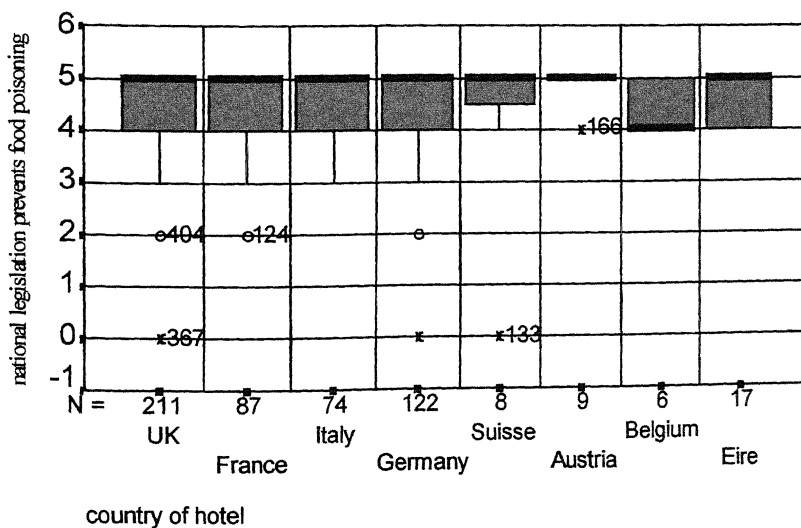
Comparing Groups, Looking at Distributions

Having presented an analysis of values for the summary (marginal) statistics, this section of the study investigated if the variables differed by sub groups of cases. The justification behind this approach can be related back to the three research objectives set within the methodology chapter. The central quest was firstly to determine whether there were a variation in response between countries. Secondly, there was a requirement to find out if there were a difference between chain and independent hotels and, thirdly, if there were a difference in response dependent on job position. The analysis involved the comparison of groups using cross tabulation analyses and examined the distribution of values for individual groups of cases. The main method of illustration within this section was the use of boxplots that helped visualise distribution. The lower boundary of the box represented the 25th percentile. The upper boundary of the box represented the 75th percentile and the vertical length of the box, the interquartile range, with the line inside

the box representing the median. Cases with values between 1.5 and 3 box lengths were referred to as “outliers” and were designated with a zero. Cases with values greater than 3 box lengths were called “extreme” values and were designated with an asterisk. If the median were closer to the bottom of the box, this outcome were referred to as “positive skewness” with alternative line positioning classified as “negative skewness”.

The first stage of this analysis investigated whether national legislation prevented food poisoning on a country basis, as illustrated in figure 7.2, and additionally, through cross tabulations, comments indicated any differences by position and hotel type where appropriate. Throughout the four main countries analysed, there was strong agreement on the point addressed. Yet contrasts did emerge. For instance, out of the 82 UK managers responding and working in an hotel chain, only 48 per cent strongly agreed with the statement, with a similar percentage being found in UK independent hotels. On the other hand, higher agreement levels came from both Italy and France, respectively 69 and 77 per cent.

Figure 7.2 Attitudes to National Legislation and Food Poisoning by Country

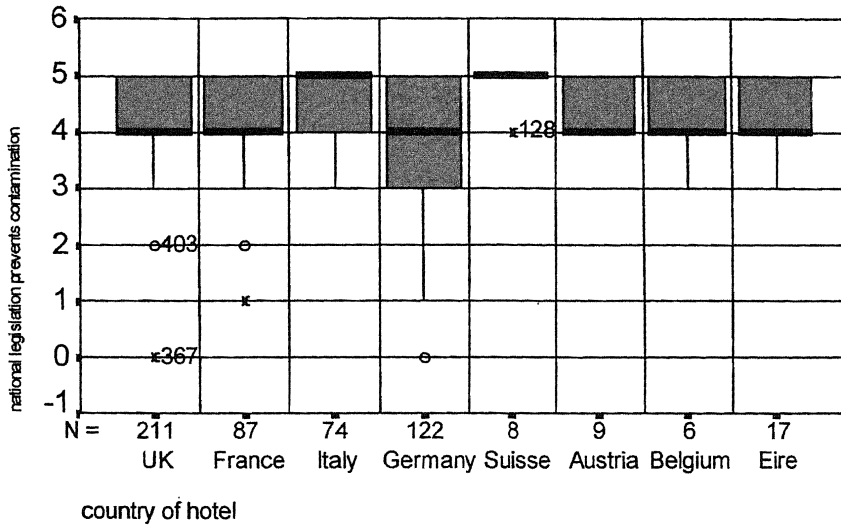


Yet, there was a greater shift away from this Franco / Italian consensus in German chain hotels, with the percentage dropping to 47. This trend in Germany was emphasised to a greater extent in the independent hotel sector. At the supervisory level, variability of support was recorded in both UK and German chain hotels with 50 and 62 per cent of respondents respectively strongly agreeing with the statement. While many of the chain hotel head chefs were positive about this issue, the distribution of responses was considerably wider in France, (41 per cent), than in Germany, (57 per cent strongly agreeing).

Views on food contamination by country were addressed with the results presented in figure 7.3. The data showed that on a country by country basis, there was a wider distribution of responses with respect to this issue than there was to the previous question. Further comments were made by hotel type and position. Crosstabulation of the results revealed that hotel chain managers in both the UK and Germany were considerably less positive than those in France and Italy. Indeed, for both the UK and Germany, the strongly agree response was in a minority in the chain hotels, the latter accounting for only 17 per cent of the total country response. A similar skewness, (in the UK and Germany), was discovered from managers working in independent hotels, with 56 per cent of German respondents uncertain about this matter. This UK / German trend, though less pronounced, was also evident in the views of chain hotel supervisors. Variability in the strength of attitudes from head chefs of chain hotels in France and Italy was recorded with 25 and 37 per cent respectively of the country total agreeing strongly, whilst such agreement for this issue in the UK registered at 68 per cent, the latter response contrasting with independent hotels (44 per cent). With chefs in chain

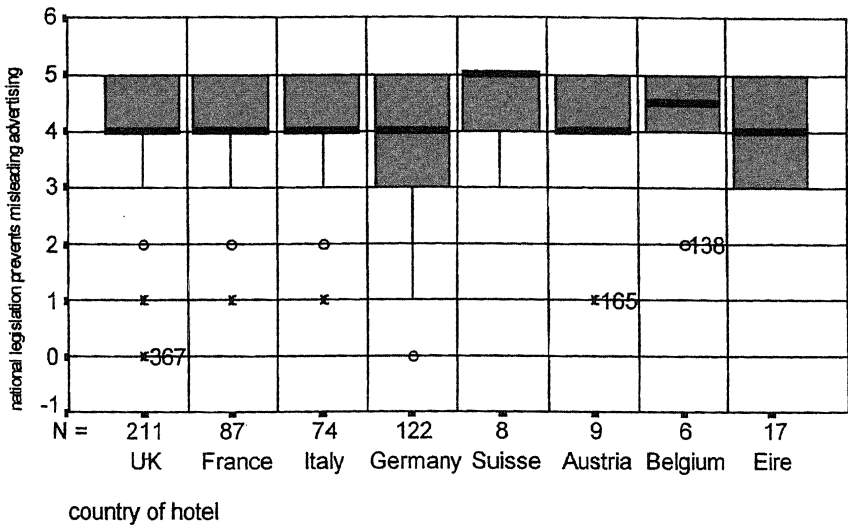
hotels, considerable variability in attitudes was found in Germany and strong positive support in the UK and France. No discernible patterns were found with waiters.

Figure 7.3 Attitudes to National Legislation and Food Contamination by Country



The box plot presented in figure 7.4 highlighted attitudes concerning national legislation and food labelling by country and yielded a median of “agree” response across the four main countries. Further breakdown of the data by position and hotel type found a range of attitude strengths emerging. For instance, 32 per cent of chain hotel managers in Germany strongly supported the statement, and in independent hotels 61 per cent were uncertain. By comparison, in the UK, the figures were 46 and 17 per cent respectively. Yet again, the pattern within Germany was spread across the attitude scale for supervisors in both hotel categories. Uncertainty about this matter was also evident with German head chefs, with 42 per cent registering this strongly supportive view within chain hotels.

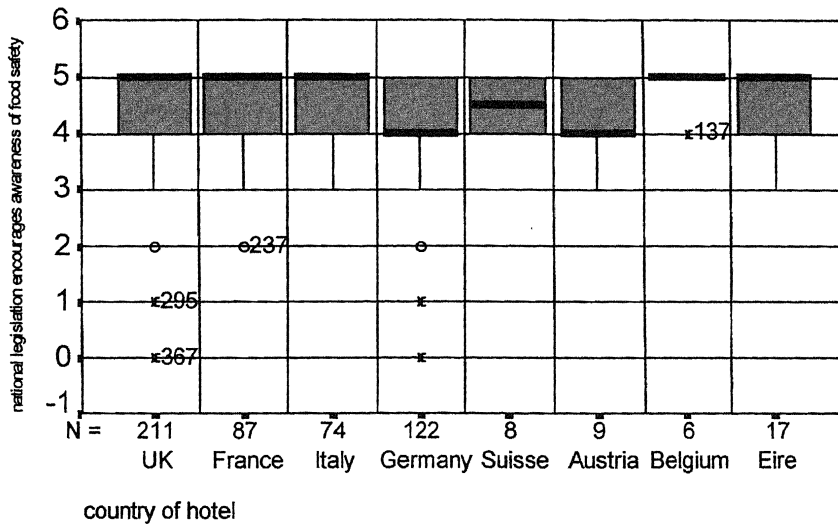
Figure 7.4 Attitudes to National Legislation and Food Labelling by Country



The data presented in figure 7.5 reveal the attitudes of respondents to national legislation and whether they felt that it created an awareness of food safety. Hotel chain managers within three out of the four countries were in strong agreement about this issue, although a degree of variability was detected in the responses from Germany. Indeed, in that country, only 20 per cent strongly agreed, whereas the figure was 89 per cent in France. For managers in independent hotels, variability was again recorded in Germany, with a strong move away from the strongly agree response; only 18 per cent supported this matter. This trend continued at the supervisory level, a similar response being noted in both hotel categories, with variability detected in Germany, recording only 19 per cent strongly agreeing within hotel chains, as opposed to 45 per cent in the UK and 66 per cent in Italy. Head chefs responding, illustrated the same divergence of views as was shown with the previous position categories. Hotel chain head chefs strongly agreed to the tune of 82 per cent in the UK, while an endorsement rate of only

50 per cent was recorded in Germany. This German trend continued with chain hotel chefs where 42 per cent were uncertain about this matter.

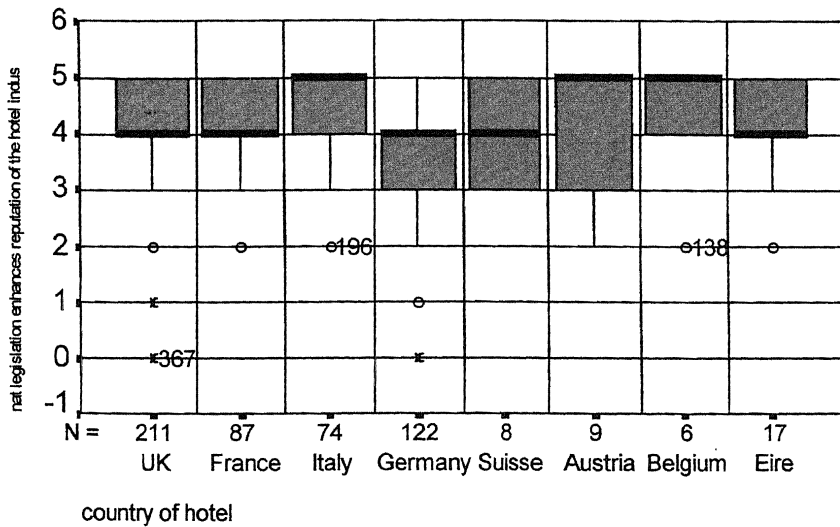
Figure 7.5 Attitudes to National Legislation and Food Safety Awareness by Country



The study's next stage measured attitudes towards national food safety legislation and whether it enhanced the reputation of the hotel industry. Here, figure 7.6 indicates wider variability than in responses to previous questions. Of the 82 UK managers in chain hotels who responded, 43 per cent strongly agreed, whereas in Germany, 40 managers responded, of whom only 15 per cent strongly agreed. The figure rose to 67 per cent in France and 69 per cent in Italy. By contrast, in Germany, 20 per cent were uncertain and the same percentage of respondents disagreed. This variability was also reflected in the views of German managers within the independent hotel sector, 50 per cent being uncertain and only 18 per cent strongly agreeing with the statement. The data also indicated a similar trend in the supervisors' responses, with only 31 per cent of Germans being strongly supportive. A similar response profile was obtained from German chain

hotel head chefs, and to a lesser extent in the UK. Chefs in chain hotels revealed a contrast between the wider variability of the UK, and particularly Germany, (42 per cent were uncertain), and the strongly positive responses of France and Italy. Rating variability continued to a greater extent, with waiters and the “other” category in both chain and independent hotels.

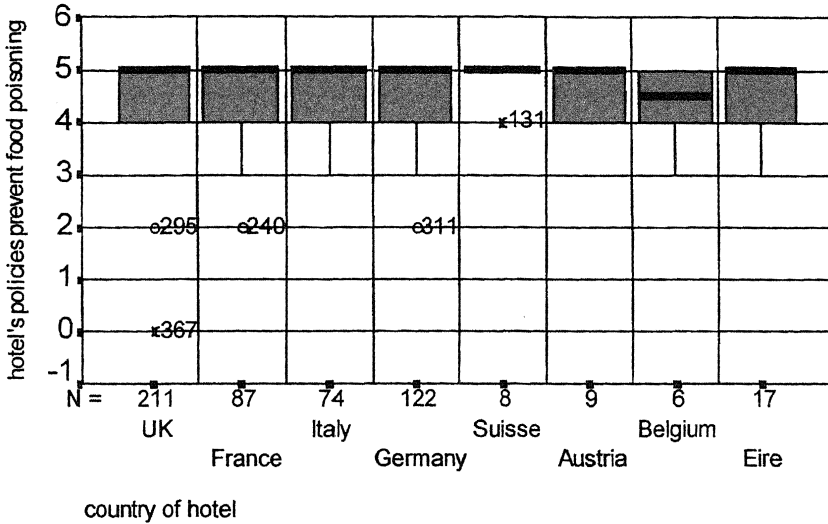
Figure 7.6 Attitudes to National Legislation and Reputation of the Hotel Industry by Country



Having analysed attitudes towards a range of national legislative matters, the study’s attention next focused on food safety matters specific to the respondents’ hotel. The results contained in figure 7.7 show that in all countries, respondents, in the main, strongly endorsed the view that their hotels’ policies assisted in preventing food poisoning. Further analysis revealed that a high percentage of UK hotel chain managers strongly agreed with the statement, while a lesser figure was recorded for the three other main European countries, the results being: UK 74 per cent, France 66 per cent, Italy 69 per cent and Germany 45 per cent, the figure for independent German hotels being 31 per cent. No discernible contrasts were recorded for supervisors, yet it was noticeable

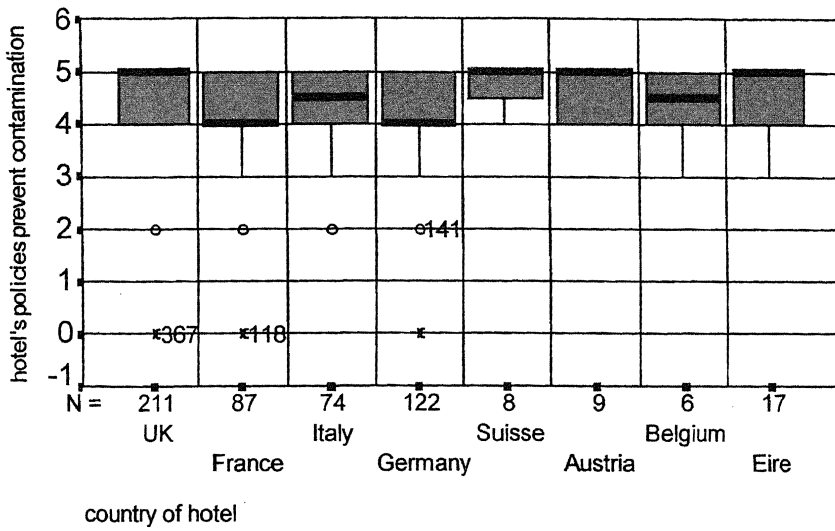
that head chefs gave a uniformly high rating for this issue, (91 per cent in UK chain hotels !), a trend supported by the views of chefs.

Figure 7.7 Attitudes to Food Poisoning by Hotel



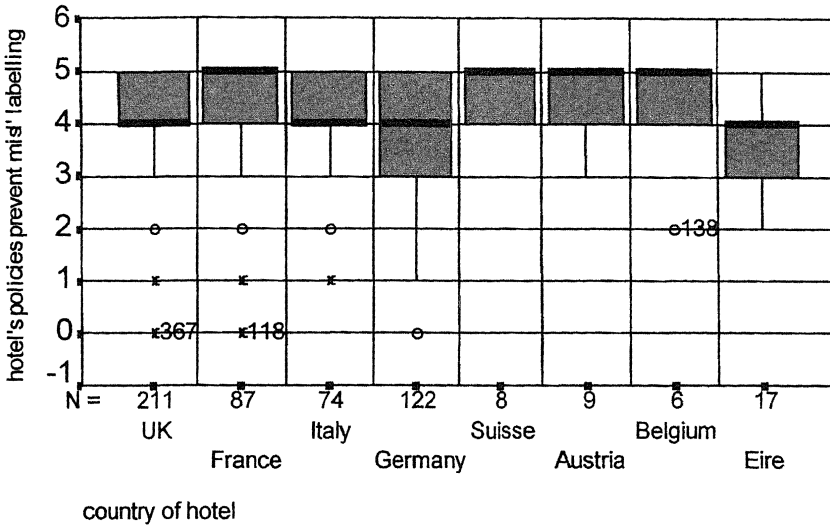
Respondents' attitudes towards food contamination were next analysed by country, with the general trend emphasising less of a priority towards this question than with the previous food poisoning issue. For instance, in the UK, 73 per cent of chain managers strongly agreed with the statement. Yet, in two other major countries, the results were 55 per cent in France and 35 per cent in Germany. A similar low figure of 31 per cent was recorded for German independent hotels. Overall, supervisors attached a lower priority than managers to this issue, with such differences particularly being recorded in the UK, France and Italy. The data, however, showed the importance attached to this matter by UK head chefs in chain hotels, where over 77 per cent strongly agreed, in contrast to a figure of 37 per cent for Italy. In all four main countries, over half of the chefs strongly supported this matter (see figure 7.8).

Figure 7.8 Attitudes to Contamination by Hotel



Food labelling has attracted a great deal of interest in recent years from legislators. Figure 7.9 shows attitudes towards this matter by country. The data indicated that attitudes towards this topic varied considerably among the four main countries, and by hotel type and job positions represented in the survey. A marginally higher frequency, 56 per cent of UK hotel chain managers, strongly agreed with the statement than the French sub sample (52 per cent). German respondents registered only a 25 per cent positive response, illustrating that they clearly did not highly rate this issue, a trend also reflected in that country's independent outlets. Such a wide variability in responses was also reflected in the views of German supervisors. Other than Italy, where a value of 25 per cent was recorded, head chefs in the other three countries were more positive on this issue, a clear contrast with the views of managers. All the other categories of staff attached low importance to the question of labelling, particularly respondents from German hotels.

Figure 7.9 Attitudes Labelling by Hotel



The data contained in figure 7.10 illustrate a gap in awareness of food safety at the unit level, and divided the UK and France in one group from Italy and Germany in the other. While in the former over 70 per cent strongly agreed with this statement, as little as 34 per cent were supportive in the latter. Further analysis showed that most categories of staff responded according to the two country groups just identified. For instance, in the case of chain hotel managers, the range was over 77 per cent who strongly agreed with the statement in the UK and France, falling to 27 per cent in Germany. A similarly low figure was recorded in German independent hotels. The exception to this trend were head chefs, where over 90 per cent were in support in all four main countries.

The data contained within figure 7.11 reveal that German respondents were less positive about this issue of reputation than the other three countries. Further analysis by occupational position in these countries showed that over 55 per cent of managers were strongly supportive, except for Germany, where the figure was 32 per cent. No discernible trends were detected with supervisors. Head chefs across all four countries

indicated a very high level of support, registering over 90 per cent in France, for instance.

Figure 7.10 Strong Awareness of Food Safety by Hotel

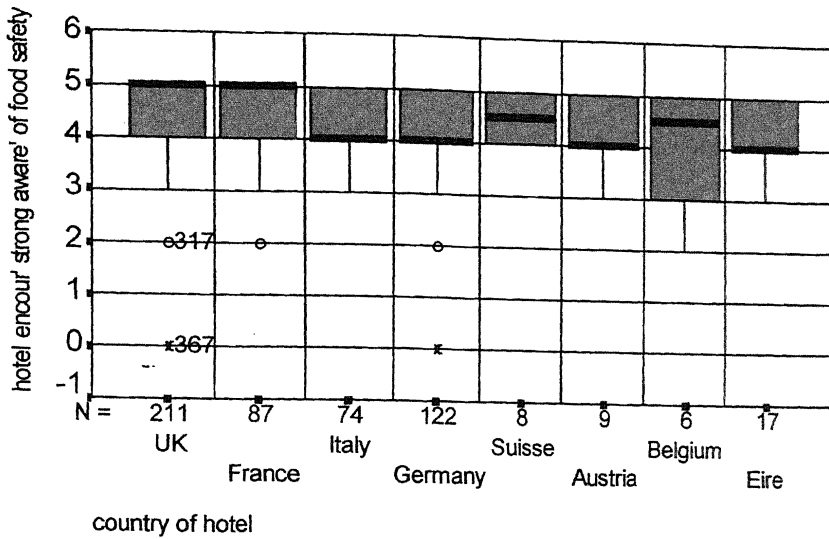
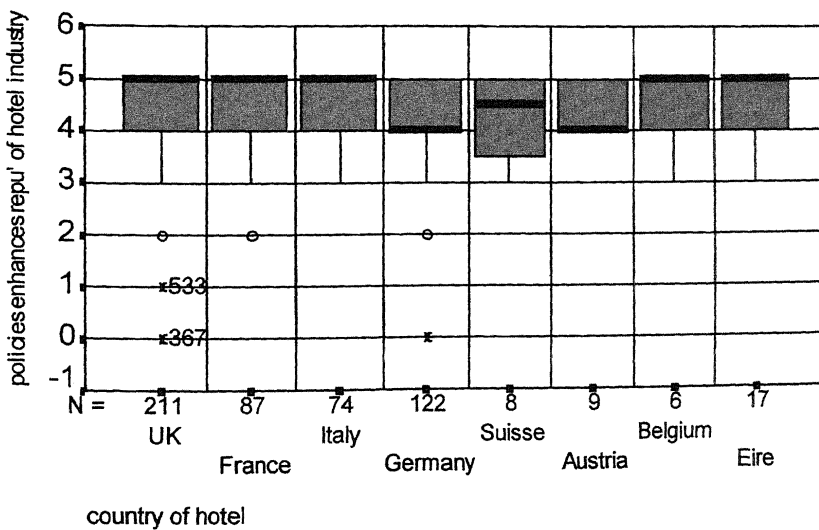
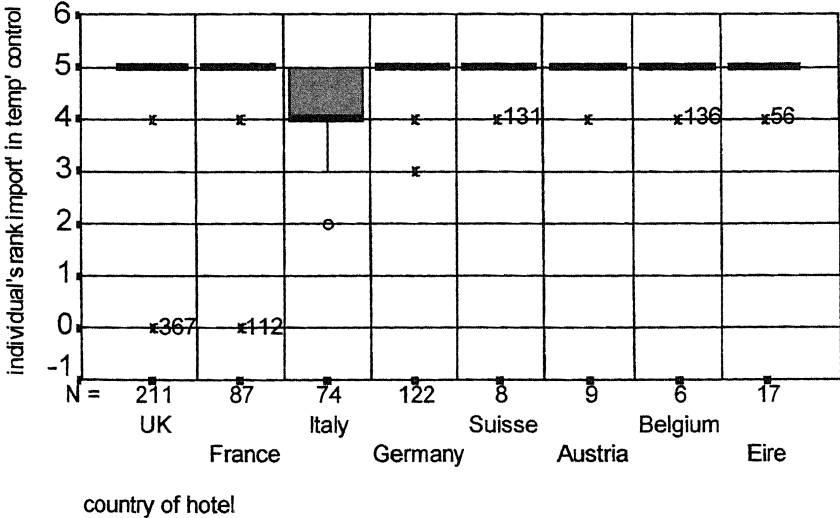


Figure 7.11 Food Safety Policies Enhance Reputation of Hotel Industry



In addressing the next question, respondents were asked to rate the importance of various food safety measures. Except for Italy, temperature control, (see figure 7.12), was regarded as very important in all countries. Only 46 per cent of Italian managers regarded this matter positively, compared with nearly 90 per cent in the other three main countries, with the same trend occurring in independent hotels. No discernible trends were noted in the responses of supervisors. It is interesting to note that in Italy, only 50 per cent of head chefs rated this matter as very important, while the figure in the other three countries was over 83 per cent. A similar negative trend was also observed with chefs in Italy. Here only 50 per cent regarded temperature control as very important, compared with nearly 78 per cent in France.

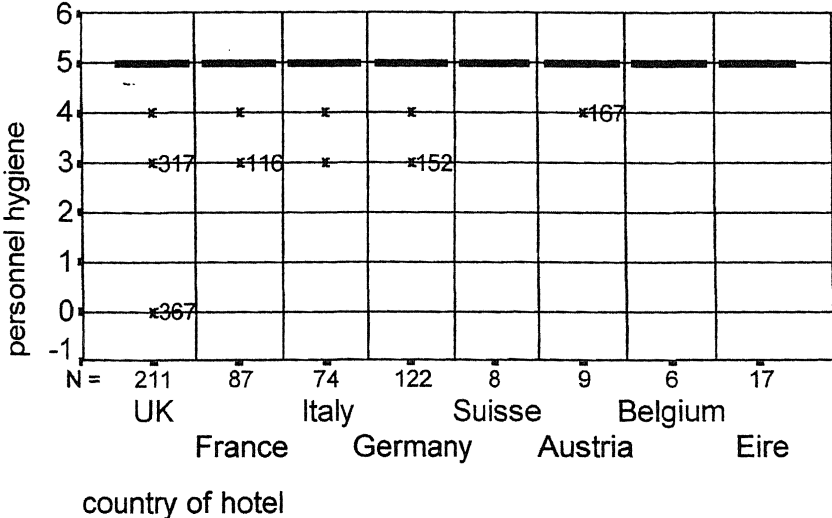
Figure 7.12 Importance Ranking of Temperature Control



The results presented in figure 7.13 show that across all four main countries the overall view was that personal hygiene was very important and, in virtually all cases, regardless of position and hotel type, there was nearly 100 per cent endorsement. While the median portrayed in the box plot of figure 7.13 was the same throughout all countries,

operational staff from Italy rated this issue of lesser importance than the other categories of respondents. For instance, only 50 per cent of both head chefs and chefs in that country regarded this matter as being very important.

Figure 7.13 Importance Ranking of Personal Hygiene



While the importance attached to kitchen structure differed among countries, greater variation was due to position. This fluctuation of response is illustrated in figure 7.14, which particularly highlights the gap between head chefs and other staff. For instance, whereas 47 per cent of UK hotel managers rated this matter as very important, the equivalent figure for head chefs rose to 89 per cent. Crosstabulation showed that chefs rated kitchen structure less highly than other operational categories of staff, with a 50 per cent figure being recorded. The median “important” response was lower in Germany than that in the other three main countries.

The data presented in figure 7.15 consider the importance of staff washing facilities and reveal that some categories of respondents from Italy rated this issue of lesser importance than those from the other three main countries. Crosstabulations showed that in the UK, France and Germany, over 67 per cent of managers regarded this matter as very important, in contrast to the figure for Italy which was only 30 per cent. No discernible trends were noted in the responses from supervisors. Yet with head chefs, it was again the Italian view that rated this matter lower at 50 per cent, as opposed to Germany's 85 per cent, with a similar pattern of responses being recorded for chefs.

Figure 7.14 Importance Ranking of Kitchen Structure

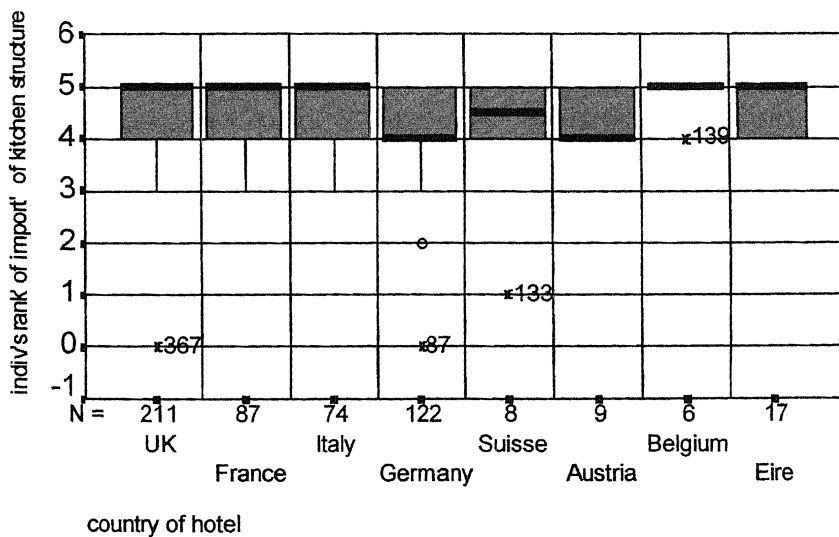
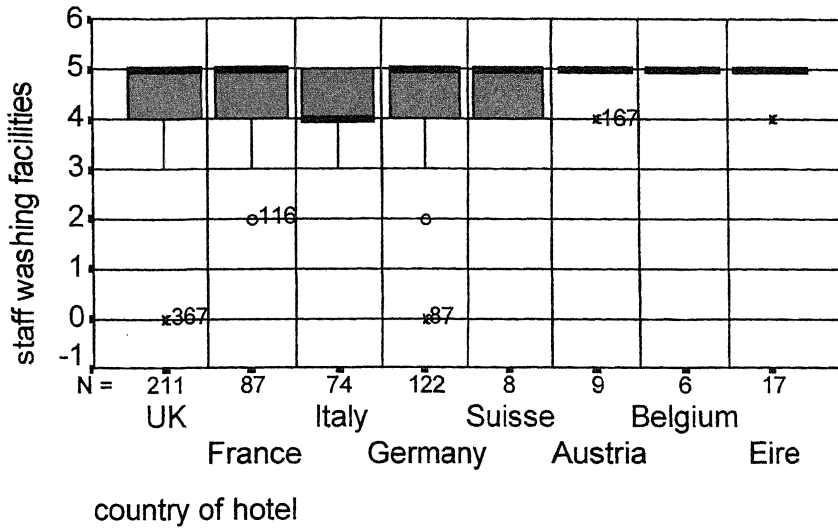
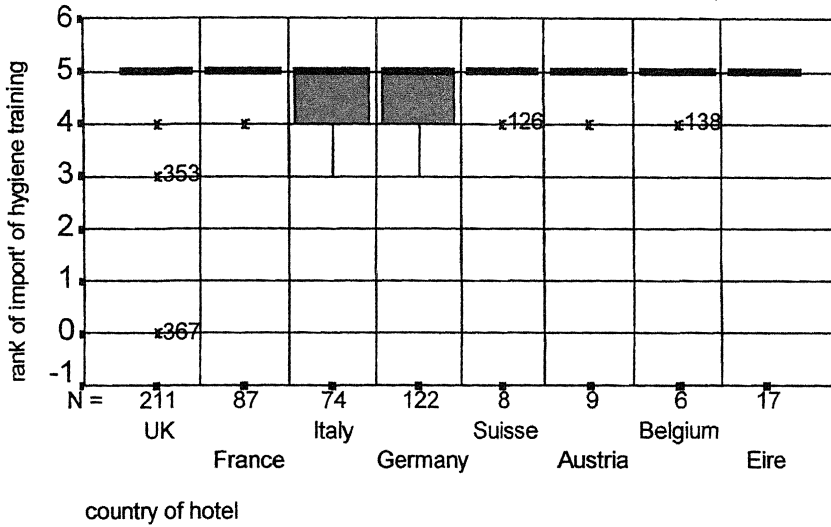


Figure 7.15 Importance Ranking of Staff Washing Facilities



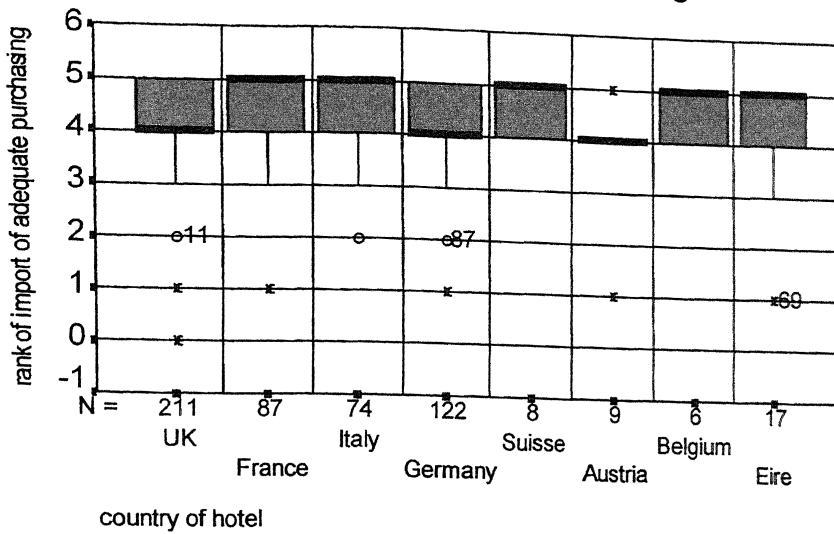
The results presented in figure 7.16 deal with the ranking of hygiene training, with variability being highlighted in the responses from Italy and Germany. For instance, in chain hotels, 85 per cent of managers from the UK regarded the matter as very important, compared with 69 per cent in Italy. The views of supervisors were considerably less positive in Italy (33 per cent) and Germany (56 per cent), compared with the UK (90 per cent). The responses from head chefs were uniformly high (over 90 per cent), except for Italy (62 per cent). In both categories of hotels, the grouping of responses tended to be similar in the UK / France category, and the Italy / Germany category.

Figure 7.16 Importance Ranking of Hygiene Training



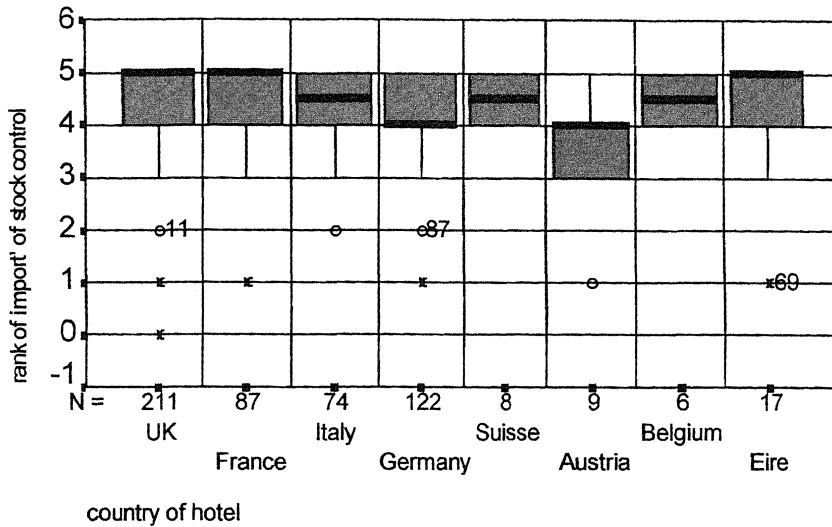
The next topic investigated was purchasing, and figure 7.17 illustrates the variability in response from the four main countries, with the UK and Germany regarding this matter of lesser importance than France and Italy. Specifically, with job positions and hotel types, chain hotel managers' responses registering very important, ranged from 45 per cent in the UK to 66 per cent in France. However, only 12.5 per cent of German managers in independent hotels regarded this issue in the same light. Supervisors in the UK and Germany rated this matter low. For instance, only 18 per cent in Germany regarded this topic as very important. This trend in negative responses was most pronounced among head chefs and chefs, the former in the UK registering a 72 per cent rating on the very important label, (it was surprising that they did not rate this matter more highly).

Figure 7.17 Importance Ranking of Purchasing



In contrast to purchasing, stock control data presented in figure 7.18 show the UK and France respondents regarding this issue of greater importance than Germany and Italy. Other than in France, where 77 per cent rated this question as very important, managers in the other three main countries registered only 50 per cent. Further analysis showed that supervisors in the UK and Germany were, in some cases, negative about stock control with, for instance, only 18.8 per cent in Germany regarding this matter as very important. The exception to these trends were the responses from head chefs, where lower results were reported from France and Italy (50 and 37 per cent respectively). It was also surprising that chefs did not share the positive views of their head chefs in the UK and Germany.

Figure 7.18 Importance Ranking of Stock Control



The data presented in table 7.6 illustrate the difference in policy making within the four countries and show that in percentage terms UK respondents had a considerably higher commitment to written policies than those from the other three countries. Further analysis of the data by hotel type recorded no differences in the responses compared with this overall picture.

Table 7.6 Policy on Temperature Control (%)

	UK	France	Italy	Germany
No response	0.5			2.5
No policy		4.6	9.5	2.5
Unwritten	9.5	34.5	58.1	59.8
Written	90.0	60.9	32.4	35.2

Policies on personal hygiene, contained in table 7.7, show a contrast between the UK and Italy where, in the former 93.8 per cent were written and in the latter the equivalent figure was only 31.1 per cent. Further analysis by hotel type revealed no discernible differences in the responses, although trends in Italy did emerge according to hotel star rating - the lower the rating, the greater the likelihood of an unwritten policy.

Table 7.7 Policy on Personal Hygiene (%)

	UK	France	Italy	Germany
No response	0.5			1.6
No policy	0.5	2.3		
Unwritten	5.2	17.2	68.9	37.7
Written	93.8	80.5	31.1	60.7

Responses on policy concerning kitchen premises structure were less pronounced than the previous issues discussed, as illustrated in table 7.8. Having said that, in both Italy and Germany the bias was still towards unwritten policies, and in the UK and France, approximately 10 per cent of hotels had no policy at all.

Table 7.8 Policy on Kitchen Premises Structure (%)

	UK	France	Italy	Germany
No response	0.5	1.1		1.6
No policy	9.5	10.3		4.9
Unwritten	26.1	37.9	56.8	48.4
Written	64.0	50.6	43.2	45.1

The results in table 7.9 continue to identify the importance of written policies in the UK (72.5 per cent) versus Italy (28.4 per cent), figures which identify the level of formalised management commitment towards staff washing facilities in the countries surveyed.

Table 7.9 Policy on Staff Washing Facilities (%)

	UK	France	Italy	Germany
No response	0.5			2.5
No policy	1.9	4.6	9.5	4.1
Unwritten	25.1	40.2	62.2	39.3
Written	72.5	55.2	28.4	54.1

Table 7.10 shows that, with food hygiene training, the gap was between the UK and the other three countries. A clear contrast was noted between the UK, 91.9 per cent and

Italy, 29.7 per cent. Given the central importance of such training, it is perhaps surprising that three out of the four countries did not adopt a more formalised approach.

Table 7.10 Policy on Food Hygiene Training (%)

	UK	France	Italy	Germany
No response	0.5			3.3
No policy		4.6	10.8	3.3
Unwritten	7.6	36.8	59.5	37.7
Written	91.9	58.6	29.7	55.7

Table 7.11 relates to differences of opinion as to whether there were codes of practice on the foregoing five issues and if they were legally enforceable. A high percentage of respondents from the UK had the knowledge that codes of practice, (section 40 Food Safety Act 1990), existed and that they were legally enforceable, (in strict legal terms this view is incorrect). The conclusion that can be drawn from the other responses was that in France there was an awareness of codes of practice, yet not everyone was clear as to whether they were legally enforceable. In Italy the data suggested that respondents were not knowledgeable about such information and many were unsure whether it could be set within a legal context.

The data in figure 7.19 are presented as a bar chart centred on various means and reported to a confidence level of 95%. The calculated mean for the entire sample was 4.65 for temperature control, with respondents from Italy regarding the matter of lesser importance than the UK. The contrast for food hygiene training was between the UK and Germany, with the latter regarding it of lesser importance. Other than cleaning factors in Italy, the division was between UK / France on the one hand and Italy / Germany on the other.

Table 7.11 Code of Practice and Legal Enforceability (Positive responses only %)

	UK		France		Italy		Germany	
	Code	Legal	Code	Legal	Code	Legal	Code	Legal
Temperature Control	97.6	81.5	96.6	80.5	73.0	64.9	82.0	59.8
Personnel Hygiene	91.0	62.1	97.7	83.9	75.7	66.2	87.7	49.2
Kitchen Premises	84.8	66.8	89.7	73.6	85.1	75.7	76.2	51.6
Staff Washing Facilities	92.4	76.3	96.6	78.2	47.3	29.7	86.9	62.3
Food Hygiene Training	95.3	75.8	80.5	57.5	56.8	43.2	79.5	57.4

Figure 7.19 Importance of Food Safety Matters in Preventing Food Poisoning

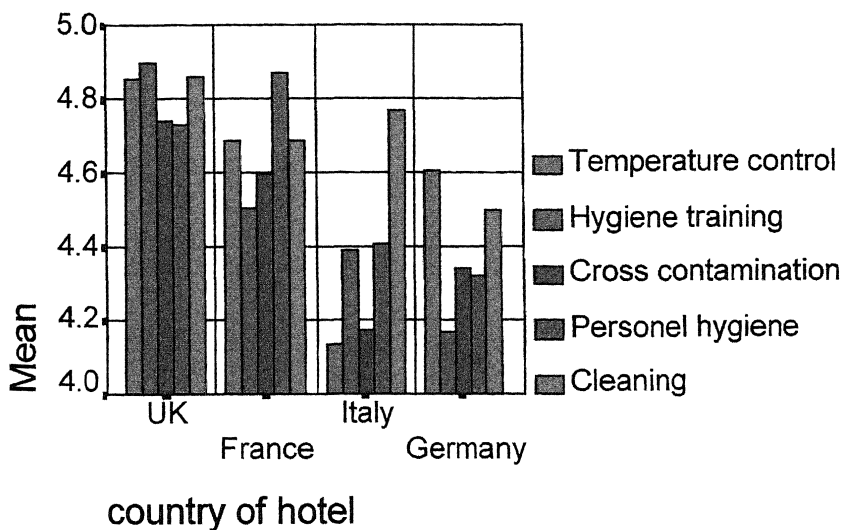


Figure 7.20 also comprises a chart. It addresses the frequency of visits from enforcement officers. The data suggest that hotels were visited more frequently in France than in other countries, and again the crosstabulation results from Italy were below the average for independent hotels. It is also important to note that Italy also went against the trend

with the range of responses being much wider than in the other three countries, (in a number of European countries, frequency of inspection is usually based on risk assessment of the premises and, all things being equal, independent hotels are generally regarded as a higher risk). While many of the responses showed that hotels were visited twice, French independent hotels were, in many cases, visited three or more times. In the UK and Germany there was little difference in the frequency of visits between hotel types.

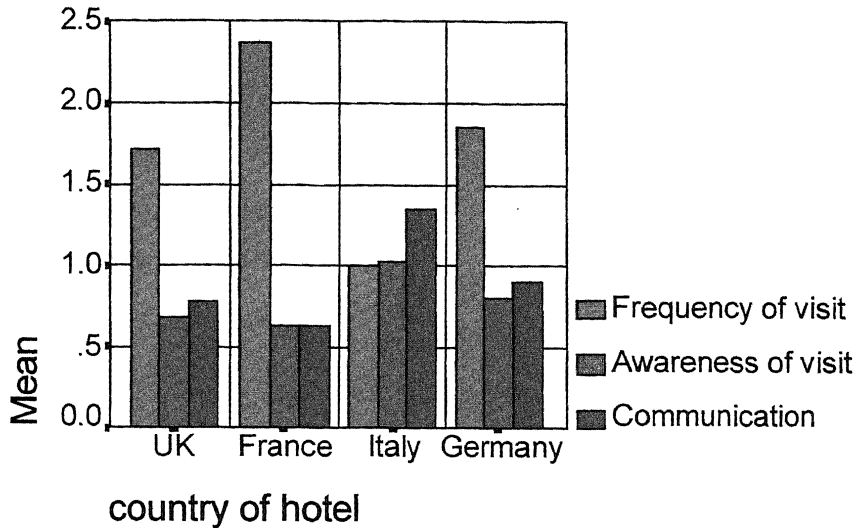
The results presented in figure 7.20 illustrate staff awareness of visits, with crosstabulation analysis being presented by hotel type. A mean closer to one represented staff who were aware of such visits and showed that respondents in France, followed by the UK, were kept informed to a greater extent than those from Italy. Minimal differences were detected between the two hotel types.

In developing the enforcement issue, one important element in the effective implementation of food safety practices is management communication with staff. The results contained within figure 7.20 reveal the level of communication between management and operational staff, (results close to one identifying high levels of communication). The responses from the Italian sample indicated a bias towards staff sometimes being informed. Overall communication in the German hotels, of both types, showed that the majority was always informed. Taken overall, communication was greater in hotel chains than in the independents.

The keeping of records on the three key areas of food safety are represented in figure 7.21, (results close to one are positive). With temperature control and food hygiene training, the clear contrast was between the UK and Italy, where the latter's mean was biased towards hotels that did not have such records. There was consistency in

responses by hotel type in the UK, yet the mean response was higher within the Italian independent hotels. With cleaning records, the data showed that in all four countries similar means were reported, although by hotel type, independent hotels attached a greater importance to this matter.

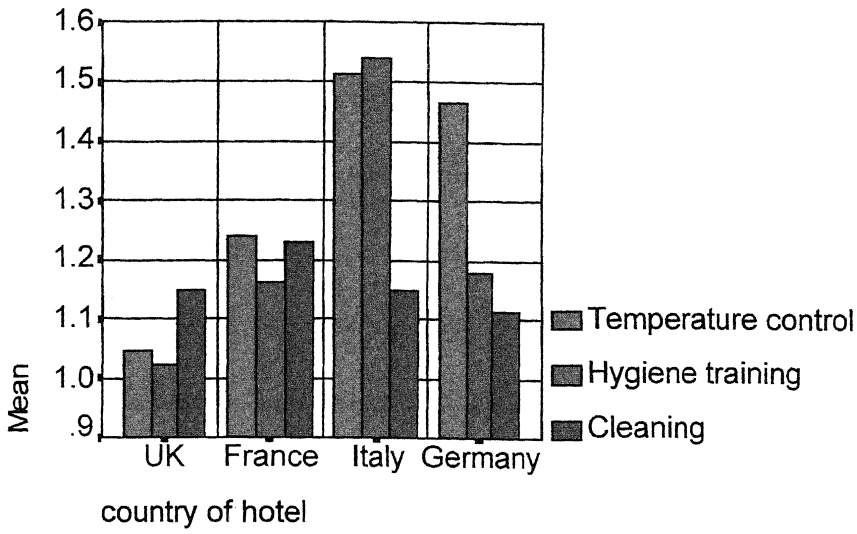
Figure 7.20 Food Safety Enforcement



Note: results close to one are positive

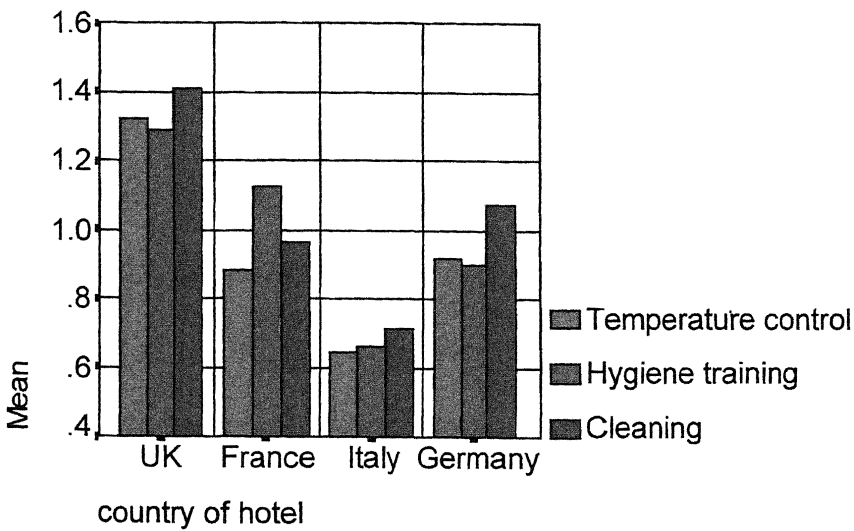
Having considered the existence of records, France, the UK and Germany had witnessed changes in policy over the previous 12 months. The exception was Italy where changes seem to have only occurred with cleaning and, regarding the other two issues, nearly 60 per cent gave no response (see figure 7.22).

Figure 7.21 Records on Food Safety Practices



Note: results close to one are positive

Figure 7.22 Changes in Records on Food Safety Practices During Past 12 months



Note: results close to one are positive

Summary

The objective of this chapter has been to examine, describe and summarise the variables involved in the main body of this survey and to relate the results back to the objectives set in chapter five. It began with comments on the total sample and then continued with results by country and, where appropriate, by hotel type and position. Of the four main countries that were surveyed, groupings did occur in relation to the issues discussed, and in overall terms, these were: the UK / France on the one hand, and Italy / Germany on the other. Additionally, a positional divide emerged, specifically in terms of managers' views, as opposed to those of head chefs. As a further point, and in overall terms, chain hotels registered more positive opinions than independents.

Data concerning the national perspective illustrated the perceived importance of food poisoning, but lesser significance of other hygiene matters, such as contamination and labelling. While respondents registered a high level of awareness regarding food safety, they believed that such a focus had a negative effect on the industry's reputation.

Contrasting the national and hotel perspective, it was again noticeable that food poisoning was regarded as the most important issue and that awareness registered at a greater level than previously. It was noteworthy that labelling nationally was given more weight than at the hotel level. Additionally, reputation of the unit was enhanced to a greater extent than obtained nationally.

The rating of importance in seven food safety matters identified priorities which, in part, were not consistent with safe food practices. The results illustrated the importance attached to personal hygiene, even above hygiene training and temperature monitoring. Stock control and purchasing were ranked sixth and seventh respectively which, in the views of respondents, were considered of least importance. These twin issues may be

regarded as the “poor relations” of food safety. Yet they play a prominent role in any hygiene training programme and, additionally, the proper implementation of HACCP principles would not be possible without placing due emphasis on them. Another conclusion coming out of the data was the low ranking of the kitchen premises structure. Proper kitchen design is central to effective food safety, particularly in the avoidance of cross contamination and the flow of food from delivery to storage, preparation, cooking and service. As a final point, whereas personal hygiene was rated highest, washing facilities, which could be regarded as an important element, were ranked third.

Proper documentation commences with the best practice establishment of a food safety policy. The data revealed the existence of a written policy in 53 per cent of outlets regarding kitchen premises structure through to 67 per cent for food hygiene training. The conclusion is that a minority of hotels does not adopt such best practice and that lack of written policies leads to inadequate management control in some instances. However, (and the data do not specify this point), respondents might not have been aware of the existence of such policies, even though they may have existed, thus suggesting a possible breakdown in communication.

This theme of policy was developed further with the subject of codes of practice covering five food safety elements. A high percentage, between 80 - 90 per cent, responded that there was a code of practice, and between 60 - 70 per cent replied that it was legally enforceable. Here differences emerged between codes that were in existence within the country, if they were legally enforceable and whether individuals were aware of their existence. The evidence suggested that some respondents were misinformed as to the existence and status of the relevant codes.

In enquiring about factors that had the potential to lead to food poisoning, the results showed a curious set of priorities. Hygiene training and cross contamination were ranked fourth and fifth respectively, yet it was the latter that led to a serious food poisoning outbreak in Scotland, November 1996. This episode could be regarded as representing an inadequacy in appropriate training at that particular establishment. Whilst not wishing to belittle the importance of cleaning, ranked first, effective temperature control is more likely to avoid problems of food poisoning. Yet the latter attracted a lower ranking, thereby reinforcing evidence from the literature review which showed that inadequacy in this area had been the cause of a large percentage of reported incidents.

Visits by enforcement officers are an important element of the control process. It was therefore surprising to learn that 16 per cent of the hotels in the sample had not been visited during the previous 12 months - an obvious matter for concern or possibly a lack of awareness of such visits. However, of those hotels that had been visited, a high level of communication was evidenced between management and staff, particularly as regards the results of the inspection.

Proper record keeping is a necessary follow-on from the establishment of policies. It was regarded as good practice in all countries surveyed, to the extent that some had made it a legal requirement. It was therefore surprising to discover that between 20 - 28 per cent of hotels in the sample did not keep records on the three areas of food temperature controls, staff training, and cleaning.

Analysis of attitudes towards national food safety legislation showed that managers in France and Italy were more supportive than those in the UK and Germany, with chain hotels recording higher rankings than independents. While managers were consistent in

registering their views within the countries, it was noticed that there was greater variability in response from operational staff. This grouping of UK and Germany was reflected, not only in matters to do with food poisoning, but also as regards contamination. Indeed, a high percentage of German managers in both types of hotels were uncertain about the latter issue. A high degree of uncertainty was also recorded on the topic of labelling by, particularly, German hotel managers, but also to a lesser extent among UK managers. In terms of awareness, within three out of the four countries, managers were in strong agreement about this issue. Indeed, the contrast lay between Germany, where only 20 per cent strongly agreed, and France, where the figure was 89 per cent, a trend reflected in the responses from head chefs and chefs. The data also showed considerable variability in response concerning enhancing industry reputation from the German sample.

In summarising food safety, it was evident that greater weight was placed on the five issues contained within the question at the hotel level when compared with the national perspective. For instance, with food poisoning, the data revealed that a high percentage of UK hotel chain managers strongly agreed with the statement. Yet a lesser figure was recorded for the other three main European countries, the lowest being Germany. Similar trends were recorded with the other four issues, with German views in particular registering a greater variability in response.

In rating the importance of seven food safety matters, all four main countries weighted personal hygiene consistently high. Yet differences in the other six categories did emerge between Italy and the other three countries. For instance, concerning temperature control, just 46 per cent of Italian managers regarded this topic positively, compared with nearly 90 per cent in the other three main countries. The same trend occurred in

independent hotels. The question of kitchen structure saw variations between country, but more so by job position, for instance, a gap between head chefs on the one hand against management and other operational staff on the other. While 47 per cent of UK hotel managers, for example, rated this matter very important, the equivalent figure for head chefs rose to 89 per cent.

Analysis of the cross tabulations showed that in the UK, France and Germany, over 67 per cent of managers regarded staff washing facilities as very important. Yet the figure for Italy was only 30 per cent. The ranking of hygiene training saw, for instance, that in chain hotels 85 per cent of managers from the UK regarded the issue as very important, while the corresponding figure for Italy was 69 per cent. Additionally, on the same question, head chefs registered a uniformly high rating (over 90 per cent), the exception being Italy (62 per cent). In both categories of hotels, the grouping of responses tended to be similar: the UK / France versus Italy / Germany. Purchasing illustrated variability in response, with the UK and Germany regarding this matter of lesser importance than France and Italy. This trend contrasted with stock control data showing the UK and France respondents regarding this topic of greater importance than Germany and Italy.

Differences in policy making within the four countries were in evidence, and were illustrated in percentage terms, with UK respondents recording a higher commitment to written policies than the other three countries.

This analysis of policy was extended to opinions expressed on whether there were codes of practice on five food safety issues and if these codes were legally enforceable. A high percentage of respondents from the UK registered a positive view, whereas in Italy the data suggested that respondents held the opposite opinion, and many were unsure whether such codes had a legal connotation.

On the topic of temperature control, factors leading towards food poisoning saw, Italian respondents regarding the matter of lesser importance than the UK, a contrast with food hygiene training, where the difference was between the UK and the lower rated views of the German sample. Other than cleaning factors in Italy, the division seemed to be between UK / France versus Italy / Germany.

The data showed that hotels were visited more frequently in France than in the other three countries and that the visitation in Italy was below the sub group average for the independent hotels category. The UK and Germany recorded little difference in frequency of visits between hotel types.

Operational staff in France, followed by the UK, were kept informed of such enforcement visits to a greater extent than Italy, and minimal differences were detected between the two hotel types. Additionally, the responses from the Italian sample indicated a trend towards staff sometimes being informed about visits, whereas overall communication in the German hotels, of both types, illustrated that the majority were always informed. Overall, the data revealed that communication was greater in hotel chains than in independent establishments.

Finally, with regard to record keeping, specifically temperature control and food hygiene training, the clear contrast was between the UK and Italy, where the latter showed a bias towards hotels that did not keep such records. For cleaning records, the data indicated that all four countries reported similar positive levels, although by hotel type, independent hotels attached a greater importance to this matter.

Having considered the existence of records, France, the UK and Germany had seen changes in policy over the previous 12 months. The exception was Italy, where changes seem to have only occurred for cleaning.

Chapter 8

Exploring the Relationship between Food Safety Variables: One Way Analysis of Variance (ANOVA)

Introduction

Having examined and commented upon the frequency distributions of the data (chapter seven), the next stage of the research was to explore the statistical relationship between the independent variable of country and the dependent variables of sections B and C of the questionnaire. The objective was to test the null hypothesis that the country variable did not significantly influence attitudes towards a range of food safety issues, by using the statistical technique of One Way Analysis of Variance (ANOVA). While this approach used a parametric test, it was decided appropriate with the *ordinal* variables of sections B and C since the procedure applied to numbers and not to what those numbers signified. The significance level adopted as a probability value was 0.05 which indicated a 95 per cent confidence limit. Specifically this test, measured estimates of variability, labelled “mean squares”, with the ratio being referred to as the “F ratio”. If the null hypothesis were to be upheld, the ratio of the “between groups mean square” to the “within groups' square” would approximate unity, since both elements were estimates of population variance. On the other hand, large values for the “F ratio” would show that the sample means varied more than would be expected if the null hypothesis were true. The test did not identify which groups were different from each other.

To address this problem, the second stage of the analysis employed a *multiple comparison procedure* to pinpoint exactly where the differences lay. Multiple

comparisons protected this analysis from designating differences as significant when they were not. It also avoided the use of *multiple t tests*, since the probability was, that one or more comparisons might turn out to be statistically significant, even when all the population means were not equal. While there are many such procedures available, the *Bonferroni Multiple Comparison Test*, a post hoc procedure, was adopted as this section of the study was not predicting a difference. The test adjusted the observed significance level by multiplying it by the number of comparisons being made. Essentially the analysis was interested in inter group differences.

Hypothesis Testing

The purpose of question twelve was to investigate the extent to which a country's national food safety legislation influenced five specific areas. The data are supplied in figure 8.1. These five attitude groups were presented as an error bar, with the dependent variables tested against the four main countries. The usefulness of this approach was that the mid point identified the mean response, and the length of the vertical error bar, variability to a 95% confidence level.

Overall within the five categories it was noted that the German response attached a lower level of importance to these five issues than did the other three countries. In considering food poisoning *vis à vis* food labelling, the data showed the priority that all four countries attached to the former as opposed to the latter. It was noteworthy that variability of response was found to be consistently lower in the UK across all categories when compared with the other three countries.

Prevention of food poisoning was seen to produce a statistically significant difference between, Italy and the UK on the one hand, and Germany on the other (F ratio, 6.54).

Prevention of food contamination as an issue produced a similar significant disparity between countries as the findings reported with food poisoning (the lower German rating), with the additional point of a divergence in attitudes between Italy and France (F ratio, 12.98).

National legislation and its impact on food labelling attracted marginally higher weighting in the UK than in France and Italy. Yet a clear contrast in response was detected between the UK and Germany, with the latter attaching a lower importance to this matter (F ratio, 3.14).

The data presented, also found German respondents isolated in the view that such legislation encouraged awareness of food hygiene, with a statistically significant difference between this country and the other three (F ratio, 18.36).

Enhancement of the hotel industry's reputation through the enactment of food safety legislation was the final point raised in question twelve. The data produced similar responses to those concerning awareness of food hygiene i.e. lower German rating (F ratio, 21.39).

The overriding conclusion drawn from question twelve was the lower level of importance attached by the Germans to these five topics and indeed the wider variability of responses within that country.

The data presented in figure 8.2 addressed attitudes towards hotel policies, covering the same five food safety issues contained within the previous question. In adopting this comparative approach, the analysis allowed variances and similarities to be detected between the two sets of (questionnaire) responses from hotel staff in the four countries.

While all four countries attached strong importance to food poisoning, it was evident from the data that food labelling did not attract the same level of concern. Additionally, it was noted that response variability was considerably greater with food labelling than with food poisoning, suggesting that respondents, in rating the former category, were unsure as to its importance and relevance to food safety. Another point to be noted from the error chart was the consistently higher support for matters to do with contamination in the UK, compared with the other three countries.

Regarding food poisoning, the “between groups” analysis followed by the comparison test showed that no two groups exhibited a statistically significant difference, thereby indicating that all hotels in the sample attached an equally high importance to food poisoning policies (F ratio, 2.42).

The subject of food contamination explored in the analysis, identified, using the comparison test, a clear difference between the UK and the other three countries, namely that UK hotels within the sample attached greater weight to this question (F ratio, 9.21).

The increasing concerns that legislators, industry and consumers have with food labelling was not reflected in the German sample, a significant difference being noted between the UK and Germany (F ratio, 3.61).

The fourth part of question thirteen investigated whether the hotel’s food safety policies encouraged a strong awareness of these matters. The error chart of figure 8.2, and further analysis of “between group” variance showed that there was a lower level of importance attached to this issue by Germany. In applying the multiple comparison procedure, statistical differences were recorded between the UK, and both Germany and

Italy, with a significant difference existing also between France and Germany (F ratio, 15.30).

The continuing theme of German views attaching a lower mean response was evident in the analysis of attitudes towards hotel food safety policies enhancing the industry's reputation. The multiple comparison test identified significant differences between Germany and both the UK and Italy (F ratio, 5.87).

Figure 8.1 Attitudes Towards National Legislation (Analysis by Mean Response)

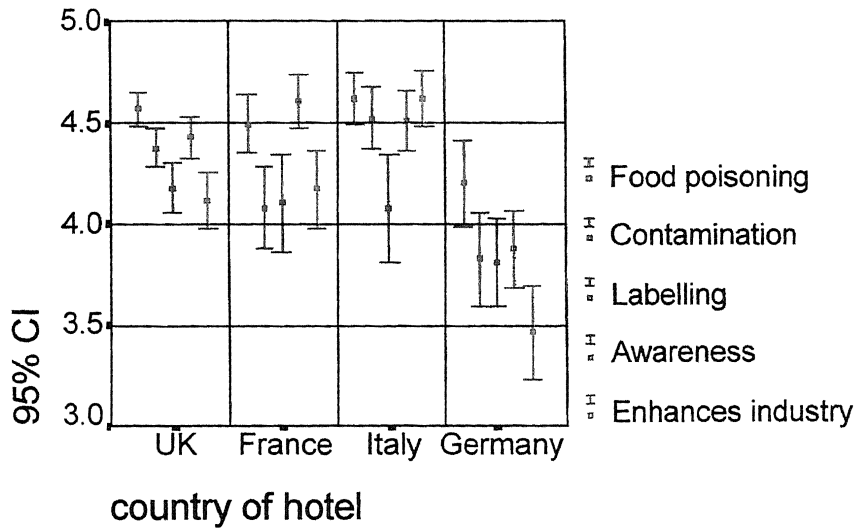
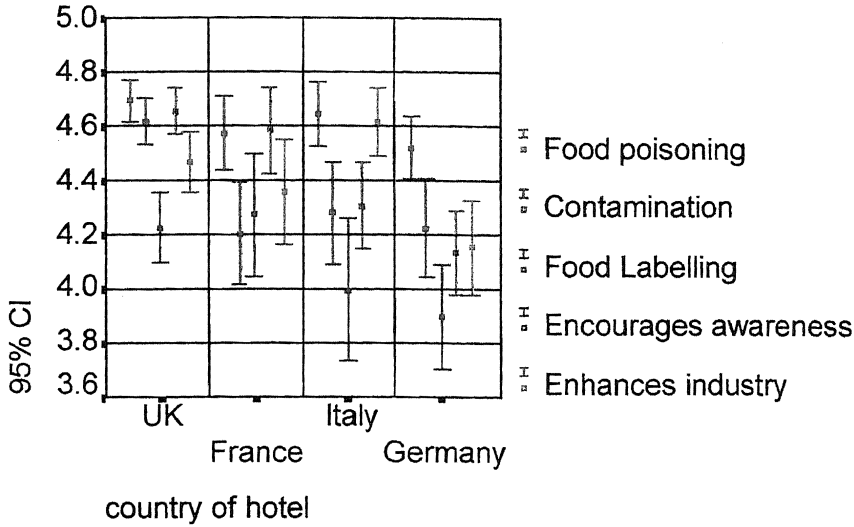


Figure 8.2 Attitudes Towards Hotel Policies (Analysis by Mean Response)



The data presented in figure 8.3 examined the attitudes of individual respondents towards seven food safety practices which were identified in previous chapters as being required for effective operational management. The most telling issue that emerged from the chart below was the low level of importance attached to purchasing and stock control in the four main countries. Regarding contrasts between countries, the pre-eminence of temperature control, as an issue in food safety, in France, Germany and the UK, was not shared by Italian respondents. Additionally, the data showed that the question of personal hygiene was regarded more highly, with less variability in response, than food hygiene training notwithstanding the realisation that to improve hygiene overall a greater emphasis should be placed on the latter.

Following these overall findings, further analysis was conducted using the multiple comparison procedure, firstly by investigating views expressed regarding the importance of temperature control. Italy gave significantly less weight to this matter than did the

other three countries with the conclusion, in its view, that this issue was of lesser relevance to food safety (F ratio, 23.50).

The data showed that no two countries were found to be significantly different in attitudes towards personnel hygiene, i.e. there was unanimity and consistency across the four main countries (F ratio, 3.00).

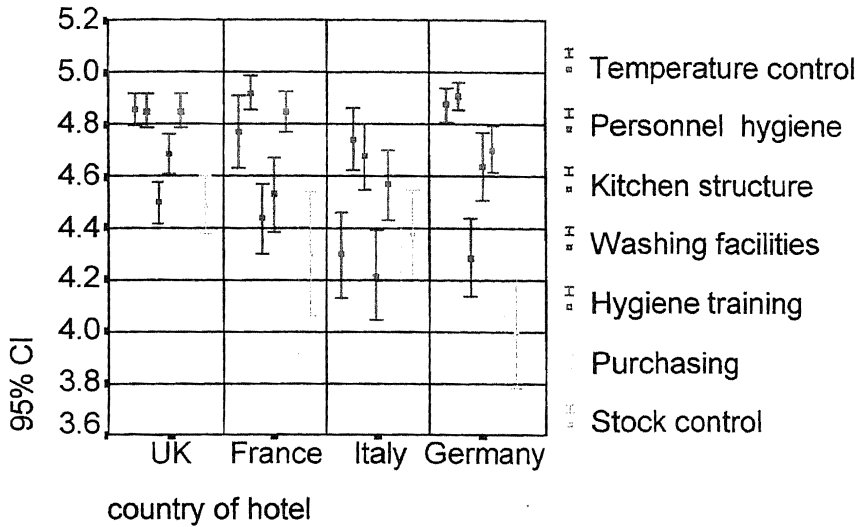
It has already been shown in previous chapters that kitchen structure is fundamental to the proper implementation of food safety procedures. Yet here it was found that the German sample regarded this issue as less relevant than both Italy and the UK (F ratio, 5.54).

Staff washing facilities were identified separately within this study and were not subsumed within the categories of personal hygiene, training or kitchen structure. The results contained in figure 8.3 illustrate the lesser weight attached to this matter in Italy, a view contrasting with that of the other three main countries (F ratio, 9.93).

Food hygiene training is now established in EU legislation and therefore part of the national perspective. Yet, according to this analysis, attitudes varied among the four countries. The extremes in views recorded were between Italian personnel, (lower importance) and the UK and French samples (high importance) (F ratio, 7.76).

The topic of purchasing (F ratio, 2.77), elicited consistently low attitudes from all four countries, as, indeed, did stock control (F ratio, 6.89). However, regarding the latter, differences were recorded between Germany at the lower end of the mean range, and both the UK and Italy.

Figure 8.3 Individual Level of Importance Attached to Food Safety Practices (Analysis by Mean Response)



The data contained within the error chart of figure 8.4, explored the existence of written or unwritten policies on a range of food safety matters within the four main countries. Mean results closer to three indicated the existence of written policies. It has already been established from the literature review that the value of written policies on temperature control was that they introduced a systematic approach to this important food safety measure. Yet, from the data, a statistical difference was established between the UK, which attached a high importance to this issue with little variability in response, and the other three countries. It was also noteworthy that, while France did not attach the same weight compared as the UK, that country's response was statistically different from Italy and Germany (F ratio, 51.87).

Written policies on personnel hygiene were not considered as a priority in Italy. By contrast, a significantly higher regard was placed on this topic by the three countries of Germany, France and the UK. Further analysis of the four groups, via the multiple comparison procedure, identified additional differences, since both the respondents of

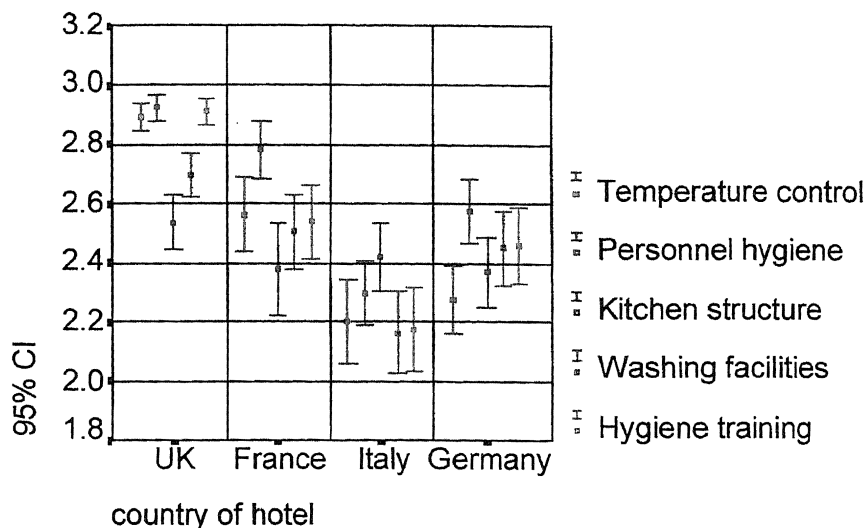
France and the UK more frequently used written policies than did Germany or Italy (F ratio, 41.20).

When the question of kitchen structure was investigated, no statistical differences emerged among the four nation groups (F ratio, 2.18).

Written policies on staff washing facilities are a central part of food safety in any hotel operation. Yet the data showed that Italy placed a lower weight on this matter than did the other three countries. Further analysis revealed a statistical difference between the UK, with an unequivocal stance on this issue, when contrasted to Germany (F ratio, 15.76).

The final dependent variable considered was the important subject of food hygiene training. Here the "F ratio" clearly rejected the null hypothesis of no significant between group differences. Whereas, in the UK, there was an almost unanimous incidence of written policies, the situation was far from similar in the countries of Germany, France and Italy. Additionally, further analysis of the Italian response illustrated that they attached a lower importance to this training issue than did Germany or France (F ratio, 41.50).

Figure 8.4 Existence of Written or Unwritten Policies(Analysis by Mean Response)



NOTE: Mean results closer to three indicates the existence of written policies, two indicates unwritten policies .

A natural progression in this analysis was to move from a discussion of the occurrence of written policies regarding food hygiene matters to the prevalence of codes of practice and their legal status. The data presented within figure 8.5 highlighted the existence of codes of practices on a range of food safety issues within the four main countries (mean results close to one indicating the existence of such codes).

Firstly, the initial part of question sixteen dealt with temperature control. Here there were statistical differences between Italy who attached a lower weight to this issue than did France or the UK. A significant difference was also found between the latter two countries and Germany (F ratio, 19.52). This gap between Italy and the other three countries was also evident on the topic of codes of practice on personal hygiene (F ratio, 7.37).

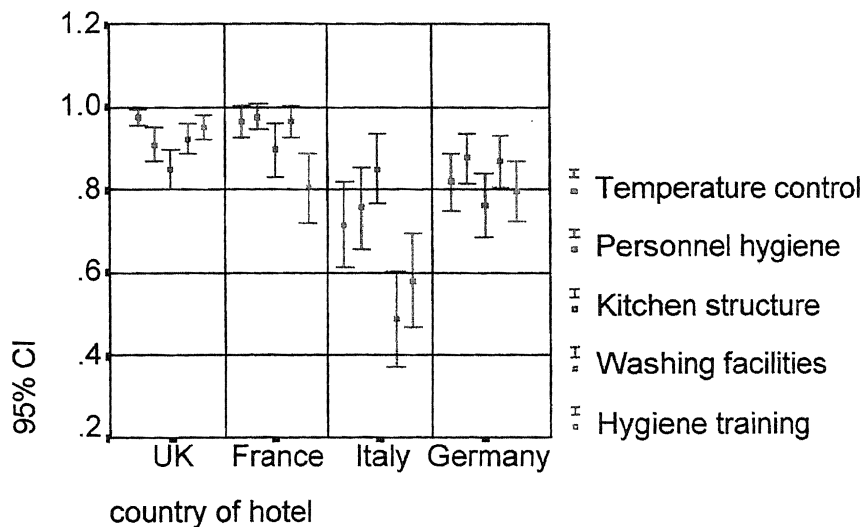
In contrast to these first two issues, no statistical differences were recorded among the four countries regarding the existence of codes of practice on kitchen premises structure (F ratio, 2.52). Within this question a return to the previous trend was noted with staff washing facilities. Here there was a statistical difference between the countries of Germany, France and the UK on the one hand and Italy on the other, with the latter attaching less weight to the matter (F ratio, 39.60). As regards staff training, statistical differences emerged between the lower rated views of Italy and those of the other three countries. Further analysis showed a high consistency of response from the UK and greater variability in views within the German and French groups (F ratio, 21.28).

Having considered the existence of codes of practice concerning the five food safety areas, the error chart of figure 8.6 shows whether respondents believed that they were legally enforceable, with the recorded view contrasting with the literature on the topic. As regards temperature control, there was a statistical difference between both the UK and French samples, who recorded a bias towards legally binding codes of practice, when contrasted with Germany. A statistical difference also emerged between the UK and Italy, the latter according less importance to this matter (F ratio, 8.51).

The enforceability of a code of practice on personal hygiene identified in the data, registered a divergence in attitudes between France, which was very positive, and the lesser weighted views recorded by both the UK and Germany (F ratio, 9.36). The data revealed statistical differences concerning kitchen structure, with German response attaching lesser importance to this issue, than the other three countries of the UK, France and Italy (F ratio, 5.62).

A significant contrast was also identified on the legality of codes specific to staff washing facilities, with lesser support among Italian hotels than those in the other three countries (F ratio, 22.58). Finally, within this section of the question, the issue of training revealed a statistical difference between the higher values recorded by the UK and the other three countries (F ratio, 10.61).

Figure 8.5 Existence of Codes of Practice(Analysis by Mean Response)



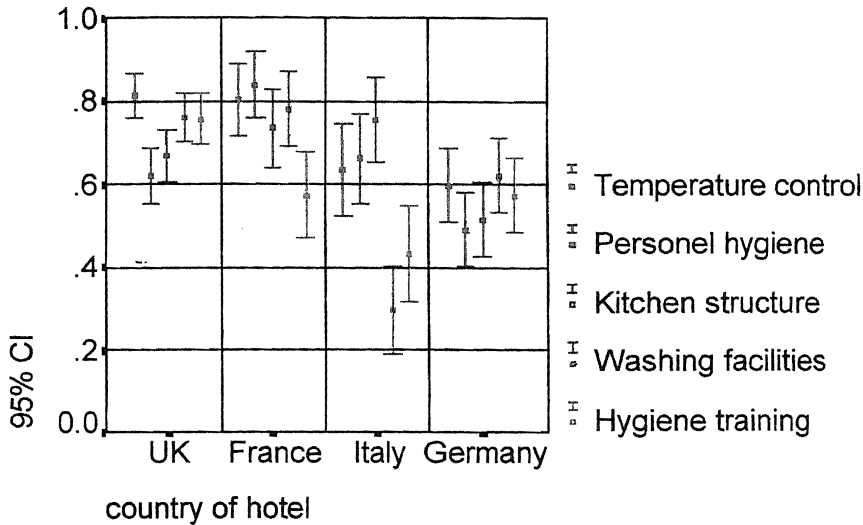
Note: Mean results closer to one indicated an existence of such codes.

The data presented in figure 8.7 relate to five matters that, if inadequate, may lead to food poisoning. Temperature control was the first subject to be addressed. Here there was a clear contrast between the low priority of Italy and the higher priority of Germany, France and the UK. Further, differences emerged between Germany and the stronger attitudes of the UK (F ratio, 22.38).

The results showed that inadequate food hygiene training was viewed by UK respondents as significantly contributing to food poisoning, a view not so strongly held

by the other three countries. Statistical differences were identified between France and the UK, as opposed to Germany (F ratio, 25.05).

Figure 8.6 Legally Binding Nature of Codes of Practice (Analysis By Mean Response)



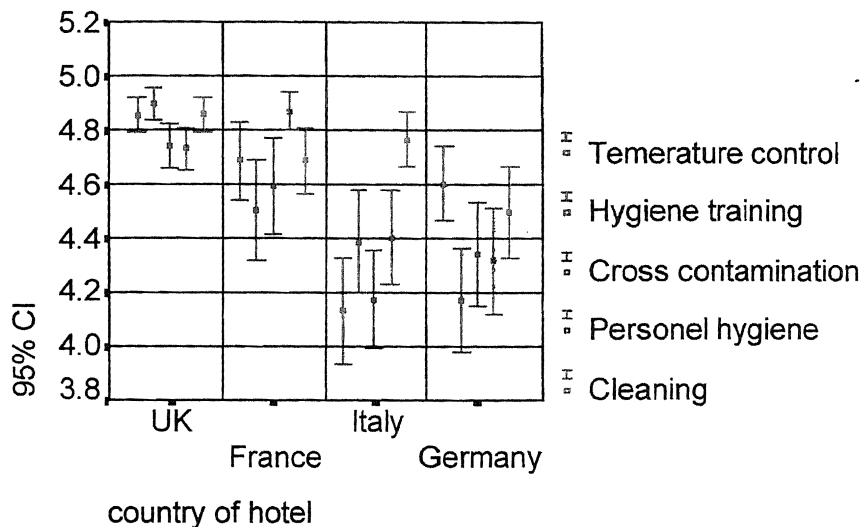
Note: Mean results closer to one indicated an existence of such legally binding codes.

This analysis of cross contamination highlighted the strength of importance that both France and the UK attached to this matter, and the lack of weight from the Italian response. Differences were also recorded between the UK and the lower ratings of Germany (F ratio, 12.35).

The categorisation of responses concerning inadequate personal hygiene showed differences between two groups, France and UK, as opposed to lower values recorded by both the Italians and Germans (F ratio, 13.87).

The data on cleaning illustrated a statistical difference between the countries of both Italy and the UK, who regarded this issue highly, as opposed to the lower value recorded by Germany (F ratio, 8.71).

Figure 8.7 Inadequate Practices Leading to Food Poisoning (Analysis by Mean Response)



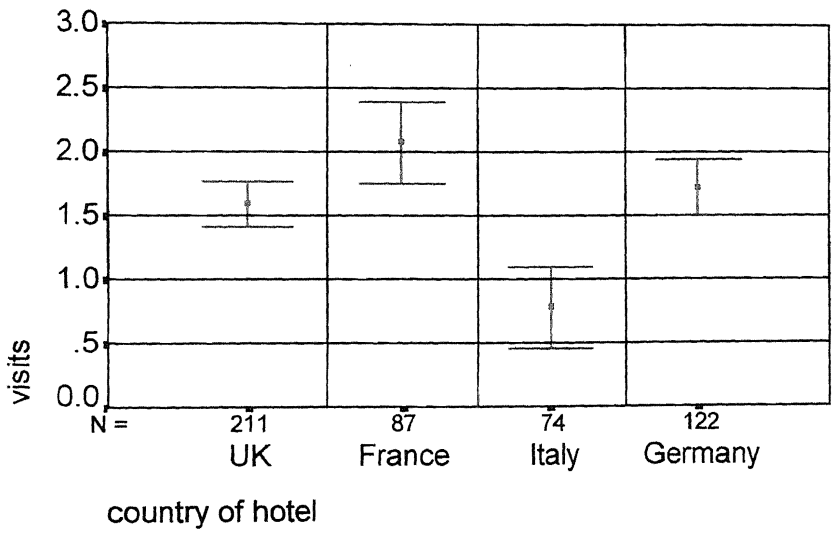
A key topic for this study was the enforcement of food safety practices within the four main countries. The data presented in figure 8.8 reveal the frequency of visits from enforcement officers. For the four countries, the multiple comparison procedure identified a statistically different response between France, Germany and the UK as opposed to Italy, the latter country being less frequently visited by the authorities. The French response showed that its hotels were more frequently visited than the UK (F ratio, 13.20).

The study went on to analyse further this enforcement issue by establishing whether staff were aware of these visits from the authorities (see figure 8.9). Overall a statistical difference emerged between Italy and the other three countries, the latter group showing a high level of awareness of visits, (even though they were less frequently visited).

Additionally, differences emerged between the operational staff in German and French hotels, the former being less aware of the visits than the latter (F ratio, 15.59).

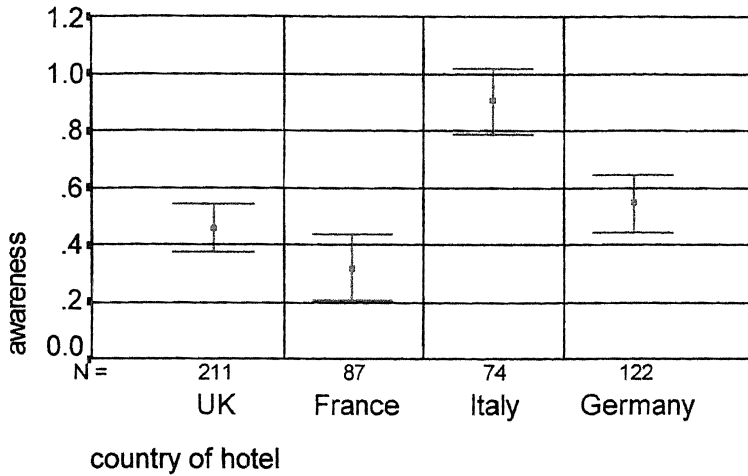
The final stage of this analysis on enforcement is illustrated by the data of figure 8.10. They revealed whether the results of visits by the authorities were communicated to staff. The data showed a statistical difference between Italy and the other three countries, the Italians displaying a greater tendency to always be informed on such matters. It was noteworthy that response variability was high within hotels of the countries surveyed, thus highlighting inconsistencies in communication towards some or all staff categories (F ratio, 19.27).

Figure 8.8 Frequency of Visits From Enforcement Officers (Analysis by Mean Response)



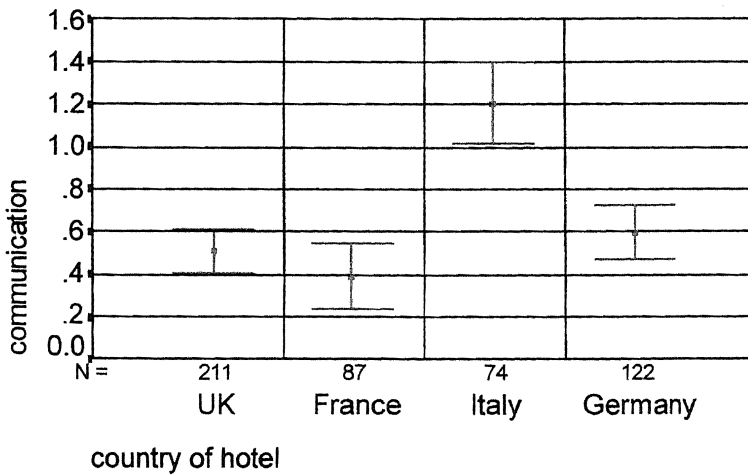
Note: Results closer to one equals once, two equals twice, three equals three or more times.

Figure 8.9 Staff Awareness of Visits (Analysis by Mean Response)



Note: one equals yes, two equals no.

Figure 8.10 Results of Visits Communicated to Staff (Analysis by Mean Response)



Note: One equals always, two equals sometimes, three equals never.

The final two questions investigated three food safety issues and whether hotels had seen any changes in their related documentation over the past twelve months.

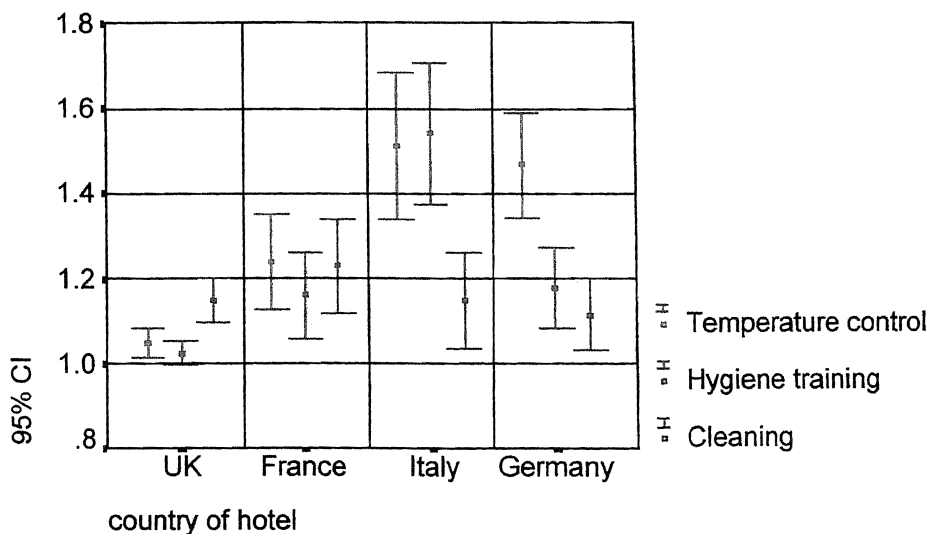
Firstly, as regards temperature control, a statistical difference was registered between the UK who kept records and attached a higher importance to this matter than was the case for the other three countries. Additionally, differences were found in Germany and Italy, both according a lower rating to this issue than France (F ratio, 23.42).

Subsequently, food hygiene training records were explored. Here a statistical difference was yielded between Italy, which placed a lesser emphasis on such records, and the other three countries. The UK response showed that they were more strongly in favour of these records than Germany (F ratio, 23.72).

With cleaning records, there was no statistical difference among the four countries, all displaying a preference towards the keeping of such information (F ratio, 1.17).

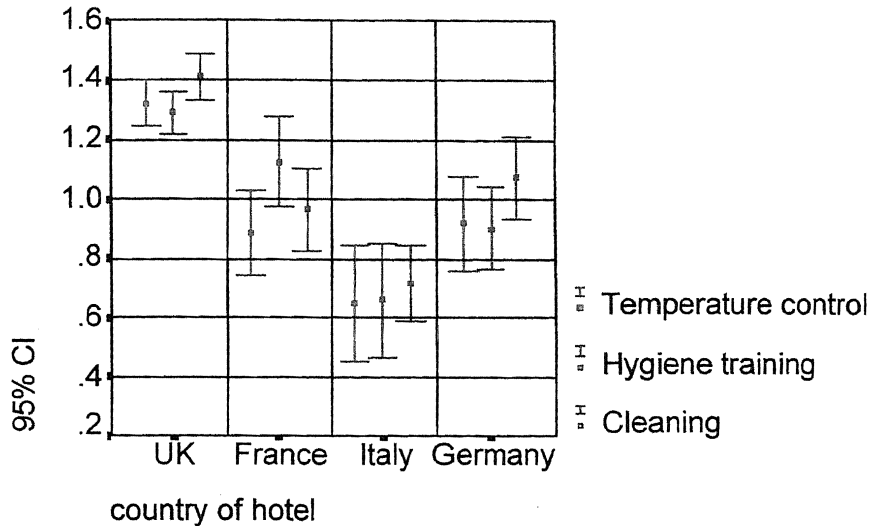
Finally, figure 8.12 shows changes to those three categories of records across the four countries. With temperature control, differences emerged between the UK, where changes were less likely to have occurred, and the other three countries (F ratio, 20.85). With the subject of food hygiene training, variation emerged between the UK, where changes were less likely to have occurred, and Italy (F ratio, 18.88). Finally, with cleaning, differences appeared between the UK, that saw a lesser number of changes, and the other three countries (F ratio, 25.78).

Figure 8.11 Records on Food Safety (Analysis by Mean Response)



Note: One equals yes, two equals no, zero equals no response.

Figure 8.12 Changes in records over the previous 12 months (Analysis by Mean Response)



Note: One equals yes, two equals no, zero equals no response.

Summary

The data contained within table 8.1 provide an overall ranked summary of the results discussed in this chapter. Yet this tabulation does not indicate the statistical differences between the four countries, or indeed the results of the multi comparison tests which were undertaken within the main body of this chapter. While such a summary may be regarded as an over simplification of the preceding discussion, it does allow comments to be made on the sometimes conflicting range of attitudes towards food safety within the four main countries, and help draw this part of the discussion to a conclusion. Overall, respondents from the UK registered the highest positive attitudes on the questions posed. Their replies contrasted with the least positive views of the Germans. In general terms, the four countries, individually, were consistent in their response levels to both national legislation matters and hotel policies. Yet, in comparing the four,

contrasts did emerge, particularly between the UK and the less positive views of Germany.

Table 8.1 Overall Summary of Questionnaire Results (Ranking)

<i>Question</i>	<i>Topic</i>	<i>UK</i>	<i>France</i>	<i>Italy</i>	<i>Germany</i>
12. National Legislation	Food Poisoning	2	3	1	4
	Contamination	2	3	1	4
	Labelling	1	2	3	4
	Awareness	3	1	2	4
	Reputation	3	2	1	4
13. Hotel Policies	Food Poisoning	1	3	2	4
	Contamination	1	4	2	3
	Labelling	2	1	2	4
	Awareness	1	2	3	4
	Reputation	2	3	1	4
14. Food Safety Practices	Temperature Control	2	3	4	1
	Personal Hygiene	3	2	4	1
	Kitchen Structure	2	3	1	4
	Washing Facilities	1	3	4	2
	Training	1	2	4	3
	Purchasing	2	3	1	4
	Stock Control	1	3	2	4
	Temperature Control	1	2	4	3
15. Written Policies	Personal Hygiene	1	2	4	3
	Kitchen Structure	1	3	2	4
	Washing Facilities	1	2	4	3
	Training	1	2	4	3
	Temperature Control	1	2	4	3
16. Code of Practice	Personal Hygiene	2	1	4	3
	Kitchen Structure	2	1	3	4
	Washing Facilities	2	1	4	3
	Training	1	2	4	3
	Temperature Control	1	2	4	3
17. Potential for Food Poisoning	Training	1	2	3	4
	Contamination	1	2	4	3
	Personal Hygiene	2	1	3	4
	Cleaning	1	3	2	4
18. Enforcement	Visits	2	1	3	4
	Awareness	1	2	4	3
	Communication	2	1	4	3
19. Records	Temperature	1	2	4	3
	Training	1	2	4	3
	Cleaning	2	3	3	1
	Temperature	4	3	1	2
20. Record Changes	Training	4	3	1	2
	Cleaning	4	3	1	2

The seven food safety practices of question fourteen illustrated the positive approach of the UK and the negative views of Italy. Particularly noteworthy was the importance attached to written policies in the UK and the lack of them in Italy. As for codes of practice, higher responses were recorded by France, with a negative view existing in Italy. It was clear also from the evidence that UK respondents were more knowledgeable as to the factors that could lead to food poisoning than were the

Germans. Frequencies of visits were high in France, as were factors to do with awareness and communication, a situation which contrasted, to a lesser extent, with that of Italy. Finally, record keeping was strong in the UK and, to a lesser degree in Italy. Overall, responses seemed to fall into two groups: the UK and France, on the one hand, and Italy and Germany, on the other.

Chapter 9

Examining Relationships and Exploring Differences

Introduction

The central purpose of this chapter is to investigate both the relationships and differences among the sub groups of the four main countries regarding a range of food safety matters. Here the focus is on nine separate independent variables (contained within Section A of the questionnaire), and attitudes towards twenty-two issues of food contained in questions twelve, thirteen, fourteen and seventeen. The data are presented in appendix six.

Relationships and Differences

The Effects of National Food Legislation.

1. National food legislation helps prevent food poisoning

In question twelve, the data reveal that, with regard to hotel type, Italian chains, and to a lesser extent those in the UK and France, demonstrated a positive attitude towards the national perspective on food poisoning, and that German independent hotels accorded this matter greater importance than did the country's chain properties.

When the survey's data were broken down by job position, this independent variable was found to have little impact on the issue of food poisoning in countries other than Germany.

However, when hotel room size was examined, hotels in the smallest category, across all four countries, paid far less attention to this matter than larger establishments. Mean results in Germany were in all cases lower than the other three countries.

As far as star rating was concerned, there was little evidence of this variable's influence within the four main countries, although standard deviation was significantly greater from German respondents.

However, analysis of respondents' formal education allowed for an identification of contrasts on an intra and inter country basis. For instance, in France, those with a formal hospitality education of less than one year registered a high mean response, in contrast to the UK and Italian situation, (few cases were recorded in these categories). Yet for those with no such education, responses across the UK, France and Italy showed similar views towards food poisoning, while Germans across all categories seemed less concerned.

Respondents with over 2 years practical education in France rated this matter as less important as similarly qualified respondents in Italy.

The general point that emerges from the analysis of employment levels was that the larger hotel categories displayed a more positive attitude towards food poisoning than smaller units.

Finally, the data revealed no significant gender differences in three out of the four countries. The exception was the UK, where males generally had a higher regard for this issue than females.

2. National food legislation helps prevent contamination

Attitudes towards contamination by hotel type showed few differences, although the UK and Italy placed greater emphasis on this topic than did France or Germany.

As regards job position, there was a divergence in attitude level, with both head chefs and supervisors in France recording a low value on this issue when compared to the other three countries. Whereas there was little difference in response across all the job categories in the UK, in Germany across most of the job categories, values were lower than the other three countries.

The three classifications of room size were remarkably similar in their responses within the countries of France, UK and Italy, although inter country comparisons showed that rating levels were higher in the latter two. However, within Germany, differences between the hotel classifications did emerge, particularly in the smallest units, where a lower mean value was attached to this matter than in the other three countries.

As regards star rating, it was found that those at the higher market level adopted a more positive attitude towards contamination.

The data recorded consistently high ratings across all age groups in both UK and Italy, while in Germany the results showed the same consistency, but at a lower level. In France, a number of older age group categories accorded this topic a lesser weight.

In contrasting the variables of formal education and practical experience, inter country differences did emerge. For instance, the lower categories of formal education in Germany recorded a higher response value, as was the case for those individuals with greater practical experience. However, data for the UK showed a uniformity of response across both the practical and formal education variables within almost all categories,

while the Italian view recorded a higher mean response than the other three countries in all but one value label.

With hotel employment, the evidence showed that the larger units adopted a more positive response, the exception being France, where this trend was reversed. Finally, male attitudes towards contamination were recorded at a higher level than females within France, Italy and Germany. In the UK, by contrast, there was no significant variation by gender.

3. National food legislation helps prevent misleading labels and / or advertising

The results showed that on this topic, and in all countries except the UK, there was a substantially different response between hotel types, with the independents rating this issue lower than the chains.

As regards job position, it was found that UK head chefs rated this topic of higher importance than their counterparts in the other three countries, while analysis by room size showed that the larger hotels attached greater weight to this issue than did the smaller properties.

Star rating revealed broadly similar responses in the UK. However, the general trend in the other three countries was that the higher market level hotels regarded this matter as being of greater importance.

It was observed that middle aged Italians considered this issue of greater salience than like individuals in other countries.

Formal education and practical experience also threw up differences. For instance, in Italy, those with such education were generally more positive than the other countries, the exception being for those within the “less than one year” category. This Italian trend

was reversed in France, where a positive rating was identified from those with over one year's practical training.

It was found that hotels with a larger number of employees had a greater commitment to this matter than hotels in the other two categories.

When responses by gender were examined, contrasts emerged between the UK and the other countries, the latter three showing that males apportioned a greater weight to this issue.

4. National food legislation helps encourage awareness of food safety

As regards awareness of food safety, the data showed that in both France and Italy, chain hotels placed this issue at a higher attitude level than did respondents from the other two countries, with Germany registering the lowest level of all.

It was found that various job positions recorded broadly similar results within all four countries, although a clear variance was detected in France, where waiters gave this area less weighting.

Analysis by hotel size illustrated a more positive approach of the larger units. Even so, there was a sharp reduction in Germany's attitude strength across all three unit categories. Except for Italy, three and four star hotels placed greater importance on this awareness issue than the deluxe units surveyed.

As far as age was concerned, Germans across all age ranges regarded this subject of lesser importance than did respondents from the other three countries, where a more positive attitude was displayed within the older age groups.

Regarding formal education, UK responses were consistent across all sub categories. On the other hand, those with little practical training rated this matter less highly.

Additionally, Italians with two or more years practical training were more positive than their UK counterparts.

The data also showed that, apart from the UK, units that employed greater numbers viewed this topic more highly.

As regards gender, females adopted a more positive view in the UK and France than in Italy and Germany. Additionally, the overall German response from both sexes regarded this question as being of lesser importance than in the other three countries.

5. National food legislation helps enhance the reputation of the hotel industry

As far as reputation enhancement was concerned, responses were consistent across both types of hotel within three of the countries. However, French opinion differed from this trend, with chain hotels regarding this matter higher than the independents.

As regards job position, waiters took a lesser view than other categories. While most respondents in Italy adopted a positive stance, the German sample placed less weight on this issue.

The data on room size ranked Italy first and Germany fourth within the smallest hotel category, to the extent that the level recorded was either equal to or greater than the other two hotel sub groups.

The general trend in attitudes expressed by star rating showed a familiar trend with higher rated hotels favouring the topic, although the German rating was lower than in the other three countries.

When age was analysed, there was a consistency in response levels across all four countries. However, there was a slight dip in response within the 40 - 49 age group in France, and an overall reduction in attitude strength within all German categories.

Those with formal education showed a consistently high response level in Italy. Yet those with less than one year's education in France were not so positive. Relatedly, contrasts did emerge vis à vis practical training, which showed French respondents within the 1 - 3 year's category taking a lesser view. Yet the overall response from Italy was more positive.

The general trend, particularly in Italy, illustrated that hotels with a large number of employees responded more positively than hotels with fewer employees.

Finally, it was found that, apart from the UK view, males were more positive than females on this issue, although there was a substantially lower rating by German respondents in both gender categories.

Hotel Policies and Procedures

1. Hotel policies and procedures prevent food poisoning:

The evidence regarding hotel policies and food poisoning showed that chain hotels adopted a stronger attitude than the independents in all countries except for the UK, where there was a slight bias towards individuals working for independent units.

Results by job position revealed that, while a similar level of response was obtained from head chefs in the UK, France and Germany, the Italians rated this issue lower. Additionally, it was noteworthy that German managers and chefs lent less weight to this topic than was the case for those in the other three countries.

In the UK views were similar regardless of room size. Yet, within Italy and Germany, it was the larger hotels that rated this matter highly, and, additionally, the smallest hotel category in Germany diverged from the general trend.

As far as star rating was concerned, it was found that higher the ranking of the hotel the greater was the value placed on this subject.

Responses in all age groups were broadly similar, although older individuals were generally less positive than younger employees.

Regarding levels of formal education, there were similar responses across all categories in the UK and Germany. Yet, in France, those with no education were less positive, while those with up to one year's education rated this matter highly. The related topic of practical training registered a similar level of response across all values in the UK. However, in France, individuals with 2 - 3 year's experience adopted a lesser view, the reverse of what occurred in Italy.

The data revealed that, with the exception of the UK, hotels with a greater number of employees had a more positive attitude.

Finally, consideration of the gender variable showed that, while males rated this matter more highly than females in France, Italy and Germany, the relationship was reversed in the UK.

2. Hotel policies and procedures help prevent food contamination.

The data concerning food contamination indicated that, with the exception of Italy, chain hotels viewed this matter as being of greater importance than independents in the other three countries.

As regards job position, with the exception of France, where supervisors and waiters attached a lower result to this topic, there was a consistency in responses from within all countries and categories.

The variable of hotel room size saw the UK record a similar mean response in all three sub categories, whereas in the other three countries it was found that larger hotels held a more positive view.

Turning to contamination by star rating, the higher market level hotels recorded a positive rating.

All age group categories within the UK rated this subject at a higher attitude level than the other three countries. Yet deviation from this trend did emerge within the 20 - 29 and 40 - 49 categories in both France and Italy, where a lower weighting was apportioned.

The general trend with formal education in both France and Italy was that the higher categories allocated a higher rating to the issue of contamination. Similarly, the variable of practical training in France and Italy, revealed that more experience was associated with a more positive attitude, and that there was a consistency of response across all categories within the UK.

It was also found that larger hotels by employment in the four countries gave a more positive attitude, and that males attached greater importance to this issue than females.

3. Hotel policies and procedures prevent misleading labelling and advertising.

Analysis by hotel type showed that, in all four countries, hotel chains registered a higher attitude level than independent units.

However, contrasts emerged between these member states when job position was taken into account. Whereas a similar level of response was evident across all position categories in the UK, a divergence in views occurred with French supervisors, who rated this matter lower overall. Additionally, while the response of head chefs was uniformly high in the UK, France and Germany, there was a drop in the mean result within Italy.

As for the categorisation of hotels by number of rooms, the data revealed that the smallest units within the UK, Italy and Germany lent less weight to this issue compared to the other categories, with only France going against this trend. It was noteworthy that the largest hotels in Italy and Germany placed the greatest value on this topic of mislabelling. The star rating data similarly showed that up market hotels were uniformly positive.

Turning to age group categories, it was discovered that the 50 - 59 group registered a high attitude level in all countries except Germany. However, in Italy the 40 - 49 group were least positive, while all other categories were broadly similar.

Those with no formal education recorded a lesser view. Yet those with one year's education in France rated this matter highly. Additionally, Italian respondents registered a sharp drop in this category, whilst the UK sample was broadly homogeneous.

The variable of practical experience similarly showed consistency of response across all categories in the UK, and variation within the other three countries. For instance, in France and Italy, greater experience seemed to equate with a more positive attitude, while no such relationship was established in Germany or the UK.

With the exception of France greater weight was given to this matter in hotels with the largest number of employees. Similarly, males rated this topic more highly than females.

4. Hotel policies and procedures help create awareness of food safety.

When awareness of food safety policies was analysed by hotel type, with a general downward trend being observed from UK to German respondents, there was little difference between the two sub categories.

Similarly job position had little effect, even though head chefs within all four countries were marginally more positive than other categories and, apart from the UK, waiters were seen to rate this issue of less importance.

As for hotel room size, it was noted that larger units attached more weight to this matter within three out of the four countries, the exception to this trend being France. Up market star-rated hotels also rated this topic at a higher level.

Turning to age group, the French and Italian 40 - 49 age category and the over 60 age group in France and Germany viewed this matter of lesser significance than other respondents.

Analysis by formal education showed that individuals in France with no such education rated this matter low, whilst ratings in Italy improved according to length of education. Likewise, French respondents with less than one year and 2 - 3 years practical experience, recorded low attitude levels to this topic, and in Italy and Germany higher results were associated with higher levels of experience. Apart from France, a similar positive association was established between number of employees and positive attitudes.

With the exception of the UK, males were also more positive than females on this subject of awareness.

5. Hotel policies and procedures help enhance the industry's reputation.

The final section of this question considered the industry's reputation and whether hotel policies assisted in this respect. No variation between the two hotel types was recorded in either the UK or Italy, although chain hotels in France and Germany recorded stronger attitudes.

Job position data displayed a similar rating across all categories in the UK, while some variation by category did emerge in the other three countries. For instance, supervisors in France rated the issue lower than did other categories, and waiters in France, Italy and Germany were consistent in giving a lower weight to this topic.

The emergent trend for hotel room size was that the UK response was consistently high across all categories. Yet in both Italy and Germany, the larger hotels rated this subject at a higher level, while in France it was the 100 - 199 category that registered a positive view. Star rating and age had minimal impact, except for the 50 - 59 category in France and Italy, and the under 20s in the UK.

Formal education in France produced a sharp drop in rating from respondents with none or less than one year's education. Yet, individuals with 1 - 2 year's education across the four countries lent higher weight to this matter, and there was a similar peak with Italian personnel who had undergone more than three years education.

Analysis of practical training showed a similar trend, in that those within the three or more years sub category rated this issue at a high level. However, in France the 2 - 3

year category accorded low importance to this question, as did the 1 - 2 years category in Italy.

As regards the size of the workforce, it was found that the larger hotels gave greater weight to this topic in all countries except for France.

Finally, females were more positive than males in the UK and France, though less so in the other two countries.

Importance of the Following in Safe Food Operation at the Hotel.

1. Temperature control.

With the exception of Italy, independent units in other countries regarded the question of temperature control more importantly than those employed in chain hotels.

Analysis by job position yielded a consistent lower trend in Italy across all categories, but a higher attitude level in the other three countries.

A similar high trend was observed across all age groups, except for the 50 - 59 category within Italy, where the rating was substantially lower than in the other three countries.

Consideration of room size data showed that, other than in Germany, larger hotels had a more positive attitude to this matter. This pattern was continued in the higher star rated hotels, although there was a noticeable drop in rating within Italy.

Formal education illustrated similar high levels throughout all sub categories. However, there was a steady drop in weighting registered by Italian respondents as well as those from the UK, France and Italy with less than one years' education.

In contrast, the data concerning practical training showed considerable divergence. While the results from the UK were broadly uniform across all categories, differences in France did emerge. In the latter country, individuals with less than 2 years attached a

lesser weight and those with more than 2 years adopted a stronger view. Germany was recorded as taking the same approach as France, while such a trend was reversed in Italy.

Evidence relating to employment size were broadly similar in the UK, France and Germany. However, within Italy, a greater weight was attached to this matter by individuals in the larger units. Finally, gender analysis showed that both men and women had broadly similar views, although there was a strong downward trend in the level of response from Italians of both sexes.

2. Personal hygiene

Attitudes towards personal hygiene by hotel type revealed little difference between the two categories across the four countries, except for independent units in Italy, where a downward trend in support level was recorded.

However, in terms of job position, a wider diversity in response was noted, with supervisors rating this topic low in the UK and France, and waiters taking a similar view in the UK, France and Italy. This trend contrasted with managers who gave a high weighting to this issue in all four countries, as did head chefs, the exception being Italy. Additionally, chefs rated this matter as very important in the UK, unlike their counterparts in the other three countries.

Analysis of the hotel by room size, found responses from the largest hotels across all four countries broadly similar. Yet a divergence from this trend did emerge among the other categories, with the two smaller hotel categories mirroring each other in their responses. Even so, French and German views were more positive than those of the UK and Italy. It was found that market level, as measured by star rating, showed that those

hotels at the higher level were more positive than the other units across all four countries. By contrast, age groups registered very little difference between categories in any of the countries.

Formal education identified some divergence of views, particularly with the individuals under the “none” and “less than one year” categories in Italy who registered a lower level of response. All other replies were broadly similar and contained within a narrow band. As far as practical training was concerned a similar narrow band of mean results was found, although lesser values did emerge with those personnel who had less than one year training in France, and 1 - 2 years training in Italy and Germany.

Employment size attracted lower replies only within the smallest category of hotel in Italy.

Finally, examination of the data by gender showed consistency in rating by males across all four countries. Although a less positive trend was found among females in France and Italy, both sexes gave a broadly similar response in the UK and Germany.

3. Kitchen premises structure.

The subject of the kitchen premises structure analysed by hotel type showed that both sub categories exhibited a lesser attitude level in Germany.

Job position data revealed that head chefs placed a consistently high value on the importance of kitchen structure, while less support was evident among waiters across all four countries. It was also noteworthy that supervisors rated this matter lower in France and Germany, results which contrasted with those from the other two countries. Turning to room size, the larger hotels generally attached greater importance to this issue than

did the other categories, although an exception to this trend did emerge with the smallest units in Germany.

Analysis of star rating showed a trend towards a positive attitude in the five star hotels. Examination of the results by age group saw a peak in responses by older individuals in France and Italy i.e. persons over 40 years of age. Yet, within the UK, the highest attitude values were recorded by those under 20.

Formal education data revealed that those with less than one year training in France, rated this topic as highly important. Yet persons with no formal education in summary registered a lower value.

As regards practical education, in the UK and France respondents with less than two years training took a more positive attitude, quite the opposite to the situation in Italy and Germany.

When employment size was considered larger units in countries other than Germany viewed this matter positively. Finally, analysis by gender revealed that females attached greater weight to this issue in the UK and France, while males were more positive in Italy and Germany.

4. Staff washing facilities

In examining attitudes towards staff washing facilities, little variance between the two hotel types was noted. However, in France, independents rated this subject at a low level, as did both categories in Italy.

Data on job position saw both supervisors and waiters valuing this topic lower than other positions in France, while head chefs took a positive view in the UK, France and

Germany. In contrast, managers' views dropped against the trend in Italy as opposed to the other three countries.

Analysis by room size showed that larger units rated this matter highly, although the smallest category of hotel in Germany went against this trend.

Similarly, the five star hotels regarded this question of greater importance than did the other categories among all four main countries surveyed.

The data demonstrated that individuals with one year or less formal education in the UK and France valued this topic of high importance, as did respondents with more than one years' education in the other two countries. However, while people with 1 - 2 years practical training in the UK and Italy saw this matter important, in France and Germany it was those with 3 or more years' experience who adopted such a view. Analysis by employment size saw similar responses in the two larger categories within the UK and Germany, while it was the largest hotel category in France and Italy that apportioned greater importance to this subject. Analysis by gender showed that females valued this matter less in France and more strongly in Italy, while male respondents rated this topic at a higher attitude level in the UK and Germany.

5. Food hygiene training

Analysing of attitudes towards food hygiene training by hotel type indicated that chains were more positively disposed than independents, with results between countries revealing that Italy was less enthusiastic than the UK. Examination of the survey data by job position demonstrated, as with related questions, that waiters, particularly in France, rated this issue low. At the same time, managers and chefs attached a higher importance

to such training. The category of head chef in countries other than Italy viewed this issue of great importance, and supervisors showed a steady downward trend from the high attitude level of the UK to a lesser view in Germany.

The survey identified that the largest hotels by room size category regarded this issue more favourably in the UK and Italy. The middle room sized group in France and the smallest category in Germany recorded similar views.

Other than in the UK, it was found that the five star hotels lent the greatest weight to such training. Yet, when age groups were analysed, considerable variation emerged. Here it was noted that the 50 - 59 age group considered this matter as very important within both the UK and France. Less support was evident among the 20 - 29 group in the UK, France and Germany, and was quite minimal in Italy. Over most categories, there was a more positive trend in the UK and France than in Italy or Germany.

Formal education showed broadly similar results to the previous item, a reduction in rating being particularly evident among individuals with less than 2 years' education in Italy and Germany. By contrast, the data on practical training showed that persons with less than 2 years' training in the UK, France and Germany placed a low value on this matter, while similarly experienced persons in Italy recorded high levels of support.

Other than in Germany, larger hotels were more positive on hygiene training.

Concerning gender, females lent greater weight to this issue in the UK and Germany, while males were more positive in France and Italy.

6. Purchasing

The focus on purchasing found chain hotels according more significance to this matter across all four countries than did the independents. However, greater variation was recorded when the data on job position were analysed. Here waiters in France and Germany rated this matter lower than those in the other two countries. By contrast, chefs in France regarded this question as very important, as did supervisors in Italy and head chefs in both the UK and Germany. Atypical results emerged from the room size analysis, with the smallest category being more positive in all countries except Italy.

Whereas all hotel star categories were broadly similar in their responses in the UK, the five star hotels attached greater importance to purchasing in France and Italy.

The data on age groups showed that in the 50 - 59 category there was a uniformly positive attitude in the UK and France. A similar situation was obtained among the 40 - 49 category in the UK and Italy, yet less so in France and Germany. The other age categories yielded broadly similar replies.

Those with no formal education rated this issue lower in the UK and Italy, as did respondents with 1 - 2 years' education in Germany. People with three or more years' education recorded similar positive views across all four countries.

There was also some variation in practical education. French respondents who had undergone 1 - 2 years training rated this matter at a low level as did those in the UK in 2-3 year category.

As far as employment size was concerned, the middle sized hotels consistently attached greatest weight to purchasing, in all countries except Italy.

Regarding gender, males were more positive than females, especially women hotel workers in France.

7. Stock control

Investigation of the importance of stock control revealed that it was regarded more highly in independent hotels than in chains. Yet in both categories a general downward trend was observed from the UK to Germany.

Analysis by job position showed that waiters adopted a less favourable view in both France and Germany, while head chefs in the UK, and chefs in both France and Italy were more supportive.

As regards number of rooms, the smallest hotels valued this topic highly in all countries. However, in Italy and Germany the largest category also adopted a positive view. Star rating, by contrast, yielded no significant variation in responses.

Turning to formal education, in Italy respondents with three or more year's education weighted this matter highly, while those with no education did not. All categories within the UK took a similar view, while the trend was significantly downwards for those with 1 - 2 years' education in Germany. When these results were compared with those for practical training, the data showed the 1 - 2 years category in France did not rate stock control highly.

With the exception of Italy, smaller hotels had the most positive view on stock control. As regards gender, females lent marginally greater weight to this topic in the UK and Italy, while males were more positive in France and Germany

Potential to Lead to Food Poisoning?

1. Inadequate temperature control

Analysis of attitudes on inadequate temperature control showed that independent hotels rated this matter at a high level in three out of the four countries, the exception being

France. Regarding job position, contrasts emerged, particularly with head chefs in Italy, who had a low regard for this issue compared with the other three countries. Uniform positive response levels were recorded across all categories in the UK. Italian waiters and French chefs similarly viewed this matter highly.

Across all four countries, it was found that hotels with the smallest number of rooms were rating this issue of greater importance than the other two categories, although a lesser level of support was registered in Italy.

Analysis by hotel star classification revealed homogeneity in responses, the exception being Italy where five star hotels were the most positive.

Analysis by age group again showed a drop in attitude rating within Italy for all categories, except the 50 - 59 category, and a similar low level of response for most categories within the UK. Turning to formal education, there was a similar low response level from all categories within the UK. Those with no formal education in both France and Germany gave high responses, while all categories in Italy rated this matter relatively low. Practical education, on the other hand, saw respondents in Italy with three or more years' training lending a low weight to temperature control, and individuals with a period of 1 - 3 years' training in Germany attached a lesser view than did respondents in the UK or France.

Employment size recorded a lower weighting in the Italian response. Yet across all countries it was noted that the smaller hotels were more positive than the larger ones. Finally, analysis by gender revealed a broadly similar positive response across both categories, although in France females were slightly more positive, and there was a

continuing downward trend in response levels from both men and women in the Italian sample.

2. Inadequate food hygiene training

As regards food hygiene training, and in terms of hotel type, chains were recorded as being more positive than independents in all countries except Italy, although a downward trend in rating was observed from a high level in the UK to a lower level in Germany. While attitudes which emerged from the job position categories within the UK recorded a similar high level, in France waiters rated this matter lower than the other occupational categories. Both managers and head chefs regarded this issue as very important in both the UK and France, yet less so in Italy and Germany.

Hotel size saw all room categories giving a similar response in the UK. In all four countries it emerged that the largest category of hotel rated this matter the highest. Yet, at the same time, inter country comparisons revealed less support in Germany than in the UK.

Hotel star rating yielded a similar set of responses across all categories in the UK. However, in the other three countries, five star hotels were found to be less positive than the other grades.

Analysis by age groups again yielded homogeneous responses across all categories in the UK, with diminution of support levels through France, Italy and finally to Germany. Turning to age, slight variations were noted in the 50 - 59 category in France (negative) and Italy (positive).

Examination of the data regarding formal education elicited similar responses across all categories in the UK, and under the "no formal education" label a lesser attitude in both

Italy and Germany was recorded. Unlike German respondents, those individuals with 2 - 3 years' practical training in the UK, France and Italy regarded this matter as very important. Another trend noted was that those with 1 - 2 years' training in France regarded this issue as less important than the other countries.

In most cases it was found that the larger hotels by employment size rated this topic more highly, although there was a downward trend from a strongly positive UK view to a lesser endorsement in Germany. Finally little difference was noted by gender, although the UK respondents (male and female) rated the matter higher than Germans.

3. Cross contamination

Analysis of the topic cross contamination found little difference within three of the four countries as regards hotel type. However, in Germany, the independent category took a more positive approach to this issue, whilst lower support was recorded from Italian respondents.

The job position data showed that waiters in both Italy and Germany regarded this matter as of lower priority than those from the other two countries, while in France, supervisors rated this topic as very important and managers took a lesser view.

Hotel room size analysis registered a similar positive response across all categories in the UK, yet in both France and Germany the smallest category recorded a stronger attitude, and Italy rated this matter substantially lower. It was in Italy that the larger hotels rated this issue more strongly than the other categories.

Responses according to star rating saw the five star hotels in France and Italy attributing a higher weight than other categories. Yet in the UK the three star hotels regarded this matter higher and a sharp dip in this category response was recorded in Italy.

Age group analysis yielded similar results in the UK and France, while in Italy and Germany the 50 - 59 group regarded this topic as more important than was the case for the other age groups.

Individuals across all formal education categories in the UK recorded a broadly similar view. Yet those with no formal education in Italy and Germany rated this matter substantially lower.

As far as practical training was concerned, responses across all categories and countries were broadly similar, the exception being in Italy, where those in the 1 -2 years' group attached lesser importance to this topic. No differences according to number of employees emerged in the UK. However, the middle category was more positive in France and the largest category attached a higher rating in Italy. Finally gender analysis also showed that females across all four countries rated this issue as more important than males.

4. Inadequate personal hygiene

The examination of data on inadequate personal hygiene by hotel type revealed marginal differences between the two categories, although independents were slightly more positive in both Italy and Germany.

Job position analysis showed a similar response across all categories in three out of the four countries. However waiters in Italy and supervisors in France regarded this matter of great importance.

Turning to room size, trends emerged in France where hotels with 100 - 199 rooms adopted a more positive view than did the other categories, while in both the UK and

Italy it was the largest hotels that rated this topic highly. A similarity of response was recorded across all three categories in Germany.

As regards classification, five star hotels in the UK, France and Germany attached the highest weight to this subject.

Little difference emerged according to age groups, although the 50 - 59 category was slightly more positive in its views within Germany.

With the variable of formal education, similar responses were recorded by country although those with no education rated this issue low in Germany.

When these results were contrasted with practical experience it was found that those in the 3 or more years' category in the UK placed a high value, yet those with less than 3 years in France also rated this matter higher. The 1 - 2 year category in Italy regarded this topic as very important while, overall in Germany, all groups attached less weight to this matter.

Analysis by employment size showed a peaking of response levels by all groups in France and a downward trend in the two largest categories within Italy and Germany.

Little differences were detected by gender across the four countries surveyed.

5. Inadequate cleaning and disinfection

Finally, within this question, the important subject of cleaning and disinfection was investigated. Here similar results were recorded across the two hotel categories in both the UK and Italy, while chains, rather than independents, rated this matter more highly in France and less so in Germany. Job position data illustrated similar positive results across all categories in the UK, while in France and Italy supervisors regarded this issue as very important, a lower rating to this question was recorded by chefs in Germany.

Smaller hotels by room size strongly rated this topic in both the UK and Germany, a view contrasting with that of France, where the matter was rated low. Also in France, the 100 - 199 category regarded this issue as highly important, an opinion shared in the largest hotels in Italy. Although analysis by hotel star grading saw similar results across all categories, five star hotels recorded higher attitude levels in both France and Italy. Four star hotels viewed this topic at a high level in Germany, whilst the other categories dipped in their rating. Analysis by age group saw similar results across all categories in both the UK and Italy, while variation emerged in the other countries. In France, the 40 - 49 age group regarded this matter as very important, while in Germany, the 20 - 29 group rated it substantially lower than the other age categories. Investigation of formal education identified similar results across all categories in the UK, while in France and Italy those with less than one year formal education rated this topic as very important. A general trend downwards was noted in most categories within the German response. Examination of the data on practical training yielded less supportive views in France and Germany within the 1 - 2 years category, and in Italy and Germany within the 2 - 3 years group. Respondents with three or more years' practical training rated this matter at similar levels across all four countries. While hotels with an employment size over 100 viewed this subject high in Italy, in the other three countries smaller hotels were more supportive. Finally, regarding gender, no significant attitudinal differences were recorded.

Summary

This chapter has analysed the results of a survey among four main EU countries, where the influence of nine independent variables on four attitudinal clusters was gauged. In considering both the data contained within appendix six and the commentary presented, differences emerged which allowed the study to identify some general conclusions, despite the few cases in some sub categories.

Overall, the countries fell into two main groups, that of the UK and France, on the one hand, and Germany and Italy, on the other. Here the former was often more positive than the latter on the range of issues addressed. While different responses did emerge according to the specific nature of the question, it was generally found that chain hotels registered higher mean support rates than independent establishments. As regards job position, the data showed that both managers and head chefs placed higher values on the issues posed than did other operational staff. The evidence strongly upheld the view that larger hotels, measured in terms of quantity of rooms, were much more aware of the importance of food safety and associated topics than were smaller establishments. Analysis by star rating also saw higher graded hotels adopting a more positive stance on a whole range of issues presented to them. Turning to age, the data generally indicated that older individuals were not as positive in outlook as their younger colleagues. The twin variables of formal education and practical experience yielded a general conclusion that qualifications had a positive effect on attitudes registered, the effect of formal education being the greater of the two. Analysis by number of employees revealed that those from larger hotels expressed more positive opinions than those from smaller

properties. Finally, in terms of gender, males were more positive than females, although in the UK, little difference was detected between the two categories.

Chapter 10

Conclusion

Background

The aims of this final chapter are fourfold:

1. To draw conclusions on the attitudinal data presented in chapters seven, eight and nine, which, in turn, relate back to the theoretical underpinnings of chapter two.
2. To set these data within the context of historical trends in EU food law.
3. To comment on developing trends in EU food law.
4. To explore areas for future research.

Context

Following more than 30 years of legislative activity, most national food laws have been harmonised at the EU level. Yet, at a lower level, clearly differences in implementation have emerged between hotel types, as also with respect to other independent variables analysed in chapter nine. A gap has therefore emerged between legislative intention and operational good practice at the unit level. Such dissonance has clear implications for the provision of safe food to the customer.

This research has revealed that many studies, in particular, *The Study of the Impact and Effectiveness of the Internal Market Programme on the Processed Foodstuffs Sector* (EC Commission, 1996), have maintained that the EU's legislative programme in the foodstuffs sector has had a generally positive impact. Even so, this thesis has highlighted

a number of criticisms of the programme in terms of: unnecessarily detailed legislation, fragmentation, difficulties of adapting the legislation to innovation and problems in the day-to-day functioning of the internal market. These criticisms were given added weight in chapters seven, eight and nine, when the views of those actually working in the hotel industry were canvassed and analysed. When one adds these dissenting voices to recent unfortunate events, such as BSE and E.Coli, together they raise doubts about the capacity of existing legislation to fulfil its public health objectives at both the EU and member state levels.

The central issue to have emerged from this research is that, in contrast to legislation in most member states, EU food law has developed very much in an *ad hoc* fashion over time. There has been no central unifying text setting out its fundamental principles, one that clearly defines the obligations of all concerned. Views concerning vertical versus horizontal directives, regulations, the use of codes of practice and what can be described as a democratic deficit between the European Parliament and the Commission, have tended to add layers of complexity to the issue of food safety. The stance adopted over the past few years has contributed towards a piecemeal, fragmentary approach towards implementation. Earlier chapters of this thesis have also noted differences in food safety legislation within selected member states, for instance Scotland versus England and Wales, the various regions of Spain, Italy and regions of Germany. It is therefore the central objective of this concluding chapter to consider the equivalence and effectiveness of EU food law, as also to determine whether such legislation has fulfilled its public health objectives, both at EU level and within individual member states. Equally, considering the empirical evidence of chapters seven, eight and nine, comments on the

coherence and day to day functioning of food law within the hotel industry can also be made, a discussion that is set within the overall context of the research objectives identified and explored in chapter five.

The evidence from the empirical research suggests that across the four main countries investigated, there are still substantial regional variations in the market for foodstuffs and, especially between northern and Mediterranean regions, attitudes towards food safety within hotels. This situation offers a partial cultural explanation for differences in attitudes towards national legislation, although separating out national culture from other factors is clearly problematic because of the former's multi-faceted nature. In addition, more telling differences emerged in relation to hotel type and hierarchy, differences which helped resolve the matter as to whether to accord pre-eminence to nation state or organisational type. Against this background, it appears clear that the EU has a major role to play in promoting a clear and stable regulatory environment as the foundation for further development of this sector. In particular, the transparency and efficiency of the internal market, enshrined within the Single European Act, is important for the survival of large numbers of smaller and medium-sized independent hotel companies which must increasingly and inevitably compete with chain operations.

Stage One: Conclusions about Attitudes towards Food Safety

Country Analysis

The main finding from the data is that within the four main countries surveyed, instead of individual variation two attitudinal clusters occurred. In overall terms, these were:

- UK / France, and

- Italy / Germany.

The emergence of clusters, as opposed to separate inter-country differences predicted by the likes of Hofstede, was at variance from much of the cross cultural management literature of chapter two, since such clustering indicated that the variable of a single country is *not* a significant predictor of attitudes towards food safety. Relatedly, secondary and primary investigations illustrated a theoretical poverty in this area, to the extent that a variable such as national culture could be regarded as spurious within the context of this research. This conclusion is justified because it would seem that modern nations are far too complex and subculturally heterogeneous to possess a national culture. Indeed, the findings of the present study in the sphere of hospitality concur with the arguments of Dann (1993) in the associated realm of tourism, to the extent that, due to historical, migratory and allied factors, most contemporary states of the developed world are cosmopolitan and pluriform, rather than single-nationality and uniform in nature. Thus, just as Dann (1993) found it virtually meaningless to speak of British or American tourists complaining or failing to object about service provision at airports, since both so-called national labels contained a multitude of subcultural entities, so too did this study look elsewhere for explanation. Hence, instead of an emphasis on individual country, what emerged from the empirical section of this thesis was rather that differences resided in hotel type and the position of individuals within the firm's hierarchy. Within this study's categorisation of hotel type, the results showed that such factors as corporate size, location and market complexity were far more salient than a given national culture. Further inquiry identified the perceived importance of food poisoning, but the lesser significance of other hygiene matters, such as contamination and labelling. While respondents registered a high level of awareness regarding food

safety, they believed that such a focus had an overall negative effect on the industry's reputation. Contrasting the national and hotel perspective, similar results were obtained, with the UK and France jointly registering a more positive view than the other cluster. This ranking of food safety matters produced results that were inconsistent with good practice.

The conclusion from the data on seven food safety matters demonstrated that best practice was not in evidence across the four countries surveyed. Although it is clear that respondents, on the basis of the attitudes expressed, were aware of this topic, ranking of the constituent elements yielded a conclusion that there were weaknesses in effective implementation of policy. The results illustrated the importance attached to personal hygiene, above more relevant matters such as food hygiene training and temperature monitoring. This finding led to the view that, whereas respondents were aware of food safety, significant problems could be detected in the operationalisation of policy, which had implications for the provision of safe food to the consumer.

Establishing an appropriate food policy usually commences with a written document. Such a practice was found to exist in 53 per cent of outlets regarding the structure of kitchen premises through to 67 per cent for food hygiene training. This was a de facto occurrence despite the fact that the latter is a legal requirement throughout the EU. The conclusion from the data is that a minority of hotels do not adopt such best practice or their legal obligations, and that lack of written policies may sometimes lead to inadequate management control. Although it is certainly possible to have a policy without a written document, (documentation is not a legal requirement in all member states), doubts would inevitably arise as to its consistency in implementation.

A related, though separate, theme of policy is the subject of official codes of practice covering five food safety elements. A high percentage, between 80 - 90 per cent, responded that there were codes of practice, and between 60 - 70 per cent replied that they were legally enforceable. A contrast therefore emerged between existing codes. Yet fewer hotels actually translated such material into written documentation at unit level. Equally, the data showed differences between codes that were in existence within a country, if they were legally enforceable and whether individuals were aware of their existence. The emerging trend is that there is a gap between good intention and common practice, a situation which leads to the realisation that the customer is not being properly protected. This lack of consumer protection is at variance with Maastricht Treaty obligations – a matter previously highlighted.

Following on from earlier comments, factors that had the potential to lead to food poisoning illustrated a questionable set of priorities, with food hygiene training and cross contamination, (ranked fourth and fifth respectively), showing an inconsistency with good practice. Effective temperature control is more likely to avoid problems of food poisoning. Yet this matter attracted a lower ranking, thereby reinforcing evidence from the literature review which showed that inadequacy in this area had been the cause of a large percentage of reported incidents. A difference therefore emerged between awareness and effectiveness. Food hygiene training, a legal requirement, was not regarded as a top priority by the study's sample.

Taking all these issues into consideration, it was therefore worrying to learn that 16 per cent of the hotels in the sample had not been visited during the previous 12 months - an obvious matter for concern or possibly a lack of awareness of such visits. This lack of visitation cast doubt on the effectiveness of enforcement and perhaps additionally, the

resources devoted to it by central government. However, a positive result emerging from the data was that, of those hotels that had been visited, a high level of communication was evident between management and staff, particularly as regards the results of the inspection.

Another aspect of policy is record keeping. This feature was regarded as good practice in all the member states surveyed, to the extent that some had made it a legal requirement. It was therefore highly significant that between 20 - 28 per cent of hotels in the sample did not keep records on the three key areas of food temperature controls, staff training, and cleaning. Record keeping is an essential part of the monitoring and verification process. Whilst in the UK it is not a legal requirement, the literature has shown it to be an essential part of the legal defence of “due diligence and all reasonable precautions”, present in a number of countries of the EU.

Hotel Type and Hierarchy

It is relevant at this juncture to highlight contrasts that emerged between the country analysis and consideration of hotel type. In exploring the data, it was found that personnel in chain hotels registered more positive opinions than staff in independents, with the added result that again clusters (albeit different combinations from those encountered previously), rather than single country difference emerged. Whilst it was recognised in earlier chapters that to classify into two hotel types may be an oversimplification of the industry, such a “variance reducing scheme” was necessary in order to draw some conclusions from the study, particularly as independent units represented a majority of the European hotel industry. It was also once more noticeable from the primary data that statistical differences by hotel type were far larger than

between country differences, thereby highlighting the significance of the former. Additionally, variation emerged by hierarchy, particularly between management and operational staff. Whereas it may be problematic to draw generalisable conclusions, the sample data again showed that a greater importance should be attached to hotel type and hierarchy as opposed to nation state, thus further rejecting Hofstede's cultural divergence theory as outlined in chapter two. The essence of the argument being proposed is that if between EU country differences are less than within country variations, the former can be rejected as adequate explanations. Relatedly, the data supported Child's view (1981) of convergence at the hotel organisational level (chain or independent), but divergence at the personal level (management and operational staff). This finding implies that many organisational design principles with respect to food safety are free of national considerations. It would also seem that, whereas the skills and abilities to perform a given job may be quite similar from one country to another, the criteria for evaluating how well incumbents are performing a task are bound by the organisational context in which they operate.

This emphasis on hotel type and hierarchy, reflected in the analysis of attitudes towards food safety legislation, showed that managers in both France and Italy were more supportive than their UK and German counterparts, with chain hotels recording higher rankings than independents. While managers were consistent in registering their views within the countries, (showing no intra-country *regional* variation), it was noticed that there was greater variability in response from operational staff.

Turning to the question of food safety practices at the hotel, it was evident that organisational contrasts regarding the issues contained within the question were far more apparent than a single nation perspective. For instance, in evaluating the

importance of seven food safety matters, all four main countries rated personal hygiene consistently high. The same trend occurred in independent hotels. The question of kitchen structure saw variations by job position, for instance, a gap between head chefs on the one hand against management and other operational staff on the other.

In considering both the data contained within appendix six and the commentary presented, differences emerged which allowed the study to identify some general trends, despite the few cases in some sub categories. Here, of the seven food safety practices investigated, the results illustrated a positional divide, specifically in terms of managers' views, as opposed to those of head chefs. As regards the frequency of enforcement visits, the data revealed that communication was greater in hotel chains than in independent establishments.

For cleaning records, the findings indicated that all four countries reported similar positive levels. However by hotel type, independent hotels attached a greater importance to this matter than did chains.

Overall, while different responses did emerge according to the specific nature of the question, it was generally found that chain hotels registered higher mean support rates than independent establishments. As regards job position, the results showed that both managers and head chefs placed higher values on the issues posed than did other operational staff. The evidence strongly upheld the view that larger hotels, measured in terms of quantity of rooms, were much more aware of the importance of food safety and associated topics than were smaller establishments. Analysis by star rating also saw higher graded hotels adopting a more positive stance on a whole range of issues presented to them. Turning to age, the data generally indicated that older individuals were not as positive in outlook as their younger colleagues. The twin variables of formal

education and practical experience yielded a general conclusion that qualification had a positive effect on attitudes registered, the effect of formal education being the greater of the two. Analysis by number of employees revealed that those from larger hotels expressed more positive opinions than those from smaller properties. Finally, in terms of gender, males were usually more positive than females.

The primary data from this study thus lend support to Child's (1981) research, in that those investigations dealing with macro-level variables discover few differences that can be attributed to national culture, whereas those inquiries focusing on micro-factors find many significant differences. Thus, it would seem that, whereas hotel organisational structures are converging, the behaviour and attitudes of individuals within such hotels diverge. The conclusion is, therefore, that variation between EU countries on food safety *cannot* be attributed to national culture, but that differences within hotel firms, (chain and independent), and their employees are so associated (Marshall and McLean, 1986).

Stage Two: Contextualizing the Data within the History of Existing EU Food Legislation

Introduction

What is being emphasised in this concluding chapter is that the root of the problem of food safety lies within the law rather than with individual hotels or their personnel. The arguments advanced here are for various measures that can be taken to rationalise or simplify existing EU legislation in order to address the previously discussed variances present within the accommodation sector. They begin with a consideration of certain

aspects of the EU's working procedures, such as the choice of legal instruments and the possibility of updating legislation in accordance with technical and scientific progress. They also consider the scope for improving the coherence of legislation through the introduction of common terms and definitions. This section concludes with a review of one main area of EU food law - hygiene - that is of particular importance to the hotel industry and central to this study. All these issues are of relevance to food legislation and its implementation within the European hotel industry.

Influences

The problems of both EU and hotel industry food law have already been identified. Yet their effective implementation can be regarded as a consequence of a range of influences. Whereas the focus of this research has been directed towards the hotel industry, the primary influence regarding food safety has evolved specifically from the realisation of the internal market (EC Commission, 1986). In the future, the development of activities in the hotel sector will also be strongly moulded by those new provisions added by the Maastricht Treaty concerning human health protection (Article, 129), consumer protection (Article, 129a) and the environment (Article 4, 130r) (see EC Commission, 1993c).

As the previous sections and chapters have shown, EU rules applicable to foodstuffs have developed from the variety of legal bases set out in the Treaty to serve different policy objectives. The legislation is also grounded on a division of responsibilities between the Commission and member states, with the situation being complex and difficult to understand. Such opacity is open to criticism since there is no coherent policy and the approach is piecemeal. The *BSE* crisis, which has affected red meat sales in hotel

restaurants, is one example that has highlighted the need for a European food policy to mitigate the fragmentary approach of legislators.

In this context, account must be taken of the fact that, following the entry into force of the Maastricht Treaty, the Commission has acquired new responsibilities, (to which reference has already been made). Additionally, in recent years, increasing attention in the hotel industry has been paid to issues such as nutrition, health and labelling.

Rationalisation

Mention has already been made of the complexity, fragmentation and incoherence of EU food law. It is argued here that there is a need for greater rationalisation, specifically in terms of the formulation of a European food policy, as well as an appropriate regulatory approach.

Against the general background of the previously cited 1985 communication, it should be noted that a suggested policy change does not constitute a viable argument for wholesale deregulation or the dismantling of the system of protection that has been in place over the past few years. The issue being advanced, one clearly supported by the literature review, is that certain legislative provisions are unnecessarily detailed and prescriptive; they fail to take account of the development of internal control systems by the hotel industry. Duplication of legislative provisions between vertical and horizontal rules is a case in point.

It is a truism that all developed countries, not just those in Europe, have adopted a substantial body of legislation which seeks to guarantee that food is safe, wholesome and fit for human consumption, that commercial transactions are conducted fairly and

that the necessary systems of official control and inspection are put in place. However, in recent years, a new range of issues concerning foodstuffs has emerged, as a result of increasing scientific knowledge, (e.g., genetically modified organisms, awareness of the links between nutrition and health), and as a consequence of the new aspirations of consumers. As work towards the implementation of the internal market has progressed, national rules have increasingly been replaced by EU legislation. Today, the vast majority of food law has been harmonised at EU level and, in many fields, the scope for unilateral initiatives by member states is severely restricted. It follows that, with this transfer of decision making, the EU must itself develop policies that both provide for a high level of protection and meet the legitimate demands and expectations of consumers. However, at the same time, the EU must also avoid legislation which imposes unnecessary burdens on the hotel industry, the costs of which, of course, would ultimately be passed on to customers through higher prices. In essence, the central issue in developing an appropriate policy revolves around the adopted regulatory framework.

Regulatory approach

Whereas rationalisation is the key to the development of effective EU food safety law, a regulatory framework must be designed and implemented in such a way as to take full account of the fact that the primary responsibility for the production of safe and wholesome food lies with producers and the hotel industry. Thus, whenever possible, such a framework should offer the industry flexibility to design and implement appropriate internal monitoring procedures, provided that these steps are backed up by effective official surveillance systems. Hence, the opposing issues of flexibility and

control create a dilemma for legislators. Whereas in some instances specific detailed legislation may be necessary, such prescription should be kept to an absolute minimum. In other cases, it would be sufficient for regulatory requirements to be worded in terms of their objectives and intended results, rather than in terms of prescribing how those outcomes are to be achieved. Once a clear legislative framework has been established, setting out the objectives to be attained, hotel operators can be left to implement the legislation. This implementation would be subject to the effective supervision of the authorities, using HACCP-type systems, codes of practice and other appropriate instruments.

The problem for EU legislators is that both approaches offer advantages and disadvantages. In general terms, it may be noted that, rather than favouring one approach over another in every case, it is more often a question of finding the appropriate balance between the two. A horizontal approach makes it possible to take a general overview of a particular situation, and facilitates implementation, particularly for food businesses working in many sectors, including not only manufacturers, but also hotels, both small and large. A vertical approach, on the other hand, makes it possible to adjust the legislation to the needs of a specific sector, particularly in cases where a more targeted approach to legislation has been judged necessary. It also makes it possible to envisage a more integrated regulatory framework that covers all facets of a particular sector.

Since a more prescriptive stance requires legislators to identify the major risk factors and the means of managing those risks, it often makes it easier for hoteliers to identify their

obligations, and hence facilitates the duties of the authorities. In this sense, for the countries in this research, prescription results in control.

A more general approach, on the other hand, leaves the industry with greater flexibility in the implementation of legislation, and is thus likely to reduce compliance costs. It is also likely to minimise the need for frequent updating of legislation. However, it requires both hotel businesses and the inspectorate to take a much more active role in analysing the hazards presented by different activities and in clearly ensuring that effective measures are taken to control them. Evidence from this study suggests that a sizeable minority of those surveyed has not adopted this proactive approach. This requirement may present particular difficulties for small businesses working in the hotel sector, (i.e., 80 per cent in the UK and 95 per cent in Italy), although the elaboration of industry-wide codes of practice may provide a partial solution to this problem.

It should also be noted that the two approaches are not necessarily mutually exclusive. Indeed, empirical evidence from the previous three chapters suggests that the industry is experiencing difficulties in adopting a general approach and, while this problematic situation does not negate such an evolving framework, stronger emphasis should be placed on training and monitoring by the authorities, (the latter is clearly not in evidence from this research). The primary data of this study showed that relatively, (and surprisingly), few respondents placed a high priority on training, and that monitoring was lax in some instances, (16 per cent of hotels, for instance, had not been visited by enforcement authorities in the previous twelve months).

In such circumstances, it is argued that a balanced approach is necessary between detailed prescriptive legislation and a more general legislative approach.

In developing this theme of regulation, due to the sensitivity of the foodstuffs sector within hotels, debate has occurred as to the extent to which the use of codes of practice are appropriate, either as an alternative to regulation or in order to supplement it. The problem here is the degree to which codes remain genuinely voluntary. It is noteworthy that the primary data contained within the previous three chapters suggested that a substantial minority of the sample (i.e., on average 25-35 per cent of all respondents) was not aware of the existence of such codes and whether or not they were legally enforceable,

Another issue to recognise is that, at the member state level, there has been an increasing employment of codes of practice, a usage which brings with it the risk of new *de facto* barriers to intra-EU trade and the free movement of goods and services within the EU. In the field of food hygiene, voluntary instruments are being used to complement the existing legislation, for instance, Article 5 of Directive 93/43/EEC (EC Commission, 1993a).

These comments about problems in implementing a regulatory approach inevitably lead to a discussion on the concept of subsidiarity. It was Article 3b of the EC Treaty which stated that in areas which do not fall within its exclusive competence, the EU shall take action, in accordance with the principle of subsidiarity, only if, and in so far as, the objectives of the proposed action cannot be sufficiently achieved by member states, and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the EU. For several years, it has been the practice of the Commission to include a “subsidiarity statement” in all new legislative proposals, in order to explain why the Commission considers that action at the EU level is necessary.

However, legislative simplification is not an easy task, particularly with an expanding membership of the EU. Provisions that are considered as over-restrictive by some member states, may be regarded as fundamentally important by others. The potential advantages of legislative simplification must be carefully balanced against the risks of reopening old controversies and of creating a long period of uncertainty for operators in, for instance, the hotel sector. The dilemma for accommodation establishments is the difficulty of reconciling the practical concepts of simplification and subsidiarity with the maintenance of a high level of protection for the consumer. Nevertheless, if they are to be fully effective, the principles of subsidiarity and legislative simplification must be applied at the member state as well as at the *EU* level - situations contradicted by current available evidence, (e.g., differences in temperature control within member states). Consistency in the application of this principle is important; otherwise there will be a constant risk of fragmentation of the internal market into separate member state markets.

In keeping with the principle of subsidiarity, member states can therefore adopt more detailed legislation in order to take account of the particular situation in their own countries, a good example from the present study being Denmark in relation to the issue of temperature control. However, in order to protect EU interests, notably the operation of the internal market, the Commission has powers to supervise the use which member states make of this possibility. In some non-harmonised areas, member states have frequently emphasised the difficulty of using mutual recognition clauses to resolve problems of free circulation.

EU Working Procedures

In order to be effective, consultation on food safety matters should not be limited to the technical aspects of a proposal. Such initiatives should also enable stakeholders, (discussed in chapter two), to provide all relevant information, along with their interpretation regarding the legislative approach envisaged and the costs and benefits of the proposed measure for the hotel industry. Adequate consultation of the socio-economic interests affected by EU legislation, before and during the decision-making process, is the foundation of transparency and is in the long term interests of the internal market.

Although this consultation process does in part exist through the *Advisory Committee on Foodstuffs*, established in 1975, it is important for reasons of clarity to take steps to improve the process through, for instance, the increased use of Green Papers.

Directives versus Regulations

The debate between the use of directives or regulations is particularly relevant at this juncture since the provisions of certain initiatives can be extremely detailed, and leave little or no margin for the discretion of member states in their implementation. Examples include specific EU provisions relating to materials in contact with foodstuffs. In such circumstances, the use of a regulation as an alternative to a directive may present several advantages:

- enabling the uniform application of legislation throughout the internal market,
- increasing the transparency of EU law, and

- since implementing legislation by member states is not necessary, facilitating the rapid updating of EU legislation in order to take account of technical and scientific developments.

For these three reasons, it is argued that consideration should be given to greater use of regulations in appropriate cases, both in primary and in secondary EU legislation. However, legislation that is limited in scope to the harmonisation of general principles, and criteria, such as legislation on the *Official Control of Foodstuffs*, should continue to be adopted by means of a directive.

Democratic Deficit

Practices and procedures within the foodstuffs industry are continually evolving and, from the points of view of innovation and competitiveness of the hotel industry, it is important that new products should gain swift access to the European market. This environment of rapid change means that an ability to amend legislation quickly in order to rapidly take account of technical and scientific progress, is of fundamental importance. From the public health point of view, it is also important to be able to adapt legislation promptly so as to take account of any new risk factors that may emerge. However, the problem lies with a Community that does not possess the instruments that are necessary to respond to the growing pace of innovation and the ever-increasing range of scientific knowledge.

One reason for this situation is the unwillingness of the Council and Parliament to delegate to the Commission the necessary powers for the technical implementation of EU legislation. Although the Council and Parliament have entrusted significant powers to the Commission in fields such as general food hygiene, materials in contact with

foodstuffs and food labelling, in other areas there has been much less delegation of authority. For example, in the realm of food additives, any amendment requires on average about five years to complete procedures at the EU level. This, already lengthy, period increases to six or seven years, if allowance is also made for the time necessary for the adoption of national implementation measures. By contrast, in most, if not all, member states, a similar decision would be taken far more rapidly by a ministerial order, on advice from the competent national scientific advisory committee, and without the need for primary legislation. It is thus argued that the adaptation of EU legislation to innovation and technical progress in the foodstuffs' sector constitutes a serious problem, which needs to be urgently addressed.

Definitional Problems

Another issue to tackle in the EU foodstuffs' legislation is the problem of definition. Many directives already contain a series of definitions, including those on materials and articles intended to come into contact with foodstuffs, labelling, nutrition labelling, nutrition claims, official control of foodstuffs and hygiene of foodstuffs.

However, doubts have sometimes arisen as to whether these definitions apply only to those specific pieces of legislation in which they are contained, or whether they apply more generally. To remove any further doubt, these definitions should be generally applicable to all EU legislation on foodstuffs. Furthermore, although the legislation of most member states contains a definition of "foodstuffs", the EU does not yet have its own definition. The benefit of an EU definition is that it would ensure that all such legislation on foodstuffs would apply to the same products and substances in all member states.

A further question concerns the application of the definition of primary food production, which may be intended either for human consumption or for industrial use, (e.g., potatoes, which may be consumed as food, or used for the production of industrial starch and chemicals, both of which may be used as food additives or for other industrial purposes). Their inclusion within the scope of the definition would mean that producers would have to fulfil all the relevant obligations arising under EU food legislation, which may be inappropriately restrictive. However, it is obviously necessary to ensure that all substances used in food meet the requirements of EU legislation.

Furthermore, the concept of “placing on the market” is employed several times in EU food legislation, without actually being defined. Although a definition of marketing is included in the veterinary hygiene directives, its use is not entirely suitable for the purposes of foodstuffs legislation since it excludes retail sale. Other definitions of placing on the market are included in Directive 90/220/EEC (EC Commission, 1990b) on the deliberate release of genetically modified organisms into the environment, but these definitions are not entirely appropriate to the foodstuffs sector.

Having considered various procedural and definitional issues, the next section of this concluding chapter advances arguments on a matter of specific relevance to the hotel industry – that of food hygiene.

Food hygiene

EU legislation on food hygiene and the hotel industry is an area that raises difficult questions for simplification and rationalisation within the EU.

For instance, foodstuffs of animal origin are covered by a series of 11 vertical directives establishing specific conditions of hygiene for the categories concerned: fresh meat, poultry meat, meat products, minced meat and meat preparations, rabbit, farmed and wild game, fish, shellfish, eggs and egg products, milk and milk products, and other products such as frogs legs, snails and honey. These directives set out specific regulatory requirements for various features of these products, while using a HACCP based approach for other aspects.

Alternatively, for foodstuffs not covered by these specific provisions, it is the General Directive on the Hygiene of Foodstuffs that applies (EC Commission, 1993a). This directive adopts a more generalised approach to hazard management, based on the application of HACCP principles and the development of voluntary codes of good hygiene practice.

The co-existence of these two approaches opens the door to numerous criticisms of inconsistency and incoherence. Thus, Article 1 (2) of the general hygiene directive requires the Commission to establish a relationship between specific hygiene rules and those of the general directive and, if necessary, to make proposals.

As a first step in this process, the Commission has launched a large-scale consultation exercise on the inter-relationship between the vertical veterinary hygiene rules, which apply to foodstuffs of animal origin. To this end, the Commission has prepared a guide to certain rules governing the production, marketing and importation of products of animal origin intended for human consumption. The guide envisages the consolidation of the provisions of 14 separate directives relating to animal and public health into a single text that would also cover the conditions of imports from third countries. Certain

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common principles, such as HACCP, would be extended to cover all the directives, and a number of unnecessarily detailed provisions and contradictions in the texts would be eliminated.

Additionally, the Commission has launched a consultation exercise on the possibilities for simplification of the rules, with the following areas being investigated:-

- the role of voluntary instruments, such as standards or codes of practice in veterinary hygiene,
- temperature control requirements,
- the need and appropriateness of derogations (allowances) for small and medium-sized enterprises,
- the international dimension of veterinary hygiene rules,
- the role of self-control by manufacturers and the role of the public authorities,
- authorisation procedures and procedures for the approval of establishments, and
- conformity marking.

Further questions have also been raised concerning the inclusion in hygiene legislation of quality or labelling provisions that are not directly related to food hygiene.

Once the relationship between the specific vertical hygiene directives has been clarified, consideration must be given to the association between them and the general directive on food hygiene. In this context, it would appear appropriate to give priority to ensuring that there is a coherent and consistent body of legislation relating to food hygiene. This goal can best be achieved by the application of HACCP principles and by limiting

detailed prescriptive provisions to cases where they are considered essential. Nevertheless, it should be noted that there is some flexibility in the manner whereby HACCP principles are conceived and applied in present legislation, a point explored in earlier chapters.

Under the general hygiene directive, it was not considered necessary to lay down formal HACCP requirements regarding verification and documentation, a situation which may be considered a significant weakness. Each food business is left with the flexibility to decide what requirements are necessary, subject to the supervision of the competent authority, thus leaving an element of discretion. By contrast, because of the nature of the foodstuffs concerned, the basic principles for “own checks”, set out in the veterinary hygiene directives, include detailed rules on keeping written records for presentation to the competent authority. This example illustrates flexibility in the design and implementation of food hygiene regulations in order to ensure the maintenance of a high level of protection, while keeping the regulatory burden for a business to a minimum. The search for consistency and coherence between the two approaches has therefore not been successful. At the end of the day there is no uniform system.

Weaknesses are therefore emerging in this twin track approach, since to be effective, any system of food hygiene legislation must cover the entire food chain, from primary production to the point of consumption. The general food hygiene directive covers all stages of food production and distribution *after* primary agricultural production. There is no general community legislation covering the hygiene of products of non-animal origin at the primary agricultural production stage. In the case of foodstuffs of animal origin, the primary production stage is covered by the veterinary hygiene rules. These

directives cover all phases from primary production to distribution. However, retail sale in general is excluded from the scope of the veterinary hygiene rules, and the general hygiene directive therefore applies. The result of all this confusion is a lack of coherence and consistency.

Stage Three: Comments on Developing Trends in the EU

Protecting the Consumer

In the previous section, the discussion centred on the legislative approach adopted in EU food law, and specific attention was paid to food hygiene. Yet, an equally important issue is that of consumer protection. Contained within Article 100a (3), Article 129 and Article 129a of the Treaty, there are varying requirements for the Commission to address this public health matter (EC Commission, 1986).

It is suggested that the establishment of a proper EU food policy which gives pride of place to consumer protection and health is an important step towards satisfying these Treaty obligations. In this spirit, the EU must provide itself with the necessary means of action, by identifying two imperatives:

1. A closer involvement of Parliament in the decision-making process (to this end the Commission should make more use of Article 100a, qualified majority voting), and
2. The need to give the EU greater powers in the field of health.

As far as food safety is concerned, there can be no scope for compromise. The Treaty requires the Commission to take as its basic position a high level of protection in its proposals, in order to ensure that public health requirements are fully integrated into its policies. This level of protection must be kept under constant review and, where

necessary, it must be adjusted to take account of new information, or of a re-evaluation of existing information. This section shows how these objectives are integrated, successfully or otherwise, into the EU's policies for the management of the internal market.

Integration

In principle, consultation with independent scientific experts is the best means of guaranteeing objectivity and consistency of hazard analysis during the preparation of rules relating to public health.

However, to be totally effective, the process of risk assessment must cover the entire food chain. A number of scientific committees have responsibilities which relate to the foodstuffs sector (discussed in earlier chapters). In order to be effective, an integrated approach to risk assessment may require consultation with several of these committees. However, while the involvement of several committees is necessary, their co-ordination is essential in order to avoid repeated evaluation of the same risk or unnecessary duplication of effort. Furthermore, the regrouping of all Scientific Committees under the same Commission Directorate General would ensure a greater synergy and a better co-ordination of their work.

On the other hand, it is important to note the limits of the role of the Scientific Committees. At the EU level, a clear distinction should be drawn between the concepts of risk assessment and risk management. According to definitions which are under consideration by the *Codex Alimentarius*, risk assessment is a scientifically based process consisting of the identification and characterisation of hazards, the assessment of

exposure and the measurement of risk. Risk management, by contrast, is the process of weighing policy alternatives in the light of the results of risk assessment and, if required, selecting and implementing appropriate control options, including regulatory measures. Clearly, such a distinction can lead to conflict as evidenced by the UK's Beef on the Bone Regulations. Whereas the task of risk assessment may be delegated to scientific advisory bodies, the task of risk management remains the responsibility of the regulatory authorities and, at the EU level, of the Council, Commission and European Parliament.

Particular difficulties may arise in those cases where, because of scientific uncertainty or an absence of data, the Scientific Committees are unable to undertake a comprehensive risk assessment. In such cases, in accordance with the obligation to provide a high level of protection, it would appear necessary to take a conservative approach to risk management through the application of the precautionary principle.

To enable the scientific co-operation process to operate effectively, each member state is required to designate a single authority that is responsible for co-operation with the Commission and the distribution of work to the appropriate institute.

The management of food safety tasks at the state level is the responsibility of the coordinating institute. The Commission undertakes the overall management of the scientific co-operation process. As a final point, it is important to recognise the complementary nature of the scientific co-operation process and the function of the SCF. In the area of risk assessment, the role of scientific co-operation is to collect and collate the best information available to member states on a particular problem and to evaluate risk.

Safe and Wholesome Food

Another aspect of consumer protection is that existing EU legislation imposes a series of obligations on food producers in order to ensure that foodstuffs meet certain required conditions. However, certain member states are more specific. Besides adopting existing EU legislation, they have also introduced into their domestic legislation an obligation of food safety, meaning that only food that is safe, wholesome and fit for human consumption can be placed on the market. Any food business that sells a food which does not meet these standards is liable to a criminal or administrative penalty. It is important to emphasise that such a condition of “safety and wholesomeness” constitutes an obligation owed by food businesses directly to the competent authorities. It is thus totally separate from the question of the liability of *producers* to *consumers* for defective products.

Although EU food legislation sets out a series of obligations on food businesses, except for the general Product Safety Directive, it does not currently contain a legal obligation that *only food which is safe, wholesome and fit for human consumption should be placed on the market*. Individual directives approach the question in different ways. For instance, there is an explicit requirement in some vertical hygiene directives for certain products to be fit for human consumption. Yet the general hygiene directive only states that the “preparation, processing, manufacturing, packaging, storing, transportation, handling and offering for sale or supply of foodstuffs shall be carried out in a hygienic way” (EC Commission, 1993a)

In contrast to food legislation, Article 3(1) Directive 92/59/EEC regarding general product safety imposes on manufacturers the obligation to place only safe products on the market (EC Commission, 1992b). However, doubts have been expressed as to whether the concept of product safety, which is laid down by this Directive, is or is not different from the requirement that foodstuffs should be safe, wholesome and fit for human consumption. For example, food may be adulterated with substances that do not of themselves present a health risk, and would not make the foodstuff unsafe within the meaning of Directive 92/59/EEC (EC Commission, 1992b). Nevertheless, such foodstuffs would not normally be considered as fit for human consumption.

The introduction of a general obligation of food safety and wholesomeness, (in addition to product safety), would thus serve to reinforce the overall level of consumer protection within the EU, by encouraging all food businesses to introduce their own internal safety and supervisory procedures. Such a new obligation of food safety may also help simplify overall EU food legislation, since it would avoid the need for more specific regulations in areas where general provisions would be sufficient. However, it would also be necessary to ensure that the introduction of a new obligation of safety and wholesomeness did not result in the creation of barriers to trade within the internal market. Thus, all measures should be compatible with the principles of the internal market, and, in particular, with the Treaty rules on the free movement of goods.

To be effective, any new general obligation of food safety and wholesomeness should, in principle, apply to the whole food chain, from primary production to the final sale of the foodstuff to the consumer. It must also take account of the fact that interactions between producers, manufacturers and distributors are becoming increasingly complex.

Such a new development should result in greater joint responsibility throughout the food chain, rather than dispersed individual responsibilities. Each link in the food chain should adopt the necessary measures to ensure that food safety within the context of its own specific activities, applying HACCP-type principles and other similar instruments. Where a food product is found to be not up to standard, the liability of each link in the chain should be reviewed according to whether it has properly fulfilled its own specific responsibilities. For example, it would appear wrong in principle to hold food retailers liable for the presence of an excessive quantity of food additives in a canned product over which they have no control. However, where cooked sliced cold meats are found to be microbiologically contaminated at the point of sale, further investigation would be required to determine whether or not the contamination has arisen as a result of poor hygiene during manufacture, a failure to respect the cold chain during distribution, or poor handling and storage at the point of sale. This discussion is closely related to the next section on due diligence.

Due Diligence

This situation on product liability raises the question of so-called “due diligence” defence. When a food company markets a foodstuff that does not conform to the safety requirements prescribed by EU or national law, that business may be liable to criminal or administrative penalties under the law of the member state concerned. However, in some member states, e.g., the UK, the firm is not liable if it can demonstrate that it has taken all the steps that could reasonably be expected of it in order to ensure that the food meets legal requirements, (due diligence and all reasonable precautions). Thus, compliance with the due diligence obligation constitutes an absolute means of defence in

any subsequent judicial or administrative procedure. In other member states, however, an operator would still be liable, although the fact that a company had exercised due diligence would be taken into account, in order to reduce the severity of the penalties imposed.

It is therefore argued here that a general obligation to insert food safety requirements into EU legislation should be accompanied by the introduction of a “due diligence” defence. The question of “due diligence” defence should also be considered in connection with the possibility of extending the scope of the obligation of safety to primary production.

Product Liability

In recent years, increasing demands have been heard, in particular from consumer organisations, for the inclusion of unprocessed primary agricultural production within the scope of the Product Liability Directive. These demands have escalated as a result of the *BSE* crisis.

In principle, the inclusion of unprocessed primary agricultural production within the scope of the Product Liability Directive should constitute an important step in the protection of consumers under EU legislation. Nevertheless, it must not be thought that such an extension would automatically constitute a solution to all the problems that may arise. Article 4 of the Directive stipulates that an injured person shall be required to prove the damage, the defect and the causal relationship between the defect and the damage. Experience has shown that it is very difficult to trace the precise source of outbreaks of food-borne disease. The longer the period between exposure to the

contaminated foodstuff and the onset of symptoms, the greater this problem becomes. In the specific case of *BSE*, even if a link were proved with the new variant of *Creutzfeldt Jakob Disease*, the associated lengthy incubation period means that it is virtually impossible to prove that a particular product is responsible for the damage caused.

A further question concerns the problem of tracing the origin of a foodstuff from the point of sale to the consumer and back to the point of production. The EU has recently adopted measures to ensure the traceability of products of bovine origin back to the point of production, and it has been suggested that these rules might be extended to other products of animal origin. Consideration is also needed as to whether further rules on traceability should be laid down in legally binding instruments, or whether these would be better covered on a voluntary basis.

In these circumstances, it would appear that the extension of the scope of the Product Liability Directive to cover unprocessed primary agricultural production should not be considered as an alternative to the development of appropriate product safety rules and effective official control systems, but as an additional measure in its own right.

Consumer Concerns

Taken together, these protection issues focus on the concerns of consumers. The principal aim of EU food law until now has been to ensure the free circulation of foodstuffs within the EU, largely through harmonised food legislation. By contrast, EU food law has not dealt, to any great extent, either with nutritional issues or with finding ways of meeting the needs of consumers.

For instance, consumers have become more and more worried about the methods through which their foods are produced. Increasingly, customers wish to ensure that the foods which they eat are yielded in a manner which is environmentally friendly and which meets the welfare needs of farm animals. Recent events, in particular, fears about the possible transmission of *BSE* to humans, have highlighted concerns that certain production methods may also have an impact on food safety. Other issues relevant to consumers have focused on the ethical and environmental impacts of new scientific developments, such as genetically modified organisms (GMOs) in foodstuffs and the application of cloning techniques.

EU legislation already contains many provisions that are intended to address these concerns. Nevertheless, they raise two important questions of direct relevance to food law: the safety issue and the matter of consumer information.

As far as food safety is concerned, there is no scope for compromise. The previous sections of this chapter have described how risk assessment and risk management techniques are integrated into the EU's policies for the foodstuffs sector. The maintenance of a high level of protection implies that it would not, however, be appropriate to authorise unsafe foods or food production methods subject to a labelling requirement. If they are not safe, they simply cannot be permitted.

As regards labelling, at present, Directive 79/112/EEC only requires information on processes or treatments to be provided on food labels in cases where the omission of such information is likely to create confusion in the mind of the consumer, for example, where products are powdered, freeze dried, deep-frozen, concentrated or smoked (EC Commission, 1979). In addition, irradiated foodstuffs must always be labelled. However,

EU legislation does not require the labelling of production methods or processes which do not have an impact on the food characteristics of the finished product. It is high time that it should, and some believe that this requirement should be extended to restaurant menus and wayside food stalls!

In general, experience suggests that, where there is a genuine consumer demand for more information about certain characteristics of a foodstuff, this demand will frequently be met by producers and distributors on a voluntary basis, for example, through labelling, telephone information lines or the Internet. It is therefore important for new EU measures to encourage the development of such voluntary initiatives. Moreover, in certain cases, such as the recent beef-labelling scheme, further mandatory measures may be appropriate.

Implementation

Now that the harmonisation of national foodstuff's legislation has largely been completed, it is necessary to ensure that the internal market operates effectively in order to provide the benefits anticipated for hoteliers and consumers.

The need to ensure efficient management of the internal market has been recognised by the Sutherland Report of October 1992: "The Internal Market after 1992, Meeting the Challenge" and by the European Council (EC Commission, 1992a). A series of Commission communications to the Council has also emphasised the need for efficient operation of the internal market:

- Management of the Mutual Recognition of National Rules after 1992 (COM (93) 669 final, 15 December 1993),

- Development of Administrative Co-operation for the Implementation and Application of EU Legislation in the Framework of the Internal Market (COM (94) 29 final, 16 February 1994),
- Making the most of the Internal Market (COM (93) 632 final, 22 December 1993),
and
- The Action Plan for the Internal Market (COM (97) 184).

More recently, the Internal Market Council has adopted a series of resolutions which is intended to ensure that the rules governing the operation of the internal market are as simple and straightforward as possible. While the possibilities for the simplification of EU food law have been considered already in this chapter, the following comments deal with current arrangements for ensuring the effective implementation of EU legislation within the internal market.

Functioning

In order to ensure the proper functioning of the internal market, it is clearly necessary to monitor the adoption of EU directives by member states and to verify that the rules are applied correctly. Besides the incorporation of EU legislation, it is common practice for the authorities in member states to issue implementing instructions or guidelines for enforcement officials. Such guidelines are intended to ensure that the legislation is applied uniformly throughout the member states concerned, and to resolve practical implementation problems. Nevertheless, such guidelines may cause difficulties for management of the internal market when even member states adopt different interpretations of the legislation, with the result that provisions are not applied uniformly

throughout the internal market. It is important, therefore, that transparency be maintained at EU level and that these differences be resolved wherever there is divergence.

For several years, the Commission has followed the informal working practice of submitting questions concerning the implementation of EU legislation to the standing committees. The ultimate responsibility for the interpretation of EU law lies with the Court of Justice.

According to the Treaty, responsibility for control and enforcement of EU rules primarily rests with the competent authorities of the member states. The main role of the EU in the field of control is not to replace the enforcement activities of the latter, but to control the manner in which they are implementing the relevant legislation in their countries. A central element of this control process is the Official Control of Foodstuffs Directive, 1989 (EC Commission, 1989a).

Control

The Official Control of Foodstuffs Directive 1989 lays down general principles for foodstuffs. The objective of the Directive is to facilitate the operation of the internal market by establishing mutual confidence between individual country inspectors, thereby removing the need to repeat controls for products produced in other member states.

Nevertheless, it should be emphasised that the official inspectorates of member states have limited resources and cannot examine every single batch of each product on a market, where the consumption of foodstuffs is evaluated at some ECU 500,000 million.

Moreover, systematic official inspections would not be appropriate, in view of the quality and safety control procedures developed by the industry in recent years.

For this reason, official inspections in all industrialised countries are increasingly focusing on the suitability and reliability of companies' own internal control procedures for meeting product conformity objectives. This situation means that public resources are used more efficiently, since inspection authorities can concentrate their efforts on those companies whose activities give grounds for concern, and reduce the frequency of official inspections of those firms that have introduced reliable and suitable control systems.

It would therefore seem appropriate, if a safety obligation is to be imposed on food companies, to include in EU provisions a general requirement that the official inspectorates should determine the intensity and frequency of inspections, not only in accordance with the level of risk presented by foodstuffs and the operations concerned, but also as a function of the suitability and reliability of internal procedures introduced by companies for ensuring and verifying that foodstuffs conform to the required standards. Applying this principle would bring the general provisions on the inspection of foodstuffs into line with Article 8 of the General Directive on Food Hygiene, (EC Commission, 1993a), which states that all food premises should be inspected at a frequency which has regard to the risk associated with the premises. In addition, due account should be taken, in the operation of the control systems of new tools which are being developed by the industry, such as indicators of freshness, which may be used to indicate whether or not there has been a break in the cold chain during the distribution of a product.

Finally, concerns have been expressed about the lack of transparency of certain aspects of food inspection and control activities, and the lack of consumer access to the work of the inspection systems. In its Communication on the role of sanctions in the implementation of EU legislation in the field of the internal market (COM (95) 162 final), the Commission concluded that the penalties laid down by member states for the infringement of internal market legislation should be equivalent to the sanctions set out in the corresponding provisions of member state legislation - effective, proportionate and dissuasive. These general principles were endorsed by the Internal Market Council in its resolution of 6 June 1996. It would therefore appear necessary that these principles should be introduced into EU food legislation.

In sectors which have not been harmonised at EU level, the jurisprudence of the Court of Justice provides a basis for ensuring the free movement of foodstuffs.

In its interpretative communications, the Commission has presented its understanding of the principles concerning the free movement of foodstuffs, in the light of the case law of the court. For example, in its 1989 Communication on the Free Movement of Foodstuffs within the EU, the Commission set out its interpretation of the rules applicable in the absence of EU legislation. Member states are required to admit to their territory foodstuffs lawfully produced and marketed in other member states. The importation and marketing of such foodstuffs may be restricted, in the absence of harmonised rules at EU level, only where such a measure can be demonstrated to be necessary in order to satisfy mandatory requirements, (public health, protection of consumers, fairness of commercial transactions and environmental protection), that are:

- proportionate to the desired objective, and

- the means of achieving that objective which least hinders trade.

In these communications, the Commission also described the major specific problems that concerned the free movement of foodstuffs, namely:

- trade description, (i.e., the name under which imported foodstuffs can be sold), and
- the presence of additives in foodstuffs.

Subsequently, the major problems described in the communications appear to have been largely resolved, either as a result of the harmonisation of legislation or as a result of developments in the case law of the Court.

From 1 January 1997, the Commission has had available an important new mechanism for the management of the internal market. In accordance with the provisions of the Decision of the European Parliament and the Council, establishing a procedure for mutual information on individual country measures deviating from the principle of the free movement of goods within the EU, member states are required to inform the Commission of any measure which impedes the free circulation of products that are legally produced or marketed in another member state. The progressive implementation of this new procedure provides the Commission with a much more accurate overview of the true situation within the internal market, thereby enabling it to take appropriate remedial action where necessary. These developments have several consequences for EU activities in the food sector:-

1. The growing requirement to provide scientific justification for its measures at the international level,

2. The importance of taking account of the international dimension of its scientific assessment work,
3. The need to ensure that new measures adopted by its major trading partners are also in accordance with their international obligations, and
4. The ability to play a full role during the negotiations within the *Codex Alimentarius* and other fora that lead to the adoption and acceptance of international standards.

Stage Four: Areas for Future Research

Before this thesis draws to a close, a number of areas for future research can be very briefly identified. The central debate in this study has focused on the respective influences of nationality, hotel type and/or job position on attitudes towards food safety. The data presented have shown that the latter two factors have the greater sway. One approach towards further isolating these key variables would be to conduct a similar research project based around a single hotel firm with a presence in all four countries. In such a manner, it should be possible to determine the extent to which a given transnational ethos overrides, or is driven by, local cultural conditions. Another area, noted within the earlier chapters, was the dissonance between attitudes and overt behaviour. The introduction of a range of co-present methods including in-depth interviews and/or observation would seek to address this variation in attitudes versus behaviour. Apart from attitudes towards food safety within the hotel, there is the further issue of stakeholders. Previous comments on this topic have illustrated the wide range of groups that influences food safety at both an EU and member state level. Measuring the power and influence that these groups have on the development of food safety would also be an interesting area for future investigation.

Concluding Remarks

The central message coming out of this study is that the realisation of food safety legislation within the context of the internal market, whilst laudable, has encountered, and will continue to meet with, difficulties in its effective implementation. In considering specifically food safety within the European hotel industry, there has been a move away from prescription to generalised principles contained within the relevant legislation. Yet, with such flexibility, differences have emerged in interpretation, all at the expense of the single market, free of trade barriers. Additionally, attitudinal differences have appeared at the unit level within the countries surveyed. The size of the EU inevitably means that more emphasis regarding food safety procedures will be placed on shifting responsibility to hotel proprietors and also on appropriate monitoring by authorities. However, because of the nature and structure of the European hotel industry, in terms of chain and independent hotels, and its transient workforce, the evidence suggests that a substantial minority is still not ready to assume these responsibilities. Such a situation may result in a twin track approach to legislation, where the *desire* may be for a horizontal approach, while the practice reflects a return to prescription. A legislative body in “two minds” will call into question the idealism of the Single European Act 1986 as it applies specifically to food (EC Commission, 1986).

This study has led to the conclusion that a choice lies between food safety initiatives that are “wide yet shallow” or “narrow and deeper” in their content. Differences in attitudes towards food safety have emerged in this study between countries, hotel types and

personnel, particularly as regards the latter two variables. Additionally, legislation has been shown to vary within the EU. Such differences are probably a result of the piecemeal nature of implementing EU food safety laws and the historical development of food safety within individual member states. Evaluative labels such as *good food* and *good wine* will inevitably vary inside an institution as diverse as the EU. Such food safety problems will only begin to be resolved once the EU takes the important step of establishing a European-wide food safety policy, expands the administrative food safety structure at the Commission and places greater emphasis on training, education and effective monitoring and control mechanisms. It is only with the development of such a policy and its effective co-ordination that the EU will avoid the legislative fragmentation that currently exists within the European hotel industry.

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Attitudes towards Food Safety within Selected Countries of The European
Hotel Industry

by

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Volume II. Appendices

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June, 1999

Appendix One - Fact Finding Questionnaire

Food Inspection of Retail Catering Establishments within Member States of the European Union

Overall Objective

The objective of this doctoral research is to undertake a two stage comparative analysis on food inspection legislation and policy in the EU's member states and determine the organisational and cost implications for retail catering premises. Central to this research is that differences in legislation between member states have had, and are having, organisational and cost implications for retail catering premises.

The first stage in achieving this research objective is the completion of the enclosed questionnaire. Your co-operation would be most appreciated and I would be grateful if you return the completed questionnaire in the enclosed envelope.

Please return to:

Tim Knowles

Lecturer in Hotel Management

Department of Management Studies

University of Surrey

Guildford, Surrey. GU2 5XH

England

Objectives of Stage 1 of this Doctoral Research

To determine the development of food enforcement legislation and policy in member states, with particular reference to the following;

1. EC Official Control of Foodstuffs Directive June 1989
2. EC Directive on the Hygiene of Foodstuffs June 1993

It aims to;

1. Identify differences in policy, procedure and legislation between member states
2. Identify differences in policy, procedure and legislation within the regions of member states
and to
3. Relate food inspection procedures within member states to the number of catering premises, the market for eating meals away from home and the country's total population size

The Industry Sector to be considered is;

Retail catering establishments either commercial or non profit making.

Questionnaire

Please answer the following questions and return to Mr Tim Knowles

PART A NATIONAL LEGISLATION

Q1 Are any of the following **exempt** from food safety legislation in your country ?

please **TICK**

Hotels	
Hospital Catering	
Guest Houses	
Bars	
Factory Canteens	
School catering	
Restaurants	

Q2 Which central government organisation is responsible for the inspection of food composition in your country ?.

--

Q2a Please give its full address and the senior officer responsible

Senior Officer	
Address	
Telephone	
Fax	

Q2b Is responsibility for the inspection of food composition devolved by region within your country ?.

Yes	No
-----	----

Q2c If **YES**, can the regional organisations determine their own legislation

Yes	No
-----	----

Q3 Which central government organisation is responsible for the inspection of food labelling in your country ?

--

Q3a Please give its full address and the senior officer responsible

Senior Officer	
Address	
Telephone	
Fax	

Q3b Is responsibility for the inspection of food labelling devolved by region ?.

Yes	No
-----	----

Q3c If YES, can the regional organisations determine their own legislation ?

Yes	No
-----	----

PART B HYGIENE INSPECTION

Q4 Which central government organisation is responsible for the hygiene inspection of **RETAIL** catering establishments in your country ?

--

Q4a Please give its full address and the senior officer responsible

Senior Officer	
Address	
Telephone	
Fax	

Q4b Is responsibility for the inspection of **RETAIL** catering establishments devolved by region ?.

Yes	No
-----	----

Q4c If YES, can the regional organisations determine their own legislation ?

Yes	No
-----	----

Q5 Do the food enforcement authorities use statistical based sampling in determining the number of food samples taken from **RETAIL** catering establishments ?

Yes	No
-----	----

Q5a If YES, is such an approach written into legislation ?

Yes	No
-----	----

Q5b If statistical based food sampling is used, on what basis are samples selected?

	Yes	No
Total Population		
Number of Catering Premises		
Other PLEASE SPECIFY		

Q6 Does frequency of inspection of retail catering premises involve categorising premises on the basis of food safety risk ?

Yes	No
-----	----

Q7 If YES, is such a food safety risk categorisation system formalised i.e. legislation or informal i.e. codes of practice or general food enforcement policy ?.

	Yes	No
Formalised i.e. legislation		
Informal i.e. codes of practice or general policy		

Q8 In inspecting **RETAIL** catering establishments do enforcement authorities inspect documents e.g. delivery notes from suppliers or manufacturers batch numbers on packaging.

Yes	No
-----	----

Q9 Does food safety inspection of **RETAIL** catering premises involve access to recipes i.e. their composition and formulation ?

Yes	No
-----	----

PART C EUROPEAN UNION LEGISLATION

Q10 Have changes to national legislation since 1989 been required to comply with the EC Official Control of Foodstuffs Directive ?.

Yes	No
-----	----

Q10a If YES, have they related to food safety enforcement practices in **RETAIL** catering premises ?

Yes	No
-----	----

Q10b If **YES**, have they included any of the following . Please give date of implementation. If **NO**, were any of these measures introduced prior to 1989 ?. Please give date of implementation.

	Yes	No	Date of Implementation
Industry Codes to Good Hygiene Practice			
Food Hygiene Training for Food Handlers			
Introduction of food safety risk assessment of catering premises			
Recommended use of EN29000			
Compilation of national food enforcement statistics			
Introduction into legislation of microbiological criteria			
Changes in temperature control			
Registration of food premises			
Licensing or prior approval of food premises			

Q11 Have changes been required in national legislation since 1993 in order to comply with the EC Directive on the Hygiene of Foodstuffs ?.

Yes	No
-----	----

Q11a If **YES**, have they related to food safety enforcement practices in **RETAIL** catering premises ?

Yes	No
-----	----

Q11b If YES, have they included any of the following . Please give date of implementation. If NO, were any of these measures introduced prior to 1993 ?. Please give date of implementation.

	Yes	No	Date of Implementation
Industry Codes to Good Hygiene Practice			
Food Hygiene Training for Food Handlers			
Introduction of food safety risk assessment of catering premises			
Recommended use of EN29000			
Compilation of national food enforcement statistics			
Introduction into legislation of microbiological criteria			
Changes in temperature control			
Registration of food premises			
Licensing or prior approval of food premises			

PART D THE INSPECTORATE AND ITS POWERS

Q12 What is the size of inspectorate concerned with hygiene of catering establishments on a national basis ?

--

Q13 What are the maximum criminal sanctions that can be applied to contraventions of food hygiene legislation in **RETAIL** catering premises and to what level ?

	Yes	No	Maximum Level
Fine			
Imprisonment			
Both			

Q14 Can food enforcement sanctions in **RETAIL** catering premises be applied to any of the following ?.

	Yes	No
Improve; the structure of the premise and/or a food process and/or a piece of kitchen equipment		
Prohibit the use of food process and/or a piece of kitchen equipment		
Do the inspectorate have sanctions for the immediate closure of RETAIL catering premises		

Q15 Is there an appeals procedure in place against a food enforcement officer's decision

Yes	No
-----	----

Q15a If **YES**, at what legislative level is it at;

Level	Yes	No
Local		
Regional		
National		

PART E FOOD HYGIENE TRAINING

Q16 Is there compulsory food hygiene training for staff who directly handle food in your country ?

Yes	No
-----	----

Q16a If **YES**, when did training become compulsory. Please give the date of implementation

--

Q16b Is the level and content of that training determined by legislation ?

Yes	No
-----	----

Q16c If **NO** to question 16b , is the level and content of that training determined by non statutory codes of practice?.

Yes	No
-----	----

Q16d Is there a legislative requirement for staff in **RETAIL** catering premises who do **NOT** directly handle food to be trained in food hygiene matters i.e. supervisors or managers ?

Yes	No
-----	----

PART F LICENSING OF RETAIL CATERING PREMISES

Q17 Is there a system of licensing **RETAIL** catering premises prior to opening in your country

Yes	No
-----	----

Q17a If **YES**, when did licensing become compulsory ?

--

Q17b If **YES** to **question 17**, are the nature of the structure, fixtures, fittings and equipment of the **RETAIL** catering premises determined by legislation ?

Yes	No
-----	----

Q17c If **NO** to **question 17b**, are the nature of the structure, fixtures fittings and equipment of the **RETAIL** catering premises determined by non statutory codes of practice?.

Yes	No
-----	----

PART G MICROBIOLOGICAL SAMPLING

Q18 Has microbiological sampling of foodstuffs been written into legislation ?

Yes	No
-----	----

Q18a If **YES**, when was it written into legislation ?

--

Q18b If **YES** to **question 18** does the legislation identify specific pathogenic organisms ?. Please specify.

PART H HAZARD ANALYSIS

Q19 Have the principles of Hazard Analysis Critical Control Point been written into legislation ?

Yes	No
-----	----

Q19a If YES, when was it written into legislation ?

PART I TEMPERATURE CONTROL

Q20 What is the maximum chill temperature for perishable foods kept on **RETAIL** catering premises ?

Q20a When was this written into legislation ?

Q21 What is the minimum hot holding temperature for foods to be served hot and kept on **RETAIL** catering premises ?

Q21a When was this written into legislation ?

PART J FOOD CONTROL STATISTICS

The purpose of this part of the questionnaire is to gain national food control statistics relevant to Retail Catering Premises. The majority of statistics requested are contained in the returns required under article 14 of the Official Control of Foodstuffs Directive 1989 to be supplied to the EU Commission

Q22 What was the total number of food safety inspection visits on catering retail premises (including multiple visits) in:

1991=	1992=	1993=
-------	-------	-------

Q23 What was the total number of prosecutions for a food safety related offence in **RETAIL** catering establishments during:

1991=	1992=	1993=
-------	-------	-------

Q24 How many Immediate closure of **RETAIL** catering premises due to food safety reasons were undertaken during:

1991=	1992=	1993=
-------	-------	-------

Q25 How many official samples were taken for pathogenic organisms

	1991	1992	1993
Listeria			
Salmonella			
Other PLEASE SPECIFY			
Total Samples			

Q26 Of the total number of official samples, how many were found to be positive

1991=	1992=	1993=
-------	-------	-------

Q27 Please enter your name, job title, work address, telephone number and FAX number in the box below

Your Name and Job Title	
Your Work Address	
Telephone	
Fax	

Thankyou for your co-operation. Please return the completed questionnaire in the enclosed addressed envelope.

Appendix Two - Fact Finding Questionnaire Addresses

Addresses

Ref: TK/WSH

Dear Sir

I am at present undertaking PhD research into the food safety legislation of member states of the European Union. Despite the fact that food safety legislation is a single market issue, differences in both approach and implementation can be detected in a number of countries. The enclosed questionnaire will be sent to government officials and their representatives in: United Kingdom, France, Germany, Denmark, Netherlands and Spain.

Completing this questionnaire will take approximately 20 minutes of your time. I do hope you are in a position to assist me in my research. Please return the completed questionnaire to me in the enclosed self addressed envelope. If you have any queries please feel free to contact me on:

Telephone : (0)1483 259 342
Fax : (0)1483 259 387

Thank you in anticipation of your help.

Yours sincerely

Tim Knowles
Lecturer in Hotel Management

Enc

Denmark (13)

Forbrugerradet
Fiolstrade 17
1017 København K.
Denmark

Sundheds Ministeriet
Herlut Trolles Gade 11
1052 København K.
Denmark

Forbruger Styrelsen
Amager Falledvej 56
2300 København S.
Denmark

Sundheds Styrelsen
Amaliegade
Postboks 2020
1256 København K.
Denmark

Levnedsmiddel Styrelsen
Møkhj Bygade 19
2860 Søborg
Denmark

Arhus Kommune, Levnedsmiddel - og Miljøtilsyne
Gøteborg Allé 1
8200 Arhus N.
Denmark

Veterinar Direktoratet
H. Pontoppidansgade 2
8000 Arhus N.
Denmark

Landhrugs Ministeriet
Slotsholmsgade 10
1216 Københarn K.
Denmark

Forbrugerradet
Fiolstrade 17
1017 København K.
Denmark

Forbruger Styrelsen
Amager Falledvej 56
2300 København S.
Denmark

Mr Finn H Clemmensen
National Food Agency of Denmark
Moerkhoej Bygade 19
DK 2860 Soeborg
Denmark
Tel: 010 45 39 69 66 00
Fax: 010 45 39 69 61 26

Mr Ole Kopp Chistensen
Director General
National Food Agency of Denmark
Moerkhoej Bygade 19
DK 2860 Soeborg
Denmark
Tel: 010 45 39 69 66 00
Fax: 010 45 39 66 01 00

Kristian Nickolia Vinter Knudsen
Veterinary, Msc.
National Food Agency of Denmark
Moerkhoej Bygade 19
DK 2860 Soeborg
Denmark
Tel: 010 45 39 69 66 00
Fax: 010 45 39 66 01 00

France (8)

Madame Gauthier
Responsable
Direction des Services Veterinaires
Du Dept du Lain
Chemin de la Miche
Cénard, 01012
Bourg-en-Bresse CEDEX
Tel: 74 456 180
Fax: 74 450 075

Monsieur Jean-Christophe TOSI
Chef de Bureau
Ministere de L'Agriculture et des la Peche
Service de la Qualité Alimentaire et der
Accions Vélérinaire et Plyto - Sanitairc
Direction Générale de l'Alimentation
175 rue du Chevalevet
75646 Paris CEDEX 13
Tel: (1) 495 58491

Dr Philippe Mellin
Directeur
Services Veterinaires du Dept des Bougies
Du Rhone
66a rue St. Sébastien
BP 23 134 47
Marseille, Cantigny CEDEX 06
Tel: 91 37 2170
Fax: 91 81 23 15

Dr Vre F Bonet
Le Directeur des Services Veterinaires
Services Vélérinaines du Dept au Loinet
1 bis rue St. Evverte
45043 Oriéans CEDEX 3
Tel: 38 54 1570
Fax: 38 53 0923

Services Vélérinaires
52 rue au Maubeuge
59008 L'Ile
Tel: 20 52 6497
Fax: 20 86 1671

Ministere de l' Agriculture et de la Peche
Direction Generale de l' Alimentation (Produits animaux et d'origine animale)
175 rue du Chevaleret
75646 Paris, Cedex 13.
Tel: 49 55 49 55
Fax: 49 86 63 08

Ministere de l'Economie et des Finances
Direction Generale de la Concurrence Consommation et Repression des
Fraudes
59 boulevard Vincent Auriol
75703 Paris Cedex 13
Tel: 44 87 17 17
Fax: 44 97 30 30

Ministere de la Sante
Direction Generale de la Sante (Eaux de consommation)
8 avenue de Segur
75007 Paris
Tel: 40 56 60 00
Fax: 46 62 47 21

Netherlands (1)

Mr Van Kooi
Coordinator of Food Inspection Officers
Ministerie van Welzijn Volksgezondheid en Cultuur
Postbox 5840
2280 HV Rijswijk
Netherlands
Tel: 010 31 70 340 69 62
Fax: 010 31 70 340 54 35

Spain (2)

D. Jose Domingo Gomez Bastallo
Director General (Managing Director)
Instituto Nacional de Consumo (INC)
28006 Madrid
Spain
Tel: 010 34 1 431 18 92
Fax: 010 34 1 435 94 12

Ministerio de Sanidad Y Consumo
Direccion General De Salud Publica
Sr D Juan Fracisco Polledo
Paseo del Prado 18-20
28071 Madrid Spain
Tel: 596 19 93
Fax: 91 596 44 09

Subdireccion Higiene de Los Alimentos
Fax Gabinete: 5961547/8
Fax del Director General De Salud Publica: 5964409
Subdirector General : D Jose Ignacio Arranz Recio Tel: 5962070/5961964
Jefa del Area de Ordenacion Alimentaria: Rosa Sanchidrian Fernandez Tel:
5962099
Servicio de Ordenacion Y Vigilancia Alimentaria : Micaela Garcia Tejedor Tel:
5961993
Servico de Normativa Tecnica : Isabel Vila Valero Tel : 5961976
Servicio de Nutricion :Ma Luz Carretero Baeza Tel: 5961962/3
Servicio de Programas de Prevencion de Riesgos en Alimentos : Oscar
Hernandez Prado Tel: 5961967/8
Servicio de Registro General Sanitario de Alimentos : Jacinto Ascorve
Dominguez Tel : 5961950/1

Ministerio De Agricultura Pesca Y Alimentacion
Paseo de la Infanta Isabel, 1
28014 Madrid , Spain.
Tel: 91 347 50 00

Germany (1)

Mr Epstein
Food Law Officer
Arbeitsgemeinschaft der Verbraucher
Heilsbachstr.20
53123 Bonn
Tel: 010 49 22 86 48 91 49
Fax: 010 49 22 86 44 25 8

United Kingdom (4)

MAFF
Food Safety Directorate
Room 303a
Ergon House
c/o Nobel House
17 Smith Square
London SW1P 3JR

Mr C A Cockbill
Ministry of Agriculture Fisheries and Food
Room 308
Ergon House
17 Smith Square
London
SW1P 3JR
Tel: 0171 238 6278
Fax: 0171 238 6773

Mr R Cunnningham
Department of Health
Room 608A
Skipton House
80 London Road
London
SE1 6LW
Tel: 0171 972 5032
Fax: 0171 972 5138

Mr M Meekums
Executive Officer
Ministry of Agriculture Fisheries and Food
Consumer Protection Division
Room 303B
Ergon House
17 Smith Square
London
SW1P 3JR
Tel: 0171 238 6762
Fax: 0171 238 6763

Italy (8)

Comando Carabinieri
Nucleo Anti Sofisticazione
Piazza Albania
00153
Roma
Ref: Tenente Montanino
Tel: 010 39 6 57 44288

USL - Unita Sanitaria Locale 75/2
Via Cherasco 7
20100 Milano
Coordinatore sanitario (health coordinator) Dott.ssa Porro
Tel: 010 39 2 66212710 / 66212111

Direzione Generale per l'Igiene e la Nutrizione
del Ministero della Sanita
Piazza Marconi 25
00144
Roma
Ref Dott Marchese
Tel: 010 39 6 59943556
Fax: 010 39 6 59943598

USL - Unita Sanitaria Locale 28
Via Ugo Bassi 2
40100
Bologna
Coordinatore sanitario (health coordinator) Dott Brunotti
Tel: 010 39 51 207411

USL - Unita Sanitaria Locale RM/A
Via GB Piatti 19
00185
Roma
Coordinatore sanitario (health coordinator) Dott G Topini
Tel: 010 39 6 77301
Fax: 010 39 6 77302279

USL - Unita Sanitaria Locale 10/A
Servizio Igiene Pubblica
Via Degli Alfani 56
50100
Firenze
Responsabile Igiene (hygiene officer) Dott ssa Baroncini
Tel: 010 39 55 27584911

AL l'Alimentarista (journal specialising in food industries)
Mrs Antonella Parolo
Tel: 010 39 331 740675 (home)

Mr Calogero Moscato
Via Vittorio Scati 1
15011 Acqui Terme (Alessandria)
Tel/Fax: 010 39 144 324885

European Union (3)

Alex Mossel
(Runs food inspection, is following up programme of exchange between EU states)
Tel: 010 32 2 295 3147 (direct line)

Paul Allen
Sussex University
ITSA
351 London Road
Hadleigh
Essex
SS7 2BZ, or
County Trading Standards Officer
Trading Standards Department
PO Box 5
County Hall
Lewes
East Sussex
BN7 1SW
Tel: 0273 481526
Fax: 0273 482555

Christine Majewski
DGIII C1
European Commission
Nerv 3/24
200 Rue de la Loi
1049 Brussels
Tel: 010 322 295 0874

Appendix Three - Fact finding Interviews Pilot Study Stage

Interview / Group Discussions

Part A Introduction

- 1.How would you define food safety what are the areas you feel it encompasses ?
- 2.Please explain the policies and procedures you have at your hotel on food safety ?
- 3.How has your attitude towards food safety changed over the past three years?
- 4.Have you or your staff undergone any training in food safety ?

Part B Europe

- 5.Are you aware of European directives on food safety being implemented ?
- 6.Do you believe EU directives help or hinder food safety in your hotel ?
- 7.How do you keep up with food safety legislation ?
- 8.Do you think there should be differences in food legislation between European countries ?

Part C National

- 9.Do you see a difference between food poisoning, food contamination, food labelling ?
- 10.Do you believe that these three elements contribute to food safety ?
- 11.How are changes in national food safety legislation communicated to you ?
- 12.Do you believe that national food safety legislation is important to the hotel industry ?

Part D The Hotel

13. Please explain how your hotel policies and procedures help prevent food poisoning ?

14. Do you implement food hygiene training at your hotel and what areas does it cover ?

15. Are there any aspects of your food safety policies that you would change ?

16. Do you believe it is important to have a written policy on food safety ?

17. How do those policies vary with the food safety issue ?

18. Is there any particular food safety code of practice that you follow ?

19. What do you believe has the greatest potential to cause food poisoning ?

20. Have you ever heard of the term hazard analysis critical control point HACCP ?

21. Do you believe purchasing, stock control and proper kitchen design assists in food safety ?

Part E Enforcement

22. Who is the food safety enforcement authority that enforces food safety at your hotel ?

23. Does that authority advise on legislation ?

24. Does that authority react to breaches of food safety or does it advise in order to avoid such breaches ?

25. How frequently is your hotel visited by an enforcement officers ?

26. To what extent do you inform staff under your control about the results of such a visit ?

27. Do you have a programme of keeping records on food temperature, training and cleaning ?

28. To what extent are your staff involved in that record keeping process ?

29. To what extent has such records been changed and updated over the past 2 years ?

Appendix Four: The Questionnaire - English Version

Dear General Manager

I am researching the hotel industry's opinions on food safety, at both management and operational level, throughout the European Union (EU). This information I hope will assist the hotel industry in expressing its views on the harmonisation of EU food safety legislation.

This research has the support of a number of international hotel companies including, *Forte Plc, Inter-Continental Hotels and Hilton International.*

If you wish, I am quite happy to supply you with a summary of the research findings.

The attached questionnaire is one of the measures that I am using to investigate the issues surrounding food safety within the Hotel industry.

It is important to emphasise that all information received will be treated as *confidential*, and no individual or hotel will be identified in any materials arising from the research.

I would be most appreciative if you would distribute the enclosed questionnaires to; **food and beverage managers, chefs and waiters**. I am keen to get a response of between 5 - 10 completed questionnaires from your hotel.

May I thank you for your co-operation in anticipation. If you wish to contact me about this research I am available on: +44 1483 259 342 or local 01483 259342

Yours faithfully

Tim Knowles

Lecturer in Hotel Management

PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO ME AT THE DEPARTMENT OF MANAGEMENT STUDIES, ADDRESS BELOW, IN THE ENCLOSED ENVELOPE:

Dear Participant

I am interested in the hotel industry's opinions on food safety, at both management and operational level, throughout the European Union (EU). This research will assist the hotel industry in expressing its views on the harmonisation of EU food safety legislation and has the support of a number of international hotel companies including, Forte Plc, Inter-Continental Hotels and Hilton International.

If you wish, I am quite happy to supply you with a summary of the research findings.

The attached questionnaire is one of the measures that I am using to investigate the issues surrounding food safety within the hotel industry.

All information received will be treated as confidential and no individual or hotel will be identified, in any materials arising from the research.

About the questions: there are no right or wrong answers, I simply want to know what you think about these issues. Your answers are for research purposes only and have nothing to do with any authorities, so please answer all questions as fully and as honestly as possible. It is important to answer every question.

If you have any queries or extra comments to make about the issues dealt with in the questionnaire, I have attached an extra page. Please feel free to make your comments there.

May I thank you for your co-operation in anticipation. If you wish to contact me about this research I am available on: +44 1483 259 342 or local 01483 259342

Yours faithfully

Tim Knowles

Lecturer in Hotel Management

PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO ME AT THE DEPARTMENT OF MANAGEMENT STUDIES, ADDRESS BELOW, IN THE ENCLOSED ENVELOPE.

Confidential
University of Surrey
Food Safety Questionnaire

Section A

1.

Please indicate the size of your hotel in terms of rooms by circling the appropriate number.

<i>Size</i>		<i>Circle</i>
Small	10 - 99 rooms	1
Medium	100 - 199 rooms	2
Large	200 or more rooms	3

1a

Please indicate the country in which your hotel is located.

.....

1b

Please indicate the city or town in which your hotel is located.

.....

1c

In your opinion, please indicate in terms of percentages the number of business travellers, leisure travellers and local demand for **food and beverages at your hotel.**

Business travellers
 Leisure travellers
 Local demand
TOTAL SHOULD = 100%

2

Please indicate the size of your hotel in terms of full time employees by circling the appropriate number.

<i>Size</i>		<i>Circle</i>
Small	less than 10 employees	1
Medium	10 - 99 employees	2
Large	100+ employees	3

3

Please indicate how many hours in the day, food and beverage facilities are available at your hotel.

Hours

Food.....
 Alcoholic Beverages.....
 Non Alcoholic beverages.....

4

Which of the following categories best describe your hotel
(please circle one number only).

	Circle
Part of a chain of hotels	1
Independent or family owned business	2

5 Are you male or female? (Please circle the appropriate number)

Male	1	Female	2
------	---	--------	---

6

How old are you? (Please circle the appropriate number.)

	Circle
under 20	1
20 - 29	2
30 - 39	3
40 - 49	4
50 - 59	5
60 or over	6

7

How many years of formal education in **hotel and catering** have you had ?
(Please circle the appropriate number)

	Circle
None	1
less than 1 year	2
1 less than 2 years	3
2 less than 3 years	4
3 years or more	5

7a

How many years of practical experience have you had in the **hotel and catering industry** ?
(Please circle the appropriate number)

	Circle
less than 1 year	1
1 less than 2 years	2
2 less than 3 years	3
3 years or more	4

8

What is your nationality?

Please state

9

How long have you held your present position at this hotel ?

..... years months

10

Please indicate your position within the company
(please circle the appropriate number).

	Circle
manager	1
supervisor	2
head chef	3
chef	4
waiter	5
other, please specify:	6

11

What rating is your property? (Please circle the appropriate number or its equivalence if you do not employ a star rating system.)

	Circle
5 Star	5
4 Star	4
3 Star	3
2 Star	2
1 Star	1

Section B

12

Please give your view on the following question (circle appropriate number).
A country's national food safety legislation helps:

	Strongly Agree	Agree	Uncertain	Disagree	Strongly disagree
Prevent food poisoning	5	4	3	2	1
Prevent contamination of food eg. glass, etc.	5	4	3	2	1
Prevent misleading labels and/or advertising	5	4	3	2	1
Encourages a strong awareness of food hygiene	5	4	3	2	1
Enhance the reputation of the hotel industry	5	4	3	2	1

13

Please give your view on the following question (circle the appropriate number)

My hotel's policies and procedures on food safety help:

	Strongly Agree	Agree	Uncertain	Disagree	Strongly disagree
Prevent food poisoning	5	4	3	2	1
Prevent contamination of food eg. glass, etc.	5	4	3	2	1
Prevent misleading labels and/or advertising	5	4	3	2	1
Encourages a strong awareness of food hygiene	5	4	3	2	1
Enhance the reputation of the hotel industry	5	4	3	2	1

Section C

14

Please indicate how important **YOU** think the following are in the safe food operation of your hotel (circle the appropriate number).

	very-important	important	not-important	un-important	very un-important
Food temperature control	5	4	3	2	1
Personal hygiene	5	4	3	2	1
Kitchen premises structure	5	4	3	2	1
Staff washing facilities	5	4	3	2	1
Staff training in food hygiene	5	4	3	2	1
Adequate purchasing	5	4	3	2	1
Adequate stock control	5	4	3	2	1

15

Does your hotel have a written or unwritten policy on the following topics ?. Please circle the appropriate number.

	written	unwritten	no policy
Food temperature control	3	2	1
Personal hygiene	3	2	1
Kitchen premises structure	3	2	1
Staff washing facilities	3	2	1
Staff training in food hygiene	3	2	1

16

Is there a government or national code of practice on any of the following in your country?
Is it legally enforceable?

Please circle either **yes** or **no** in both columns.

	Code of Practice	Legally enforceable
Food temperature control	Yes / No	Yes / No
Personal hygiene	Yes / No	Yes / No
Kitchen premises structure	Yes / No	Yes / No
Staff washing facilities	Yes / No	Yes / No
Staff training in food hygiene	Yes / No	Yes / No

17

Please answer the following questions (circle the appropriate number).

Which of the following has the potential to lead to food poisoning .

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree
Inadequate temperature control	5	4	3	2	1
Inadequate hygiene training	5	4	3	2	1
Cross contamination	5	4	3	2	1
Inadequate personal hygiene	5	4	3	2	1
Inadequate cleaning & disinfection	5	4	3	2	1

If you are in a management role please answer question 18. If you are in an operational role please answer questions 18a and 18b.

18

If you are in a **management role**, how often was the hotel visited by the food enforcement authorities in the past 12 months.(Please circle the appropriate number)

	Circle
Once	1
Twice	2
Three or more times	3
No visits	4

(GO TO Question 19)

18a

If you are in an **operational role**, are you aware of the visits by food enforcement authorities. Please circle the appropriate number.

Yes	1	No	2
-----	---	----	---

(IF YES TO QUESTION 18a, PLEASE ANSWER QUESTION 18b)

(IF NO TO QUESTION 18a, PLEASE GO TO QUESTION 19)

18b

If you are in an **operational role**, are the results of visits from enforcement authorities communicated to you (please circle the appropriate number)

<i>Always</i>	<i>1</i>	<i>Sometimes</i>	<i>2</i>	<i>Never</i>	<i>3</i>
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19

On which of the following does the hotel keep written records (please circle the appropriate number).

	YES	NO
Food temperature controls	1	2
Staff training records	1	2
Cleaning & disinfection records	1	2

20

If you have answered **YES to question 19** please state in **your view** if the keeping of such records has led to a change in procedures within the hotel over the past 12 months.
(please circle the appropriate number).

	YES	NO
Food temperature controls	1	2
Staff training records	1	2
Cleaning & disinfection records	1	2

Thank you for your co-operation. Please turn to the last page.

Would you mind checking that you have answered **ALL** questions?

There is space here for any further comments you would like to make concerning food safety.

APPENDIX Five -

List of Hotels Contacted

UK

The General Manager
Radisson Edwardian,
140 Bath Road
Hayes
UB3 5AW

The General Manager
Holiday Inn
Crowne Plaza Heathrow
Stockley Road
West Drayton UB7 9NA

The General Manager
Sheraton Skyline
Bath Road
Hayes
UB3 5BP

The General Manager
London Heathrow Hilton
Terminal 4
TW6 3AF

The General Manager
Excelsior Heathrow (Forte)
Bath Road
West Drayton
UB7 0DU

The General Manager
Forte Crest
Simpson Road
West Drayton
UB7 0JU

The General Manager
Sheraton Heathrow
Colnbrook Bypass
West Drayton
UB7 0HJ

The General Manager
Novotel
Cherry Lane
West Drayton
UB7 9HB

The General Manager
Forte Posthouse
Bath Road
Hayes
UB3 5AJ

The General Manager
Heathrow Park (Mt Charlotte Thistle)
Bath Road
Longford
West Drayton, UB7 0EQ

The General Manager
London Gatwick Airport Hilton
South Terminal
RH6 0LL

The General Manager
Ramada Hotel Gatwick
Povey Cross Road
London
RH6 0PH

The General Manager
Forte Crest
Gatwick Airport (North Terminal)
Rh6 0PH

The General Manager
Forte Posthouse
Povey Cross Road
London
RH6 0BA

The General Manager
Holiday Inn Kings Cross
1 Kings Cross Road
London WC1X 9HX

The General Manager
Russell Hotel (Forte)
Russell Square
London WC1B 5BE

The General Manager
Marlborough Hotel
9-14 Bloomsbury Street
London WC18 3QD

The General Manager
Mountbatten Hotel
20 Monmouth Street
WC2H 9HD

The General Manager
Grafton Hotel
130 Tottenham Court Road
London W1P 9HP

The General Manager
Kenilworth Hotel
97 Great Russell Street
London
WC1B 3LB

The General Manager
Forte Crest Bloomsbury
Coram Street
London
WC1N 1HT

The General Manager
Montague Park Hotel
12-20 Montague Street
London WC1B 5BJ

The General Manager
Blooms Hotel
7 Montague Street
London WC1B 5BP

The General Manager
Bonnington Hotel
92 Southampton Row
London WC1B 4BH

The General Manager
Euston Plaza Hotel
17/18 Upper Woburn Place
London WC1H 0HT

The General Manager
Swiss Cottage Hotel
4 Adamson Road
London NW3 3HP

The General Manager
Forte Posthouse
215 Haverstock Hill
London NW3 4RB

The General Manager
Clive Hotel
Primrose Hill Road
London NW3 3NA

The General Manager
Drury Lane Moathouse Hotel
10 Drury Lane
High Holborn
London WC2B 5RE

The General Manager
White House Hotel
Albany Street
Regents Park
London NW1 3UP

The General Manager
Regents Park Marriott Hotel
128 King Henrys Road
London NW3 3ST

The General Manager
La Reserve Hotel
422-428 Fulham Road
London SW6 1DU

The General Manager
Hyatt Carlton Tower Hotel
2 Cadogan Place
Chelsea, London
SW1X 9PY

The General Manager
Sheraton Park Tower Hotel
101 Knightsbridge
London SW1X 7RN

The General Manager
Conrad London Hotel
Chelsea Harbour
London SW10 0XG

The General Manager
Durley House Hotel
115 Sloane Street
London SW1X 9PJ

The General Manager
Capital Hotel
22-24 Basil Street
London SW3 1AT

The General Manager
Draycott Hotel
24-26 Cadogan Gardens
London SW3 2RP

The General Manager
Cadogan Hotel
75 Sloane Street
London SW1X 9SG

The General Manager
Franklin Hotel
28 Egerton Gardens
London SW3 2DB

The General Manager
Basil Street Hotel
8 Basil Street
London SW3 1AH

The General Manager
Chelsea Hotel
17-25 Sloane Street
London SW1X 9NU

The General Manager
Sydney House Hotel
9-11 Sydney Street
London SW33 6PU

The General Manager
Egerton House Hotel
17-19 Egerton Terrace
London SW3 2BX

The General Manager
Sloane Hotel
29 Draycott Place
London SW3 2SH

The General Manager
Eleven Cadogan Gardens Hotel
11 Cadogan Gardens
London SW3 2RJ

The General Manager
L'Hotel
28 Basil Street
London SW3 1AT

The General Manager
Royal Court Hotel
Sloane Square
London SW1W 8EG

The General Manager
The Milestone Hotel
1-2 Kensington Court
London W8 5DL

The General Manager
Halcyon Hotel
81 Holland Park
London W11 3RZ

The General Manager
Cophorne Tara
Scarsdale Place
London W8 5SR

The General Manager
Kensington Park Hotel
16-32 De Vere Gardens
London W8 5AG

The General Manager
London Kensington Hilton
179-199 Holland Park Avenue
London W11 4UL

The General Manager
Hilton National London Olympia
380 Kensington High Street
London W14 8NL

The General Manager
Kensington Palace Thistle
8 De Vere Gardens
London W8 5AF

The General Manager
Kensington Close Hotel
Wrights Lane
London W8 5SP

The General Manager
Harrington Hall Hotel
5-25 Harrington Gardens
London SW7 4JW

The General Manager
Gloucester Hotel
4-18 Harrington Gardens
London SW7 4LH

The General Manager
Pelham Hotel
15 Cromwell Place
London SW7 2LA

The General Manager
Blakes Hotel
33 Roland Gardens
London SW7 3PF

The General Manager
Rembrandt Hotel
11 Thurloe Place
London SW7 2RS

The General Manager
Swallow International Hotel
Cromwell Road
London SW5 0TH

The General Manager
Holiday Inn
100 Cromwell Road
London SW5 4ER

The General Manager
Regency Hotel
100 Queen's Gate
London SW7 5AG

The General Manager
Vanderbilt Hotel
68-86 Cromwell Road
London SW7 5BT

The General Manager
Jury's Kensington Hotel
109-113 Queen's Gate
London SW7 5LR

The General Manager
Forum Hotel
97 Cromwell Road
London SW7 4DN

The General Manager
Gore Hotel
189 Queen's Gate
London SW7 5EX

The General Manager
Park International Hotel
117-125 Cromwell Road
London SW7 4DS

The General Manager
Kensington Plaza Hotel
61 Gloucester Road
London SW7 4PE

The General Manager
Cannizaro House Hotel
West Side
Wimbledon Common
London SW19 4UF

The General Manager
Scandic Crown Hotel
265 Rotherhithe Street
Nelson Dock
London SE16 1EJ

The General Manager
Royal Lancaster Hotel
Lancaster Terrace
London W2 2TY

The General Manager
London Metropole Hotel
Edgware Road
London W2 1JU

The General Manager
Whites Hotel
Bayswater Road
90-92 Lancaster Gate
London W2 3NR

The General Manager
Plaza on Hyde Park
1-7 Lancaster Gate
London W2 3NA

The General Manager
Stakis London Coburg
129 Bayswater Road
London W2 4RJ

The General Manager
London Embassy Hotel
150 Bayswater Road
London W2 4RT

The General Manager
Hyde Park Towers Hotel
41-51 Inverness Terrace
London W2 3JN

The General Manager
Queen's Park Hotel
48 Queensborough Terrace
London W2 3SS

The General Manager
Berkeley Hotel
Wilton Place
London SW1X 7RL

The General Manager
Lanesborough Hotel
1 Lanesborough Place
London SW1X 7TA

The General Manager
Halkin Hotel
5 Halkin Street
London SW1X 7DJ

The General Manager
Sheraton Belgravia
20 Chesham Place
London SW1X 8HQ

The General Manager
Lowndes Hotel
21 Lowndes Street
London SW1X 9ES

The General Manager
Hyde Park Hotel
66 Knightsbridge
London SW1Y 7LA

The General Manager
Dorchester Hotel
Park Lane
London W1A 2HJ

The General Manager
Claridge's
Brook Street
London W1A 2JQ

The General Manager
Four Seasons
Hamilton Place
Park Lane
London W1A 1AZ

The General Manager
Le Meridien Piccadilly
21 Piccadilly
London W1V 0BH

The General Manager
Grosvenor House Hotel
Park Lane
London W1A 3AA

The General Manager
Connaught Hotel
Carlos Place
London W1Y 6AL

The General Manager
47 Park Street
47 Park Street
London W1Y 4EB

The General Manager
London Hilton on Park Lane
22 Park Lane
London W1Y 4BE

The General Manager
Brown's Hotel
29-34 Albemarle Street
London W1A 4SW

The General Manager
Park Lane Hotel
Piccadilly
London W1 8BX

The General Manager
Britannia Hotel
Grosvenor Square
London W1A 3AN

The General Manager
Inter-Continental Hotel
1 Hamilton Place
Hyde Park Corner
London W1V 0QY

The General Manager
May Fair Inter-Continental
Stratton Street
London W1A 2AN

The General Manager
Athenaeum
116 Piccadilly
London W1V 0BJ

The General Manager
Marriott Hotel
Duyke Street
Grosvenor Square
London W1A 4AW

The General Manager
Westbury Hotel
Conduit Street
London W1A 4UH

The General Manager
Washington Hotel
5-7 Curzon Street
London W1Y 8DT

The General Manager
Holiday Inn
3 Berkeley Street
London W1X 6NE

The General Manager
Chesterfield Hotel
35 Charles Street
London W1X 8LX

The General Manager
Green Park Hotel
Half Moon Street
London W1Y 8BP

The General Manager
Flemings Hotel
7-12 Half Moon Street
London W1Y 7RA

The General Manager
London Mews Hilton Hotel
2 Stanhope Row
London W1Y 7HE

The General Manager
Regent London Hotel
222 Marylebone Road
London NW1 6JQ

The General Manager
Churchill Inter-Continental Hotel
30 Portman Square
London W1A 4ZX

The General Manager
Langham Hilton Hotel
1 Portland Place
London W1N 3AA

The General Manager
Selfridge Hotel
Orchard Street
London W1H 0JS

The General Manager
SAS Portman Hotel
22 Portman Square
London W1H 9FL

The General Manager
Berkshire Hotel
350 Oxford Street
London W1N 0By

The General Manager
London Regents Park Hilton
18 Lodge Road
London NW8 7JT

The General Manager
Clifton Ford Hotel
47 Welbeck Street
London W1N 8DN

The General Manager
Montcalm Hotel
Great Cumberland Place
London W1A 2LF

The General Manager
Marble Arch Marriott Hotel
134 George Street
London W1H 6DN

The General Manager
Berner's Park Plaza Hotel
10 Berner's Street
London W1A 3BE

The General Manager
St Georges Hotel
Langham Place
London W1N 8QS

The General Manager
Forte Crest Regents Park Hotel
Carburton Street
London W1P 8EE

The General Manager
Rathbone Hotel
Rathbone Street
London W1P 1AJ

The General Manager
Dorset Square Hotel
39/40 Dorset Square
London NW1 6QN

The General Manager
Durrant's Hotel
26/32 George Street
London W1H 6BJ

The General Manager
Savoy Court Hotel
Granville Place
London W1H 0EH

The General Manager
Langham Court Hotel
31/35 Langham Street
London W1N 5RE

The General Manager
Holiday Inn Garden Court Hotel
57/59 Welbeck Street
London W1M 8HS

The General Manager
Harewood Hotel
Harewood Row
London NW1 6SE

The General Manager
Ritz Hotel
Piccadilly
London W1V 9DG

The General Manager
Duke's Hotel
35 St James' Place
London SW1A 1NY

The General Manager
22 Jermyn Street
22 Jermyn Street
London SW1Y 6HL

The General Manager
Stafford Hotel
16/18 St James' Place
London SW1A 1NJ

The General Manager
Forte Crest St James'
81 Jermyn Street
London SW1Y 6JF

The General Manager
Royal Trafalgar Thistle Hotel
Whitcomb Street
London WC2H 7HG

The General Manager
Hospitality Inn Piccadilly
39 Coventry Street
London W1V 8EL

The General Manager
Pastoria Hotel
3/6 St Martins Street
Off Leicester Square
London WC2H 7HL

The General Manager
Hampshire Hotel
Leicester Square
London WC2H 7LH

The General Manager
Savoy Hotel
Strand
London WC2R 0EU

The General Manager
Howard Hotel
12 Temple Place
London WC2R 2PR

The General Manager
Waldorf Hotel
Aldwych
London WC2B 4DD

The General Manager
St James' Court Hotel
Buckingham Gate
London SW1E 6AF

The General Manager
Royal Horseguards Thistle Hotel
2 Whitehall Court
London SW1A 2EJ

The General Manager
Stakis London St Ermin's Hotel
Caxton Street
London SW1H 0QW

The General Manager
Goring Hotel
15 Beeston Place
London SW1W 0JW

The General Manager
Royal Westminster Thistle Hotel
49 Buckingham Palace Road
London SW1W 0QT

The General Manager
Grosvenor Hotel
101 Buckingham Palace Road
London SW1W 0SJ

The General Manager
Dolphin Square Hotel
Dolphin Square
London SW1V 3LX

The General Manager
Scandic Crown Hotel
2 Bridge Place
London SW1V 1QA

The General Manager
Reubens Hotel
39/41 Buckingham Palace Road
London SW1W 0PS

The General Manager
Rochester Hotel
69 Vincent Square
London SW1P 2PA

Eire

The General Manager
Conrad Dublin Hotel
Earlsfort Terrace
Dublin 2

The General Manager
Berkley Court Hotel
Lansdowne Road
Ballsbridge
Dublin 4

The General Manager
Westbury Hotel
Grafton Street
Dublin 2

The General Manager
Shelbourne Hotel
27 St Stephens Green
Dublin 2

The General Manager
Jury's H Towers Hotel
Pembroke Road
Ballsbridge
Dublin 4

The General Manager
Gresham Hotel
O'Connell Street
Dublin 1

The General Manager
Burlington Hotel
Upper Leeson Street
Dublin 4

The General Manager
Doyle Montrose Hotel
Stillorgan Road
Dublin 12

The General Manager
Royal Dublin Hotel
O'Connell Street
Dublin 1

The General Manager
Hibernian Hotel
East Moreland Place
Ballsbridge
Dublin 4

The General Manager
Central Hotel
1/5 Exchequer Street
Dublin 2

The General Manager
Stephen's Hall Hotel
Earlsfort Centre
14/17 Lower Leeson Street
Dublin 2

The General Manager
Temple Bar Hotel
Fleet Street
Dublin 2

The General Manager
Doyle Tara Hotel
Merrion Road
Dublin 4

The General Manager
Russell Court Hotel
21/25 Harcourt Street
Dublin 2

The General Manager
Skylon Hotel
Upper Drumcondra Road
Dublin

The General Manager
Jurys Christchurch Inn Hotel
Christchurch Place
Dublin

Germany

The General Manager
Bristol-Hotel Kempinski
Kurfurstendamm 27
Berlin 10719
Germany

The General Manager
Grand Hotel Esplanade
Lutzowufer 15
Berlin 10785
Germany

The General Manager
Maritim Grand Hotel
Friedrichstr 158
Berlin 10117
Germany

The General Manager
Inter-Continental Hotel
Budapester Str 2
Berlin 10787
Germany

The General Manager
Schweizerhof Hotel
Budapester Str 21
Berlin 10787
Germany

The General Manager
Palace Hotel
Budapester Str 42
Berlin
Germany

The General Manager
Berlin Hotel
Lutzowplatz 17
Berlin 10785
Germany

The General Manager
Berlin Hotel
Mohrenstr 30
Berlin 10117
Germany

The General Manager
Steigenberger Berlin Hotel
Los-Angeles Platz 1
Berlin 10789
Germany

The General Manager
Radisson Plaza Hotel Berlin
Karl-Liebknecht-Str 5
Berlin 10178
Germany

The General Manager
Savoy Hotel
Rasanenstr 9
Berlin 10623
Germany

The General Manager
Brandenburger Hof
Eislebener Str 14
Berlin 10789
Germany

The General Manager
Mondial Hotel
Kurfurstendamm 47
Berlin 10707
Germany

The General Manager
Maritim Hotel Berlin
Friedrichstr 150
Berlin 10117
Germany

The General Manager
President Hotel
An der Urania 16
Berlin 10787
Germany

The General Manager
Berlin Penta Hotel
Nurnberger Str 65
Berlin 10787
Germany

The General Manager
Seehof
Lietzensee-Ufer 11
Berlin 14057
Germany

The General Manager
Luisenhof
Kopenicker Str 92
Berlin 10179
Germany

The General Manager
Forum-Hotel Berlin
Alexanderplatz
Berlin 10178
Germany

The General Manager
Ambassador Hotel
Bayreuther Str 42
Berlin 10787
Germany

The General Manager
Alsterhof
Augsburger Str 5
Berlin 10789
Germany

The General Manager
Residenz Hotel
Meinekestr 9
Berlin 10719
Germany

The General Manager
Sylter Hof
Kurfürstenstr 116
Berlin 10787
Germany

The General Manager
Hamburg Hotel
Landgrafenstr 4
Berlin 10787
Germany

The General Manager
Curator Hotel
Grolmanstr 14
Berlin 10623
Germany

The General Manager
Berlin Excelsior Hotel
Hardenbergstr 14
Berlin 10623
Germany

The General Manager
Schlossparkhotel
Heubnerweg 2a
Berlin 14059
Germany

The General Manager
Berliner Congress Center
Markisches Ufer 54
Berlin 10179
Germany

The General Manager
Albrechtshof
Albrechstr 8
Berlin 10117
Germany

The General Manager
Arosa Parkscholss Hotel
Lietzenburger Str 79
Berlin 10719
Germany

The General Manager
Berlin-Plaza Hotel
Knesebeckstr 63
Berlin 10719
Germany

The General Manager
Forsthaus Paulsborn
Am Grunewaldsee
Berlin 14193
Germany

The General Manager
PICCO Hotel
Gurtelstr 41
Berlin 10247
Germany

The General Manager
Scholsshotel Vier Jahreszeiten
Brahmsstr 6
Berlin 14193
Germany

The General Manager
Sdtuttgarter Hof
Anhalter Str 9
Belin 10963
Germany

The General Manager
Riehmers Hofgarten
Yorckstr 83
Berlin 10965 Germany

The General Manager
Abacus Am Tierpark
Franz-Mett Str 7
Berlin 10319
Germany

The General Manager
Landhaus Alpinia Hotel
Santistr 32
Berlin 12107
Germany

The General Manager
Rheinsberg am See
Finsterwalder Str 64
Berlin 13435
Germany

The General Manager
Airport Hotel Esplanade
Rohrdamm 80
Berlin 13629
Germany

The General Manager
Novotel Hotel
Ohmstr 4
Berlin 13629
Germany

The General Manager
Steglitz International Hotel
Albrechstr 2
Berlin 12129
Germany

The General Manager
Sorat-hotel Humboldt-Muhle
An der Muhle 5
Berlin 13507
Germany

The General Manager
Novotel Berlin Airport Hotel
Kurt-Schumacher-Damm 202
Berlin 13405
Germany

The General Manager
Sorat Hotel Am Spreebogen
Alt Moabit 99
Berlin 10559 Germany

The General Manager
Muggelsee Hotel
Am Muggelsee
Berlin-Kopenick 12559
Germany

The General Manager
Seehotel Friedrichshagen
Muggelseedamm 288
Berlin-Kopenick 12587
Germany

The General Manager
Steigenberger Frankfurter Hof
Bethmannstr 33
Frankfurt on Main 60311
Germany

The General Manager
Hessischer Hof
Friedrich-Ebert-Anlage 40
Frankfurt on Main 60325
Germany

The General Manager
Arabella Grand Hotel
Konrad-Adenauer-Str 7
Frankfurt on Main 60313
Germany

The General Manager
Frankfurt InterContinental Hotel
Wilhelm-Leuschner-str 43
Frankfurt on Main 60329
Germany

The General Manager
Forte Grand Parkhotel
Wiesenhuttenplatz 28
Frankfurt on Main 60329
Germany

The General Manager
Frankfurt Marriott Hotel
Hamburger Alle 2
Frankfurt on Main 60486
Germany

The General Manager
Palmenhof
Bockenheimer Landstr 89
Frankfurt on Main 60325
Germany

The General Manager
Sofitel Hotel
Savignystr 14
Frankfurt on Main 60325
Germany

The General Manager
National Hotel
Baseler Str 50
Frankfurt on Main 60329
Germany

The General Manager
An der Messe Hotel
Westendstr 104
Frankfurt on Main 60325
Germany

The General Manager
Mercure Hotel
Voltastr 29
Frankfurt on Main 60486
Germany

The General Manager
Scandic Crown Hotel
Wiesenhuttenstr 42
Frankfurt on Main 60329
Germany

The General Manager
Imperial Hotel
Sophienstr 40
Frankfurt on Main 60329
Germany

The General Manager
Continental Hotel
Baseler Str 56
Frankfurt on Main 60329
Germany

The General Manager
Novotel Frankfurt-Messe Hotel
Voltastr 1b
Frankfurt on Main 60486
Germany

The General Manager
Intercity Hotel
Poststr 8
Frankfurt on Main 60329
Germany

The General Manager
Ramada Hotel
Oeserstr 180
Frankfurt on Main 65933
Germany

The General Manager
Queens Hotel
Isenburger Schneise 40
Frankfurt on Main 60528
Germany

The General Manager
Arabella Congress Hotel
Lyoner Str 44
Frankfurt on Main 60528
Germany

The General Manager
Dorint Hotel
Hahnstr 9
Frankfurt on Main 60528
Germany

The General Manager
Ramada Hotel Nordwest Zentrum
Walter-Moller-Platz
Frankfurt on Main 60439
Germany

The General Manager
Holiday Inn Crown Plaza Hotel
Mailander Str 1
Frankfurt on Main 60598
Germany

The General Manager
Novotel
Philipp-Heffmann-Str 10
Frankfurt on Main 65750
Germany

The General Manager
Gravenbruch-Kempinski-Frankfurt Hotel
Frankfurt on Main 63223
Germany

The General Manager
Sheraton Hotel (Central Terminal)
Airport
Frankfurt on Main 60549
Germany

The General Manager
Steigenberger Avance Frankfurt Airport
Unterschweinstiege 16
Frankfurt on Main 60549
Germany

The General Manager
Atlantic Hotel Kempinski
An der Alster 72
Hamburg 20099
Germany

The General Manager
Holiday Inn Crowne Plaza
Graumannsweg 10
Hamburg 22087
Germany

The General Manager
Maritim Hotel Reichshof
Kirchenallee 34
Hamburg 20099
Germany

The General Manager
Europaischer Hof
Kirchenallee 45
Hamburg 20099
Germany

The General Manager
Prem Hotel
An der Alster 9
Hamburg 20099
Germany

The General Manager
Berlin Hotel
Borgfelder Str 1
Hamburg 20537
Germany

The General Manager
Senator Hotel
Lange Reihe 18
Hamburg 20099
Germany

The General Manager
St Raphael
Adenaurallee 41
Hamburg 20097
Germany

The General Manager
Novotel City Sud
Amsinckstr 53
Hamburg 20097
Germany

The General Manager
Bellevue Hotel
An der Alster 14
Hamburg 20099
Germany

The General Manager
Aussen Alster Hotel
Schmilinskystr 11
Hamburg 20099
Germany

The General Manager
Ambassador Hotel
Heidenkampsweg 34
Hamburg 20097
Germany

The General Manager
Ibis Alster Hotel
Holzdamm 4
Hamburg 20099
Germany

The General Manager
Peter Lembcke Hotel
Holzdamm 49
Hamburg 20099
Germany

The General Manager
Vier jahreszeiten Hotel
Neuer Jungfernstieg 9
Hamburg 20354
Germany

The General Manager
Steigenberger Hamburg Hotel
Heiligengeistbrücke 4
Hamburg 20549
Germany

The General Manager
Hamburg Renaissance Hotel
Grosse Bleichen
Hamburg 20354
Germany

The General Manager
Marriott Hotel
ABC Str 52
Hamburg 20354
Germany

The General Manager
SAS Plaza Hotel
Marseiller Str 2
Hamburg 20355
Germany

The General Manager
Am Holstenwall Hotel
Am Holstenwall 19
Hamburg 20355
Germany

The General Manager
Hafen Hamburg
Seewartenstr 9
Hamburg 20459
Germany

The General Manager
Alster-Hof
Esplanade 12
Hamburg 20354
Germany

The General Manager
Baseler Hof
Esplanade 11
Hamburg 20354
Germany

The General Manager
Alsterkrug Hotel
Alsterkrugchaussee 277
Hamburg 22297
Germany

The General Manager
Raphael Hotel Altona
Präsident-Krahn-Str 13
Hamburg 22765
Germany

The General Manager
Novotel Hamburg West
Albert-Einstein Ring 2
Hamburg 22761
Germany

The General Manager
Bottcherhof
Wohlerstr 2
Hamburg 22113
Germany

The General Manager
Strandhotel
Strandweg 13
Hamburg 22587
Germany

The General Manager
Queens Hotel
Mexicoring 1
Hamburg 22297
Germany

The General Manager
Norge Hotel
Schaferkampsallee 49
Hamburg 20357
Germany

The General Manager
Airport Hotel Hamburg
Flughafenstr 47
Hamburg 22415
Germany

The General Manager
Hamburg International Hotel
Hammer Landstr 200
Hamburg 20537
Germany

The General Manager
Lindtner Hotel
Heimfelder Str 123
Hamburg 21075
Germany

The General Manager
Panorama Hotel
Harburger Ring 8
Hamburg 21073
Germany

The General Manager
Marinas Hotel
Schellerdamm
Hamburg 21079
Germany

The General Manager
Inter-Continental Hotel
Fontenay 10
Hamburg 20354
Germany

The General Manager
Garden Hotels Poseldorf
Magdalenenstr 60
Hamburg 20148
Germany

The General Manager
Abtei Hotel
Abteistr 14
Hamburg 20149
Germany

The General Manager
Smolka Hotel
Isestr 98
Hamburg 20149
Germany

The General Manager
Dorint-Hotel-Airport
Langenhorner Chaussee 183
Hamburg 22404
Germany

The General Manager
Treudelberg Hotel
Lemsahler Landstr 45
Hamburg 22397
Germany

The General Manager
Elysee Hotel
Rothenbaumchaussee 10
Hamburg 20148
Germany

The General Manager
Holiday Inn
Kieler Str 333
Hamburg 22525
Germany

The General Manager
Helgoland Hotel
Kieler Str 177
Hamburg 22525
Germany

The General Manager
Forte Crest Hotel
Stillhorner Weg 40
Hamburg 21109
Germany

The General Manager
Parkhotel Alster-Ruh
Am Langenzug 6
Hamburg 22085
Germany

The General Manager
Nippon Hotel
Hofweg 75
Hamburg 22085
Germany

The General Manager
Carat hotel
Sieldeich 9
Hamburg 20539
Germany

Italy

The General Manager
Cavalieri Hilton
via Cadlolo 101
Rome 00136
Italy

The General Manager
Lord Byron Hotel
via De Notaris 5
Rome 00197
Italy

The General Manager
Aldrovandi Palace Hotel
via Aldrovandi 15
Rome 00197
Italy

The General Manager
Parco dei Principi Hotel
via Gerolamo Frescobaldi 5
Rome 00198
Italy

The General Manager
Albani Hotel
via Adda 45
Rome 00198
Italy

The General Manager
Rivoli Hotel
via Torquato Taramelli 7
Rome 00197
Italy

The General Manager
Degli Aranci Hotel
via Oriani 11
Rome 00197
Italy

The General Manager
Hassler Hotel
Piazza Trinita dei Monti 6
Rome 00187
Italy

The General Manager
Holiday Inn Minerva
Piazza della Minerva 69
Rome 00186
Italy

The General Manager
De la Ville Inter-Continental
via Sistina 69
Rome 00187
Italy

The General Manager
D'Inghilterra
via Bocca di Leone 14
Rome 00187
Italy

The General Manager
Jolly Leonardo da Vinci Hotel
via dei Gracchi 324
Rome 00192
Italy

The General Manager
Plaza Hotel
via del Corso 126
Rome 00186
Italy

The General Manager
Atlante Star Hotel
via Vitelleschi 34
Rome 00193
Italy

The General Manager
Valadier Hotel
via della Fontanella 15
Rome 00187
Italy

The General Manager
Columbus Hotel
via della Conciliazione 33
Rome 00193
Italy

The General Manager
Excelsior Hotel
via Vittorio Veneto 125
Rome 00187
Italy

The General Manager
Le Grand Hotel
via Vittorio Emanuele Orlando 3
Rome 00187
Italy

The General Manager
Majestic Hotel
via Vittorio Veneto 50
Rome 00187
Italy

The General Manager
Bernini Hotel
piazza Barberini 23
Rome 00187
Italy

The General Manager
Ambasciatori Palace Hotel
via Vittoria Veneto 62
Rome 00187
Italy

The General Manager
Quirinale Hotel
via Nazionale 7
Rome 00184
Italy

The General Manager
Jolly Vittorio Veneto
corso d'Italia 1
Rome 00198
Italy

The General Manager
Regina Baglioni Hotel
via Vittorio Veneto 72
Rome 00187
Italy

The General Manager
Mediterraneo Hotel
via Cavour 15
Rome 00184
Italy

The General Manager
Starhotel Metropole
via Principe Amedeo 3
Rome 00185
italy

The General Manager
Forum Hotel
via Tor de Conti 25
Rome 00184
Italy

The General Manager
Londra e Cargill Hotel
piazza Sallustio 18
Rome 00187
Italy

The General Manager
Universo Hotel
via Principe Amedeo 5
Rome 00185
Italy

The General Manager
Sofitel
via Lombardia 47
Rome 00187
Italy

The General Manager
Massimo D'Azeglio Hotel
via Cavour 18
Rome 00187
Italy

The General Manager
Victoria Hotel
via Campania 41
rome 00187
Italy

The General Manager
Napoleon Hotel
piazza Vittorio Emanuele 105
Rome 00185
Italy

The General Manager
Imperiale Hotel
via Vittoria Veneto 24
Rome 00187
Italy

The General Manager
Artdeco Hotel
via Patestro 19
Rome 00185
Italy

The General Manager
Diana Hotel
via Principe Amedeo 4
Rome 00185
Italy

The General Manager
Jolly Hotel Midas
via Aurelia al km 8
Rome 00165
Italy

The General Manager
Villa Pamphili Hotel
via della Nocetta 105
Rome 00164
Italy

The General Manager
Holiday Inn St Peter's
via Aurelia Antica 415
Rome 00165
Italy

The General Manager
Forte Agip
via Aurelia al km 8
Rome 00165
Italy

The General Manager
Myosotis Hotel
localita Torregaia piazza Pupinia 2
Rome 00133
Italy

The General Manager
Sheraton
viale del Pattinaggio
Rome 00144
Italy

The General Manager
Shangri La-Corsetti Hotel
Viale Algeria 141
Rome 00144
Italy

The General Manager
Dei Congressi Hotel
viale Shakespeare 29
Rome 00144
Italy

The General Manager
Sheraton Golf Hotel
viale Parco de Medici 22
Rome 00148
Italy

The General Manager
Holiday Inn-Eur Parco dei Medici
viale Castello della Magliana 65
Rome 00148
Italy

The General Manager
Four Seasons Hotel
via Gesi 8
Milan 20121
Italy

The General Manager
Grand Hotel et de Milan
via Manzoni 29
Milan 20121
Italy

The General Manager
Jolly Hotel President
largo Augusto 10
Milan 20122
Italy

The General Manager
Brunelleschi Hotel
via Baracchini 12
Milan 20123
Italy

The General Manager
Dei Cavalieri
piazza Missori 1
Milan 20123
Italy

The General Manager
Pierre Milano Hotel
via Edmondo de Amicis 32
Milan 20123
Italy

The General Manager
Bonaparte Hotel
via Cusani 13
Milan 20121
Italy

The General Manager
Gd H Duomo Italy
via San Raffaele 1
Milan 20121
Italy

The General Manager
Carlton Hotel Senato
via Senato 5
Milan 20121
Italy

The General Manager
Spadari al Duomo
via Spadari 11
Milan 20123
Italy

The General Manager
Cavour Hotel
via Fatebenefratelli 21
Milan 20121
Italy

The General Manager
Executive Hotel
viale Luigi Sturzo 45
Milan 20156
Italy

The General Manager
Carlyle Brera Hotel
corso Garibaldi 84
Milan 20121
Italy

The General Manager
Principle di Savoia Hotel
piazza della Repubblica 17
Milan 20124
Italy

The General Manager
Palace hotel
piazza della Repubblica 20
Milan 20124
Italy

The General Manager
Excelsior Gallia Hotel
piazza Duco d'Aosta 9
Milan 20124
Italy

The General Manager
Milano Hilton Hotel
via Galvani 12
Milan 20124
Italy

The General Manager
Duca di Milano Hotel
piazza della Repubblica 13
Milan 20124
Italy

The General Manager
Michelangelo
piazza Luigi di Savoia ang. via Scarlatti
Milan 20124
Italy

The General Manager
Centry Tower Hotel
via Fabio Filzi 25/b
Milan 20124
Italy

The General Manager
Jolly Hotel Touring
via Tarchetti 2
Milan 20121
Italy

The General Manager
Starhotel Ritz
via Spallanzani 40
Milan 20129
Italy

The General Manager
Doria Grand Hotel
viale Andrea Doria 22
Milan 20124
Italy

The General Manager
Manin Hotel
via Manin 7
Milan 20121
Italy

The General Manager
Gallea Hotel
via Ozanam 1
Milan 20129
Italy

The General Manager
Hermitage Hotel
via Messina 10
Milan 20154
Italy

The General Manager
Gd H Fieramilano Hotel
viale Boezio 20
Milan 20145
Italy

The General Manager
Capitol Hotel
via Cimarosa 6
Milan 20144
Italy

The General Manager
Gd H Brun Hotel
via Caldera 21
Milan 20153
Italy

The General Manager
Leonardo da Vinci Hotel
via Senigallia 6
Milan 20161
Italy

The General Manager
Novotel Milan Nord Hotel
viale Suzzani 13
Milan 20162
Italy

The General Manager
Ibis Hotel
viale Suzzani 13/15
Milan 20162
Italy

The General Manager
Starhotel Tourist
viale Fulvio Testi 300
Milan 20126
Italy

The General Manager
Lombardia Hotel
viale Lombardia 74
Milan 20131
Italy

The General Manager
Quark Hotel
via Lampedusa 11a
Milan 20141
Italy

The General Manager
Novotel Milano Est Aeroporto
via Mecenate 121
Milan 20138
Italy

The General Manager
Holiday Inn
via Lorenteggio 278
Milan 20152
Italy

The General Manager
Jolly Hotel Milanofiori
Strada 2
Milan 20090
Italy

The General Manager
Forte Agip Hotel
Milan 20094
Italy

France

The General Manager
Ritz Hotel
15 pl Vendome
Paris 75001
France

The General Manager
Meurice Hotel
228 r Rivoli
Paris 75001
France

The General Manager
Inter-Continental Hotel
3 r Castiglione
Paris 75001
France

The General Manager
Lotti Hotel
7 r Castiglione
Paris 75001
France

The General Manager
Westminster Hotel
13 r Paix
Paris 75002
France

The General Manager
de Louvre Hotel
pl A Mairaux
Paris 75001
France

The General Manager
Castille Hotel
37 r Cambon
Paris 75001
France

The General Manager
Normandy Hotel
7 r Echelle
Paris 75001
France

The General Manager
Regina Hotel
2 pl Pyramides
Paris 75001
France

The General Manager
Novotel Les Halles
8 pl M-de-Navarre
Paris 75001
France

The General Manager
Lutetia Hotel
45 bd Raspail
Paris 75006
France

The General Manager
Montalembert Hotel
3 r Montalembert
Paris 75007
France

The General Manager
La Bourdonnais Hotel
111 av La Bourdonnais
Paris 75007
France

The General Manager
Plaza Athenee Hotel
25 av Montaigne
Paris 75008
France

The General Manager
Crillon Hotel
10 pl Concorde
Paris 75008
France

The General Manager
Bristol Hotel
112 r Fg St-Honore
Paris 75008
France

The General Manager
George V
31 av George V
Paris 75008
France

The General Manager
Royal Monceau
37 av Hoche
Paris 75008
France

The General Manager
Prince de Galles Hotel
33 av George V
Paris 75008
France

The General Manager
Vernet Hotel
25 r Vernet
Paris 75008
France

The General Manager
San Regis Hotel
12 r j Goujon
Paris 75008
France

The General Manager
La Tremoille Hotel
14 r La Tremoille
Paris 75008
France

The General Manager
Lancaster Hotel
7 r Berri
Paris 75008
France

The General Manager
Balzac Hotel
6 r Balzac
Paris 75008
France

The General Manager
Golden Tulip St-Honore
220 r Fg St-Honore
Paris 75008
France

The General Manager
Chateau Frontenac
54 r p Charron
Paris 75008
France

The General Manager
Sofitel Arc de Triomphe
14 r Beaujon
Paris 75008
France

The General Manager
Bedford Hotel
17 r de l'Arcade
Paris 75008
France

The General Manager
Warwick Hotel
5 r Berri
Paris 75008
France

The General Manager
California Hotel
16 r Berri
Paris 75008
France

The General Manager
Queen Elizabeth Hotel
41 av Pierre 1^{er}-de-Serbie
Paris 75008
France

The General Manager
Concorde St-Lazare
108 r St-Lazare
Paris 75008
France

The General Manager
Claridge Bellman Hotel
37 r Francois
Paris 75008
France

The General Manager
Marignan Hotel
12 r Marignan
Paris 75008
France

The General Manager
Sofitel Champs-Elysees
8 r j Goujon
Paris 75008
France

The General Manager
Castiglione Hotel
40r Fg St-Honore
Paris 75008
France

The General Manager
New Roblin and rest. Le Mazagran
6 r Chauveau-Lagarde
Paris 75008
France

The General Manager
Grand Hotel Inter-Continental
2 r Scribe
Paris 75009
France

The General Manager
Scribe Hotel
1 r Scribe
Paris 75009
France

The General Manager
Ambassador Hotel
16 bd Haussmann
Paris 75009
France

The General Manager
Commodore Hotel
12 bd Haussmann
Paris 75009
France

The General Manager
L'Horset Pavillon Hotel
38 r Echiquier
Paris 75010
France

The General Manager
Brebant Hotel
32 bd Poissonniere
Paris 75009
France

The General Manager
St Petersburg Hotel
33 r Caumartin
Paris 75009
France

The General Manager
Novotel Bercy Hotel
86 r Bercy
Paris 75012
France

The General Manager
Residence Vert Galant
43 r Croulebarbe
Paris 75013
France

The General Manager
Ibis Bercy Hotel
77 r Bercy
Paris 75012
France

The General Manager
Hilton Hotel
18 av Suffren
Paris 75015
France

The General Manager
Nikko Hotel
61 quai Grenelle
Paris 75015
France

The General Manager
Meridien Montparnasse Hotel
19 Cdt Mouchotte
Paris 75014
France

The General Manager
Sofitel Porte de Sevres Hotel
8 r l Armanda
Paris 75015
France

The General Manager
Mercure Montparnasse Hotel
20 r Gaité
Paris 75014
France

The General Manager
Mercure Porte de Versailles Hotel
69 bd Victor
Paris 75015
France

The General Manager
Adagio Vagirard Hotel
253 r Vaugirard
Paris 75015
France

The General Manager
Le Parc Victor Hugo Hotel
55 av R Roinceare
Paris 75016
France

The General Manager
Raphael Hotel
17 av Kleber
Paris 75016
France

The General Manager
St James Paris Hotel
43 av Bugeaud
Paris 75016
France

The General Manager
Baltimore Hotel
88bis av Kleber
Paris 75016
France

The General Manager
Garden Elysee Hotel
12 r St-Didier
Paris 75016
France

The General Manager
Floride Etoile Hotel
14 r St-Didier
Paris 75016
France

The General Manager
Les Jardines du Trocadero
35 r Franklin
Paris 75016
France

The General Manager
Concorde Lafayette
3 pl Gen Koenig
Paris 75017
France

The General Manager
Meridien Hotel
81 bd Gouvion St Cyr
Paris 75017
France

The General Manager
Campanile Hotel
4 bd Berthier
Paris 75017
France

The General Manager
Terrass'H
12 r j de Maistre
Paris 75018
France

The General Manager
Al'Hotel
2 av Prof A Lemierre
Paris 75020
France

The General Manager
Sofitel CNIT
2 pl Defense
La Defense 92400
France

The General Manager
Sofitel La Defense
34 Cours Michelet by ring road
exit La Defense 4, Paris 92060
France

The General Manager
Novotel La Defense
2 bd Neuilly
La Defense 92400
France

The General Manager
Novotel Hotel at Motorway Junction A4
Marne la Vallee
Paris 77206, France

The General Manager
Disneyland Hotel
Marne la Vallee
Paris 77206
France

The General Manager
New York Hotel
Marne la Vallee
Paris 77206
France

The General Manager
Newport Bay Club Hotel
Marne la Vallee
Paris 77206
France

The General Manager
Sequoia Lodge Hotel
Marne la Vallee
Paris 77206
France

The General Manager
Cheyenne Hotel
Marne la Vallee
Paris 77206
France

The General Manager
Sante Fe Hotel
Marne la Vallee
Paris 77206
France

The General Manager
Hilton Orly
Orly 94396
Paris
France

The General Manager
Mercure Hotel
Orly 94547
France

The General Manager
Cophorne Hotel
alle Verger
Roissy en France 95700
France

The General Manager
Holiday Inn
allee Verger
Roissy en France 95700
France

The General Manager
Ibis Hotel
av Raperie
Roissy en France 95700
France

The General Manager
Hilton Hotel
Roissypole
Roissy en France 95700
France

The General Manager
Sofitel
Roissy en France 95700
France

The General Manager
Novotel
Roissy en France 95700
France

The General Manager
Hyatt Regency Hotel
Roissy en France 95700
France

The General Manager
Pullman Orly Hotel
20 Av Ch Lindbergh
Rungis 94656
France

The General Manager
Holiday inn
4 av Ch Lindbergh
Rungis 94656
France e87

The General Manager
Novotel
1 r Pont des Halles
Rungis 94656
France e88

The General Manager
Ibis
1 r Mondetour
Rungis 94656
France e89

The General Manager
Trianon Palace Hotel
1 bd Reine
Versailles 78000
France

The General Manager
Sofitel Chateau de Versailles
2 av Paris
Versailles 78000
France

The General Manager
Residence Trianon Palace Hotel
1 bd Reine
Versailles 78000
France

The General Manager
Novotel 4 bd St-Antoine
Versailles 78000
France

The General Manager
Ibis Hotel
av Dutartre, Comm Centre Parly II
Versailles 78000
France

Appendix Six: Examining Relationships and Exploring Differences

National legislation prevents food poisoning by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
SIZE_RM	1 10 - 99	4.5000	.5108	24
SIZE_RM	2 100 - 199	4.5098	.8336	51
SIZE_RM	3 200 +	4.6029	.5615	136
COUNTRY	2 France	4.4943	.6625	87
SIZE_RM	1 10 - 99	4.4737	.7723	19
SIZE_RM	2 100 - 199	4.5667	.5040	30
SIZE_RM	3 200 +	4.4474	.7240	38
COUNTRY	3 Italy	4.6216	.5415	74
SIZE_RM	1 10 - 99	4.5500	.5104	20
SIZE_RM	2 100 - 199	4.5484	.6239	31
SIZE_RM	3 200 +	4.7826	.4217	23
COUNTRY	4 Germany	4.2049	1.1708	122
SIZE_RM	1 10 - 99	3.7778	.6468	18
SIZE_RM	2 100 - 199	4.2917	1.0417	24
SIZE_RM	3 200 +	4.2750	1.2826	80

National legislation prevents food poisoning by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
EMPLOY	2 10 - 99	4.5400	.5425	50
EMPLOY	3 100 +	4.5776	.6580	161
COUNTRY	2 France	4.4943	.6625	87
EMPLOY	2 10 - 99	4.5581	.6288	43
EMPLOY	3 100 +	4.4318	.6954	44
COUNTRY	3 Italy	4.6216	.5415	74
EMPLOY	1 less than 10	4.5000	.5345	8
EMPLOY	2 10 - 99	4.5577	.5744	52
EMPLOY	3 100 +	4.9286	.2673	14
COUNTRY	4 Germany	4.2049	1.1708	122
EMPLOY	1 less than 10	4.0000	.0000	7

EMPLOY	2 10 - 99	4.0857	1.0109	35
EMPLOY	3 100 +	4.2750	1.2826	80

National legislation prevents food poisoning by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.5641	.6737	156
HOTEL_TY	2 independent hotel	4.5926	.4960	54
COUNTRY	2 France	4.4943	.6625	87
HOTEL_TY	1 hotel chain	4.5000	.6466	62
HOTEL_TY	2 independent hotel	4.4800	.7141	25
COUNTRY	3 Italy	4.6216	.5415	74
HOTEL_TY	1 hotel chain	4.7317	.4486	41
HOTEL_TY	2 independent hotel	4.4848	.6185	33
COUNTRY	4 Germany	4.2049	1.1708	122
HOTEL_TY	1 hotel chain	4.1563	1.2081	96
HOTEL_TY	2 independent hotel	4.3846	1.0228	26

National legislation prevents food poisoning by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.5503	.6629	169
SEX	2 female	4.6585	.4801	41
COUNTRY	2 France	4.4943	.6625	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.5263	.6826	76
SEX	2 female	4.3000	.4830	10
COUNTRY	3 Italy	4.6216	.5415	74
SEX	1 male	4.6667	.5420	60
SEX	2 female	4.4286	.5136	14
COUNTRY	4 Germany	4.2049	1.1708	122
SEX	1 male	4.2400	1.2563	100
SEX	2 female	4.0455	.6530	22

National legislation prevents food poisoning by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.5567	.6918	97
AGE_GROU	3 30 - 39	4.6250	.4875	72
AGE_GROU	4 40 - 49	4.4762	.7496	21
AGE_GROU	5 50 - 59	4.5000	.6742	12
AGE_GROU	6 60 or over	4.4000	.8944	5
COUNTRY	2 France	4.4943	.6625	87
AGE_GROU	2 20 - 29	4.4483	.5724	29
AGE_GROU	3 30 - 39	4.6486	.7534	37
AGE_GROU	4 40 - 49	4.1667	.3892	12
AGE_GROU	5 50 - 59	4.5714	.5345	7
AGE_GROU	6 60 or over	4.0000	1.4142	2
COUNTRY	3 Italy	4.6216	.5415	74
AGE_GROU	1 under 20	4.7143	.4880	7
AGE_GROU	2 20 - 29	4.6400	.5686	25
AGE_GROU	3 30 - 39	4.5806	.5016	31
AGE_GROU	4 40 - 49	4.5714	.7868	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.2049	1.1708	122
AGE_GROU	2 20 - 29	4.2000	1.2850	40
AGE_GROU	3 30 - 39	4.2821	1.2763	39
AGE_GROU	4 40 - 49	4.1765	.9510	17
AGE_GROU	5 50 - 59	4.1250	.9918	24
AGE_GROU	6 60 or over	4.0000	1.4142	2

National legislation prevents food poisoning by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population.		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
YEARS_CA	1 none	4.6061	.4962	33
YEARS_CA	2 less than 1 year	4.5556	.5270	9
YEARS_CA	3 1 - 2 years	4.6071	.4973	28
YEARS_CA	4 2 - 3 years	4.4324	.8988	37
YEARS_CA	5 3 or more years	4.5962	.5997	104

COUNTRY	2 France	4.4943	.6625	87
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.1176	.6966	17
YEARS_CA	4 2 - 3 years	4.6667	.5547	27
YEARS_CA	5 3 or more years	4.5250	.6789	40

COUNTRY	3 Italy	4.6216	.5415	74
YEARS_CA	1 none	4.5455	.8202	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.5714	.5345	7
YEARS_CA	4 2 - 3 years	4.5000	.5222	12
YEARS_CA	5 3 or more years	4.7073	.4606	41

COUNTRY	4 Germany	4.2049	1.1708	122
YEARS_CA	1 none	4.0000	1.4142	2
YEARS_CA	3 1 - 2 years	4.2500	1.7525	8
YEARS_CA	4 2 - 3 years	4.2586	1.0852	58
YEARS_CA	5 3 or more years	4.1481	1.1881	54

National legislation prevents food poisoning by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
YEARS_PR	1 less than 1 year	4.3333	.5774	3
YEARS_PR	2 1 - 2 years	4.4444	.5270	9
YEARS_PR	3 2 - 3 years	4.3636	.5045	11
YEARS_PR	4 3 years or more	4.5904	.6436	188
COUNTRY	2 France	4.4943	.6625	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	4.0000	1.0000	3
YEARS_PR	3 2 - 3 years	3.0000	.	1
YEARS_PR	4 3 years or more	4.5366	.6324	82
COUNTRY	3 Italy	4.6216	.5415	74
YEARS_PR	2 1 - 2 years	3.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.6620	.4764	71
COUNTRY	4 Germany	4.2049	1.1708	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.0000	.7559	8
YEARS_PR	4 3 years or more	4.2212	1.2007	113

National legislation prevents food poisoning by levels of country of hotel job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
POSITION	1 manager	4.5273	.6868	110
POSITION	2 supervisor	4.3929	.6853	28
POSITION	3 head chef	4.8065	.4016	31
POSITION	4 chef	4.7333	.5936	15
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.5500	.5104	20
COUNTRY	2 France	4.4943	.6625	87
POSITION	1 manager	4.7273	.4671	11
POSITION	2 supervisor	4.0000	.0000	4
POSITION	3 head chef	4.3077	.8549	13
POSITION	4 chef	4.7500	.4523	12
POSITION	5 waiter	4.6000	.8944	5
POSITION	6 other	4.4524	.6700	42
COUNTRY	3 Italy	4.6216	.5415	74
POSITION	1 manager	4.7333	.4577	15
POSITION	2 supervisor	5.0000	.0000	6
POSITION	3 head chef	4.5625	.5123	16
POSITION	4 chef	4.3333	.4924	12
POSITION	5 waiter	4.0000	.8165	7
POSITION	6 other	4.8889	.3234	18
COUNTRY	4 Germany	4.2049	1.1708	122
POSITION	0 no response	.0000	.	1
POSITION	1 manager	4.3036	.8072	56
POSITION	2 supervisor	4.4737	1.1723	19
POSITION	3 head chef	4.1053	1.6294	19
POSITION	4 chef	4.1429	1.2150	7
POSITION	5 waiter	3.7143	1.8898	7
POSITION	6 other	4.1538	.6887	13

National legislation prevents food poisoning by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4737	.8071	494
COUNTRY	1 UK	4.5687	.6315	211
HOTEL_ST	3 3 star	4.6000	.5026	20
HOTEL_ST	4 4 star	4.5294	.6986	136
HOTEL_ST	5 5 star	4.6545	.4799	55
COUNTRY	2 France	4.4943	.6625	87
HOTEL_ST	2 2 star	5.0000	.0000	2

HOTEL_ST	3 3 star	4.4444	.6157	18
HOTEL_ST	4 4 star	4.5079	.6927	63
HOTEL_ST	5 5 star	4.2500	.5000	4
COUNTRY	3 Italy	4.6216	.5415	74
HOTEL_ST	3 3 star	4.5263	.5130	19
HOTEL_ST	4 4 star	4.5714	.5903	42
HOTEL_ST	5 5 star	4.9231	.2774	13
COUNTRY	4 Germany	4.2049	1.1708	122
HOTEL_ST	0 no response	.0000	.	1
HOTEL_ST	3 3 star	4.1304	1.1403	23
HOTEL_ST	4 4 star	4.2391	.7051	46
HOTEL_ST	5 5 star	4.2885	1.3768	52

National legislation prevents contamination by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
SIZE_RM	1 10 - 99	4.3750	.6469	24
SIZE_RM	2 100 - 199	4.3725	.8476	51
SIZE_RM	3 200 +	4.3824	.6673	136
COUNTRY	2 France	4.0805	.9550	87
SIZE_RM	1 10 - 99	4.1053	.6578	19
SIZE_RM	2 100 - 199	4.1000	1.1250	30
SIZE_RM	3 200 +	4.0526	.9571	38
COUNTRY	3 Italy	4.5270	.6458	74
SIZE_RM	1 10 - 99	4.4500	.7592	20
SIZE_RM	2 100 - 199	4.5484	.5680	31
SIZE_RM	3 200 +	4.5652	.6624	23
COUNTRY	4 Germany	3.8279	1.2772	122
SIZE_RM	1 10 - 99	3.3333	.6860	18
SIZE_RM	2 100 - 199	4.0417	1.1971	24
SIZE_RM	3 200 +	3.8750	1.3814	80

National legislation prevents contamination by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
EMPLOY	2 10 - 99	4.4000	.6389	50
EMPLOY	3 100 +	4.3727	.7316	161
COUNTRY	2 France	4.0805	.9550	87

EMPLOY	2 10 - 99	4.1395	.9656	43
EMPLOY	3 100 +	4.0227	.9521	44
COUNTRY	3 Italy	4.5270	.6458	74
EMPLOY	1 less than 10	3.8750	.8345	8
EMPLOY	2 10 - 99	4.5192	.6101	52
EMPLOY	3 100 +	4.9286	.2673	14
COUNTRY	4 Germany	3.8279	1.2772	122
EMPLOY	1 less than 10	4.0000	.0000	7
EMPLOY	2 10 - 99	3.7143	1.1265	35
EMPLOY	3 100 +	3.8625	1.3939	80

National legislation prevents contamination by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
HOTEL_TY	0 no response	3.0000	.	1
HOTEL_TY	1 hotel chain	4.3974	.7065	156
HOTEL_TY	2 independent hotel	4.3519	.7046	54
COUNTRY	2 France	4.0805	.9550	87
HOTEL_TY	1 hotel chain	4.1290	1.0478	62
HOTEL_TY	2 independent hotel	3.9600	.6758	25
COUNTRY	3 Italy	4.5270	.6458	74
HOTEL_TY	1 hotel chain	4.4878	.6373	41
HOTEL_TY	2 independent hotel	4.5758	.6629	33
COUNTRY	4 Germany	3.8279	1.2772	122
HOTEL_TY	1 hotel chain	3.8125	1.2840	96
HOTEL_TY	2 independent hotel	3.8846	1.2752	26

National legislation prevents contamination by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
SEX	0 no response	3.0000	.	1
SEX	1 male	4.3964	.7089	169
SEX	2 female	4.3415	.6932	41
COUNTRY	2 France	4.0805	.9550	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.1184	.9656	76
SEX	2 female	3.8000	.9189	10

COUNTRY	3 Italy	4.5270	.6458	74
SEX	1 male	4.6000	.6431	60
SEX	2 female	4.2143	.5789	14
COUNTRY	4 Germany	3.8279	1.2772	122
SEX	1 male	3.9100	1.3341	100
SEX	2 female	3.4545	.9117	22

National legislation prevents contamination by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
AGE_GROU	0 no response	3.0000	.	1
AGE_GROU	1 under 20	4.6667	.5774	3
AGE_GROU	2 20 - 29	4.3814	.7698	97
AGE_GROU	3 30 - 39	4.3889	.5947	72
AGE_GROU	4 40 - 49	4.3333	.7958	21
AGE_GROU	5 50 - 59	4.4167	.6686	12
AGE_GROU	6 60 or over	4.4000	.8944	5
COUNTRY	2 France	4.0805	.9550	87
AGE_GROU	2 20 - 29	4.1724	.8048	29
AGE_GROU	3 30 - 39	4.1081	.8751	37
AGE_GROU	4 40 - 49	3.6667	1.3707	12
AGE_GROU	5 50 - 59	4.4286	.7868	7
AGE_GROU	6 60 or over	3.5000	2.1213	2
COUNTRY	3 Italy	4.5270	.6458	74
AGE_GROU	1 under 20	4.2857	.7559	7
AGE_GROU	2 20 - 29	4.5200	.6532	25
AGE_GROU	3 30 - 39	4.5484	.6239	31
AGE_GROU	4 40 - 49	4.7143	.7559	7
AGE_GROU	5 50 - 59	4.5000	.5774	4
COUNTRY	4 Germany	3.8279	1.2772	122
AGE_GROU	2 20 - 29	3.7250	1.4848	40
AGE_GROU	3 30 - 39	3.9744	1.2873	39
AGE_GROU	4 40 - 49	3.9412	1.0290	17
AGE_GROU	5 50 - 59	3.6667	1.1293	24
AGE_GROU	6 60 or over	4.0000	.0000	2

National legislation prevents contamination by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
YEARS_CA	1 none	4.3636	.6030	33

YEARS_CA	2 less than 1 year	4.5556	.5270	9
YEARS_CA	3 1 - 2 years	4.3929	.6289	28
YEARS_CA	4 2 - 3 years	4.2703	.9021	37
YEARS_CA	5 3 or more years	4.4038	.7039	104
COUNTRY	2 France	4.0805	.9550	87
YEARS_CA	1 none	4.0000	1.4142	2
YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.1176	.7812	17
YEARS_CA	4 2 - 3 years	3.8519	1.2311	27
YEARS_CA	5 3 or more years	4.2250	.8002	40
COUNTRY	3 Italy	4.5270	.6458	74
YEARS_CA	1 none	4.9091	.3015	11
YEARS_CA	2 less than 1 year	3.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.5714	.5345	7
YEARS_CA	4 2 - 3 years	4.5000	.5222	12
YEARS_CA	5 3 or more years	4.5122	.6753	41
COUNTRY	4 Germany	3.8279	1.2772	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.0000	1.6903	8
YEARS_CA	4 2 - 3 years	3.8103	1.1616	58
YEARS_CA	5 3 or more years	3.7963	1.3651	54

National legislation prevents contamination by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
YEARS_PR	1 less than 1 year	4.3333	.5774	3
YEARS_PR	2 1 - 2 years	4.4444	.5270	9
YEARS_PR	3 2 - 3 years	3.8182	.7508	11
YEARS_PR	4 3 years or more	4.4096	.7070	188
COUNTRY	2 France	4.0805	.9550	87
YEARS_PR	1 less than 1 year	2.0000	.	1
YEARS_PR	2 1 - 2 years	3.0000	1.0000	3
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.1463	.9179	82
COUNTRY	3 Italy	4.5270	.6458	74
YEARS_PR	2 1 - 2 years	5.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.5070	.6519	71
COUNTRY	4 Germany	3.8279	1.2772	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.1250	.6409	8
YEARS_PR	4 3 years or more	3.8053	1.3151	113

National legislation prevents contamination by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
POSITION	1 manager	4.3636	.7385	110
POSITION	2 supervisor	4.2857	.6587	28
POSITION	3 head chef	4.4839	.7690	31
POSITION	4 chef	4.4667	.7432	15
POSITION	5 waiter	4.2857	.4880	7
POSITION	6 other	4.4000	.5982	20
COUNTRY	2 France	4.0805	.9550	87
POSITION	1 manager	4.4545	.6876	11
POSITION	2 supervisor	3.2500	.9574	4
POSITION	3 head chef	3.5385	1.4500	13
POSITION	4 chef	4.5000	.6742	12
POSITION	5 waiter	4.4000	1.3416	5
POSITION	6 other	4.0714	.7455	42
COUNTRY	3 Italy	4.5270	.6458	74
POSITION	1 manager	4.4667	.7432	15
POSITION	2 supervisor	4.8333	.4082	6
POSITION	3 head chef	4.1250	.8062	16
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.7222	.4609	18
COUNTRY	4 Germany	3.8279	1.2772	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	3.6429	1.0345	56
POSITION	2 supervisor	4.1579	1.3023	19
POSITION	3 head chef	3.6316	1.9210	19
POSITION	4 chef	4.0000	1.1547	7
POSITION	5 waiter	3.8571	1.8645	7
POSITION	6 other	4.2308	.5991	13

National legislation prevents contamination by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.2126	.9497	494
COUNTRY	1 UK	4.3791	.7094	211
HOTEL_ST	3 3 star	4.5000	.5130	20
HOTEL_ST	4 4 star	4.3382	.7623	136
HOTEL_ST	5 5 star	4.4364	.6314	55
COUNTRY	2 France	4.0805	.9550	87
HOTEL_ST	2 2 star	3.0000	.0000	2

HOTEL_ST	3 3 star	4.3333	.5941	18
HOTEL_ST	4 4 star	4.0317	1.0313	63
HOTEL_ST	5 5 star	4.2500	.9574	4
COUNTRY	3 Italy	4.5270	.6458	74
HOTEL_ST	3 3 star	4.4737	.7723	19
HOTEL_ST	4 4 star	4.4524	.6325	42
HOTEL_ST	5 5 star	4.8462	.3755	13
COUNTRY	4 Germany	3.8279	1.2772	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	3.6957	1.2223	23
HOTEL_ST	4 4 star	3.8043	.8849	46
HOTEL_ST	5 5 star	3.8846	1.5799	52

National legislation prevents misleading labelling by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
SIZE_RM	1 10 - 99	3.9583	.9546	24
SIZE_RM	2 100 - 199	4.1569	1.1022	51
SIZE_RM	3 200 +	4.2279	.8252	136
COUNTRY	2 France	4.1034	1.1106	87
SIZE_RM	1 10 - 99	3.5263	1.0203	19
SIZE_RM	2 100 - 199	4.2667	1.0807	30
SIZE_RM	3 200 +	4.2632	1.1073	38
COUNTRY	3 Italy	4.0811	1.1558	74
SIZE_RM	1 10 - 99	3.3500	1.5313	20
SIZE_RM	2 100 - 199	4.0323	.9481	31
SIZE_RM	3 200 +	4.7826	.4217	23
COUNTRY	4 Germany	3.8115	1.2219	122
SIZE_RM	1 10 - 99	3.3333	.6860	18
SIZE_RM	2 100 - 199	3.7083	1.0826	24
SIZE_RM	3 200 +	3.9500	1.3303	80

National legislation prevents misleading labelling by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
EMPLOY	2 10 - 99	4.1200	.8953	50
EMPLOY	3 100 +	4.1988	.9207	161
COUNTRY	2 France	4.1034	1.1106	87

EMPLOY	2 10 - 99	3.9767	1.1441	43
EMPLOY	3 100 +	4.2273	1.0754	44
COUNTRY	3 Italy	4.0811	1.1558	74
EMPLOY	1 less than 10	2.5000	1.3093	8
EMPLOY	2 10 - 99	4.0769	1.0261	52
EMPLOY	3 100 +	5.0000	.0000	14
COUNTRY	4 Germany	3.8115	1.2219	122
EMPLOY	1 less than 10	4.0000	.0000	7
EMPLOY	2 10 - 99	3.5429	1.0387	35
EMPLOY	3 100 +	3.9125	1.3331	80

National legislation prevents misleading labelling by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.1346	.9577	156
HOTEL_TY	2 independent hotel	4.3148	.7727	54
COUNTRY	2 France	4.1034	1.1106	87
HOTEL_TY	1 hotel chain	4.1935	1.1285	62
HOTEL_TY	2 independent hotel	3.8800	1.0536	25
COUNTRY	3 Italy	4.0811	1.1558	74
HOTEL_TY	1 hotel chain	4.4146	1.0482	41
HOTEL_TY	2 independent hotel	3.6667	1.1637	33
COUNTRY	4 Germany	3.8115	1.2219	122
HOTEL_TY	1 hotel chain	3.8125	1.2253	96
HOTEL_TY	2 independent hotel	3.8077	1.2335	26

National legislation prevents misleading labelling by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.1716	.8998	169
SEX	2 female	4.2195	.9877	41
COUNTRY	2 France	4.1034	1.1106	87
SEX	0 no response	3.0000	.	1
SEX	1 male	4.1316	1.1117	76
SEX	2 female	4.0000	1.1547	10

COUNTRY	3 Italy	4.0811	1.1558	74
SEX	1 male	4.2167	1.1363	60
SEX	2 female	3.5000	1.0919	14
COUNTRY	4 Germany	3.8115	1.2219	122
SEX	1 male	3.9100	1.2720	100
SEX	2 female	3.3636	.8477	22

National legislation prevents misleading labelling by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	4.3333	1.1547	3
AGE_GROU	2 20 - 29	4.1856	.8700	97
AGE_GROU	3 30 - 39	4.0972	.9369	72
AGE_GROU	4 40 - 49	4.1429	1.0623	21
AGE_GROU	5 50 - 59	4.5833	.9003	12
AGE_GROU	6 60 or over	4.4000	.8944	5
COUNTRY	2 France	4.1034	1.1106	87
AGE_GROU	2 20 - 29	3.7931	1.0816	29
AGE_GROU	3 30 - 39	4.3784	1.0369	37
AGE_GROU	4 40 - 49	3.5833	1.3790	12
AGE_GROU	5 50 - 59	4.7143	.4880	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.0811	1.1558	74
AGE_GROU	1 under 20	3.4286	1.3973	7
AGE_GROU	2 20 - 29	4.0800	.9967	25
AGE_GROU	3 30 - 39	4.1613	1.2409	31
AGE_GROU	4 40 - 49	4.0000	1.2910	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	3.8115	1.2219	122
AGE_GROU	2 20 - 29	3.8750	1.2848	40
AGE_GROU	3 30 - 39	3.9487	1.3367	39
AGE_GROU	4 40 - 49	3.5882	1.0641	17
AGE_GROU	5 50 - 59	3.6667	1.0901	24
AGE_GROU	6 60 or over	3.5000	.7071	2

National legislation prevents misleading labelling by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
YEARS_CA	1 none	4.0606	.8993	33
YEARS_CA	2 less than 1 year	4.3333	.5000	9

YEARS_CA	3	1 - 2 years	4.3929	.7860	28
YEARS_CA	4	2 - 3 years	4.0270	1.0926	37
YEARS_CA	5	3 or more years	4.2019	.9071	104
COUNTRY	2	France	4.1034	1.1106	87
YEARS_CA	1	none	4.0000	1.4142	2
YEARS_CA	2	less than 1 year	4.0000	.	1
YEARS_CA	3	1 - 2 years	3.8235	1.1851	17
YEARS_CA	4	2 - 3 years	4.2963	1.0675	27
YEARS_CA	5	3 or more years	4.1000	1.1277	40
COUNTRY	3	Italy	4.0811	1.1558	74
YEARS_CA	1	none	4.3636	1.2060	11
YEARS_CA	2	less than 1 year	2.6667	1.1547	3
YEARS_CA	3	1 - 2 years	4.1429	.8997	7
YEARS_CA	4	2 - 3 years	4.5833	.6686	12
YEARS_CA	5	3 or more years	3.9512	1.2237	41
COUNTRY	4	Germany	3.8115	1.2219	122
YEARS_CA	1	none	4.0000	.0000	2
YEARS_CA	3	1 - 2 years	3.7500	1.7525	8
YEARS_CA	4	2 - 3 years	3.6724	1.2895	58
YEARS_CA	5	3 or more years	3.9630	1.0809	54

National legislation prevents misleading labelling by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
YEARS_PR	1 less than 1 year	4.0000	.0000	3
YEARS_PR	2 1 - 2 years	4.1111	1.1667	9
YEARS_PR	3 2 - 3 years	3.8182	.6030	11
YEARS_PR	4 3 years or more	4.2074	.9218	188
COUNTRY	2 France	4.1034	1.1106	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	3.0000	1.0000	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.1341	1.1085	82
COUNTRY	3 Italy	4.0811	1.1558	74
YEARS_PR	2 1 - 2 years	2.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.1408	1.1250	71
COUNTRY	4 Germany	3.8115	1.2219	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.0000	.5345	8
YEARS_PR	4 3 years or more	3.7965	1.2618	113

National legislation prevents misleading labelling by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
POSITION	1 manager	4.1727	.9848	110
POSITION	2 supervisor	4.3214	.6696	28
POSITION	3 head chef	4.4516	.6752	31
POSITION	4 chef	3.6667	.9759	15
POSITION	5 waiter	4.0000	.5774	7
POSITION	6 other	4.0500	1.0501	20
COUNTRY	2 France	4.1034	1.1106	87
POSITION	1 manager	4.2727	1.1909	11
POSITION	2 supervisor	4.7500	.5000	4
POSITION	3 head chef	4.0769	1.4412	13
POSITION	4 chef	4.4167	.6686	12
POSITION	5 waiter	3.6000	.8944	5
POSITION	6 other	3.9762	1.1367	42
COUNTRY	3 Italy	4.0811	1.1558	74
POSITION	1 manager	4.2667	1.3870	15
POSITION	2 supervisor	4.0000	1.0954	6
POSITION	3 head chef	3.8125	1.1673	16
POSITION	4 chef	3.5000	1.1677	12
POSITION	5 waiter	3.4286	1.1339	7
POSITION	6 other	4.8333	.3835	18
COUNTRY	4 Germany	3.8115	1.2219	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	3.8214	1.0288	56
POSITION	2 supervisor	3.6842	1.5294	19
POSITION	3 head chef	3.7368	1.5931	19
POSITION	4 chef	3.8571	.8997	7
POSITION	5 waiter	3.5714	1.8127	7
POSITION	6 other	4.0769	.7596	13

National legislation prevents misleading labelling by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0607	1.0754	494
COUNTRY	1 UK	4.1801	.9133	211
HOTEL_ST	3 3 star	4.3000	.8013	20
HOTEL_ST	4 4 star	4.1324	.9569	136
HOTEL_ST	5 5 star	4.2545	.8437	55
COUNTRY	2 France	4.1034	1.1106	87
HOTEL_ST	2 2 star	5.0000	.0000	2

HOTEL_ST	3 3 star	4.1111	.9634	18
HOTEL_ST	4 4 star	4.0794	1.1819	63
HOTEL_ST	5 5 star	4.0000	.8165	4
COUNTRY	3 Italy	4.0811	1.1558	74
HOTEL_ST	3 3 star	3.2632	1.5218	19
HOTEL_ST	4 4 star	4.3095	.9236	42
HOTEL_ST	5 5 star	4.5385	.5189	13
COUNTRY	4 Germany	3.8115	1.2219	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	3.4783	1.0816	23
HOTEL_ST	4 4 star	3.9348	.9522	46
HOTEL_ST	5 5 star	3.8269	1.4649	52

National legislation encourages awareness of food safety by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
SIZE_RM	1 10 - 99	4.3750	.7109	24
SIZE_RM	2 100 - 199	4.4510	.8789	51
SIZE_RM	3 200 +	4.4338	.7474	136
COUNTRY	2 France	4.6092	.6167	87
SIZE_RM	1 10 - 99	4.2105	.9177	19
SIZE_RM	2 100 - 199	4.6667	.4795	30
SIZE_RM	3 200 +	4.7632	.4309	38
COUNTRY	3 Italy	4.5135	.6247	74
SIZE_RM	1 10 - 99	4.4500	.6863	20
SIZE_RM	2 100 - 199	4.3871	.5584	31
SIZE_RM	3 200 +	4.7391	.6192	23
COUNTRY	4 Germany	3.8770	1.0647	122
SIZE_RM	1 10 - 99	3.7222	.6691	18
SIZE_RM	2 100 - 199	3.7083	.9079	24
SIZE_RM	3 200 +	3.9625	1.1740	80

National legislation encourages awareness of food safety by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
EMPLOY	2 10 - 99	4.4200	.7025	50
EMPLOY	3 100 +	4.4348	.7967	161
COUNTRY	2 France	4.6092	.6167	87

EMPLOY	2 10 - 99	4.4651	.7351	43
EMPLOY	3 100 +	4.7500	.4380	44
COUNTRY	3 Italy	4.5135	.6247	74
EMPLOY	1 less than 10	4.2500	.8864	8
EMPLOY	2 10 - 99	4.4231	.6054	52
EMPLOY	3 100 +	5.0000	.0000	14
COUNTRY	4 Germany	3.8770	1.0647	122
EMPLOY	1 less than 10	4.0000	.0000	7
EMPLOY	2 10 - 99	3.7429	.8521	35
EMPLOY	3 100 +	3.9250	1.1883	80

National legislation encourages awareness of food safety by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.3910	.8392	156
HOTEL_TY	2 independent hotel	4.5556	.5379	54
COUNTRY	2 France	4.6092	.6167	87
HOTEL_TY	1 hotel chain	4.6774	.5661	62
HOTEL_TY	2 independent hotel	4.4400	.7118	25
COUNTRY	3 Italy	4.5135	.6247	74
HOTEL_TY	1 hotel chain	4.6098	.6276	41
HOTEL_TY	2 independent hotel	4.3939	.6093	33
COUNTRY	4 Germany	3.8770	1.0647	122
HOTEL_TY	1 hotel chain	3.8229	1.0662	96
HOTEL_TY	2 independent hotel	4.0769	1.0554	26

National legislation encourages awareness by levels of country of hotel gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.4142	.7830	169
SEX	2 female	4.5122	.7457	41
COUNTRY	2 France	4.6092	.6167	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.5921	.6362	76
SEX	2 female	4.8000	.4216	10

COUNTRY	3 Italy	4.5135	.6247	74
SEX	1 male	4.5667	.6207	60
SEX	2 female	4.2857	.6112	14
COUNTRY	4 Germany	3.8770	1.0647	122
SEX	1 male	3.9300	1.1124	100
SEX	2 female	3.6364	.7895	22

National legislation encourages awareness of food safety by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.3814	.7832	97
AGE_GROU	3 30 - 39	4.4722	.7310	72
AGE_GROU	4 40 - 49	4.3810	.9735	21
AGE_GROU	5 50 - 59	4.3333	.7785	12
AGE_GROU	6 60 or over	5.0000	.0000	5
COUNTRY	2 France	4.6092	.6167	87
AGE_GROU	2 20 - 29	4.3793	.8200	29
AGE_GROU	3 30 - 39	4.7838	.4173	37
AGE_GROU	4 40 - 49	4.4167	.5149	12
AGE_GROU	5 50 - 59	4.8571	.3780	7
AGE_GROU	6 60 or over	5.0000	.0000	2
COUNTRY	3 Italy	4.5135	.6247	74
AGE_GROU	1 under 20	4.5714	.7868	7
AGE_GROU	2 20 - 29	4.6000	.5774	25
AGE_GROU	3 30 - 39	4.4839	.6256	31
AGE_GROU	4 40 - 49	4.2857	.7559	7
AGE_GROU	5 50 - 59	4.5000	.5774	4
COUNTRY	4 Germany	3.8770	1.0647	122
AGE_GROU	2 20 - 29	3.7500	1.2352	40
AGE_GROU	3 30 - 39	3.9744	1.0879	39
AGE_GROU	4 40 - 49	3.8824	.8575	17
AGE_GROU	5 50 - 59	3.9167	.9286	24
AGE_GROU	6 60 or over	4.0000	.0000	2

National legislation encourages awareness of food safety by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211

YEARS_CA	1 none	4.2424	.8671	33
YEARS_CA	2 less than 1 year	4.1111	.7817	9
YEARS_CA	3 1 - 2 years	4.3571	.9114	28
YEARS_CA	4 2 - 3 years	4.3514	.9194	37
YEARS_CA	5 3 or more years	4.5673	.6195	104
COUNTRY	2 France	4.6092	.6167	87
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.2941	.7717	17
YEARS_CA	4 2 - 3 years	4.8889	.3203	27
YEARS_CA	5 3 or more years	4.5250	.6400	40
COUNTRY	3 Italy	4.5135	.6247	74
YEARS_CA	1 none	4.5455	.5222	11
YEARS_CA	2 less than 1 year	3.6667	1.1547	3
YEARS_CA	3 1 - 2 years	4.2857	.4880	7
YEARS_CA	4 2 - 3 years	4.5000	.6742	12
YEARS_CA	5 3 or more years	4.6098	.5864	41
COUNTRY	4 Germany	3.8770	1.0647	122
YEARS_CA	1 none	4.0000	.0000	2
YEARS_CA	3 1 - 2 years	4.0000	1.6903	8
YEARS_CA	4 2 - 3 years	3.6897	1.0956	58
YEARS_CA	5 3 or more years	4.0556	.9197	54

National legislation encourages awareness of food safety by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
YEARS_PR	1 less than 1 year	3.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.2222	.8333	9
YEARS_PR	3 2 - 3 years	4.4545	.9342	11
YEARS_PR	4 3 years or more	4.4521	.7620	188
COUNTRY	2 France	4.6092	.6167	87
YEARS_PR	1 less than 1 year	5.0000	.	1
YEARS_PR	2 1 - 2 years	4.6667	.5774	3
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.6098	.6237	82
COUNTRY	3 Italy	4.5135	.6247	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.5211	.6293	71
COUNTRY	4 Germany	3.8770	1.0647	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	3.6250	.5175	8
YEARS_PR	4 3 years or more	3.8938	1.0968	113

National legislation encourages awareness of food safety by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
POSITION	1 manager	4.4000	.7922	110
POSITION	2 supervisor	4.2857	.7629	28
POSITION	3 head chef	4.7097	.5287	31
POSITION	4 chef	4.5333	.6399	15
POSITION	5 waiter	4.2857	.7559	7
POSITION	6 other	4.3500	1.0400	20
COUNTRY	2 France	4.6092	.6167	87
POSITION	1 manager	4.8182	.4045	11
POSITION	2 supervisor	5.0000	.0000	4
POSITION	3 head chef	4.9231	.2774	13
POSITION	4 chef	4.6667	.8876	12
POSITION	5 waiter	3.6000	.8944	5
POSITION	6 other	4.5238	.5055	42
COUNTRY	3 Italy	4.5135	.6247	74
POSITION	1 manager	4.6000	.7368	15
POSITION	2 supervisor	4.5000	.5477	6
POSITION	3 head chef	4.5000	.7303	16
POSITION	4 chef	4.3333	.4924	12
POSITION	5 waiter	4.1429	.6901	7
POSITION	6 other	4.7222	.4609	18
COUNTRY	4 Germany	3.8770	1.0647	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	3.8571	.9425	56
POSITION	2 supervisor	3.5789	1.3045	19
POSITION	3 head chef	4.0000	1.5635	19
POSITION	4 chef	3.5714	.5345	7
POSITION	5 waiter	4.4286	.7868	7
POSITION	6 other	4.0000	.4082	13

National legislation encourages awareness of food safety by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3381	.8552	494
COUNTRY	1 UK	4.4313	.7738	211
HOTEL_ST	3 3 star	4.6500	.5871	20
HOTEL_ST	4 4 star	4.3676	.8148	136
HOTEL_ST	5 5 star	4.5091	.7168	55
COUNTRY	2 France	4.6092	.6167	87

HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.4444	.7838	18
HOTEL_ST	4 4 star	4.6667	.5680	63
HOTEL_ST	5 5 star	4.2500	.5000	4
COUNTRY	3 Italy	4.5135	.6247	74
HOTEL_ST	3 3 star	4.4211	.6925	19
HOTEL_ST	4 4 star	4.4286	.6302	42
HOTEL_ST	5 5 star	4.9231	.2774	13
COUNTRY	4 Germany	3.8770	1.0647	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	3.6087	.7223	23
HOTEL_ST	4 4 star	4.0000	.7601	46
HOTEL_ST	5 5 star	3.8654	1.3724	52

National legislation on food safety enhances industry reputation by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
SIZE_RM	1 10 - 99	4.0417	.9546	24
SIZE_RM	2 100 - 199	4.0196	1.1400	51
SIZE_RM	3 200 +	4.1691	1.0078	136
COUNTRY	2 France	4.1724	.8788	87
SIZE_RM	1 10 - 99	3.6316	.9551	19
SIZE_RM	2 100 - 199	4.2667	.7397	30
SIZE_RM	3 200 +	4.3684	.8517	38
COUNTRY	3 Italy	4.6216	.5899	74
SIZE_RM	1 10 - 99	4.7500	.4443	20
SIZE_RM	2 100 - 199	4.4839	.7244	31
SIZE_RM	3 200 +	4.6957	.4705	23
COUNTRY	4 Germany	3.4672	1.2932	122
SIZE_RM	1 10 - 99	3.2778	.6691	18
SIZE_RM	2 100 - 199	3.0833	1.1389	24
SIZE_RM	3 200 +	3.6250	1.4176	80

National legislation on food safety enhances industry reputation by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
EMPLOY	2 10 - 99	4.0200	.9998	50
EMPLOY	3 100 +	4.1491	1.0441	161

COUNTRY	2 France	4.1724	.8788	87
EMPLOY	2 10 - 99	4.0000	.9258	43
EMPLOY	3 100 +	4.3409	.8053	44
COUNTRY	3 Italy	4.6216	.5899	74
EMPLOY	1 less than 10	4.5000	.5345	8
EMPLOY	2 10 - 99	4.5577	.6390	52
EMPLOY	3 100 +	4.9286	.2673	14
COUNTRY	4 Germany	3.4672	1.2932	122
EMPLOY	1 less than 10	4.0000	.0000	7
EMPLOY	2 10 - 99	3.0000	1.0290	35
EMPLOY	3 100 +	3.6250	1.3996	80

National legislation on food safety enhances industry reputation by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
HOTEL_TY	0 no response	2.0000	.	1
HOTEL_TY	1 hotel chain	4.1090	1.0196	156
HOTEL_TY	2 independent hotel	4.1852	1.0474	54
COUNTRY	2 France	4.1724	.8788	87
HOTEL_TY	1 hotel chain	4.3226	.8449	62
HOTEL_TY	2 independent hotel	3.8000	.8660	25
COUNTRY	3 Italy	4.6216	.5899	74
HOTEL_TY	1 hotel chain	4.5854	.6699	41
HOTEL_TY	2 independent hotel	4.6667	.4787	33
COUNTRY	4 Germany	3.4672	1.2932	122
HOTEL_TY	1 hotel chain	3.4792	1.2813	96
HOTEL_TY	2 independent hotel	3.4231	1.3616	26

National legislation on food safety enhances industry reputation by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
SEX	0 no response	2.0000	.	1
SEX	1 male	4.0888	1.0284	169
SEX	2 female	4.2927	1.0061	41
COUNTRY	2 France	4.1724	.8788	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.1842	.8596	76
SEX	2 female	4.1000	1.1005	10

COUNTRY	3 Italy	4.6216	.5899	74
SEX	1 male	4.6500	.6058	60
SEX	2 female	4.5000	.5189	14
COUNTRY	4 Germany	3.4672	1.2932	122
SEX	1 male	3.5800	1.3720	100
SEX	2 female	2.9545	.6530	22

National legislation on food safety enhances industry reputation by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
AGE_GROU	0 no response	2.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.1237	.9158	97
AGE_GROU	3 30 - 39	4.1528	1.1708	72
AGE_GROU	4 40 - 49	3.9524	1.1170	21
AGE_GROU	5 50 - 59	4.1667	1.0299	12
AGE_GROU	6 60 or over	4.0000	.7071	5
COUNTRY	2 France	4.1724	.8788	87
AGE_GROU	2 20 - 29	4.1379	.7894	29
AGE_GROU	3 30 - 39	4.2973	.9962	37
AGE_GROU	4 40 - 49	3.6667	.6513	12
AGE_GROU	5 50 - 59	4.5714	.5345	7
AGE_GROU	6 60 or over	4.0000	1.4142	2
COUNTRY	3 Italy	4.6216	.5899	74
AGE_GROU	1 under 20	4.5714	.5345	7
AGE_GROU	2 20 - 29	4.6000	.7071	25
AGE_GROU	3 30 - 39	4.6774	.4752	31
AGE_GROU	4 40 - 49	4.7143	.4880	7
AGE_GROU	5 50 - 59	4.2500	.9574	4
COUNTRY	4 Germany	3.4672	1.2932	122
AGE_GROU	2 20 - 29	3.2250	1.4230	40
AGE_GROU	3 30 - 39	3.5897	1.3518	39
AGE_GROU	4 40 - 49	3.5882	1.0641	17
AGE_GROU	5 50 - 59	3.6250	1.1349	24
AGE_GROU	6 60 or over	3.0000	1.4142	2

National legislation on food safety enhances industry reputation by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494

COUNTRY	1 UK	4.1185	1.0329	211
YEARS_CA	1 none	4.0909	.8790	33
YEARS_CA	2 less than 1 year	3.7778	1.3017	9
YEARS_CA	3 1 - 2 years	4.2143	.9567	28
YEARS_CA	4 2 - 3 years	3.7838	1.2502	37
YEARS_CA	5 3 or more years	4.2500	.9729	104
COUNTRY	2 France	4.1724	.8788	87
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	2 less than 1 year	2.0000	.	1
YEARS_CA	3 1 - 2 years	4.1765	.6359	17
YEARS_CA	4 2 - 3 years	4.0000	1.0377	27
YEARS_CA	5 3 or more years	4.3250	.7970	40
COUNTRY	3 Italy	4.6216	.5899	74
YEARS_CA	1 none	4.7273	.4671	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.7143	.4880	7
YEARS_CA	4 2 - 3 years	4.5000	.5222	12
YEARS_CA	5 3 or more years	4.6341	.6617	41
COUNTRY	4 Germany	3.4672	1.2932	122
YEARS_CA	1 none	3.0000	1.4142	2
YEARS_CA	3 1 - 2 years	3.7500	1.8323	8
YEARS_CA	4 2 - 3 years	3.2931	1.2426	58
YEARS_CA	5 3 or more years	3.6296	1.2634	54

National legislation on food safety enhances industry reputation by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
YEARS_PR	1 less than 1 year	3.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.1111	1.0541	9
YEARS_PR	3 2 - 3 years	3.9091	1.0445	11
YEARS_PR	4 3 years or more	4.1383	1.0404	188
COUNTRY	2 France	4.1724	.8788	87
YEARS_PR	1 less than 1 year	5.0000	.	1
YEARS_PR	2 1 - 2 years	3.3333	.5774	3
YEARS_PR	3 2 - 3 years	3.0000	.	1
YEARS_PR	4 3 years or more	4.2073	.8712	82
COUNTRY	3 Italy	4.6216	.5899	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.6479	.5879	71
COUNTRY	4 Germany	3.4672	1.2932	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	3.3750	.7440	8

YEARS_PR 4 3 years or more 3.4690 1.3301 113

National legislation on food safety enhances industry reputation by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
POSITION	1 manager	4.0273	1.1043	110
POSITION	2 supervisor	4.0714	.9400	28
POSITION	3 head chef	4.3548	.9504	31
POSITION	4 chef	4.0667	.8837	15
POSITION	5 waiter	4.1429	.8997	7
POSITION	6 other	4.3500	1.0400	20
COUNTRY	2 France	4.1724	.8788	87
POSITION	1 manager	4.3636	.8090	11
POSITION	2 supervisor	4.5000	.5774	4
POSITION	3 head chef	4.6154	.7679	13
POSITION	4 chef	3.9167	1.3114	12
POSITION	5 waiter	3.0000	.0000	5
POSITION	6 other	4.1667	.7297	42
COUNTRY	3 Italy	4.6216	.5899	74
POSITION	1 manager	4.7333	.4577	15
POSITION	2 supervisor	5.0000	.0000	6
POSITION	3 head chef	4.3750	.8062	16
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	4.1429	.3780	7
POSITION	6 other	4.7778	.5483	18
COUNTRY	4 Germany	3.4672	1.2932	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	3.3393	1.1643	56
POSITION	2 supervisor	3.2632	1.4848	19
POSITION	3 head chef	3.7895	1.6526	19
POSITION	4 chef	3.4286	.9759	7
POSITION	5 waiter	3.7143	1.7995	7
POSITION	6 other	3.6154	.7679	13

National legislation on food safety enhances industry reputation by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.0425	1.0903	494
COUNTRY	1 UK	4.1185	1.0329	211
HOTEL_ST	3 3 star	4.5000	.6070	20
HOTEL_ST	4 4 star	4.0809	1.0958	136
HOTEL_ST	5 5 star	4.0727	.9786	55

COUNTRY	2 France	4.1724	.8788	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.1111	.9634	18
HOTEL_ST	4 4 star	4.1429	.8773	63
HOTEL_ST	5 5 star	4.5000	.5774	4
COUNTRY	3 Italy	4.6216	.5899	74
HOTEL_ST	3 3 star	4.7368	.4524	19
HOTEL_ST	4 4 star	4.5000	.6717	42
HOTEL_ST	5 5 star	4.8462	.3755	13
COUNTRY	4 Germany	3.4672	1.2932	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	3.0000	1.0445	23
HOTEL_ST	4 4 star	3.6304	.9743	46
HOTEL_ST	5 5 star	3.5000	1.5780	52

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and hotel size in rooms

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
SIZE_RM	1 10 - 99	4.7083	.4643	24
SIZE_RM	2 100 - 199	4.6863	.7872	51
SIZE_RM	3 200 +	4.6985	.5065	136
COUNTRY	2 France	4.5747	.6404	87
SIZE_RM	1 10 - 99	4.6316	.4956	19
SIZE_RM	2 100 - 199	4.4667	.7761	30
SIZE_RM	3 200 +	4.6316	.5891	38
COUNTRY	3 Italy	4.6486	.5084	74
SIZE_RM	1 10 - 99	4.7000	.4702	20
SIZE_RM	2 100 - 199	4.4839	.5699	31
SIZE_RM	3 200 +	4.8261	.3876	23
COUNTRY	4 Germany	4.5246	.6326	122
SIZE_RM	1 10 - 99	3.8889	.3234	18
SIZE_RM	2 100 - 199	4.3750	.7697	24
SIZE_RM	3 200 +	4.7125	.5323	80

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
EMPLOY	2 10 - 99	4.7800	.4185	50

EMPLOY	3 100 +	4.6708	.6202	161
COUNTRY	2 France	4.5747	.6404	87
EMPLOY	2 10 - 99	4.5814	.5869	43
EMPLOY	3 100 +	4.5682	.6954	44
COUNTRY	3 Italy	4.6486	.5084	74
EMPLOY	1 less than 10	4.5000	.5345	8
EMPLOY	2 10 - 99	4.5769	.5367	52
EMPLOY	3 100 +	5.0000	.0000	14
COUNTRY	4 Germany	4.5246	.6326	122
EMPLOY	1 less than 10	4.0000	.0000	7
EMPLOY	2 10 - 99	4.1714	.7065	35
EMPLOY	3 100 +	4.7250	.5271	80

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.6923	.6182	156
HOTEL_TY	2 independent hotel	4.7222	.4521	54
COUNTRY	2 France	4.5747	.6404	87
HOTEL_TY	1 hotel chain	4.5968	.6643	62
HOTEL_TY	2 independent hotel	4.5200	.5859	25
COUNTRY	3 Italy	4.6486	.5084	74
HOTEL_TY	1 hotel chain	4.6829	.5215	41
HOTEL_TY	2 independent hotel	4.6061	.4962	33
COUNTRY	4 Germany	4.5246	.6326	122
HOTEL_TY	1 hotel chain	4.5313	.6642	96
HOTEL_TY	2 independent hotel	4.5000	.5099	26

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.6686	.5847	169
SEX	2 female	4.8293	.5433	41
COUNTRY	2 France	4.5747	.6404	87
SEX	0 no response	4.0000	.	1

SEX	1 male	4.5921	.6568	76
SEX	2 female	4.5000	.5270	10
COUNTRY	3 Italy	4.6486	.5084	74
SEX	1 male	4.6833	.5039	60
SEX	2 female	4.5000	.5189	14
COUNTRY	4 Germany	4.5246	.6326	122
SEX	1 male	4.5800	.6541	100
SEX	2 female	4.2727	.4558	22

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.6907	.6513	97
AGE_GROU	3 30 - 39	4.6667	.5566	72
AGE_GROU	4 40 - 49	4.7143	.4629	21
AGE_GROU	5 50 - 59	4.8333	.3892	12
AGE_GROU	6 60 or over	4.8000	.4472	5
COUNTRY	2 France	4.5747	.6404	87
AGE_GROU	2 20 - 29	4.5862	.6278	29
AGE_GROU	3 30 - 39	4.6216	.5940	37
AGE_GROU	4 40 - 49	4.4167	.9003	12
AGE_GROU	5 50 - 59	4.5714	.5345	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.6486	.5084	74
AGE_GROU	1 under 20	4.7143	.4880	7
AGE_GROU	2 20 - 29	4.6400	.5686	25
AGE_GROU	3 30 - 39	4.6774	.4752	31
AGE_GROU	4 40 - 49	4.4286	.5345	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.5246	.6326	122
AGE_GROU	2 20 - 29	4.6500	.6222	40
AGE_GROU	3 30 - 39	4.5641	.6804	39
AGE_GROU	4 40 - 49	4.4118	.7123	17
AGE_GROU	5 50 - 59	4.3750	.4945	24
AGE_GROU	6 60 or over	4.0000	.0000	2

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
YEARS_CA	1 none	4.6061	.6586	33
YEARS_CA	2 less than 1 year	4.6667	.5000	9
YEARS_CA	3 1 - 2 years	4.6786	.4756	28
YEARS_CA	4 2 - 3 years	4.5946	.8963	37
YEARS_CA	5 3 or more years	4.7692	.4234	104
COUNTRY	2 France	4.5747	.6404	87
YEARS_CA	1 none	3.5000	2.1213	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.5294	.6243	17
YEARS_CA	4 2 - 3 years	4.6296	.4921	27
YEARS_CA	5 3 or more years	4.6000	.6325	40
COUNTRY	3 Italy	4.6486	.5084	74
YEARS_CA	1 none	4.7273	.4671	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.2857	.4880	7
YEARS_CA	4 2 - 3 years	4.5833	.5149	12
YEARS_CA	5 3 or more years	4.7317	.5012	41
COUNTRY	4 Germany	4.5246	.6326	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.6250	.5175	8
YEARS_CA	4 2 - 3 years	4.5172	.5377	58
YEARS_CA	5 3 or more years	4.5185	.7458	54

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.6667	.5000	9
YEARS_PR	3 2 - 3 years	4.4545	.5222	11
YEARS_PR	4 3 years or more	4.7128	.5873	188
COUNTRY	2 France	4.5747	.6404	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	4.3333	.5774	3
YEARS_PR	3 2 - 3 years	3.0000	.	1
YEARS_PR	4 3 years or more	4.6098	.6237	82

COUNTRY	3 Italy	4.6486	.5084	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.6620	.5055	71
COUNTRY	4 Germany	4.5246	.6326	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.3750	.5175	8
YEARS_PR	4 3 years or more	4.5398	.6414	113

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
POSITION	1 manager	4.7182	.6227	110
POSITION	2 supervisor	4.6786	.4756	28
POSITION	3 head chef	4.8710	.3408	31
POSITION	4 chef	4.7333	.4577	15
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.3500	.7452	20
COUNTRY	2 France	4.5747	.6404	87
POSITION	1 manager	4.6364	.5045	11
POSITION	2 supervisor	4.5000	.5774	4
POSITION	3 head chef	4.8462	.3755	13
POSITION	4 chef	4.5833	.5149	12
POSITION	5 waiter	4.8000	.4472	5
POSITION	6 other	4.4524	.7715	42
COUNTRY	3 Italy	4.6486	.5084	74
POSITION	1 manager	4.7333	.4577	15
POSITION	2 supervisor	4.5000	.5477	6
POSITION	3 head chef	4.5000	.6325	16
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	4.4286	.5345	7
POSITION	6 other	4.8333	.3835	18
COUNTRY	4 Germany	4.5246	.6326	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	4.3214	.6635	56
POSITION	2 supervisor	4.6842	.5824	19
POSITION	3 head chef	4.8421	.3746	19
POSITION	4 chef	4.4286	.9759	7
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.6154	.5064	13

My hotel's policies on food safety prevent food poisoning by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6255	.5970	494
COUNTRY	1 UK	4.6967	.5798	211
HOTEL_ST	3 3 star	4.6500	.4894	20
HOTEL_ST	4 4 star	4.6471	.6501	136
HOTEL_ST	5 5 star	4.8364	.3734	55
COUNTRY	2 France	4.5747	.6404	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.5000	.6183	18
HOTEL_ST	4 4 star	4.5714	.6651	63
HOTEL_ST	5 5 star	4.7500	.5000	4
COUNTRY	3 Italy	4.6486	.5084	74
HOTEL_ST	3 3 star	4.7368	.4524	19
HOTEL_ST	4 4 star	4.5476	.5501	42
HOTEL_ST	5 5 star	4.8462	.3755	13
COUNTRY	4 Germany	4.5246	.6326	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	4.3043	.7029	23
HOTEL_ST	4 4 star	4.2826	.6553	46
HOTEL_ST	5 5 star	4.8269	.4303	52

My hotel's policies on food safety prevent food contamination by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
SIZE_RM	1 10 - 99	4.6250	.4945	24
SIZE_RM	2 100 - 199	4.5686	.8063	51
SIZE_RM	3 200 +	4.6397	.5666	136
COUNTRY	2 France	4.2069	.8910	87
SIZE_RM	1 10 - 99	3.9474	.5243	19
SIZE_RM	2 100 - 199	4.3000	.8367	30
SIZE_RM	3 200 +	4.2632	1.0574	38
COUNTRY	3 Italy	4.2838	.8196	74
SIZE_RM	1 10 - 99	3.8500	.9333	20
SIZE_RM	2 100 - 199	4.3226	.7478	31
SIZE_RM	3 200 +	4.6087	.6564	23
COUNTRY	4 Germany	4.2295	1.0024	122
SIZE_RM	1 10 - 99	3.4444	.5113	18
SIZE_RM	2 100 - 199	4.4167	.5836	24

SIZE_RM	3 200 +	4.3500	1.1035	80
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My hotel's policies on food safety prevent food contamination by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
EMPLOY	2 10 - 99	4.6800	.4712	50
EMPLOY	3 100 +	4.6025	.6641	161
COUNTRY	2 France	4.2069	.8910	87
EMPLOY	2 10 - 99	4.1860	.6988	43
EMPLOY	3 100 +	4.2273	1.0535	44
COUNTRY	3 Italy	4.2838	.8196	74
EMPLOY	1 less than 10	3.7500	1.0351	8
EMPLOY	2 10 - 99	4.1731	.7852	52
EMPLOY	3 100 +	5.0000	.0000	14
COUNTRY	4 Germany	4.2295	1.0024	122
EMPLOY	1 less than 10	4.0000	.0000	7
EMPLOY	2 10 - 99	4.0000	.8044	35
EMPLOY	3 100 +	4.3500	1.1035	80

My hotel's policies on food safety prevent food contamination by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.6346	.6333	156
HOTEL_TY	2 independent hotel	4.5926	.5993	54
COUNTRY	2 France	4.2069	.8910	87
HOTEL_TY	1 hotel chain	4.3710	.7941	62
HOTEL_TY	2 independent hotel	3.8000	1.0000	25
COUNTRY	3 Italy	4.2838	.8196	74
HOTEL_TY	1 hotel chain	4.2195	.8220	41
HOTEL_TY	2 independent hotel	4.3636	.8223	33
COUNTRY	4 Germany	4.2295	1.0024	122
HOTEL_TY	1 hotel chain	4.2500	1.0362	96
HOTEL_TY	2 independent hotel	4.1538	.8806	26

My hotel's policies on food safety prevent food contamination by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.6154	.6268	169
SEX	2 female	4.6585	.6168	41
COUNTRY	2 France	4.2069	.8910	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.2500	.7506	76
SEX	2 female	3.9000	1.6633	10
COUNTRY	3 Italy	4.2838	.8196	74
SEX	1 male	4.3000	.8694	60
SEX	2 female	4.2143	.5789	14
COUNTRY	4 Germany	4.2295	1.0024	122
SEX	1 male	4.3100	1.0318	100
SEX	2 female	3.8636	.7743	22

My hotel's policies on food safety prevent food contamination by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.5876	.6732	97
AGE_GROU	3 30 - 39	4.5833	.6446	72
AGE_GROU	4 40 - 49	4.7143	.4629	21
AGE_GROU	5 50 - 59	4.8333	.3892	12
AGE_GROU	6 60 or over	4.8000	.4472	5
COUNTRY	2 France	4.2069	.8910	87
AGE_GROU	2 20 - 29	4.0000	1.1650	29
AGE_GROU	3 30 - 39	4.3243	.6260	37
AGE_GROU	4 40 - 49	4.0833	.9962	12
AGE_GROU	5 50 - 59	4.5714	.5345	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.2838	.8196	74
AGE_GROU	1 under 20	4.2857	.7559	7
AGE_GROU	2 20 - 29	4.0800	.9539	25
AGE_GROU	3 30 - 39	4.4839	.6768	31
AGE_GROU	4 40 - 49	4.0000	1.0000	7
AGE_GROU	5 50 - 59	4.5000	.5774	4

COUNTRY	4 Germany	4.2295	1.0024	122
AGE_GROU	2 20 - 29	4.2750	1.1320	40
AGE_GROU	3 30 - 39	4.3590	1.0634	39
AGE_GROU	4 40 - 49	4.2941	.6860	17
AGE_GROU	5 50 - 59	3.9583	.8587	24
AGE_GROU	6 60 or over	3.5000	.7071	2

My hotel's policies on food safety prevent food contamination by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
YEARS_CA	1 none	4.5152	.7953	33
YEARS_CA	2 less than 1 year	4.6667	.5000	9
YEARS_CA	3 1 - 2 years	4.6786	.4756	28
YEARS_CA	4 2 - 3 years	4.4595	.9005	37
YEARS_CA	5 3 or more years	4.6923	.4638	104
COUNTRY	2 France	4.2069	.8910	87
YEARS_CA	1 none	3.5000	2.1213	2
YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.1765	1.2367	17
YEARS_CA	4 2 - 3 years	4.1481	.8182	27
YEARS_CA	5 3 or more years	4.3000	.7232	40
COUNTRY	3 Italy	4.2838	.8196	74
YEARS_CA	1 none	3.8182	.8739	11
YEARS_CA	2 less than 1 year	3.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.0000	.8165	7
YEARS_CA	4 2 - 3 years	4.5833	.5149	12
YEARS_CA	5 3 or more years	4.4390	.8077	41
COUNTRY	4 Germany	4.2295	1.0024	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.3750	.7440	8
YEARS_CA	4 2 - 3 years	4.2586	.7850	58
YEARS_CA	5 3 or more years	4.1667	1.2401	54

My hotel's policies on food safety prevent food contamination by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.5556	.5270	9

YEARS_PR	3	2 - 3 years	4.1818	.8739	11
YEARS_PR	4	3 years or more	4.6489	.6067	188
COUNTRY	2	France	4.2069	.8910	87
YEARS_PR	1	less than 1 year	2.0000	.	1
YEARS_PR	2	1 - 2 years	3.6667	.5774	3
YEARS_PR	3	2 - 3 years	4.0000	.	1
YEARS_PR	4	3 years or more	4.2561	.8722	82
COUNTRY	3	Italy	4.2838	.8196	74
YEARS_PR	2	1 - 2 years	4.0000	.0000	2
YEARS_PR	3	2 - 3 years	5.0000	.	1
YEARS_PR	4	3 years or more	4.2817	.8312	71
COUNTRY	4	Germany	4.2295	1.0024	122
YEARS_PR	2	1 - 2 years	4.0000	.	1
YEARS_PR	3	2 - 3 years	4.3750	.5175	8
YEARS_PR	4	3 years or more	4.2212	1.0328	113

My hotel's policies on food safety prevent food contamination by levels of country of hotel and job position

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			4.4008	.8288	494
COUNTRY	1	UK	4.6209	.6236	211
POSITION	1	manager	4.6636	.6810	110
POSITION	2	supervisor	4.5714	.5040	28
POSITION	3	head chef	4.7097	.4614	31
POSITION	4	chef	4.6000	.5071	15
POSITION	5	waiter	4.5714	.5345	7
POSITION	6	other	4.3500	.7452	20
COUNTRY	2	France	4.2069	.8910	87
POSITION	1	manager	4.3636	.6742	11
POSITION	2	supervisor	3.0000	2.4495	4
POSITION	3	head chef	4.3846	.7679	13
POSITION	4	chef	4.5833	.5149	12
POSITION	5	waiter	3.6000	.8944	5
POSITION	6	other	4.1905	.7404	42
COUNTRY	3	Italy	4.2838	.8196	74
POSITION	1	manager	4.4667	.7432	15
POSITION	2	supervisor	4.0000	.8944	6
POSITION	3	head chef	4.0000	1.0328	16
POSITION	4	chef	4.6667	.4924	12
POSITION	5	waiter	4.4286	.5345	7
POSITION	6	other	4.1667	.8575	18
COUNTRY	4	Germany	4.2295	1.0024	122
POSITION	0	no response	.0000	.	1
POSITION	1	manager	4.0893	.7693	56
POSITION	2	supervisor	4.4211	.8377	19
POSITION	3	head chef	4.4737	1.1723	19

POSITION	4 chef	4.2857	.9512	7
POSITION	5 waiter	4.0000	1.8257	7
POSITION	6 other	4.6154	.5064	13

My hotel's policies on food safety prevent food contamination by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4008	.8288	494
COUNTRY	1 UK	4.6209	.6236	211
HOTEL_ST	3 3 star	4.6000	.5026	20
HOTEL_ST	4 4 star	4.5809	.6617	136
HOTEL_ST	5 5 star	4.7273	.5596	55
COUNTRY	2 France	4.2069	.8910	87
HOTEL_ST	2 2 star	4.0000	.0000	2
HOTEL_ST	3 3 star	4.5000	.5145	18
HOTEL_ST	4 4 star	4.1111	.9856	63
HOTEL_ST	5 5 star	4.5000	.5774	4
COUNTRY	3 Italy	4.2838	.8196	74
HOTEL_ST	3 3 star	3.8947	.9941	19
HOTEL_ST	4 4 star	4.3095	.7486	42
HOTEL_ST	5 5 star	4.7692	.4385	13
COUNTRY	4 Germany	4.2295	1.0024	122
HOTEL_ST	0 no response	.0000	.	1
HOTEL_ST	3 3 star	4.2174	.6713	23
HOTEL_ST	4 4 star	3.9783	.7743	46
HOTEL_ST	5 5 star	4.5385	1.0749	52

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
SIZE_RM	1 10 - 99	4.0833	1.0180	24
SIZE_RM	2 100 - 199	4.2353	1.0313	51
SIZE_RM	3 200 +	4.2500	.9169	136
COUNTRY	2 France	4.2759	1.0641	87
SIZE_RM	1 10 - 99	4.4737	.5130	19
SIZE_RM	2 100 - 199	4.3333	.9223	30
SIZE_RM	3 200 +	4.1316	1.3390	38
COUNTRY	3 Italy	4.0000	1.1226	74
SIZE_RM	1 10 - 99	3.4500	1.4318	20
SIZE_RM	2 100 - 199	3.8710	1.0244	31
SIZE_RM	3 200 +	4.6522	.4870	23

COUNTRY	4 Germany	3.9016	1.0634	122
SIZE_RM	1 10 - 99	3.0556	.2357	18
SIZE_RM	2 100 - 199	3.7917	1.0206	24
SIZE_RM	3 200 +	4.1250	1.0952	80

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
EMPLOY	2 10 - 99	4.2200	.9750	50
EMPLOY	3 100 +	4.2298	.9503	161
COUNTRY	2 France	4.2759	1.0641	87
EMPLOY	2 10 - 99	4.4186	.7314	43
EMPLOY	3 100 +	4.1364	1.3046	44
COUNTRY	3 Italy	4.0000	1.1226	74
EMPLOY	1 less than 10	2.3750	1.4079	8
EMPLOY	2 10 - 99	4.0000	.9288	52
EMPLOY	3 100 +	4.9286	.2673	14
COUNTRY	4 Germany	3.9016	1.0634	122
EMPLOY	1 less than 10	3.0000	.0000	7
EMPLOY	2 10 - 99	3.6857	.9322	35
EMPLOY	3 100 +	4.0750	1.1112	80

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
HOTEL_TY	0 no response	2.0000	.	1
HOTEL_TY	1 hotel chain	4.2756	.9543	156
HOTEL_TY	2 independent hotel	4.1296	.9121	54
COUNTRY	2 France	4.2759	1.0641	87
HOTEL_TY	1 hotel chain	4.2903	1.0771	62
HOTEL_TY	2 independent hotel	4.2400	1.0520	25
COUNTRY	3 Italy	4.0000	1.1226	74
HOTEL_TY	1 hotel chain	4.2927	1.0306	41
HOTEL_TY	2 independent hotel	3.6364	1.1407	33
COUNTRY	4 Germany	3.9016	1.0634	122
HOTEL_TY	1 hotel chain	3.9375	1.0644	96
HOTEL_TY	2 independent hotel	3.7692	1.0699	26

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
SEX	0 no response	2.0000	.	1
SEX	1 male	4.2544	.9065	169
SEX	2 female	4.1707	1.0932	41
COUNTRY	2 France	4.2759	1.0641	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.3816	.8789	76
SEX	2 female	3.5000	1.9003	10
COUNTRY	3 Italy	4.0000	1.1226	74
SEX	1 male	4.1167	1.1213	60
SEX	2 female	3.5000	1.0190	14
COUNTRY	4 Germany	3.9016	1.0634	122
SEX	1 male	3.9800	1.1008	100
SEX	2 female	3.5455	.8004	22

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
AGE_GROU	0 no response	2.0000	.	1
AGE_GROU	1 under 20	4.6667	.5774	3
AGE_GROU	2 20 - 29	4.2784	.9099	97
AGE_GROU	3 30 - 39	4.1389	.9830	72
AGE_GROU	4 40 - 49	4.0476	1.1609	21
AGE_GROU	5 50 - 59	4.6667	.6513	12
AGE_GROU	6 60 or over	4.4000	.5477	5
COUNTRY	2 France	4.2759	1.0641	87
AGE_GROU	2 20 - 29	4.1034	1.2348	29
AGE_GROU	3 30 - 39	4.4324	.9586	37
AGE_GROU	4 40 - 49	3.9167	1.0836	12
AGE_GROU	5 50 - 59	4.8571	.3780	7
AGE_GROU	6 60 or over	4.0000	1.4142	2
COUNTRY	3 Italy	4.0000	1.1226	74
AGE_GROU	1 under 20	3.4286	1.3973	7
AGE_GROU	2 20 - 29	4.0400	1.0985	25
AGE_GROU	3 30 - 39	4.0968	1.0118	31
AGE_GROU	4 40 - 49	3.5714	1.5119	7

AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	3.9016	1.0634	122
AGE_GROU	2 20 - 29	3.9250	1.1410	40
AGE_GROU	3 30 - 39	4.0256	1.2028	39
AGE_GROU	4 40 - 49	4.0588	.6587	17
AGE_GROU	5 50 - 59	3.6250	.8754	24
AGE_GROU	6 60 or over	3.0000	1.4142	2

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
YEARS_CA	1 none	4.3030	.9180	33
YEARS_CA	2 less than 1 year	4.6667	.5000	9
YEARS_CA	3 1 - 2 years	4.1786	1.0203	28
YEARS_CA	4 2 - 3 years	3.8919	1.1968	37
YEARS_CA	5 3 or more years	4.2981	.8576	104
COUNTRY	2 France	4.2759	1.0641	87
YEARS_CA	1 none	3.5000	2.1213	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.4706	1.2307	17
YEARS_CA	4 2 - 3 years	4.2593	.9842	27
YEARS_CA	5 3 or more years	4.2250	1.0250	40
COUNTRY	3 Italy	4.0000	1.1226	74
YEARS_CA	1 none	4.1818	1.1677	11
YEARS_CA	2 less than 1 year	2.6667	1.1547	3
YEARS_CA	3 1 - 2 years	3.7143	1.2536	7
YEARS_CA	4 2 - 3 years	4.5000	.6742	12
YEARS_CA	5 3 or more years	3.9512	1.1391	41
COUNTRY	4 Germany	3.9016	1.0634	122
YEARS_CA	1 none	4.0000	.0000	2
YEARS_CA	3 1 - 2 years	3.8750	1.3562	8
YEARS_CA	4 2 - 3 years	3.8966	.9308	58
YEARS_CA	5 3 or more years	3.9074	1.1859	54

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and years of practical experience in the Hotel and Catering industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
YEARS_PR	1 less than 1 year	4.3333	.5774	3

YEARS_PR	2 1 - 2 years	4.4444	.5270	9
YEARS_PR	3 2 - 3 years	3.5455	1.0357	11
YEARS_PR	4 3 years or more	4.2553	.9583	188
COUNTRY	2 France	4.2759	1.0641	87
YEARS_PR	1 less than 1 year	1.0000	.	1
YEARS_PR	2 1 - 2 years	3.0000	1.0000	3
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.3659	.9877	82
COUNTRY	3 Italy	4.0000	1.1226	74
YEARS_PR	2 1 - 2 years	2.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.0423	1.0881	71
COUNTRY	4 Germany	3.9016	1.0634	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	3.8750	.8345	8
YEARS_PR	4 3 years or more	3.9027	1.0853	113

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
POSITION	1 manager	4.2727	1.0037	110
POSITION	2 supervisor	4.2857	.9372	28
POSITION	3 head chef	4.3548	.8774	31
POSITION	4 chef	3.8000	.8619	15
POSITION	5 waiter	4.2857	.7559	7
POSITION	6 other	4.0000	.9177	20
COUNTRY	2 France	4.2759	1.0641	87
POSITION	1 manager	4.3636	.8090	11
POSITION	2 supervisor	2.7500	2.6300	4
POSITION	3 head chef	4.6154	.7679	13
POSITION	4 chef	4.5833	.5149	12
POSITION	5 waiter	4.0000	.7071	5
POSITION	6 other	4.2381	1.0548	42
COUNTRY	3 Italy	4.0000	1.1226	74
POSITION	1 manager	4.0667	1.3345	15
POSITION	2 supervisor	3.5000	1.3784	6
POSITION	3 head chef	3.5625	1.2093	16
POSITION	4 chef	3.8333	.7177	12
POSITION	5 waiter	3.5714	1.2724	7
POSITION	6 other	4.7778	.4278	18
COUNTRY	4 Germany	3.9016	1.0634	122
POSITION	0 no response	.0000	.	1
POSITION	1 manager	3.7143	.9286	56
POSITION	2 supervisor	3.8947	1.2425	19

POSITION	3 head chef	4.6842	.5824	19
POSITION	4 chef	3.5714	.9759	7
POSITION	5 waiter	3.8571	1.7728	7
POSITION	6 other	4.0769	.2774	13

My hotel's policies on food safety prevent misleading labelling by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1215	1.0356	494
COUNTRY	1 UK	4.2275	.9539	211
HOTEL_ST	3 3 star	4.2000	.8335	20
HOTEL_ST	4 4 star	4.1838	1.0271	136
HOTEL_ST	5 5 star	4.3455	.7986	55
COUNTRY	2 France	4.2759	1.0641	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.1111	1.0786	18
HOTEL_ST	4 4 star	4.2857	1.0988	63
HOTEL_ST	5 5 star	4.5000	.5774	4
COUNTRY	3 Italy	4.0000	1.1226	74
HOTEL_ST	3 3 star	3.4211	1.4650	19
HOTEL_ST	4 4 star	4.1429	.9771	42
HOTEL_ST	5 5 star	4.3846	.6504	13
COUNTRY	4 Germany	3.9016	1.0634	122
HOTEL_ST	0 no response	.0000	.	1
HOTEL_ST	3 3 star	3.7826	.8505	23
HOTEL_ST	4 4 star	3.6739	.9441	46
HOTEL_ST	5 5 star	4.2308	1.0593	52

My hotel's policies encourages awareness on food safety by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
SIZE_RM	1 10 - 99	4.5833	.5036	24
SIZE_RM	2 100 - 199	4.6078	.8265	51
SIZE_RM	3 200 +	4.6912	.5377	136
COUNTRY	2 France	4.5862	.7401	87
SIZE_RM	1 10 - 99	4.6316	.4956	19
SIZE_RM	2 100 - 199	4.6000	.7701	30
SIZE_RM	3 200 +	4.5526	.8285	38
COUNTRY	3 Italy	4.3108	.7008	74
SIZE_RM	1 10 - 99	3.9000	.6407	20
SIZE_RM	2 100 - 199	4.1935	.7033	31

SIZE_RM	3 200 +	4.8261	.3876	23
COUNTRY	4 Germany	4.1393	.8750	122
SIZE_RM	1 10 - 99	3.8889	.3234	18
SIZE_RM	2 100 - 199	4.1667	.8165	24
SIZE_RM	3 200 +	4.1875	.9691	80

My hotel's policies encourages awareness on food safety by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
EMPLOY	2 10 - 99	4.6800	.5127	50
EMPLOY	3 100 +	4.6522	.6448	161
COUNTRY	2 France	4.5862	.7401	87
EMPLOY	2 10 - 99	4.6512	.5725	43
EMPLOY	3 100 +	4.5227	.8757	44
COUNTRY	3 Italy	4.3108	.7008	74
EMPLOY	1 less than 10	3.6250	.9161	8
EMPLOY	2 10 - 99	4.2308	.6141	52
EMPLOY	3 100 +	5.0000	.0000	14
COUNTRY	4 Germany	4.1393	.8750	122
EMPLOY	1 less than 10	4.0000	.0000	7
EMPLOY	2 10 - 99	4.1143	.6311	35
EMPLOY	3 100 +	4.1625	.9993	80

My hotel's policies encourages awareness on food safety by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.6731	.6542	156
HOTEL_TY	2 independent hotel	4.6296	.4874	54
COUNTRY	2 France	4.5862	.7401	87
HOTEL_TY	1 hotel chain	4.5645	.8021	62
HOTEL_TY	2 independent hotel	4.6400	.5686	25
COUNTRY	3 Italy	4.3108	.7008	74
HOTEL_TY	1 hotel chain	4.3415	.6168	41
HOTEL_TY	2 independent hotel	4.2727	.8013	33
COUNTRY	4 Germany	4.1393	.8750	122

HOTEL_TY	1 hotel chain	4.1042	.9117	96
HOTEL_TY	2 independent hotel	4.2692	.7243	26

My hotel's policies encourages awareness on food safety by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.6391	.6500	169
SEX	2 female	4.7561	.4348	41
COUNTRY	2 France	4.5862	.7401	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.6053	.7133	76
SEX	2 female	4.5000	.9718	10
COUNTRY	3 Italy	4.3108	.7008	74
SEX	1 male	4.3500	.7089	60
SEX	2 female	4.1429	.6630	14
COUNTRY	4 Germany	4.1393	.8750	122
SEX	1 male	4.1800	.9253	100
SEX	2 female	3.9545	.5755	22

My hotel's policies encourages awareness on food safety by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.6289	.6970	97
AGE_GROU	3 30 - 39	4.6944	.4639	72
AGE_GROU	4 40 - 49	4.5238	.8136	21
AGE_GROU	5 50 - 59	4.7500	.4523	12
AGE_GROU	6 60 or over	5.0000	.0000	5
COUNTRY	2 France	4.5862	.7401	87
AGE_GROU	2 20 - 29	4.4828	.8710	29
AGE_GROU	3 30 - 39	4.7297	.6078	37
AGE_GROU	4 40 - 49	4.3333	.8876	12
AGE_GROU	5 50 - 59	4.7143	.4880	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.3108	.7008	74
AGE_GROU	1 under 20	4.2857	.9512	7
AGE_GROU	2 20 - 29	4.3600	.6377	25

AGE_GROU	3 30 - 39	4.3226	.6525	31
AGE_GROU	4 40 - 49	4.0000	1.0000	7
AGE_GROU	5 50 - 59	4.5000	.5774	4
COUNTRY	4 Germany	4.1393	.8750	122
AGE_GROU	2 20 - 29	4.1000	1.0077	40
AGE_GROU	3 30 - 39	4.1795	.9966	39
AGE_GROU	4 40 - 49	4.2353	.6642	17
AGE_GROU	5 50 - 59	4.1667	.3807	24
AGE_GROU	6 60 or over	3.0000	1.4142	2

My hotel's policies encourages awareness on food safety by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
YEARS_CA	1 none	4.7879	.4151	33
YEARS_CA	2 less than 1 year	4.6667	.5000	9
YEARS_CA	3 1 - 2 years	4.5714	.7418	28
YEARS_CA	4 2 - 3 years	4.3784	.9235	37
YEARS_CA	5 3 or more years	4.7404	.4621	104
COUNTRY	2 France	4.5862	.7401	87
YEARS_CA	1 none	3.5000	2.1213	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.5882	.6183	17
YEARS_CA	4 2 - 3 years	4.7407	.6559	27
YEARS_CA	5 3 or more years	4.5250	.7506	40
COUNTRY	3 Italy	4.3108	.7008	74
YEARS_CA	1 none	4.0000	.6325	11
YEARS_CA	2 less than 1 year	3.6667	1.1547	3
YEARS_CA	3 1 - 2 years	4.0000	.8165	7
YEARS_CA	4 2 - 3 years	4.3333	.6513	12
YEARS_CA	5 3 or more years	4.4878	.6373	41
COUNTRY	4 Germany	4.1393	.8750	122
YEARS_CA	1 none	4.0000	.0000	2
YEARS_CA	3 1 - 2 years	4.3750	1.0607	8
YEARS_CA	4 2 - 3 years	4.2414	.6300	58
YEARS_CA	5 3 or more years	4.0000	1.0640	54

My hotel's policies encourages awareness on food safety by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494

COUNTRY	1 UK	4.6588	.6150	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.5556	.5270	9
YEARS_PR	3 2 - 3 years	4.3636	.9244	11
YEARS_PR	4 3 years or more	4.6809	.5979	188
COUNTRY	2 France	4.5862	.7401	87
YEARS_PR	1 less than 1 year	2.0000	.	1
YEARS_PR	2 1 - 2 years	4.3333	.5774	3
YEARS_PR	3 2 - 3 years	2.0000	.	1
YEARS_PR	4 3 years or more	4.6585	.6328	82
COUNTRY	3 Italy	4.3108	.7008	74
YEARS_PR	2 1 - 2 years	3.0000	.0000	2
YEARS_PR	3 2 - 3 years	3.0000	.	1
YEARS_PR	4 3 years or more	4.3662	.6599	71
COUNTRY	4 Germany	4.1393	.8750	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	3.6250	.5175	8
YEARS_PR	4 3 years or more	4.1770	.8887	113

My hotel's policies encourages awareness on food safety by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
POSITION	1 manager	4.6818	.6627	110
POSITION	2 supervisor	4.5357	.6929	28
POSITION	3 head chef	4.8065	.4016	31
POSITION	4 chef	4.5333	.6399	15
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.5500	.5104	20
COUNTRY	2 France	4.5862	.7401	87
POSITION	1 manager	4.6364	.6742	11
POSITION	2 supervisor	4.2500	1.5000	4
POSITION	3 head chef	4.9231	.2774	13
POSITION	4 chef	4.9167	.2887	12
POSITION	5 waiter	4.0000	.0000	5
POSITION	6 other	4.4762	.8334	42
COUNTRY	3 Italy	4.3108	.7008	74
POSITION	1 manager	4.4000	.7368	15
POSITION	2 supervisor	4.0000	.8944	6
POSITION	3 head chef	4.3750	.8062	16
POSITION	4 chef	4.3333	.4924	12
POSITION	5 waiter	3.7143	.7559	7
POSITION	6 other	4.5000	.5145	18
COUNTRY	4 Germany	4.1393	.8750	122
POSITION	0 no response	.0000	.	1

POSITION	1 manager	4.1429	.6723	56
POSITION	2 supervisor	3.9474	.8481	19
POSITION	3 head chef	4.7368	.4524	19
POSITION	4 chef	4.0000	.8165	7
POSITION	5 waiter	3.8571	1.7728	7
POSITION	6 other	4.0769	.4935	13

My hotel's policies encourages awareness on food safety by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4656	.7522	494
COUNTRY	1 UK	4.6588	.6150	211
HOTEL_ST	3 3 star	4.6500	.4894	20
HOTEL_ST	4 4 star	4.6176	.6561	136
HOTEL_ST	5 5 star	4.7636	.5431	55
COUNTRY	2 France	4.5862	.7401	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.5000	.7859	18
HOTEL_ST	4 4 star	4.5873	.7542	63
HOTEL_ST	5 5 star	4.7500	.5000	4
COUNTRY	3 Italy	4.3108	.7008	74
HOTEL_ST	3 3 star	3.8421	.6021	19
HOTEL_ST	4 4 star	4.3571	.6922	42
HOTEL_ST	5 5 star	4.8462	.3755	13
COUNTRY	4 Germany	4.1393	.8750	122
HOTEL_ST	0 no response	.0000	.	1
HOTEL_ST	3 3 star	4.0435	.7057	23
HOTEL_ST	4 4 star	4.1087	.6047	46
HOTEL_ST	5 5 star	4.2885	.9566	52

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3947	.8402	494
COUNTRY	1 UK	4.4692	.8004	211
SIZE_RM	1 10 - 99	4.5000	.5898	24
SIZE_RM	2 100 - 199	4.3922	1.0016	51
SIZE_RM	3 200 +	4.4926	.7503	136
COUNTRY	2 France	4.3563	.9019	87
SIZE_RM	1 10 - 99	4.1053	1.1002	19
SIZE_RM	2 100 - 199	4.5333	.8604	30
SIZE_RM	3 200 +	4.3421	.8146	38
COUNTRY	3 Italy	4.6216	.5415	74

SIZE_RM	1	10 - 99	4.6500	.4894	20
SIZE_RM	2	100 - 199	4.4839	.6256	31
SIZE_RM	3	200 +	4.7826	.4217	23
COUNTRY	4	Germany	4.1557	.9536	122
SIZE_RM	1	10 - 99	3.4444	.5113	18
SIZE_RM	2	100 - 199	4.0000	.9325	24
SIZE_RM	3	200 +	4.3625	.9579	80

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and employment size

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			4.3947	.8402	494
COUNTRY	1	UK	4.4692	.8004	211
EMPLOY	2	10 - 99	4.4600	.7879	50
EMPLOY	3	100 +	4.4720	.8067	161
COUNTRY	2	France	4.3563	.9019	87
EMPLOY	2	10 - 99	4.3953	1.0033	43
EMPLOY	3	100 +	4.3182	.8004	44
COUNTRY	3	Italy	4.6216	.5415	74
EMPLOY	1	less than 10	4.3750	.5175	8
EMPLOY	2	10 - 99	4.5769	.5721	52
EMPLOY	3	100 +	4.9286	.2673	14
COUNTRY	4	Germany	4.1557	.9536	122
EMPLOY	1	less than 10	4.0000	.0000	7
EMPLOY	2	10 - 99	3.7429	.9185	35
EMPLOY	3	100 +	4.3500	.9560	80

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and hotel type

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			4.3947	.8402	494
COUNTRY	1	UK	4.4692	.8004	211
HOTEL_TY	0	no response	3.0000	.	1
HOTEL_TY	1	hotel chain	4.4872	.8071	156
HOTEL_TY	2	independent hotel	4.4444	.7689	54
COUNTRY	2	France	4.3563	.9019	87
HOTEL_TY	1	hotel chain	4.4677	.7834	62
HOTEL_TY	2	independent hotel	4.0800	1.1150	25
COUNTRY	3	Italy	4.6216	.5415	74
HOTEL_TY	1	hotel chain	4.6098	.4939	41
HOTEL_TY	2	independent hotel	4.6364	.6030	33

COUNTRY	4 Germany	4.1557	.9536	122
HOTEL_TY	1 hotel chain	4.2083	.9505	96
HOTEL_TY	2 independent hotel	3.9615	.9584	26

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3947	.8402	494
COUNTRY	1 UK	4.4692	.8004	211
SEX	0 no response	3.0000	.	1
SEX	1 male	4.4320	.8218	169
SEX	2 female	4.6585	.6561	41
COUNTRY	2 France	4.3563	.9019	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.3289	.9293	76
SEX	2 female	4.5000	.7071	10
COUNTRY	3 Italy	4.6216	.5415	74
SEX	1 male	4.6667	.5420	60
SEX	2 female	4.4286	.5136	14
COUNTRY	4 Germany	4.1557	.9536	122
SEX	1 male	4.2300	.9729	100
SEX	2 female	3.8182	.7950	22

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3947	.8402	494
COUNTRY	1 UK	4.4692	.8004	211
AGE_GROU	0 no response	3.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.5258	.7785	97
AGE_GROU	3 30 - 39	4.4167	.8517	72
AGE_GROU	4 40 - 49	4.2857	.8452	21
AGE_GROU	5 50 - 59	4.5833	.6686	12
AGE_GROU	6 60 or over	4.6000	.5477	5
COUNTRY	2 France	4.3563	.9019	87
AGE_GROU	2 20 - 29	4.3448	.8140	29
AGE_GROU	3 30 - 39	4.3243	1.0555	37
AGE_GROU	4 40 - 49	4.2500	.8660	12
AGE_GROU	5 50 - 59	4.7143	.4880	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.6216	.5415	74
AGE_GROU	1 under 20	4.4286	.5345	7

AGE_GROU	2 20 - 29	4.6800	.5568	25
AGE_GROU	3 30 - 39	4.5806	.5016	31
AGE_GROU	4 40 - 49	4.7143	.7559	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.1557	.9536	122
AGE_GROU	2 20 - 29	4.4000	.9001	40
AGE_GROU	3 30 - 39	4.0513	1.1459	39
AGE_GROU	4 40 - 49	4.1176	.6966	17
AGE_GROU	5 50 - 59	3.9583	.8065	24
AGE_GROU	6 60 or over	4.0000	1.4142	2

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3947	.8402	494
COUNTRY	1 UK	4.4692	.8004	211
YEARS_CA	1 none	4.5152	.7124	33
YEARS_CA	2 less than 1 year	4.3333	1.3229	9
YEARS_CA	3 1 - 2 years	4.4643	.7927	28
YEARS_CA	4 2 - 3 years	4.3243	1.0015	37
YEARS_CA	5 3 or more years	4.5192	.6965	104
COUNTRY	2 France	4.3563	.9019	87
YEARS_CA	1 none	4.0000	1.4142	2
YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.5294	.7174	17
YEARS_CA	4 2 - 3 years	4.3333	1.0377	27
YEARS_CA	5 3 or more years	4.3250	.8883	40
COUNTRY	3 Italy	4.6216	.5415	74
YEARS_CA	1 none	4.4545	.8202	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.7143	.4880	7
YEARS_CA	4 2 - 3 years	4.5000	.5222	12
YEARS_CA	5 3 or more years	4.7073	.4606	41
COUNTRY	4 Germany	4.1557	.9536	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.5000	.7559	8
YEARS_CA	4 2 - 3 years	4.1552	.7903	58
YEARS_CA	5 3 or more years	4.0926	1.1372	54

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3947	.8402	494

COUNTRY	1 UK	4.4692	.8004	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.3333	.7071	9
YEARS_PR	3 2 - 3 years	4.1818	.7508	11
YEARS_PR	4 3 years or more	4.4894	.8110	188
COUNTRY	2 France	4.3563	.9019	87
YEARS_PR	1 less than 1 year	3.0000	.	1
YEARS_PR	2 1 - 2 years	3.6667	.5774	3
YEARS_PR	3 2 - 3 years	3.0000	.	1
YEARS_PR	4 3 years or more	4.4146	.8882	82
COUNTRY	3 Italy	4.6216	.5415	74
YEARS_PR	2 1 - 2 years	3.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.6761	.4713	71
COUNTRY	4 Germany	4.1557	.9536	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.2500	.4629	8
YEARS_PR	4 3 years or more	4.1504	.9840	113

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3947	.8402	494
COUNTRY	1 UK	4.4692	.8004	211
POSITION	1 manager	4.4818	.8958	110
POSITION	2 supervisor	4.3929	.6289	28
POSITION	3 head chef	4.5484	.6752	31
POSITION	4 chef	4.2667	.8837	15
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.4500	.6863	20
COUNTRY	2 France	4.3563	.9019	87
POSITION	1 manager	4.4545	.6876	11
POSITION	2 supervisor	3.5000	1.0000	4
POSITION	3 head chef	4.9231	.2774	13
POSITION	4 chef	4.0000	1.3484	12
POSITION	5 waiter	3.8000	.4472	5
POSITION	6 other	4.4048	.8571	42
COUNTRY	3 Italy	4.6216	.5415	74
POSITION	1 manager	4.6667	.4880	15
POSITION	2 supervisor	4.8333	.4082	6
POSITION	3 head chef	4.5000	.5164	16
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	4.0000	.8165	7
POSITION	6 other	4.8333	.3835	18
COUNTRY	4 Germany	4.1557	.9536	122

POSITION	0 no response	.0000	.	1
POSITION	1 manager	4.0357	.7377	56
POSITION	2 supervisor	4.1579	1.1187	19
POSITION	3 head chef	4.7895	.4189	19
POSITION	4 chef	3.8571	.8997	7
POSITION	5 waiter	3.8571	1.7728	7
POSITION	6 other	4.3846	.5064	13

My hotel's policies on food safety enhances the reputation of the industry by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3947	.8402	494
COUNTRY	1 UK	4.4692	.8004	211
HOTEL_ST	3 3 star	4.5500	.5104	20
HOTEL_ST	4 4 star	4.4118	.8732	136
HOTEL_ST	5 5 star	4.5818	.6856	55
COUNTRY	2 France	4.3563	.9019	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.4444	.7838	18
HOTEL_ST	4 4 star	4.3175	.9643	63
HOTEL_ST	5 5 star	4.2500	.5000	4
COUNTRY	3 Italy	4.6216	.5415	74
HOTEL_ST	3 3 star	4.6316	.4956	19
HOTEL_ST	4 4 star	4.5714	.5903	42
HOTEL_ST	5 5 star	4.7692	.4385	13
COUNTRY	4 Germany	4.1557	.9536	122
HOTEL_ST	0 no response	.0000	.	1
HOTEL_ST	3 3 star	3.7826	.9023	23
HOTEL_ST	4 4 star	3.9783	.7450	46
HOTEL_ST	5 5 star	4.5577	.8498	52

Importance ranking in the safe food operation of temperature control by levels of country and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
SIZE_RM	1 10 - 99	4.7083	.4643	24
SIZE_RM	2 100 - 199	4.8039	.7489	51
SIZE_RM	3 200 +	4.9044	.2951	136
COUNTRY	2 France	4.7701	.6416	87
SIZE_RM	1 10 - 99	4.7895	.4189	19
SIZE_RM	2 100 - 199	4.7333	.9444	30
SIZE_RM	3 200 +	4.7895	.4132	38

COUNTRY	3 Italy	4.2973	.7163	74
SIZE_RM	1 10 - 99	4.0500	.8256	20
SIZE_RM	2 100 - 199	4.3548	.6607	31
SIZE_RM	3 200 +	4.4348	.6624	23
COUNTRY	4 Germany	4.8770	.3765	122
SIZE_RM	1 10 - 99	5.0000	.0000	18
SIZE_RM	2 100 - 199	4.9167	.2823	24
SIZE_RM	3 200 +	4.8375	.4341	80

Importance ranking in the safe food operation of temperature control by levels of country and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
EMPLOY	2 10 - 99	4.8200	.3881	50
EMPLOY	3 100 +	4.8696	.4890	161
COUNTRY	2 France	4.7701	.6416	87
EMPLOY	2 10 - 99	4.7907	.8035	43
EMPLOY	3 100 +	4.7500	.4380	44
COUNTRY	3 Italy	4.2973	.7163	74
EMPLOY	1 less than 10	3.7500	1.1650	8
EMPLOY	2 10 - 99	4.3077	.5787	52
EMPLOY	3 100 +	4.5714	.7559	14
COUNTRY	4 Germany	4.8770	.3765	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.9429	.2355	35
EMPLOY	3 100 +	4.8375	.4341	80

Importance ranking in the safe food operation of temperature control by levels of country and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.8462	.5100	156
HOTEL_TY	2 independent hotel	4.9074	.2926	54
COUNTRY	2 France	4.7701	.6416	87
HOTEL_TY	1 hotel chain	4.7419	.7228	62
HOTEL_TY	2 independent hotel	4.8400	.3742	25
COUNTRY	3 Italy	4.2973	.7163	74
HOTEL_TY	1 hotel chain	4.4146	.5906	41
HOTEL_TY	2 independent hotel	4.1515	.8337	33

COUNTRY	4 Germany	4.8770	.3765	122
HOTEL_TY	1 hotel chain	4.8542	.4099	96
HOTEL_TY	2 independent hotel	4.9615	.1961	26

Importance ranking in the safe food operation of temperature control by levels of country and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.8462	.5000	169
SEX	2 female	4.9268	.2637	41
COUNTRY	2 France	4.7701	.6416	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.7895	.6596	76
SEX	2 female	4.7000	.4830	10
COUNTRY	3 Italy	4.2973	.7163	74
SEX	1 male	4.3833	.6911	60
SEX	2 female	3.9286	.7300	14
COUNTRY	4 Germany	4.8770	.3765	122
SEX	1 male	4.8700	.3933	100
SEX	2 female	4.9091	.2942	22

Importance ranking in the safe food operation of temperature control by levels of country and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.7938	.6113	97
AGE_GROU	3 30 - 39	4.9028	.2983	72
AGE_GROU	4 40 - 49	4.9524	.2182	21
AGE_GROU	5 50 - 59	4.9167	.2887	12
AGE_GROU	6 60 or over	5.0000	.0000	5
COUNTRY	2 France	4.7701	.6416	87
AGE_GROU	2 20 - 29	4.8621	.3509	29
AGE_GROU	3 30 - 39	4.7297	.8708	37
AGE_GROU	4 40 - 49	4.7500	.4523	12
AGE_GROU	5 50 - 59	4.7143	.4880	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.2973	.7163	74

AGE_GROU	1 under 20	4.1429	1.0690	7
AGE_GROU	2 20 - 29	4.3600	.5686	25
AGE_GROU	3 30 - 39	4.2258	.7169	31
AGE_GROU	4 40 - 49	4.2857	.9512	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.8770	.3765	122
AGE_GROU	2 20 - 29	4.9750	.1581	40
AGE_GROU	3 30 - 39	4.7436	.5486	39
AGE_GROU	4 40 - 49	4.7647	.4372	17
AGE_GROU	5 50 - 59	5.0000	.0000	24
AGE_GROU	6 60 or over	5.0000	.0000	2

Importance ranking in the safe food operation of temperature control by levels of country and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
YEARS_CA	1 none	4.8182	.3917	33
YEARS_CA	2 less than 1 year	4.5556	.5270	9
YEARS_CA	3 1 - 2 years	4.8929	.3150	28
YEARS_CA	4 2 - 3 years	4.7297	.8708	37
YEARS_CA	5 3 or more years	4.9327	.2518	104
COUNTRY	2 France	4.7701	.6416	87
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.7647	.4372	17
YEARS_CA	4 2 - 3 years	4.6667	1.0000	27
YEARS_CA	5 3 or more years	4.8750	.3349	40
COUNTRY	3 Italy	4.2973	.7163	74
YEARS_CA	1 none	4.4545	.5222	11
YEARS_CA	2 less than 1 year	2.6667	1.1547	3
YEARS_CA	3 1 - 2 years	4.1429	.8997	7
YEARS_CA	4 2 - 3 years	4.4167	.5149	12
YEARS_CA	5 3 or more years	4.3659	.6227	41
COUNTRY	4 Germany	4.8770	.3765	122
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	3 1 - 2 years	4.8750	.3536	8
YEARS_CA	4 2 - 3 years	4.8793	.3286	58
YEARS_CA	5 3 or more years	4.8704	.4364	54

Importance ranking in the safe food operation of temperature control by levels of country and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
YEARS_PR	1 less than 1 year	5.0000	.0000	3
YEARS_PR	2 1 - 2 years	4.7778	.4410	9
YEARS_PR	3 2 - 3 years	4.8182	.4045	11
YEARS_PR	4 3 years or more	4.8617	.4762	188
COUNTRY	2 France	4.7701	.6416	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	4.3333	.5774	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.7927	.6429	82
COUNTRY	3 Italy	4.2973	.7163	74
YEARS_PR	2 1 - 2 years	5.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.2817	.7208	71
COUNTRY	4 Germany	4.8770	.3765	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.7500	.4629	8
YEARS_PR	4 3 years or more	4.8938	.3626	113

Importance ranking in the safe food operation of temperature control by levels of country and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
POSITION	1 manager	4.8636	.5499	110
POSITION	2 supervisor	4.7857	.4179	28
POSITION	3 head chef	4.9677	.1796	31
POSITION	4 chef	4.6667	.4880	15
POSITION	5 waiter	4.8571	.3780	7
POSITION	6 other	4.9000	.3078	20
COUNTRY	2 France	4.7701	.6416	87
POSITION	1 manager	4.9091	.3015	11
POSITION	2 supervisor	4.7500	.5000	4
POSITION	3 head chef	4.5385	1.3914	13
POSITION	4 chef	4.8333	.3892	12
POSITION	5 waiter	4.6000	.5477	5
POSITION	6 other	4.8095	.3974	42
COUNTRY	3 Italy	4.2973	.7163	74

POSITION	1 manager	4.3333	.7237	15
POSITION	2 supervisor	4.0000	1.0954	6
POSITION	3 head chef	4.1250	.9574	16
POSITION	4 chef	4.2500	.4523	12
POSITION	5 waiter	4.4286	.5345	7
POSITION	6 other	4.5000	.5145	18
COUNTRY	4 Germany	4.8770	.3765	122
POSITION	0 no response	4.0000	.	1
POSITION	1 manager	4.9643	.1873	56
POSITION	2 supervisor	4.8947	.4588	19
POSITION	3 head chef	5.0000	.0000	19
POSITION	4 chef	4.5714	.7868	7
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.6154	.5064	13

Importance ranking in the safe food operation of temperature control by levels of country and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7632	.5612	494
COUNTRY	1 UK	4.8578	.4667	211
HOTEL_ST	3 3 star	4.9000	.3078	20
HOTEL_ST	4 4 star	4.8456	.5289	136
HOTEL_ST	5 5 star	4.8727	.3363	55
COUNTRY	2 France	4.7701	.6416	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.7222	.4609	18
HOTEL_ST	4 4 star	4.7778	.7058	63
HOTEL_ST	5 5 star	4.7500	.5000	4
COUNTRY	3 Italy	4.2973	.7163	74
HOTEL_ST	3 3 star	3.9474	.7799	19
HOTEL_ST	4 4 star	4.3571	.6922	42
HOTEL_ST	5 5 star	4.6154	.5064	13
COUNTRY	4 Germany	4.8770	.3765	122
HOTEL_ST	0 no response	4.0000	.	1
HOTEL_ST	3 3 star	4.9130	.2881	23
HOTEL_ST	4 4 star	4.8043	.4998	46
HOTEL_ST	5 5 star	4.9423	.2354	52

Importance ranking in the safe food operation of personal hygiene by levels of country and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
SIZE_RM	1 10 - 99	4.7917	.4149	24

SIZE_RM	2 100 - 199	4.8627	.7217	51
SIZE_RM	3 200 +	4.8529	.3757	136
COUNTRY	2 France	4.9195	.3132	87
SIZE_RM	1 10 - 99	4.9474	.2294	19
SIZE_RM	2 100 - 199	4.9667	.1826	30
SIZE_RM	3 200 +	4.8684	.4140	38
COUNTRY	3 Italy	4.7432	.5250	74
SIZE_RM	1 10 - 99	4.6500	.7452	20
SIZE_RM	2 100 - 199	4.6774	.4752	31
SIZE_RM	3 200 +	4.9130	.2881	23
COUNTRY	4 Germany	4.9098	.3150	122
SIZE_RM	1 10 - 99	5.0000	.0000	18
SIZE_RM	2 100 - 199	4.9583	.2041	24
SIZE_RM	3 200 +	4.8750	.3689	80

Importance ranking in the safe food operation of personal hygiene by levels of country and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
EMPLOY	2 10 - 99	4.8400	.3703	50
EMPLOY	3 100 +	4.8509	.5149	161
COUNTRY	2 France	4.9195	.3132	87
EMPLOY	2 10 - 99	4.9535	.2131	43
EMPLOY	3 100 +	4.8864	.3868	44
COUNTRY	3 Italy	4.7432	.5250	74
EMPLOY	1 less than 10	4.1250	.9910	8
EMPLOY	2 10 - 99	4.7692	.4254	52
EMPLOY	3 100 +	5.0000	.0000	14
COUNTRY	4 Germany	4.9098	.3150	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.9714	.1690	35
EMPLOY	3 100 +	4.8750	.3689	80

Importance ranking in the safe food operation of personal hygiene by levels of country and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.8333	.5308	156
HOTEL_TY	2 independent hotel	4.9074	.2926	54

COUNTRY	2 France	4.9195	.3132	87
HOTEL_TY	1 hotel chain	4.8871	.3669	62
HOTEL_TY	2 independent hotel	5.0000	.0000	25
COUNTRY	3 Italy	4.7432	.5250	74
HOTEL_TY	1 hotel chain	4.8293	.4417	41
HOTEL_TY	2 independent hotel	4.6364	.6030	33
COUNTRY	4 Germany	4.9098	.3150	122
HOTEL_TY	1 hotel chain	4.8854	.3515	96
HOTEL_TY	2 independent hotel	5.0000	.0000	26

Importance ranking in the safe food operation of personal hygiene by levels of country and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.8402	.5157	169
SEX	2 female	4.9024	.3004	41
COUNTRY	2 France	4.9195	.3132	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.9474	.2248	76
SEX	2 female	4.7000	.6749	10
COUNTRY	3 Italy	4.7432	.5250	74
SEX	1 male	4.8500	.4044	60
SEX	2 female	4.2857	.7263	14
COUNTRY	4 Germany	4.9098	.3150	122
SEX	1 male	4.9100	.3208	100
SEX	2 female	4.9091	.2942	22

Importance ranking in the safe food operation of personal hygiene by levels of country and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.8351	.5895	97
AGE_GROU	3 30 - 39	4.8472	.3623	72
AGE_GROU	4 40 - 49	4.8095	.5118	21
AGE_GROU	5 50 - 59	5.0000	.0000	12
AGE_GROU	6 60 or over	5.0000	.0000	5

COUNTRY	2 France	4.9195	.3132	87
AGE_GROU	2 20 - 29	4.8621	.4411	29
AGE_GROU	3 30 - 39	4.9730	.1644	37
AGE_GROU	4 40 - 49	4.9167	.2887	12
AGE_GROU	5 50 - 59	5.0000	.0000	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.7432	.5250	74
AGE_GROU	1 under 20	4.5714	.7868	7
AGE_GROU	2 20 - 29	4.7600	.4359	25
AGE_GROU	3 30 - 39	4.7419	.5755	31
AGE_GROU	4 40 - 49	4.8571	.3780	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.9098	.3150	122
AGE_GROU	2 20 - 29	4.9000	.3038	40
AGE_GROU	3 30 - 39	4.8718	.4091	39
AGE_GROU	4 40 - 49	4.9412	.2425	17
AGE_GROU	5 50 - 59	4.9583	.2041	24
AGE_GROU	6 60 or over	5.0000	.0000	2

Importance ranking in the safe food operation of personal hygiene by levels of country and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
YEARS_CA	1 none	4.7879	.4151	33
YEARS_CA	2 less than 1 year	4.7778	.4410	9
YEARS_CA	3 1 - 2 years	4.7500	.5182	28
YEARS_CA	4 2 - 3 years	4.7838	.8542	37
YEARS_CA	5 3 or more years	4.9231	.2678	104
COUNTRY	2 France	4.9195	.3132	87
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.9412	.2425	17
YEARS_CA	4 2 - 3 years	4.8519	.4560	27
YEARS_CA	5 3 or more years	4.9500	.2207	40
COUNTRY	3 Italy	4.7432	.5250	74
YEARS_CA	1 none	4.6364	.6742	11
YEARS_CA	2 less than 1 year	3.6667	1.1547	3
YEARS_CA	3 1 - 2 years	4.7143	.4880	7
YEARS_CA	4 2 - 3 years	4.6667	.4924	12
YEARS_CA	5 3 or more years	4.8780	.3313	41
COUNTRY	4 Germany	4.9098	.3150	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.7500	.4629	8
YEARS_CA	4 2 - 3 years	4.9655	.1841	58
YEARS_CA	5 3 or more years	4.8889	.3720	54

Importance ranking in the safe food operation of personal hygiene by levels of country and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
YEARS_PR	1 less than 1 year	5.0000	.0000	3
YEARS_PR	2 1 - 2 years	4.7778	.4410	9
YEARS_PR	3 2 - 3 years	4.4545	.6876	11
YEARS_PR	4 3 years or more	4.8723	.4679	188
COUNTRY	2 France	4.9195	.3132	87
YEARS_PR	1 less than 1 year	3.0000	.	1
YEARS_PR	2 1 - 2 years	4.6667	.5774	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.9512	.2167	82
COUNTRY	3 Italy	4.7432	.5250	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.7606	.5200	71
COUNTRY	4 Germany	4.9098	.3150	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	5.0000	.0000	8
YEARS_PR	4 3 years or more	4.9115	.3150	113

Importance ranking in the safe food operation of personal hygiene by levels of country and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
POSITION	1 manager	4.8455	.5616	110
POSITION	2 supervisor	4.6786	.5480	28
POSITION	3 head chef	4.9677	.1796	31
POSITION	4 chef	5.0000	.0000	15
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.8500	.3663	20
COUNTRY	2 France	4.9195	.3132	87
POSITION	1 manager	5.0000	.0000	11
POSITION	2 supervisor	4.5000	1.0000	4
POSITION	3 head chef	5.0000	.0000	13
POSITION	4 chef	4.9167	.2887	12
POSITION	5 waiter	4.6000	.5477	5
POSITION	6 other	4.9524	.2155	42

COUNTRY	3 Italy	4.7432	.5250	74
POSITION	1 manager	4.8667	.5164	15
POSITION	2 supervisor	4.8333	.4082	6
POSITION	3 head chef	4.5625	.7274	16
POSITION	4 chef	4.7500	.4523	12
POSITION	5 waiter	4.4286	.5345	7
POSITION	6 other	4.8889	.3234	18
COUNTRY	4 Germany	4.9098	.3150	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	4.9643	.1873	56
POSITION	2 supervisor	4.8421	.5015	19
POSITION	3 head chef	5.0000	.0000	19
POSITION	4 chef	4.8571	.3780	7
POSITION	5 waiter	4.8571	.3780	7
POSITION	6 other	4.6923	.4804	13

Importance ranking in the safe food operation of personal hygiene by levels of country and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.8603	.4305	494
COUNTRY	1 UK	4.8483	.4838	211
HOTEL_ST	3 3 star	4.8500	.3663	20
HOTEL_ST	4 4 star	4.8309	.5382	136
HOTEL_ST	5 5 star	4.8909	.3688	55
COUNTRY	2 France	4.9195	.3132	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.8333	.3835	18
HOTEL_ST	4 4 star	4.9365	.3044	63
HOTEL_ST	5 5 star	5.0000	.0000	4
COUNTRY	3 Italy	4.7432	.5250	74
HOTEL_ST	3 3 star	4.5789	.7685	19
HOTEL_ST	4 4 star	4.7381	.4450	42
HOTEL_ST	5 5 star	5.0000	.0000	13
COUNTRY	4 Germany	4.9098	.3150	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	4.9565	.2085	23
HOTEL_ST	4 4 star	4.8478	.4199	46
HOTEL_ST	5 5 star	4.9423	.2354	52

Importance ranking in the safe food operation of kitchen premises structure by levels of country and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211

SIZE_RM	1 10 - 99	4.4167	.5036	24
SIZE_RM	2 100 - 199	4.4314	.8063	51
SIZE_RM	3 200 +	4.5368	.5431	136
COUNTRY	2 France	4.4368	.6416	87
SIZE_RM	1 10 - 99	3.7368	.5620	19
SIZE_RM	2 100 - 199	4.7000	.4661	30
SIZE_RM	3 200 +	4.5789	.5517	38
COUNTRY	3 Italy	4.6757	.5517	74
SIZE_RM	1 10 - 99	4.5500	.7592	20
SIZE_RM	2 100 - 199	4.6129	.4951	31
SIZE_RM	3 200 +	4.8696	.3444	23
COUNTRY	4 Germany	4.2869	.8280	122
SIZE_RM	1 10 - 99	4.5000	.5145	18
SIZE_RM	2 100 - 199	4.0417	.9079	24
SIZE_RM	3 200 +	4.3125	.8508	80

Importance ranking in the safe food operation of kitchen premises structure by levels of country and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
EMPLOY	2 10 - 99	4.4400	.5014	50
EMPLOY	3 100 +	4.5155	.6433	161
COUNTRY	2 France	4.4368	.6416	87
EMPLOY	2 10 - 99	4.3023	.7083	43
EMPLOY	3 100 +	4.5682	.5455	44
COUNTRY	3 Italy	4.6757	.5517	74
EMPLOY	1 less than 10	3.8750	.8345	8
EMPLOY	2 10 - 99	4.7308	.4479	52
EMPLOY	3 100 +	4.9286	.2673	14
COUNTRY	4 Germany	4.2869	.8280	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.1143	.7960	35
EMPLOY	3 100 +	4.3000	.8479	80

Importance ranking in the safe food operation of kitchen premises structure by levels of country and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.4615	.6464	156

HOTEL_TY	2 independent hotel	4.6111	.4921	54
COUNTRY	2 France	4.4368	.6416	87
HOTEL_TY	1 hotel chain	4.5968	.5267	62
HOTEL_TY	2 independent hotel	4.0400	.7348	25
COUNTRY	3 Italy	4.6757	.5517	74
HOTEL_TY	1 hotel chain	4.7073	.5587	41
HOTEL_TY	2 independent hotel	4.6364	.5488	33
COUNTRY	4 Germany	4.2869	.8280	122
HOTEL_TY	1 hotel chain	4.3333	.8543	96
HOTEL_TY	2 independent hotel	4.1154	.7114	26

Importance ranking in the safe food operation of kitchen premises structure by levels of country and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.4556	.6264	169
SEX	2 female	4.6829	.5215	41
COUNTRY	2 France	4.4368	.6416	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.4079	.6362	76
SEX	2 female	4.6000	.6992	10
COUNTRY	3 Italy	4.6757	.5517	74
SEX	1 male	4.7333	.5164	60
SEX	2 female	4.4286	.6462	14
COUNTRY	4 Germany	4.2869	.8280	122
SEX	1 male	4.3100	.8492	100
SEX	2 female	4.1818	.7327	22

Importance ranking in the safe food operation of kitchen premises structure by levels of country and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.4948	.6789	97
AGE_GROU	3 30 - 39	4.4722	.5559	72
AGE_GROU	4 40 - 49	4.6190	.5896	21
AGE_GROU	5 50 - 59	4.5000	.5222	12
AGE_GROU	6 60 or over	4.2000	.4472	5

COUNTRY	2 France	4.4368	.6416	87
AGE_GROU	2 20 - 29	4.3448	.7209	29
AGE_GROU	3 30 - 39	4.3784	.6391	37
AGE_GROU	4 40 - 49	4.4167	.5149	12
AGE_GROU	5 50 - 59	5.0000	.0000	7
AGE_GROU	6 60 or over	5.0000	.0000	2
COUNTRY	3 Italy	4.6757	.5517	74
AGE_GROU	1 under 20	4.4286	.7868	7
AGE_GROU	2 20 - 29	4.7200	.5416	25
AGE_GROU	3 30 - 39	4.6452	.5507	31
AGE_GROU	4 40 - 49	4.8571	.3780	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.2869	.8280	122
AGE_GROU	2 20 - 29	4.2250	.9997	40
AGE_GROU	3 30 - 39	4.2564	.8801	39
AGE_GROU	4 40 - 49	4.2941	.4697	17
AGE_GROU	5 50 - 59	4.4167	.6539	24
AGE_GROU	6 60 or over	4.5000	.7071	2

Importance ranking in the safe food operation of kitchen premises structure by levels of country and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
YEARS_CA	1 none	4.3939	.5556	33
YEARS_CA	2 less than 1 year	4.5556	.5270	9
YEARS_CA	3 1 - 2 years	4.3929	.5669	28
YEARS_CA	4 2 - 3 years	4.3784	.8929	37
YEARS_CA	5 3 or more years	4.5962	.5124	104
COUNTRY	2 France	4.4368	.6416	87
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.2941	.4697	17
YEARS_CA	4 2 - 3 years	4.2963	.7240	27
YEARS_CA	5 3 or more years	4.5750	.6360	40
COUNTRY	3 Italy	4.6757	.5517	74
YEARS_CA	1 none	4.5455	.5222	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.7143	.4880	7
YEARS_CA	4 2 - 3 years	4.5833	.5149	12
YEARS_CA	5 3 or more years	4.7561	.5823	41
COUNTRY	4 Germany	4.2869	.8280	122
YEARS_CA	1 none	4.0000	.0000	2
YEARS_CA	3 1 - 2 years	4.6250	.5175	8
YEARS_CA	4 2 - 3 years	4.2759	.8120	58

YEARS_CA	5 3 or more years	4.2593	.8941	54
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Importance ranking in the safe food operation of kitchen premises structure by levels of country and years of practical experience in Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.4444	.5270	9
YEARS_PR	3 2 - 3 years	4.1818	.6030	11
YEARS_PR	4 3 years or more	4.5160	.6160	188
COUNTRY	2 France	4.4368	.6416	87
YEARS_PR	1 less than 1 year	3.0000	.	1
YEARS_PR	2 1 - 2 years	4.6667	.5774	3
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.4512	.6315	82
COUNTRY	3 Italy	4.6757	.5517	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.6901	.5501	71
COUNTRY	4 Germany	4.2869	.8280	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.7500	.4629	8
YEARS_PR	4 3 years or more	4.2566	.8428	113

Importance ranking in the safe food operation of kitchen premises structure by levels of country and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
POSITION	1 manager	4.4273	.6699	110
POSITION	2 supervisor	4.5714	.5727	28
POSITION	3 head chef	4.6774	.4752	31
POSITION	4 chef	4.6000	.5071	15
POSITION	5 waiter	4.1429	.3780	7
POSITION	6 other	4.5500	.6048	20
COUNTRY	2 France	4.4368	.6416	87
POSITION	1 manager	4.7273	.4671	11
POSITION	2 supervisor	4.0000	.8165	4
POSITION	3 head chef	4.7692	.4385	13
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	3.6000	.8944	5
POSITION	6 other	4.3333	.6115	42

COUNTRY	3 Italy	4.6757	.5517	74
POSITION	1 manager	4.6000	.7368	15
POSITION	2 supervisor	5.0000	.0000	6
POSITION	3 head chef	4.5625	.6292	16
POSITION	4 chef	4.8333	.3892	12
POSITION	5 waiter	4.2857	.4880	7
POSITION	6 other	4.7778	.4278	18

COUNTRY	4 Germany	4.2869	.8280	122
POSITION	0 no response	4.0000	.	1
POSITION	1 manager	4.1786	.7653	56
POSITION	2 supervisor	4.2632	.8057	19
POSITION	3 head chef	4.8421	.3746	19
POSITION	4 chef	4.2857	1.1127	7
POSITION	5 waiter	3.8571	1.7728	7
POSITION	6 other	4.2308	.4385	13

Importance ranking in the safe food operation of kitchen premises structure by levels of country and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.4615	.6782	494
COUNTRY	1 UK	4.4976	.6124	211
HOTEL_ST	3 3 star	4.4000	.5026	20
HOTEL_ST	4 4 star	4.5294	.6434	136
HOTEL_ST	5 5 star	4.4545	.5715	55
COUNTRY	2 France	4.4368	.6416	87
HOTEL_ST	2 2 star	4.0000	.0000	2
HOTEL_ST	3 3 star	4.5556	.5113	18
HOTEL_ST	4 4 star	4.3968	.6849	63
HOTEL_ST	5 5 star	4.7500	.5000	4
COUNTRY	3 Italy	4.6757	.5517	74
HOTEL_ST	3 3 star	4.5263	.7723	19
HOTEL_ST	4 4 star	4.6667	.4771	42
HOTEL_ST	5 5 star	4.9231	.2774	13
COUNTRY	4 Germany	4.2869	.8280	122
HOTEL_ST	0 no response	4.0000	.	1
HOTEL_ST	3 3 star	3.9130	.9493	23
HOTEL_ST	4 4 star	4.3478	.5664	46
HOTEL_ST	5 5 star	4.4038	.9343	52

Importance ranking in the safe food operation of staff washing facilities by levels of country and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494

COUNTRY	1 UK	4.6872	.5663	211
SIZE_RM	1 10 - 99	4.5417	.5090	24
SIZE_RM	2 100 - 199	4.6863	.7872	51
SIZE_RM	3 200 +	4.7132	.4700	136
COUNTRY	2 France	4.5287	.6792	87
SIZE_RM	1 10 - 99	3.9474	.7799	19
SIZE_RM	2 100 - 199	4.7000	.4661	30
SIZE_RM	3 200 +	4.6842	.6197	38
COUNTRY	3 Italy	4.2162	.7452	74
SIZE_RM	1 10 - 99	4.0500	.7592	20
SIZE_RM	2 100 - 199	4.1935	.7033	31
SIZE_RM	3 200 +	4.3913	.7827	23
COUNTRY	4 Germany	4.6393	.7280	122
SIZE_RM	1 10 - 99	4.9444	.2357	18
SIZE_RM	2 100 - 199	4.4583	.5090	24
SIZE_RM	3 200 +	4.6250	.8325	80

Importance ranking in the safe food operation of staff washing facilities by levels of country and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
EMPLOY	2 10 - 99	4.6600	.4785	50
EMPLOY	3 100 +	4.6957	.5921	161
COUNTRY	2 France	4.5287	.6792	87
EMPLOY	2 10 - 99	4.3488	.7199	43
EMPLOY	3 100 +	4.7045	.5937	44
COUNTRY	3 Italy	4.2162	.7452	74
EMPLOY	1 less than 10	3.3750	.5175	8
EMPLOY	2 10 - 99	4.1923	.7151	52
EMPLOY	3 100 +	4.7857	.4258	14
COUNTRY	4 Germany	4.6393	.7280	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.6286	.4902	35
EMPLOY	3 100 +	4.6125	.8343	80

Importance ranking in the safe food operation of staff washing facilities by levels of country and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
HOTEL_TY	0 no response	5.0000	.	1

HOTEL_TY	1 hotel chain	4.6795	.6009	156
HOTEL_TY	2 independent hotel	4.7037	.4609	54
COUNTRY	2 France	4.5287	.6792	87
HOTEL_TY	1 hotel chain	4.6935	.5607	62
HOTEL_TY	2 independent hotel	4.1200	.7810	25
COUNTRY	3 Italy	4.2162	.7452	74
HOTEL_TY	1 hotel chain	4.1951	.7490	41
HOTEL_TY	2 independent hotel	4.2424	.7513	33
COUNTRY	4 Germany	4.6393	.7280	122
HOTEL_TY	1 hotel chain	4.6250	.7847	96
HOTEL_TY	2 independent hotel	4.6923	.4707	26

Importance ranking in the safe food operation of staff washing facilities by levels of country and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
SEX	0 no response	5.0000	.	1
SEX	1 male	4.6509	.5996	169
SEX	2 female	4.8293	.3809	41
COUNTRY	2 France	4.5287	.6792	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.5395	.6417	76
SEX	2 female	4.4000	.9661	10
COUNTRY	3 Italy	4.2162	.7452	74
SEX	1 male	4.3167	.7247	60
SEX	2 female	3.7857	.6993	14
COUNTRY	4 Germany	4.6393	.7280	122
SEX	1 male	4.6200	.7756	100
SEX	2 female	4.7273	.4558	22

Importance ranking in the safe food operation of staff washing facilities by levels of country and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
AGE_GROU	0 no response	5.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.6392	.6799	97
AGE_GROU	3 30 - 39	4.7361	.4438	72
AGE_GROU	4 40 - 49	4.7143	.4629	21
AGE_GROU	5 50 - 59	4.5833	.5149	12

AGE_GROU	6 60 or over	4.8000	.4472	5
COUNTRY	2 France	4.5287	.6792	87
AGE_GROU	2 20 - 29	4.1724	.8892	29
AGE_GROU	3 30 - 39	4.7027	.4634	37
AGE_GROU	4 40 - 49	4.5833	.5149	12
AGE_GROU	5 50 - 59	5.0000	.0000	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.2162	.7452	74
AGE_GROU	1 under 20	4.0000	.8165	7
AGE_GROU	2 20 - 29	4.2400	.6633	25
AGE_GROU	3 30 - 39	4.2258	.7620	31
AGE_GROU	4 40 - 49	4.1429	1.0690	7
AGE_GROU	5 50 - 59	4.5000	.5774	4
COUNTRY	4 Germany	4.6393	.7280	122
AGE_GROU	2 20 - 29	4.5250	.9604	40
AGE_GROU	3 30 - 39	4.6154	.6734	39
AGE_GROU	4 40 - 49	4.6471	.6063	17
AGE_GROU	5 50 - 59	4.8750	.3378	24
AGE_GROU	6 60 or over	4.5000	.7071	2

Importance ranking in the safe food operation of staff washing facilities by levels of country and years of formal education in H&C

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
YEARS_CA	1 none	4.6364	.4885	33
YEARS_CA	2 less than 1 year	4.5556	.5270	9
YEARS_CA	3 1 - 2 years	4.7857	.4179	28
YEARS_CA	4 2 - 3 years	4.5405	.9005	37
YEARS_CA	5 3 or more years	4.7404	.4621	104
COUNTRY	2 France	4.5287	.6792	87
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.1765	.7276	17
YEARS_CA	4 2 - 3 years	4.5185	.7000	27
YEARS_CA	5 3 or more years	4.6500	.6222	40
COUNTRY	3 Italy	4.2162	.7452	74
YEARS_CA	1 none	4.2727	.4671	11
YEARS_CA	2 less than 1 year	3.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.0000	.8165	7
YEARS_CA	4 2 - 3 years	4.2500	.8660	12
YEARS_CA	5 3 or more years	4.2927	.7498	41
COUNTRY	4 Germany	4.6393	.7280	122
YEARS_CA	1 none	4.0000	.0000	2
YEARS_CA	3 1 - 2 years	4.8750	.3536	8
YEARS_CA	4 2 - 3 years	4.7241	.5862	58

YEARS_CA 5 3 or more years 4.5370 .8841 54

Importance ranking in the safe food operation of staff washing facilities by levels of country and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.7778	.4410	9
YEARS_PR	3 2 - 3 years	4.3636	.5045	11
YEARS_PR	4 3 years or more	4.7021	.5726	188
COUNTRY	2 France	4.5287	.6792	87
YEARS_PR	1 less than 1 year	2.0000	.	1
YEARS_PR	2 1 - 2 years	4.3333	.5774	3
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.5732	.6291	82
COUNTRY	3 Italy	4.2162	.7452	74
YEARS_PR	2 1 - 2 years	5.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.1972	.7487	71
COUNTRY	4 Germany	4.6393	.7280	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.6250	1.0607	8
YEARS_PR	4 3 years or more	4.6460	.7061	113

Importance ranking in the safe food operation of staff washing facilities by levels of country and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
POSITION	1 manager	4.6455	.6438	110
POSITION	2 supervisor	4.6786	.5480	28
POSITION	3 head chef	4.7742	.4250	31
POSITION	4 chef	4.8000	.4140	15
POSITION	5 waiter	4.4286	.5345	7
POSITION	6 other	4.8000	.4104	20
COUNTRY	2 France	4.5287	.6792	87
POSITION	1 manager	4.9091	.3015	11
POSITION	2 supervisor	3.7500	1.2583	4
POSITION	3 head chef	4.7692	.4385	13
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	3.6000	.8944	5
POSITION	6 other	4.5000	.6344	42

COUNTRY	3 Italy	4.2162	.7452	74
POSITION	1 manager	4.1333	.8338	15
POSITION	2 supervisor	4.1667	.9832	6
POSITION	3 head chef	4.0625	.7719	16
POSITION	4 chef	4.4167	.6686	12
POSITION	5 waiter	4.2857	.7559	7
POSITION	6 other	4.2778	.6691	18
COUNTRY	4 Germany	4.6393	.7280	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	4.7679	.4260	56
POSITION	2 supervisor	4.4211	.9016	19
POSITION	3 head chef	4.8947	.3153	19
POSITION	4 chef	4.4286	1.1339	7
POSITION	5 waiter	4.0000	1.8257	7
POSITION	6 other	4.4615	.5189	13

Importance ranking in the safe food operation of staff washing facilities by levels of country and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5769	.6749	494
COUNTRY	1 UK	4.6872	.5663	211
HOTEL_ST	3 3 star	4.6000	.5026	20
HOTEL_ST	4 4 star	4.6838	.6171	136
HOTEL_ST	5 5 star	4.7273	.4495	55
COUNTRY	2 France	4.5287	.6792	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.6667	.4851	18
HOTEL_ST	4 4 star	4.4603	.7367	63
HOTEL_ST	5 5 star	4.7500	.5000	4
COUNTRY	3 Italy	4.2162	.7452	74
HOTEL_ST	3 3 star	3.9474	.7799	19
HOTEL_ST	4 4 star	4.2381	.7262	42
HOTEL_ST	5 5 star	4.5385	.6602	13
COUNTRY	4 Germany	4.6393	.7280	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	4.4348	.5069	23
HOTEL_ST	4 4 star	4.6739	.6344	46
HOTEL_ST	5 5 star	4.6923	.8753	52

Importance ranking in the safe food operation of staff hygiene training by levels of country and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494

COUNTRY	1 UK	4.8483	.4838	211
SIZE_RM	1 10 - 99	4.6250	.5758	24
SIZE_RM	2 100 - 199	4.8235	.7404	51
SIZE_RM	3 200 +	4.8971	.3050	136
COUNTRY	2 France	4.8506	.3586	87
SIZE_RM	1 10 - 99	4.6842	.4776	19
SIZE_RM	2 100 - 199	5.0000	.0000	30
SIZE_RM	3 200 +	4.8158	.3929	38
COUNTRY	3 Italy	4.5676	.5753	74
SIZE_RM	1 10 - 99	4.3500	.7452	20
SIZE_RM	2 100 - 199	4.5484	.5059	31
SIZE_RM	3 200 +	4.7826	.4217	23
COUNTRY	4 Germany	4.7049	.4927	122
SIZE_RM	1 10 - 99	4.9444	.2357	18
SIZE_RM	2 100 - 199	4.3750	.5758	24
SIZE_RM	3 200 +	4.7500	.4639	80

Importance ranking in the safe food operation of staff hygiene training by levels of country and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
EMPLOY	2 10 - 99	4.8200	.4375	50
EMPLOY	3 100 +	4.8571	.4982	161
COUNTRY	2 France	4.8506	.3586	87
EMPLOY	2 10 - 99	4.8605	.3506	43
EMPLOY	3 100 +	4.8409	.3700	44
COUNTRY	3 Italy	4.5676	.5753	74
EMPLOY	1 less than 10	4.1250	.9910	8
EMPLOY	2 10 - 99	4.5192	.5045	52
EMPLOY	3 100 +	5.0000	.0000	14
COUNTRY	4 Germany	4.7049	.4927	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.5714	.5576	35
EMPLOY	3 100 +	4.7375	.4705	80

Importance ranking in the safe food operation of staff hygiene training by levels of country and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
HOTEL_TY	0 no response	5.0000	.	1

HOTEL_TY	1 hotel chain	4.8462	.5100	156
HOTEL_TY	2 independent hotel	4.8519	.4078	54
COUNTRY	2 France	4.8506	.3586	87
HOTEL_TY	1 hotel chain	4.8871	.3191	62
HOTEL_TY	2 independent hotel	4.7600	.4359	25
COUNTRY	3 Italy	4.5676	.5753	74
HOTEL_TY	1 hotel chain	4.5610	.5499	41
HOTEL_TY	2 independent hotel	4.5758	.6139	33
COUNTRY	4 Germany	4.7049	.4927	122
HOTEL_TY	1 hotel chain	4.7083	.5009	96
HOTEL_TY	2 independent hotel	4.6923	.4707	26

Importance ranking in the safe food operation of staff hygiene training by levels of country and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
SEX	0 no response	5.0000	.	1
SEX	1 male	4.8402	.5157	169
SEX	2 female	4.8780	.3313	41
COUNTRY	2 France	4.8506	.3586	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.8684	.3403	76
SEX	2 female	4.7000	.4830	10
COUNTRY	3 Italy	4.5676	.5753	74
SEX	1 male	4.6333	.5197	60
SEX	2 female	4.2857	.7263	14
COUNTRY	4 Germany	4.7049	.4927	122
SEX	1 male	4.6800	.5101	100
SEX	2 female	4.8182	.3948	22

Importance ranking in the safe food operation of staff hygiene training by levels of country and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
AGE_GROU	0 no response	5.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.7526	.6460	97
AGE_GROU	3 30 - 39	4.9306	.2560	72
AGE_GROU	4 40 - 49	4.8571	.3586	21
AGE_GROU	5 50 - 59	5.0000	.0000	12

AGE_GROU	6 60 or over	5.0000	.0000	5
COUNTRY	2 France	4.8506	.3586	87
AGE_GROU	2 20 - 29	4.6897	.4708	29
AGE_GROU	3 30 - 39	4.9189	.2767	37
AGE_GROU	4 40 - 49	5.0000	.0000	12
AGE_GROU	5 50 - 59	5.0000	.0000	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.5676	.5753	74
AGE_GROU	1 under 20	4.4286	.7868	7
AGE_GROU	2 20 - 29	4.4800	.5099	25
AGE_GROU	3 30 - 39	4.6129	.6152	31
AGE_GROU	4 40 - 49	4.8571	.3780	7
AGE_GROU	5 50 - 59	4.5000	.5774	4
COUNTRY	4 Germany	4.7049	.4927	122
AGE_GROU	2 20 - 29	4.7000	.4641	40
AGE_GROU	3 30 - 39	4.5897	.5946	39
AGE_GROU	4 40 - 49	4.7059	.4697	17
AGE_GROU	5 50 - 59	4.8750	.3378	24
AGE_GROU	6 60 or over	5.0000	.0000	2

Importance ranking in the safe food operation of staff hygiene training by levels of country and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
YEARS_CA	1 none	4.7879	.4151	33
YEARS_CA	2 less than 1 year	4.5556	.5270	9
YEARS_CA	3 1 - 2 years	4.8929	.4163	28
YEARS_CA	4 2 - 3 years	4.7838	.8542	37
YEARS_CA	5 3 or more years	4.9038	.2962	104
COUNTRY	2 France	4.8506	.3586	87
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.8235	.3930	17
YEARS_CA	4 2 - 3 years	4.8519	.3620	27
YEARS_CA	5 3 or more years	4.8500	.3616	40
COUNTRY	3 Italy	4.5676	.5753	74
YEARS_CA	1 none	4.1818	.6030	11
YEARS_CA	2 less than 1 year	3.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.4286	.5345	7
YEARS_CA	4 2 - 3 years	4.7500	.4523	12
YEARS_CA	5 3 or more years	4.7317	.4486	41
COUNTRY	4 Germany	4.7049	.4927	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.7500	.4629	8

YEARS_CA	4 2 - 3 years	4.7241	.4882	58
YEARS_CA	5 3 or more years	4.6852	.5075	54

Importance ranking in the safe food operation of staff hygiene training by levels of country and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.6667	.7071	9
YEARS_PR	3 2 - 3 years	4.8182	.4045	11
YEARS_PR	4 3 years or more	4.8617	.4762	188
COUNTRY	2 France	4.8506	.3586	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	4.3333	.5774	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.8780	.3292	82
COUNTRY	3 Italy	4.5676	.5753	74
YEARS_PR	2 1 - 2 years	5.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.5493	.5804	71
COUNTRY	4 Germany	4.7049	.4927	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.8750	.3536	8
YEARS_PR	4 3 years or more	4.6991	.4979	113

Importance ranking in the safe food operation of staff hygiene training by levels of country and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
POSITION	1 manager	4.8455	.5616	110
POSITION	2 supervisor	4.8571	.3563	28
POSITION	3 head chef	4.9677	.1796	31
POSITION	4 chef	4.6000	.6325	15
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.9000	.3078	20
COUNTRY	2 France	4.8506	.3586	87
POSITION	1 manager	5.0000	.0000	11
POSITION	2 supervisor	4.7500	.5000	4
POSITION	3 head chef	4.8462	.3755	13
POSITION	4 chef	5.0000	.0000	12
POSITION	5 waiter	4.2000	.4472	5

POSITION	6 other	4.8571	.3542	42
COUNTRY	3 Italy	4.5676	.5753	74
POSITION	1 manager	4.7333	.5936	15
POSITION	2 supervisor	4.5000	.5477	6
POSITION	3 head chef	4.3750	.7188	16
POSITION	4 chef	4.7500	.4523	12
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.5000	.5145	18
COUNTRY	4 Germany	4.7049	.4927	122
POSITION	0 no response	4.0000	.	1
POSITION	1 manager	4.7679	.4260	56
POSITION	2 supervisor	4.4737	.6118	19
POSITION	3 head chef	4.9474	.2294	19
POSITION	4 chef	4.4286	.7868	7
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.6923	.4804	13

Importance ranking in the safe food operation of staff hygiene training by levels of country and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7713	.4916	494
COUNTRY	1 UK	4.8483	.4838	211
HOTEL_ST	3 3 star	5.0000	.0000	20
HOTEL_ST	4 4 star	4.8603	.5189	136
HOTEL_ST	5 5 star	4.7636	.4700	55
COUNTRY	2 France	4.8506	.3586	87
HOTEL_ST	2 2 star	4.0000	.0000	2
HOTEL_ST	3 3 star	4.8333	.3835	18
HOTEL_ST	4 4 star	4.8730	.3356	63
HOTEL_ST	5 5 star	5.0000	.0000	4
COUNTRY	3 Italy	4.5676	.5753	74
HOTEL_ST	3 3 star	4.3158	.7493	19
HOTEL_ST	4 4 star	4.5714	.5009	42
HOTEL_ST	5 5 star	4.9231	.2774	13
COUNTRY	4 Germany	4.7049	.4927	122
HOTEL_ST	0 no response	4.0000	.	1
HOTEL_ST	3 3 star	4.4348	.5898	23
HOTEL_ST	4 4 star	4.7826	.4673	46
HOTEL_ST	5 5 star	4.7692	.4254	52

Importance ranking in the safe food operation of purchasing by levels of country and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494

COUNTRY	1 UK	4.2796	.9474	211
SIZE_RM	1 10 - 99	4.5000	.5898	24
SIZE_RM	2 100 - 199	4.4118	.9204	51
SIZE_RM	3 200 +	4.1912	1.0001	136
COUNTRY	2 France	4.1379	1.2683	87
SIZE_RM	1 10 - 99	4.4211	.6070	19
SIZE_RM	2 100 - 199	4.4000	.8944	30
SIZE_RM	3 200 +	3.7895	1.6466	38
COUNTRY	3 Italy	4.3243	.8775	74
SIZE_RM	1 10 - 99	3.6500	.9881	20
SIZE_RM	2 100 - 199	4.4839	.5080	31
SIZE_RM	3 200 +	4.6957	.8757	23
COUNTRY	4 Germany	3.9590	1.2557	122
SIZE_RM	1 10 - 99	4.5000	.5145	18
SIZE_RM	2 100 - 199	4.1250	1.1539	24
SIZE_RM	3 200 +	3.7875	1.3659	80

Importance ranking in the safe food operation of purchasing by levels of country and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494
COUNTRY	1 UK	4.2796	.9474	211
EMPLOY	2 10 - 99	4.5000	.5803	50
EMPLOY	3 100 +	4.2112	1.0272	161
COUNTRY	2 France	4.1379	1.2683	87
EMPLOY	2 10 - 99	4.4186	.8233	43
EMPLOY	3 100 +	3.8636	1.5491	44
COUNTRY	3 Italy	4.3243	.8775	74
EMPLOY	1 less than 10	3.3750	1.1877	8
EMPLOY	2 10 - 99	4.4231	.6670	52
EMPLOY	3 100 +	4.5000	1.0919	14
COUNTRY	4 Germany	3.9590	1.2557	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.1143	.9632	35
EMPLOY	3 100 +	3.8000	1.3724	80

Importance ranking in the safe food operation of purchasing by levels of country and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494

COUNTRY	1 UK	4.2796	.9474	211
HOTEL_TY	0 no response	3.0000	.	1
HOTEL_TY	1 hotel chain	4.2372	.9779	156
HOTEL_TY	2 independent hotel	4.4259	.8378	54
COUNTRY	2 France	4.1379	1.2683	87
HOTEL_TY	1 hotel chain	4.0161	1.3848	62
HOTEL_TY	2 independent hotel	4.4400	.8699	25
COUNTRY	3 Italy	4.3243	.8775	74
HOTEL_TY	1 hotel chain	4.2195	1.0127	41
HOTEL_TY	2 independent hotel	4.4545	.6657	33
COUNTRY	4 Germany	3.9590	1.2557	122
HOTEL_TY	1 hotel chain	3.8958	1.3415	96
HOTEL_TY	2 independent hotel	4.1923	.8494	26

Importance ranking in the safe food operation of purchasing by levels of country and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494
COUNTRY	1 UK	4.2796	.9474	211
SEX	0 no response	3.0000	.	1
SEX	1 male	4.2722	.9620	169
SEX	2 female	4.3415	.8835	41
COUNTRY	2 France	4.1379	1.2683	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.2632	1.1930	76
SEX	2 female	3.2000	1.5492	10
COUNTRY	3 Italy	4.3243	.8775	74
SEX	1 male	4.3667	.8823	60
SEX	2 female	4.1429	.8644	14
COUNTRY	4 Germany	3.9590	1.2557	122
SEX	1 male	3.9800	1.3557	100
SEX	2 female	3.8636	.6396	22

Importance ranking in the safe food operation of purchasing by levels of country and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494
COUNTRY	1 UK	4.2796	.9474	211
AGE_GROU	0 no response	3.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.1753	1.0802	97
AGE_GROU	3 30 - 39	4.3472	.7720	72

AGE_GROU	4 40 - 49	4.3333	1.0646	21
AGE_GROU	5 50 - 59	4.6667	.4924	12
AGE_GROU	6 60 or over	4.0000	.7071	5
COUNTRY	2 France	4.1379	1.2683	87
AGE_GROU	2 20 - 29	4.3103	1.0725	29
AGE_GROU	3 30 - 39	4.1351	1.3367	37
AGE_GROU	4 40 - 49	3.5000	1.3817	12
AGE_GROU	5 50 - 59	4.8571	.3780	7
AGE_GROU	6 60 or over	3.0000	2.8284	2
COUNTRY	3 Italy	4.3243	.8775	74
AGE_GROU	1 under 20	3.7143	1.3801	7
AGE_GROU	2 20 - 29	4.2800	.7916	25
AGE_GROU	3 30 - 39	4.3548	.8774	31
AGE_GROU	4 40 - 49	4.8571	.3780	7
AGE_GROU	5 50 - 59	4.5000	.5774	4
COUNTRY	4 Germany	3.9590	1.2557	122
AGE_GROU	2 20 - 29	3.8250	1.2788	40
AGE_GROU	3 30 - 39	3.9744	1.2873	39
AGE_GROU	4 40 - 49	3.5882	1.5435	17
AGE_GROU	5 50 - 59	4.3750	.8754	24
AGE_GROU	6 60 or over	4.5000	.7071	2

Importance ranking in the safe food operation of purchasing by levels of country and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494
COUNTRY	1 UK	4.2796	.9474	211
YEARS_CA	1 none	4.2121	.9924	33
YEARS_CA	2 less than 1 year	4.6667	.5000	9
YEARS_CA	3 1 - 2 years	4.1429	.9315	28
YEARS_CA	4 2 - 3 years	4.2432	1.0112	37
YEARS_CA	5 3 or more years	4.3173	.9478	104
COUNTRY	2 France	4.1379	1.2683	87
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.0588	1.2976	17
YEARS_CA	4 2 - 3 years	3.9259	1.4122	27
YEARS_CA	5 3 or more years	4.3000	1.2026	40
COUNTRY	3 Italy	4.3243	.8775	74
YEARS_CA	1 none	3.8182	.8739	11
YEARS_CA	2 less than 1 year	3.6667	1.1547	3
YEARS_CA	3 1 - 2 years	4.2857	.4880	7
YEARS_CA	4 2 - 3 years	4.2500	1.1382	12
YEARS_CA	5 3 or more years	4.5366	.7777	41
COUNTRY	4 Germany	3.9590	1.2557	122
YEARS_CA	1 none	4.5000	.7071	2

YEARS_CA	3	1 - 2 years	3.1250	1.8077	8
YEARS_CA	4	2 - 3 years	3.7931	1.2809	58
YEARS_CA	5	3 or more years	4.2407	1.0804	54

Importance ranking in the safe food operation of purchasing by levels of country and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494
COUNTRY	1 UK	4.2796	.9474	211
YEARS_PR	1 less than 1 year	4.3333	.5774	3
YEARS_PR	2 1 - 2 years	4.2222	.8333	9
YEARS_PR	3 2 - 3 years	3.6364	.6742	11
YEARS_PR	4 3 years or more	4.3191	.9614	188
COUNTRY	2 France	4.1379	1.2683	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	2.3333	2.3094	3
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.2073	1.2043	82
COUNTRY	3 Italy	4.3243	.8775	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.3380	.8935	71
COUNTRY	4 Germany	3.9590	1.2557	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	3.8750	.8345	8
YEARS_PR	4 3 years or more	3.9646	1.2882	113

Importance ranking in the safe food operation of purchasing by levels of country and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494
COUNTRY	1 UK	4.2796	.9474	211
POSITION	1 manager	4.3273	.9098	110
POSITION	2 supervisor	4.0000	1.1222	28
POSITION	3 head chef	4.4839	1.0286	31
POSITION	4 chef	4.2000	.6761	15
POSITION	5 waiter	4.1429	.3780	7
POSITION	6 other	4.2000	1.0563	20
COUNTRY	2 France	4.1379	1.2683	87
POSITION	1 manager	4.2727	1.2721	11
POSITION	2 supervisor	3.7500	1.8930	4
POSITION	3 head chef	3.8462	1.4632	13
POSITION	4 chef	4.7500	.6216	12

POSITION	5 waiter	3.4000	2.1909	5
POSITION	6 other	4.1429	1.1385	42
COUNTRY	3 Italy	4.3243	.8775	74
POSITION	1 manager	4.4000	1.0556	15
POSITION	2 supervisor	4.5000	.5477	6
POSITION	3 head chef	4.0625	1.1236	16
POSITION	4 chef	4.4167	.5149	12
POSITION	5 waiter	4.2857	.4880	7
POSITION	6 other	4.3889	.9164	18
COUNTRY	4 Germany	3.9590	1.2557	122
POSITION	0 no response	4.0000	.	1
POSITION	1 manager	4.0714	1.2189	56
POSITION	2 supervisor	3.6316	1.1648	19
POSITION	3 head chef	4.4211	1.0706	19
POSITION	4 chef	4.0000	1.4142	7
POSITION	5 waiter	3.0000	1.6330	7
POSITION	6 other	3.7692	1.3634	13

Importance ranking in the safe food operation of purchasing by levels of country and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.1822	1.0880	494
COUNTRY	1 UK	4.2796	.9474	211
HOTEL_ST	3 3 star	4.4500	.5104	20
HOTEL_ST	4 4 star	4.2647	.9679	136
HOTEL_ST	5 5 star	4.2545	1.0223	55
COUNTRY	2 France	4.1379	1.2683	87
HOTEL_ST	2 2 star	1.0000	.0000	2
HOTEL_ST	3 3 star	3.8889	1.2314	18
HOTEL_ST	4 4 star	4.2698	1.1942	63
HOTEL_ST	5 5 star	4.7500	.5000	4
COUNTRY	3 Italy	4.3243	.8775	74
HOTEL_ST	3 3 star	3.5263	.9048	19
HOTEL_ST	4 4 star	4.5000	.7408	42
HOTEL_ST	5 5 star	4.9231	.2774	13
COUNTRY	4 Germany	3.9590	1.2557	122
HOTEL_ST	0 no response	4.0000	.	1
HOTEL_ST	3 3 star	3.7826	1.2416	23
HOTEL_ST	4 4 star	4.3043	1.0300	46
HOTEL_ST	5 5 star	3.7308	1.4019	52

Importance ranking in the safe food operation of stock control by levels of country and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
SIZE_RM	1 10 - 99	4.7083	.4643	24
SIZE_RM	2 100 - 199	4.5294	.8798	51
SIZE_RM	3 200 +	4.4338	.8494	136
COUNTRY	2 France	4.2989	1.1218	87
SIZE_RM	1 10 - 99	4.5789	.5073	19
SIZE_RM	2 100 - 199	4.4000	.8944	30
SIZE_RM	3 200 +	4.0789	1.4404	38
COUNTRY	3 Italy	4.3784	.7347	74
SIZE_RM	1 10 - 99	4.2000	.8335	20
SIZE_RM	2 100 - 199	4.4516	.5059	31
SIZE_RM	3 200 +	4.4348	.8958	23
COUNTRY	4 Germany	3.9918	1.1818	122
SIZE_RM	1 10 - 99	4.5000	.5145	18
SIZE_RM	2 100 - 199	4.2500	.6079	24
SIZE_RM	3 200 +	3.8000	1.3632	80

Importance ranking in the safe food operation of stock control by levels of country and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
EMPLOY	2 10 - 99	4.6400	.4849	50
EMPLOY	3 100 +	4.4410	.9003	161
COUNTRY	2 France	4.2989	1.1218	87
EMPLOY	2 10 - 99	4.4884	.7980	43
EMPLOY	3 100 +	4.1136	1.3506	44
COUNTRY	3 Italy	4.3784	.7347	74
EMPLOY	1 less than 10	4.2500	.4629	8
EMPLOY	2 10 - 99	4.3462	.6533	52
EMPLOY	3 100 +	4.5714	1.0894	14
COUNTRY	4 Germany	3.9918	1.1818	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.2286	.5470	35
EMPLOY	3 100 +	3.8000	1.3632	80

Importance ranking in the safe food operation of stock control by levels of country and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.4295	.8880	156
HOTEL_TY	2 independent hotel	4.6667	.5828	54
COUNTRY	2 France	4.2989	1.1218	87
HOTEL_TY	1 hotel chain	4.1935	1.2783	62
HOTEL_TY	2 independent hotel	4.5600	.5066	25
COUNTRY	3 Italy	4.3784	.7347	74
HOTEL_TY	1 hotel chain	4.2927	.8730	41
HOTEL_TY	2 independent hotel	4.4848	.5075	33
COUNTRY	4 Germany	3.9918	1.1818	122
HOTEL_TY	1 hotel chain	3.8958	1.2854	96
HOTEL_TY	2 independent hotel	4.3462	.5616	26

Importance ranking in the safe food operation of stock control by levels of country and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.4675	.8594	169
SEX	2 female	4.5854	.6699	41
COUNTRY	2 France	4.2989	1.1218	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.3816	1.0579	76
SEX	2 female	3.7000	1.4944	10
COUNTRY	3 Italy	4.3784	.7347	74
SEX	1 male	4.3667	.7804	60
SEX	2 female	4.4286	.5136	14
COUNTRY	4 Germany	3.9918	1.1818	122
SEX	1 male	4.0100	1.2752	100
SEX	2 female	3.9091	.6102	22

Importance ranking in the safe food operation of stock control by levels of country and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.4227	.9224	97
AGE_GROU	3 30 - 39	4.5278	.7115	72
AGE_GROU	4 40 - 49	4.5714	.9258	21
AGE_GROU	5 50 - 59	4.6667	.4924	12
AGE_GROU	6 60 or over	4.2000	.8367	5
COUNTRY	2 France	4.2989	1.1218	87
AGE_GROU	2 20 - 29	4.4828	.8290	29
AGE_GROU	3 30 - 39	4.4054	1.1170	37
AGE_GROU	4 40 - 49	3.5000	1.3817	12
AGE_GROU	5 50 - 59	4.7143	.4880	7
AGE_GROU	6 60 or over	3.0000	2.8284	2
COUNTRY	3 Italy	4.3784	.7347	74
AGE_GROU	1 under 20	4.0000	1.0000	7
AGE_GROU	2 20 - 29	4.3200	.7483	25
AGE_GROU	3 30 - 39	4.4839	.7244	31
AGE_GROU	4 40 - 49	4.4286	.5345	7
AGE_GROU	5 50 - 59	4.5000	.5774	4
COUNTRY	4 Germany	3.9918	1.1818	122
AGE_GROU	2 20 - 29	3.9750	1.0739	40
AGE_GROU	3 30 - 39	3.9487	1.2763	39
AGE_GROU	4 40 - 49	3.5294	1.5049	17
AGE_GROU	5 50 - 59	4.3333	.8681	24
AGE_GROU	6 60 or over	5.0000	.0000	2

Importance ranking in the safe food operation of stock control by levels of country and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
YEARS_CA	1 none	4.3939	.9334	33
YEARS_CA	2 less than 1 year	4.6667	.5000	9
YEARS_CA	3 1 - 2 years	4.3929	.8317	28
YEARS_CA	4 2 - 3 years	4.3784	1.0097	37
YEARS_CA	5 3 or more years	4.5673	.7342	104
COUNTRY	2 France	4.2989	1.1218	87
YEARS_CA	1 none	4.5000	.7071	2

YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.4118	1.0037	17
YEARS_CA	4 2 - 3 years	3.9259	1.4122	27
YEARS_CA	5 3 or more years	4.5000	.9337	40
COUNTRY	3 Italy	4.3784	.7347	74
YEARS_CA	1 none	3.7273	.7862	11
YEARS_CA	2 less than 1 year	4.0000	.0000	3
YEARS_CA	3 1 - 2 years	4.2857	.4880	7
YEARS_CA	4 2 - 3 years	4.0833	1.0836	12
YEARS_CA	5 3 or more years	4.6829	.4711	41
COUNTRY	4 Germany	3.9918	1.1818	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	3.2500	1.9086	8
YEARS_CA	4 2 - 3 years	3.8793	1.1406	58
YEARS_CA	5 3 or more years	4.2037	1.0707	54

Importance ranking in the safe food operation of stock control by levels of country and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.4444	.5270	9
YEARS_PR	3 2 - 3 years	4.2727	.6467	11
YEARS_PR	4 3 years or more	4.5000	.8497	188
COUNTRY	2 France	4.2989	1.1218	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	2.0000	1.7321	3
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.3902	1.0275	82
COUNTRY	3 Italy	4.3784	.7347	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.3944	.7460	71
COUNTRY	4 Germany	3.9918	1.1818	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	3.8750	.8345	8
YEARS_PR	4 3 years or more	4.0000	1.2101	113

Importance ranking in the safe food operation of stock control by levels of country and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494

COUNTRY	1 UK	4.4882	.8244	211
POSITION	1 manager	4.4909	.8959	110
POSITION	2 supervisor	4.1429	1.0789	28
POSITION	3 head chef	4.8387	.3739	31
POSITION	4 chef	4.4000	.6325	15
POSITION	5 waiter	4.4286	.5345	7
POSITION	6 other	4.5000	.5130	20
COUNTRY	2 France	4.2989	1.1218	87
POSITION	1 manager	4.6364	.6742	11
POSITION	2 supervisor	4.2500	.5000	4
POSITION	3 head chef	3.9231	1.4979	13
POSITION	4 chef	4.8333	.3892	12
POSITION	5 waiter	3.4000	2.1909	5
POSITION	6 other	4.2857	1.0426	42
COUNTRY	3 Italy	4.3784	.7347	74
POSITION	1 manager	4.6667	.4880	15
POSITION	2 supervisor	4.6667	.5164	6
POSITION	3 head chef	4.0625	.9287	16
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	4.2857	.4880	7
POSITION	6 other	4.1667	.8575	18
COUNTRY	4 Germany	3.9918	1.1818	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	4.1250	1.0456	56
POSITION	2 supervisor	3.6842	1.1572	19
POSITION	3 head chef	4.4211	1.0706	19
POSITION	4 chef	3.8571	1.3452	7
POSITION	5 waiter	3.0000	1.6330	7
POSITION	6 other	3.7692	1.3634	13

Importance ranking in the safe food operation of stock control by levels of country and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.3158	.9854	494
COUNTRY	1 UK	4.4882	.8244	211
HOTEL_ST	3 3 star	4.6500	.4894	20
HOTEL_ST	4 4 star	4.4265	.9078	136
HOTEL_ST	5 5 star	4.5818	.6856	55
COUNTRY	2 France	4.2989	1.1218	87
HOTEL_ST	2 2 star	1.0000	.0000	2
HOTEL_ST	3 3 star	4.1111	1.2783	18
HOTEL_ST	4 4 star	4.4444	.9466	63
HOTEL_ST	5 5 star	4.5000	.5774	4
COUNTRY	3 Italy	4.3784	.7347	74
HOTEL_ST	3 3 star	4.1053	.8093	19
HOTEL_ST	4 4 star	4.3571	.7265	42

HOTEL_ST	5 5 star	4.8462	.3755	13
COUNTRY	4 Germany	3.9918	1.1818	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	4.0870	.9002	23
HOTEL_ST	4 4 star	4.2174	1.0091	46
HOTEL_ST	5 5 star	3.7308	1.3878	52

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
SIZE_RM	1 10 - 99	4.9167	.2823	24
SIZE_RM	2 100 - 199	4.7843	.7827	51
SIZE_RM	3 200 +	4.8750	.3319	136
COUNTRY	2 France	4.6897	.6873	87
SIZE_RM	1 10 - 99	4.8421	.3746	19
SIZE_RM	2 100 - 199	4.8000	.4068	30
SIZE_RM	3 200 +	4.5263	.9223	38
COUNTRY	3 Italy	4.1351	.8492	74
SIZE_RM	1 10 - 99	4.2000	.4104	20
SIZE_RM	2 100 - 199	4.0968	.8701	31
SIZE_RM	3 200 +	4.1304	1.0998	23
COUNTRY	4 Germany	4.6066	.7666	122
SIZE_RM	1 10 - 99	5.0000	.0000	18
SIZE_RM	2 100 - 199	4.6667	.4815	24
SIZE_RM	3 200 +	4.5000	.8859	80

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
EMPLOY	2 10 - 99	4.8800	.3854	50
EMPLOY	3 100 +	4.8509	.5026	161
COUNTRY	2 France	4.6897	.6873	87
EMPLOY	2 10 - 99	4.8605	.3506	43
EMPLOY	3 100 +	4.5227	.8757	44
COUNTRY	3 Italy	4.1351	.8492	74
EMPLOY	1 less than 10	4.2500	.4629	8
EMPLOY	2 10 - 99	4.1346	.7148	52
EMPLOY	3 100 +	4.0714	1.3848	14

COUNTRY	4 Germany	4.6066	.7666	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.8571	.3550	35
EMPLOY	3 100 +	4.4625	.8851	80

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
HOTEL_TY	0 no response	5.0000	.	1
HOTEL_TY	1 hotel chain	4.8397	.5267	156
HOTEL_TY	2 independent hotel	4.9074	.2926	54
COUNTRY	2 France	4.6897	.6873	87
HOTEL_TY	1 hotel chain	4.7097	.6868	62
HOTEL_TY	2 independent hotel	4.6400	.7000	25
COUNTRY	3 Italy	4.1351	.8492	74
HOTEL_TY	1 hotel chain	4.0732	.9589	41
HOTEL_TY	2 independent hotel	4.2121	.6963	33
COUNTRY	4 Germany	4.6066	.7666	122
HOTEL_TY	1 hotel chain	4.5521	.8319	96
HOTEL_TY	2 independent hotel	4.8077	.4019	26

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
SEX	0 no response	5.0000	.	1
SEX	1 male	4.8343	.5196	169
SEX	2 female	4.9512	.2181	41
COUNTRY	2 France	4.6897	.6873	87
SEX	0 no response	4.0000	.	1
SEX	1 male	4.7105	.6494	76
SEX	2 female	4.6000	.9661	10
COUNTRY	3 Italy	4.1351	.8492	74
SEX	1 male	4.1167	.9223	60
SEX	2 female	4.2143	.4258	14
COUNTRY	4 Germany	4.6066	.7666	122
SEX	1 male	4.5900	.8177	100
SEX	2 female	4.6818	.4767	22

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
AGE_GROU	0 no response	5.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.8557	.5772	97
AGE_GROU	3 30 - 39	4.9028	.2983	72
AGE_GROU	4 40 - 49	4.8571	.3586	21
AGE_GROU	5 50 - 59	4.6667	.6513	12
AGE_GROU	6 60 or over	4.6000	.5477	5
COUNTRY	2 France	4.6897	.6873	87
AGE_GROU	2 20 - 29	4.7931	.6199	29
AGE_GROU	3 30 - 39	4.5946	.7623	37
AGE_GROU	4 40 - 49	4.7500	.6216	12
AGE_GROU	5 50 - 59	4.5714	.7868	7
AGE_GROU	6 60 or over	5.0000	.0000	2
COUNTRY	3 Italy	4.1351	.8492	74
AGE_GROU	1 under 20	4.0000	1.0000	7
AGE_GROU	2 20 - 29	4.2400	.5972	25
AGE_GROU	3 30 - 39	3.9677	.9826	31
AGE_GROU	4 40 - 49	4.2857	.9512	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.6066	.7666	122
AGE_GROU	2 20 - 29	4.4750	.8767	40
AGE_GROU	3 30 - 39	4.5641	.9118	39
AGE_GROU	4 40 - 49	4.5882	.5073	17
AGE_GROU	5 50 - 59	4.9167	.2823	24
AGE_GROU	6 60 or over	4.5000	.7071	2

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and years of formal education in H&C

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
YEARS_CA	1 none	4.8182	.3917	33
YEARS_CA	2 less than 1 year	4.8889	.3333	9
YEARS_CA	3 1 - 2 years	4.8571	.3563	28
YEARS_CA	4 2 - 3 years	4.7568	.8630	37
YEARS_CA	5 3 or more years	4.9038	.3274	104
COUNTRY	2 France	4.6897	.6873	87
YEARS_CA	1 none	5.0000	.0000	2

YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.6471	.7859	17
YEARS_CA	4 2 - 3 years	4.5185	.9352	27
YEARS_CA	5 3 or more years	4.8250	.3848	40
COUNTRY	3 Italy	4.1351	.8492	74
YEARS_CA	1 none	4.2727	.4671	11
YEARS_CA	2 less than 1 year	4.0000	.0000	3
YEARS_CA	3 1 - 2 years	3.8571	.8997	7
YEARS_CA	4 2 - 3 years	4.0833	1.0836	12
YEARS_CA	5 3 or more years	4.1707	.8917	41
COUNTRY	4 Germany	4.6066	.7666	122
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	3 1 - 2 years	4.7500	.4629	8
YEARS_CA	4 2 - 3 years	4.6034	.7710	58
YEARS_CA	5 3 or more years	4.5741	.8150	54

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
YEARS_PR	1 less than 1 year	5.0000	.0000	3
YEARS_PR	2 1 - 2 years	4.8889	.3333	9
YEARS_PR	3 2 - 3 years	4.8182	.4045	11
YEARS_PR	4 3 years or more	4.8564	.4912	188
COUNTRY	2 France	4.6897	.6873	87
YEARS_PR	1 less than 1 year	5.0000	.	1
YEARS_PR	2 1 - 2 years	5.0000	.0000	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.6707	.7037	82
COUNTRY	3 Italy	4.1351	.8492	74
YEARS_PR	2 1 - 2 years	5.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.0986	.8478	71
COUNTRY	4 Germany	4.6066	.7666	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.3750	.5175	8
YEARS_PR	4 3 years or more	4.6283	.7814	113

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494

COUNTRY	1 UK	4.8578	.4768	211
POSITION	1 manager	4.8545	.5721	110
POSITION	2 supervisor	4.8571	.3563	28
POSITION	3 head chef	4.9032	.3005	31
POSITION	4 chef	4.8000	.4140	15
POSITION	5 waiter	4.8571	.3780	7
POSITION	6 other	4.8500	.3663	20
COUNTRY	2 France	4.6897	.6873	87
POSITION	1 manager	4.6364	.5045	11
POSITION	2 supervisor	4.2500	1.5000	4
POSITION	3 head chef	4.5385	1.1266	13
POSITION	4 chef	4.9167	.2887	12
POSITION	5 waiter	4.6000	.8944	5
POSITION	6 other	4.7381	.4968	42
COUNTRY	3 Italy	4.1351	.8492	74
POSITION	1 manager	4.2667	1.0998	15
POSITION	2 supervisor	4.1667	.9832	6
POSITION	3 head chef	3.6875	.9465	16
POSITION	4 chef	4.1667	.3892	12
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.1667	.7071	18
COUNTRY	4 Germany	4.6066	.7666	122
POSITION	0 no response	4.0000	.	1
POSITION	1 manager	4.7321	.7505	56
POSITION	2 supervisor	4.5263	.5130	19
POSITION	3 head chef	4.5263	1.1723	19
POSITION	4 chef	4.4286	.7868	7
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.4615	.5189	13

Inadequate temperature control has the potential to cause food poisoning by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6579	.6994	494
COUNTRY	1 UK	4.8578	.4768	211
HOTEL_ST	3 3 star	4.9500	.2236	20
HOTEL_ST	4 4 star	4.8235	.5562	136
HOTEL_ST	5 5 star	4.9091	.2901	55
COUNTRY	2 France	4.6897	.6873	87
HOTEL_ST	2 2 star	3.0000	2.8284	2
HOTEL_ST	3 3 star	4.7222	.6691	18
HOTEL_ST	4 4 star	4.7460	.5379	63
HOTEL_ST	5 5 star	4.5000	.5774	4
COUNTRY	3 Italy	4.1351	.8492	74
HOTEL_ST	3 3 star	4.1579	.3746	19
HOTEL_ST	4 4 star	3.9286	.9974	42

HOTEL_ST	5 5 star	4.7692	.4385	13
COUNTRY	4 Germany	4.6066	.7666	122
HOTEL_ST	0 no response	4.0000	.	1
HOTEL_ST	3 3 star	4.5652	1.0798	23
HOTEL_ST	4 4 star	4.7174	.5017	46
HOTEL_ST	5 5 star	4.5385	.8035	52

Inadequate training has the potential to cause food poisoning by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
SIZE_RM	1 10 - 99	4.8750	.3378	24
SIZE_RM	2 100 - 199	4.7843	.7567	51
SIZE_RM	3 200 +	4.9485	.2218	136
COUNTRY	2 France	4.5057	.8744	87
SIZE_RM	1 10 - 99	4.1579	.8983	19
SIZE_RM	2 100 - 199	4.7000	.5960	30
SIZE_RM	3 200 +	4.5263	1.0064	38
COUNTRY	3 Italy	4.3919	.8246	74
SIZE_RM	1 10 - 99	4.1500	.8751	20
SIZE_RM	2 100 - 199	4.4839	.5080	31
SIZE_RM	3 200 +	4.4783	1.0816	23
COUNTRY	4 Germany	4.1721	1.0733	122
SIZE_RM	1 10 - 99	3.8889	1.5297	18
SIZE_RM	2 100 - 199	4.2083	.7211	24
SIZE_RM	3 200 +	4.2250	1.0431	80

Inadequate training has the potential to cause food poisoning by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
EMPLOY	2 10 - 99	4.9000	.3030	50
EMPLOY	3 100 +	4.9006	.4637	161
COUNTRY	2 France	4.5057	.8744	87
EMPLOY	2 10 - 99	4.4651	.7973	43
EMPLOY	3 100 +	4.5455	.9512	44
COUNTRY	3 Italy	4.3919	.8246	74
EMPLOY	1 less than 10	4.3750	.7440	8
EMPLOY	2 10 - 99	4.3462	.6533	52
EMPLOY	3 100 +	4.5714	1.3425	14

COUNTRY	4 Germany	4.1721	1.0733	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	3.9714	1.1242	35
EMPLOY	3 100 +	4.1875	1.0685	80

Inadequate training has the potential to cause food poisoning by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
HOTEL_TY	0 no response	5.0000	.	1
HOTEL_TY	1 hotel chain	4.9038	.4653	156
HOTEL_TY	2 independent hotel	4.8889	.3172	54
COUNTRY	2 France	4.5057	.8744	87
HOTEL_TY	1 hotel chain	4.5806	.8787	62
HOTEL_TY	2 independent hotel	4.3200	.8524	25
COUNTRY	3 Italy	4.3919	.8246	74
HOTEL_TY	1 hotel chain	4.2927	.9809	41
HOTEL_TY	2 independent hotel	4.5152	.5658	33
COUNTRY	4 Germany	4.1721	1.0733	122
HOTEL_TY	1 hotel chain	4.1979	1.1482	96
HOTEL_TY	2 independent hotel	4.0769	.7442	26

Inadequate training has the potential to cause food poisoning by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
SEX	0 no response	5.0000	.	1
SEX	1 male	4.8935	.4634	169
SEX	2 female	4.9268	.2637	41
COUNTRY	2 France	4.5057	.8744	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.5132	.8717	76
SEX	2 female	4.4000	.9661	10
COUNTRY	3 Italy	4.3919	.8246	74
SEX	1 male	4.3667	.8823	60
SEX	2 female	4.5000	.5189	14
COUNTRY	4 Germany	4.1721	1.0733	122
SEX	1 male	4.1700	1.1725	100
SEX	2 female	4.1818	.3948	22

Inadequate training has the potential to cause food poisoning by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
AGE_GROU	0 no response	5.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.8454	.5835	97
AGE_GROU	3 30 - 39	4.9583	.2012	72
AGE_GROU	4 40 - 49	4.9048	.3008	21
AGE_GROU	5 50 - 59	4.9167	.2887	12
AGE_GROU	6 60 or over	5.0000	.0000	5
COUNTRY	2 France	4.5057	.8744	87
AGE_GROU	2 20 - 29	4.4483	.8275	29
AGE_GROU	3 30 - 39	4.6486	.6332	37
AGE_GROU	4 40 - 49	4.8333	.5774	12
AGE_GROU	5 50 - 59	4.0000	.8165	7
AGE_GROU	6 60 or over	2.5000	3.5355	2
COUNTRY	3 Italy	4.3919	.8246	74
AGE_GROU	1 under 20	4.5714	.5345	7
AGE_GROU	2 20 - 29	4.3200	.8021	25
AGE_GROU	3 30 - 39	4.3548	.9848	31
AGE_GROU	4 40 - 49	4.4286	.5345	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.1721	1.0733	122
AGE_GROU	2 20 - 29	4.1000	1.0328	40
AGE_GROU	3 30 - 39	4.2051	1.1960	39
AGE_GROU	4 40 - 49	4.0000	1.4577	17
AGE_GROU	5 50 - 59	4.3750	.5758	24
AGE_GROU	6 60 or over	4.0000	.0000	2

Inadequate training has the potential to cause food poisoning by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
YEARS_CA	1 none	4.9394	.2423	33
YEARS_CA	2 less than 1 year	4.7778	.4410	9
YEARS_CA	3 1 - 2 years	4.8929	.3150	28
YEARS_CA	4 2 - 3 years	4.7838	.8542	37
YEARS_CA	5 3 or more years	4.9423	.2343	104
COUNTRY	2 France	4.5057	.8744	87

YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.2353	.7524	17
YEARS_CA	4 2 - 3 years	4.4074	1.1522	27
YEARS_CA	5 3 or more years	4.6500	.6998	40
COUNTRY	3 Italy	4.3919	.8246	74
YEARS_CA	1 none	3.5455	.5222	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.2857	.4880	7
YEARS_CA	4 2 - 3 years	4.5833	.5149	12
YEARS_CA	5 3 or more years	4.5854	.8937	41
COUNTRY	4 Germany	4.1721	1.0733	122
YEARS_CA	1 none	4.0000	.0000	2
YEARS_CA	3 1 - 2 years	4.5000	.5345	8
YEARS_CA	4 2 - 3 years	4.1897	.8047	58
YEARS_CA	5 3 or more years	4.1111	1.3690	54

Inadequate training has the potential to cause food poisoning by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
YEARS_PR	1 less than 1 year	4.6667	.5774	3
YEARS_PR	2 1 - 2 years	4.8889	.3333	9
YEARS_PR	3 2 - 3 years	4.9091	.3015	11
YEARS_PR	4 3 years or more	4.9043	.4404	188
COUNTRY	2 France	4.5057	.8744	87
YEARS_PR	1 less than 1 year	4.0000	.	1
YEARS_PR	2 1 - 2 years	3.0000	2.6458	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.5610	.7387	82
COUNTRY	3 Italy	4.3919	.8246	74
YEARS_PR	2 1 - 2 years	4.0000	.0000	2
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.3944	.8363	71
COUNTRY	4 Germany	4.1721	1.0733	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.0000	.9258	8
YEARS_PR	4 3 years or more	4.1858	1.0901	113

Inadequate training has the potential to cause food poisoning by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
POSITION	1 manager	4.8545	.5558	110
POSITION	2 supervisor	4.9286	.2623	28
POSITION	3 head chef	5.0000	.0000	31
POSITION	4 chef	4.9333	.2582	15
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	5.0000	.0000	20
COUNTRY	2 France	4.5057	.8744	87
POSITION	1 manager	4.8182	.4045	11
POSITION	2 supervisor	4.5000	.5774	4
POSITION	3 head chef	4.9231	.2774	13
POSITION	4 chef	4.4167	.7930	12
POSITION	5 waiter	3.6000	2.1909	5
POSITION	6 other	4.4286	.8306	42
COUNTRY	3 Italy	4.3919	.8246	74
POSITION	1 manager	4.3333	1.2910	15
POSITION	2 supervisor	4.6667	.5164	6
POSITION	3 head chef	4.3125	.6021	16
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	4.4286	.5345	7
POSITION	6 other	4.2222	.8782	18
COUNTRY	4 Germany	4.1721	1.0733	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	4.1250	1.1918	56
POSITION	2 supervisor	4.1053	.6578	19
POSITION	3 head chef	4.2632	1.2402	19
POSITION	4 chef	3.8571	1.0690	7
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.2308	1.0919	13

Inadequate training has the potential to cause food poisoning by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5749	.8289	494
COUNTRY	1 UK	4.9005	.4304	211
HOTEL_ST	3 3 star	4.9500	.2236	20
HOTEL_ST	4 4 star	4.9118	.4787	136
HOTEL_ST	5 5 star	4.8545	.3558	55
COUNTRY	2 France	4.5057	.8744	87
HOTEL_ST	2 2 star	5.0000	.0000	2

HOTEL_ST	3 3 star	4.5000	.8575	18
HOTEL_ST	4 4 star	4.4762	.9133	63
HOTEL_ST	5 5 star	4.7500	.5000	4
COUNTRY	3 Italy	4.3919	.8246	74
HOTEL_ST	3 3 star	4.1053	.8753	19
HOTEL_ST	4 4 star	4.5000	.5061	42
HOTEL_ST	5 5 star	4.4615	1.3914	13
COUNTRY	4 Germany	4.1721	1.0733	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	3.5217	1.4731	23
HOTEL_ST	4 4 star	4.4130	.6856	46
HOTEL_ST	5 5 star	4.2308	1.0593	52

Cross contamination has the potential to cause food poisoning by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
SIZE_RM	1 10 - 99	4.7083	.4643	24
SIZE_RM	2 100 - 199	4.7059	.7822	51
SIZE_RM	3 200 +	4.7647	.5053	136
COUNTRY	2 France	4.5977	.8416	87
SIZE_RM	1 10 - 99	4.8421	.3746	19
SIZE_RM	2 100 - 199	4.7333	.4498	30
SIZE_RM	3 200 +	4.3684	1.1489	38
COUNTRY	3 Italy	4.1757	.7827	74
SIZE_RM	1 10 - 99	3.9000	.7881	20
SIZE_RM	2 100 - 199	4.0645	.8538	31
SIZE_RM	3 200 +	4.5652	.5069	23
COUNTRY	4 Germany	4.3443	1.0584	122
SIZE_RM	1 10 - 99	4.8889	.4714	18
SIZE_RM	2 100 - 199	4.3333	.9631	24
SIZE_RM	3 200 +	4.2250	1.1471	80

Cross contamination has the potential to cause food poisoning by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
EMPLOY	2 10 - 99	4.7200	.4536	50
EMPLOY	3 100 +	4.7516	.6127	161
COUNTRY	2 France	4.5977	.8416	87

EMPLOY	2 10 - 99	4.7907	.4116	43
EMPLOY	3 100 +	4.4091	1.0852	44
COUNTRY	3 Italy	4.1757	.7827	74
EMPLOY	1 less than 10	4.3750	.7440	8
EMPLOY	2 10 - 99	4.0000	.7921	52
EMPLOY	3 100 +	4.7143	.4688	14
COUNTRY	4 Germany	4.3443	1.0584	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.5714	.7391	35
EMPLOY	3 100 +	4.1875	1.1810	80

Cross contamination has the potential to cause food poisoning by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
HOTEL_TY	0 no response	5.0000	.	1
HOTEL_TY	1 hotel chain	4.7564	.6051	156
HOTEL_TY	2 independent hotel	4.7037	.5002	54
COUNTRY	2 France	4.5977	.8416	87
HOTEL_TY	1 hotel chain	4.5968	.7566	62
HOTEL_TY	2 independent hotel	4.6000	1.0408	25
COUNTRY	3 Italy	4.1757	.7827	74
HOTEL_TY	1 hotel chain	4.1951	.7148	41
HOTEL_TY	2 independent hotel	4.1515	.8704	33
COUNTRY	4 Germany	4.3443	1.0584	122
HOTEL_TY	1 hotel chain	4.2604	1.1168	96
HOTEL_TY	2 independent hotel	4.6538	.7452	26

Cross contamination has the potential to cause food poisoning by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
SEX	0 no response	5.0000	.	1
SEX	1 male	4.7456	.5879	169
SEX	2 female	4.7317	.5488	41
COUNTRY	2 France	4.5977	.8416	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.5658	.8845	76
SEX	2 female	4.8000	.4216	10

COUNTRY	3 Italy	4.1757	.7827	74
SEX	1 male	4.1333	.8329	60
SEX	2 female	4.3571	.4972	14
COUNTRY	4 Germany	4.3443	1.0584	122
SEX	1 male	4.2600	1.1337	100
SEX	2 female	4.7273	.4558	22

Cross contamination has the potential to cause food poisoning by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
AGE_GROU	0 no response	5.0000	.	1
AGE_GROU	1 under 20	4.6667	.5774	3
AGE_GROU	2 20 - 29	4.6804	.7004	97
AGE_GROU	3 30 - 39	4.8333	.3753	72
AGE_GROU	4 40 - 49	4.6667	.5774	21
AGE_GROU	5 50 - 59	4.8333	.5774	12
AGE_GROU	6 60 or over	4.8000	.4472	5
COUNTRY	2 France	4.5977	.8416	87
AGE_GROU	2 20 - 29	4.6897	.9675	29
AGE_GROU	3 30 - 39	4.5405	.8365	37
AGE_GROU	4 40 - 49	4.6667	.4924	12
AGE_GROU	5 50 - 59	4.5714	.7868	7
AGE_GROU	6 60 or over	4.0000	1.4142	2
COUNTRY	3 Italy	4.1757	.7827	74
AGE_GROU	1 under 20	4.5714	.5345	7
AGE_GROU	2 20 - 29	4.1600	.8981	25
AGE_GROU	3 30 - 39	4.0968	.5975	31
AGE_GROU	4 40 - 49	3.8571	1.2150	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.3443	1.0584	122
AGE_GROU	2 20 - 29	4.2500	1.2142	40
AGE_GROU	3 30 - 39	4.3846	1.0161	39
AGE_GROU	4 40 - 49	4.0588	1.1440	17
AGE_GROU	5 50 - 59	4.7083	.6903	24
AGE_GROU	6 60 or over	3.5000	.7071	2

Cross contamination has the potential to cause food poisoning by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211

YEARS_CA	1 none	4.7273	.5168	33
YEARS_CA	2 less than 1 year	4.7778	.4410	9
YEARS_CA	3 1 - 2 years	4.7857	.4987	28
YEARS_CA	4 2 - 3 years	4.5946	.9563	37
YEARS_CA	5 3 or more years	4.7885	.4334	104
COUNTRY	2 France	4.5977	.8416	87
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	2 less than 1 year	4.0000	.	1
YEARS_CA	3 1 - 2 years	4.5882	.5073	17
YEARS_CA	4 2 - 3 years	4.5926	.6939	27
YEARS_CA	5 3 or more years	4.6250	1.0546	40
COUNTRY	3 Italy	4.1757	.7827	74
YEARS_CA	1 none	3.1818	.7508	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.0000	.8165	7
YEARS_CA	4 2 - 3 years	4.4167	.5149	12
YEARS_CA	5 3 or more years	4.3902	.6663	41
COUNTRY	4 Germany	4.3443	1.0584	122
YEARS_CA	1 none	3.0000	1.4142	2
YEARS_CA	3 1 - 2 years	4.3750	.7440	8
YEARS_CA	4 2 - 3 years	4.4655	.9025	58
YEARS_CA	5 3 or more years	4.2593	1.2160	54

Cross contamination has the potential to cause food poisoning by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
YEARS_PR	1 less than 1 year	4.3333	.5774	3
YEARS_PR	2 1 - 2 years	4.7778	.4410	9
YEARS_PR	3 2 - 3 years	4.6364	.6742	11
YEARS_PR	4 3 years or more	4.7553	.5793	188
COUNTRY	2 France	4.5977	.8416	87
YEARS_PR	1 less than 1 year	5.0000	.	1
YEARS_PR	2 1 - 2 years	4.3333	1.1547	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.5976	.8441	82
COUNTRY	3 Italy	4.1757	.7827	74
YEARS_PR	2 1 - 2 years	2.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.2394	.7064	71
COUNTRY	4 Germany	4.3443	1.0584	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.3750	.7440	8
YEARS_PR	4 3 years or more	4.3451	1.0837	113

Cross contamination has the potential to cause food poisoning by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
POSITION	1 manager	4.7909	.5919	110
POSITION	2 supervisor	4.7143	.5998	28
POSITION	3 head chef	4.8065	.4774	31
POSITION	4 chef	4.6000	.5071	15
POSITION	5 waiter	4.4286	.7868	7
POSITION	6 other	4.6500	.5871	20
COUNTRY	2 France	4.5977	.8416	87
POSITION	1 manager	4.1818	1.5374	11
POSITION	2 supervisor	5.0000	.0000	4
POSITION	3 head chef	4.7692	.5991	13
POSITION	4 chef	4.8333	.3892	12
POSITION	5 waiter	4.4000	.8944	5
POSITION	6 other	4.5714	.7696	42
COUNTRY	3 Italy	4.1757	.7827	74
POSITION	1 manager	4.4667	.5164	15
POSITION	2 supervisor	4.1667	.9832	6
POSITION	3 head chef	4.1250	.7188	16
POSITION	4 chef	4.3333	.4924	12
POSITION	5 waiter	3.5714	1.1339	7
POSITION	6 other	4.1111	.9003	18
COUNTRY	4 Germany	4.3443	1.0584	122
POSITION	0 no response	5.0000	.	1
POSITION	1 manager	4.5893	.9101	56
POSITION	2 supervisor	4.3684	.6840	19
POSITION	3 head chef	4.4211	1.1698	19
POSITION	4 chef	4.0000	1.0000	7
POSITION	5 waiter	3.5714	1.7182	7
POSITION	6 other	3.6923	1.2506	13

Cross contamination has the potential to cause food poisoning by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.5344	.8242	494
COUNTRY	1 UK	4.7441	.5781	211
HOTEL_ST	3 3 star	5.0000	.0000	20
HOTEL_ST	4 4 star	4.7059	.6338	136
HOTEL_ST	5 5 star	4.7455	.5170	55
COUNTRY	2 France	4.5977	.8416	87

HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.7778	.5483	18
HOTEL_ST	4 4 star	4.5079	.9311	63
HOTEL_ST	5 5 star	5.0000	.0000	4
COUNTRY	3 Italy	4.1757	.7827	74
HOTEL_ST	3 3 star	3.8947	.7375	19
HOTEL_ST	4 4 star	4.1429	.7831	42
HOTEL_ST	5 5 star	4.6923	.6304	13
COUNTRY	4 Germany	4.3443	1.0584	122
HOTEL_ST	0 no response	5.0000	.	1
HOTEL_ST	3 3 star	4.0870	1.2400	23
HOTEL_ST	4 4 star	4.4783	.7814	46
HOTEL_ST	5 5 star	4.3269	1.1836	52

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
SIZE_RM	1 10 - 99	4.6667	.5647	24
SIZE_RM	2 100 - 199	4.6471	.8203	51
SIZE_RM	3 200 +	4.7794	.4821	136
COUNTRY	2 France	4.8736	.3343	87
SIZE_RM	1 10 - 99	4.7895	.4189	19
SIZE_RM	2 100 - 199	5.0000	.0000	30
SIZE_RM	3 200 +	4.8158	.3929	38
COUNTRY	3 Italy	4.4054	.7570	74
SIZE_RM	1 10 - 99	4.3500	.4894	20
SIZE_RM	2 100 - 199	4.3226	.5993	31
SIZE_RM	3 200 +	4.5652	1.0798	23
COUNTRY	4 Germany	4.3197	1.0853	122
SIZE_RM	1 10 - 99	4.3889	1.6139	18
SIZE_RM	2 100 - 199	4.3750	.8242	24
SIZE_RM	3 200 +	4.2875	1.0212	80

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
EMPLOY	2 10 - 99	4.7000	.5051	50
EMPLOY	3 100 +	4.7453	.6152	161

COUNTRY	2 France	4.8736	.3343	87
EMPLOY	2 10 - 99	4.9070	.2939	43
EMPLOY	3 100 +	4.8409	.3700	44
COUNTRY	3 Italy	4.4054	.7570	74
EMPLOY	1 less than 10	4.6250	.5175	8
EMPLOY	2 10 - 99	4.3269	.5503	52
EMPLOY	3 100 +	4.5714	1.3425	14
COUNTRY	4 Germany	4.3197	1.0853	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.2571	1.2912	35
EMPLOY	3 100 +	4.2875	1.0212	80

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
HOTEL_TY	0 no response	3.0000	.	1
HOTEL_TY	1 hotel chain	4.7949	.5532	156
HOTEL_TY	2 independent hotel	4.5926	.6300	54
COUNTRY	2 France	4.8736	.3343	87
HOTEL_TY	1 hotel chain	4.8871	.3191	62
HOTEL_TY	2 independent hotel	4.8400	.3742	25
COUNTRY	3 Italy	4.4054	.7570	74
HOTEL_TY	1 hotel chain	4.3171	.9066	41
HOTEL_TY	2 independent hotel	4.5152	.5075	33
COUNTRY	4 Germany	4.3197	1.0853	122
HOTEL_TY	1 hotel chain	4.2083	1.1690	96
HOTEL_TY	2 independent hotel	4.7308	.5335	26

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
SEX	0 no response	3.0000	.	1
SEX	1 male	4.7515	.5853	169
SEX	2 female	4.7073	.5587	41
COUNTRY	2 France	4.8736	.3343	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.8553	.3542	76
SEX	2 female	5.0000	.0000	10

COUNTRY	3 Italy	4.4054	.7570	74
SEX	1 male	4.4333	.8102	60
SEX	2 female	4.2857	.4688	14
COUNTRY	4 Germany	4.3197	1.0853	122
SEX	1 male	4.2800	1.1641	100
SEX	2 female	4.5000	.5976	22

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
AGE_GROU	0 no response	3.0000	.	1
AGE_GROU	1 under 20	4.6667	.5774	3
AGE_GROU	2 20 - 29	4.6804	.6854	97
AGE_GROU	3 30 - 39	4.8611	.3483	72
AGE_GROU	4 40 - 49	4.5714	.6761	21
AGE_GROU	5 50 - 59	4.8333	.5774	12
AGE_GROU	6 60 or over	4.8000	.4472	5
COUNTRY	2 France	4.8736	.3343	87
AGE_GROU	2 20 - 29	4.8966	.3099	29
AGE_GROU	3 30 - 39	4.8378	.3737	37
AGE_GROU	4 40 - 49	5.0000	.0000	12
AGE_GROU	5 50 - 59	4.8571	.3780	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.4054	.7570	74
AGE_GROU	1 under 20	4.5714	.5345	7
AGE_GROU	2 20 - 29	4.5600	.5066	25
AGE_GROU	3 30 - 39	4.1290	.9571	31
AGE_GROU	4 40 - 49	4.7143	.4880	7
AGE_GROU	5 50 - 59	4.7500	.5000	4
COUNTRY	4 Germany	4.3197	1.0853	122
AGE_GROU	2 20 - 29	4.2250	.9997	40
AGE_GROU	3 30 - 39	4.2564	1.1858	39
AGE_GROU	4 40 - 49	4.2353	1.3477	17
AGE_GROU	5 50 - 59	4.7500	.7372	24
AGE_GROU	6 60 or over	3.0000	.0000	2

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
YEARS_CA	1 none	4.7273	.4523	33
YEARS_CA	2 less than 1 year	4.5556	.5270	9
YEARS_CA	3 1 - 2 years	4.6071	.6853	28
YEARS_CA	4 2 - 3 years	4.6216	.9235	37
YEARS_CA	5 3 or more years	4.8269	.4282	104
COUNTRY	2 France	4.8736	.3343	87
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.7647	.4372	17
YEARS_CA	4 2 - 3 years	4.8148	.3958	27
YEARS_CA	5 3 or more years	4.9500	.2207	40
COUNTRY	3 Italy	4.4054	.7570	74
YEARS_CA	1 none	4.1818	.4045	11
YEARS_CA	2 less than 1 year	4.3333	.5774	3
YEARS_CA	3 1 - 2 years	4.2857	.4880	7
YEARS_CA	4 2 - 3 years	4.4167	.5149	12
YEARS_CA	5 3 or more years	4.4878	.9253	41
COUNTRY	4 Germany	4.3197	1.0853	122
YEARS_CA	1 none	2.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.3750	.7440	8
YEARS_CA	4 2 - 3 years	4.4655	.7995	58
YEARS_CA	5 3 or more years	4.2222	1.3270	54

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
YEARS_PR	1 less than 1 year	4.0000	.0000	3
YEARS_PR	2 1 - 2 years	4.4444	.8819	9
YEARS_PR	3 2 - 3 years	4.4545	.8202	11
YEARS_PR	4 3 years or more	4.7766	.5502	188
COUNTRY	2 France	4.8736	.3343	87
YEARS_PR	1 less than 1 year	5.0000	.	1
YEARS_PR	2 1 - 2 years	4.6667	.5774	3
YEARS_PR	3 2 - 3 years	5.0000	.	1

YEARS_PR	4 3 years or more	4.8780	.3292	82
COUNTRY	3 Italy	4.4054	.7570	74
YEARS_PR	2 1 - 2 years	5.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.3944	.7649	71
COUNTRY	4 Germany	4.3197	1.0853	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.2500	1.0351	8
YEARS_PR	4 3 years or more	4.3274	1.0974	113

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
POSITION	1 manager	4.7364	.6160	110
POSITION	2 supervisor	4.6429	.6785	28
POSITION	3 head chef	4.8710	.3408	31
POSITION	4 chef	4.8000	.5606	15
POSITION	5 waiter	4.7143	.4880	7
POSITION	6 other	4.6000	.6806	20
COUNTRY	2 France	4.8736	.3343	87
POSITION	1 manager	4.7273	.4671	11
POSITION	2 supervisor	5.0000	.0000	4
POSITION	3 head chef	4.9231	.2774	13
POSITION	4 chef	4.9167	.2887	12
POSITION	5 waiter	4.8000	.4472	5
POSITION	6 other	4.8810	.3278	42
COUNTRY	3 Italy	4.4054	.7570	74
POSITION	1 manager	4.4667	1.3020	15
POSITION	2 supervisor	4.5000	.5477	6
POSITION	3 head chef	4.3750	.6191	16
POSITION	4 chef	4.3333	.4924	12
POSITION	5 waiter	4.4286	.5345	7
POSITION	6 other	4.3889	.6077	18
COUNTRY	4 Germany	4.3197	1.0853	122
POSITION	0 no response	4.0000	.	1
POSITION	1 manager	4.3571	1.1974	56
POSITION	2 supervisor	4.1579	.6882	19
POSITION	3 head chef	4.4737	1.2188	19
POSITION	4 chef	4.1429	1.2150	7
POSITION	5 waiter	4.8571	.3780	7
POSITION	6 other	4.0000	1.0801	13

Inadequate personal hygiene has the potential to cause food poisoning by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.6073	.7667	494
COUNTRY	1 UK	4.7346	.5901	211
HOTEL_ST	3 3 star	4.8000	.4104	20
HOTEL_ST	4 4 star	4.7206	.6288	136
HOTEL_ST	5 5 star	4.7455	.5517	55
COUNTRY	2 France	4.8736	.3343	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.8333	.3835	18
HOTEL_ST	4 4 star	4.8730	.3356	63
HOTEL_ST	5 5 star	5.0000	.0000	4
COUNTRY	3 Italy	4.4054	.7570	74
HOTEL_ST	3 3 star	4.2632	.4524	19
HOTEL_ST	4 4 star	4.4524	.5927	42
HOTEL_ST	5 5 star	4.4615	1.3914	13
COUNTRY	4 Germany	4.3197	1.0853	122
HOTEL_ST	0 no response	4.0000	.	1
HOTEL_ST	3 3 star	3.6087	1.5880	23
HOTEL_ST	4 4 star	4.8043	.4998	46
HOTEL_ST	5 5 star	4.2115	1.0163	52

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and hotel size in room

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
SIZE_RM	1 10 - 99	4.9583	.2041	24
SIZE_RM	2 100 - 199	4.8235	.7404	51
SIZE_RM	3 200 +	4.8603	.3480	136
COUNTRY	2 France	4.6897	.5769	87
SIZE_RM	1 10 - 99	4.4737	.7723	19
SIZE_RM	2 100 - 199	4.9000	.3051	30
SIZE_RM	3 200 +	4.6316	.5891	38
COUNTRY	3 Italy	4.7703	.4235	74
SIZE_RM	1 10 - 99	4.8000	.4104	20
SIZE_RM	2 100 - 199	4.6774	.4752	31
SIZE_RM	3 200 +	4.8696	.3444	23
COUNTRY	4 Germany	4.5000	.9469	122
SIZE_RM	1 10 - 99	4.9444	.2357	18
SIZE_RM	2 100 - 199	4.5833	.6539	24

SIZE_RM	3 200 +	4.3750	1.0835	80
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Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and employment size

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
EMPLOY	2 10 - 99	4.9400	.2399	50
EMPLOY	3 100 +	4.8385	.5111	161
COUNTRY	2 France	4.6897	.5769	87
EMPLOY	2 10 - 99	4.7209	.5906	43
EMPLOY	3 100 +	4.6591	.5683	44
COUNTRY	3 Italy	4.7703	.4235	74
EMPLOY	1 less than 10	4.7500	.4629	8
EMPLOY	2 10 - 99	4.7308	.4479	52
EMPLOY	3 100 +	4.9286	.2673	14
COUNTRY	4 Germany	4.5000	.9469	122
EMPLOY	1 less than 10	5.0000	.0000	7
EMPLOY	2 10 - 99	4.6857	.5827	35
EMPLOY	3 100 +	4.3750	1.0835	80

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and hotel type

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
HOTEL_TY	0 no response	4.0000	.	1
HOTEL_TY	1 hotel chain	4.8526	.5055	156
HOTEL_TY	2 independent hotel	4.9074	.2926	54
COUNTRY	2 France	4.6897	.5769	87
HOTEL_TY	1 hotel chain	4.7419	.4769	62
HOTEL_TY	2 independent hotel	4.5600	.7681	25
COUNTRY	3 Italy	4.7703	.4235	74
HOTEL_TY	1 hotel chain	4.7805	.4191	41
HOTEL_TY	2 independent hotel	4.7576	.4352	33
COUNTRY	4 Germany	4.5000	.9469	122
HOTEL_TY	1 hotel chain	4.4375	1.0137	96
HOTEL_TY	2 independent hotel	4.7308	.6038	26

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and gender

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
SEX	0 no response	4.0000	.	1
SEX	1 male	4.8521	.4958	169
SEX	2 female	4.9268	.2637	41
COUNTRY	2 France	4.6897	.5769	87
SEX	0 no response	5.0000	.	1
SEX	1 male	4.6842	.5935	76
SEX	2 female	4.7000	.4830	10
COUNTRY	3 Italy	4.7703	.4235	74
SEX	1 male	4.8000	.4034	60
SEX	2 female	4.6429	.4972	14
COUNTRY	4 Germany	4.5000	.9469	122
SEX	1 male	4.4600	1.0192	100
SEX	2 female	4.6818	.4767	22

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and age groups

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
AGE_GROU	0 no response	4.0000	.	1
AGE_GROU	1 under 20	5.0000	.0000	3
AGE_GROU	2 20 - 29	4.8660	.5706	97
AGE_GROU	3 30 - 39	4.8750	.3330	72
AGE_GROU	4 40 - 49	4.8095	.4024	21
AGE_GROU	5 50 - 59	4.9167	.2887	12
AGE_GROU	6 60 or over	4.8000	.4472	5
COUNTRY	2 France	4.6897	.5769	87
AGE_GROU	2 20 - 29	4.7241	.5276	29
AGE_GROU	3 30 - 39	4.5676	.6888	37
AGE_GROU	4 40 - 49	5.0000	.0000	12
AGE_GROU	5 50 - 59	4.7143	.4880	7
AGE_GROU	6 60 or over	4.5000	.7071	2
COUNTRY	3 Italy	4.7703	.4235	74
AGE_GROU	1 under 20	4.8571	.3780	7
AGE_GROU	2 20 - 29	4.8400	.3742	25
AGE_GROU	3 30 - 39	4.6774	.4752	31
AGE_GROU	4 40 - 49	4.8571	.3780	7
AGE_GROU	5 50 - 59	4.7500	.5000	4

COUNTRY	4 Germany	4.5000	.9469	122
AGE_GROU	2 20 - 29	4.2500	1.0316	40
AGE_GROU	3 30 - 39	4.4872	1.0227	39
AGE_GROU	4 40 - 49	4.6471	.9963	17
AGE_GROU	5 50 - 59	4.7917	.5090	24
AGE_GROU	6 60 or over	5.0000	.0000	2

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and years of formal education in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
YEARS_CA	1 none	4.8788	.3314	33
YEARS_CA	2 less than 1 year	4.7778	.4410	9
YEARS_CA	3 1 - 2 years	4.8929	.3150	28
YEARS_CA	4 2 - 3 years	4.7838	.8542	37
YEARS_CA	5 3 or more years	4.8846	.3210	104
COUNTRY	2 France	4.6897	.5769	87
YEARS_CA	1 none	5.0000	.0000	2
YEARS_CA	2 less than 1 year	5.0000	.	1
YEARS_CA	3 1 - 2 years	4.6471	.4926	17
YEARS_CA	4 2 - 3 years	4.5185	.7530	27
YEARS_CA	5 3 or more years	4.8000	.4641	40
COUNTRY	3 Italy	4.7703	.4235	74
YEARS_CA	1 none	4.9091	.3015	11
YEARS_CA	2 less than 1 year	5.0000	.0000	3
YEARS_CA	3 1 - 2 years	4.7143	.4880	7
YEARS_CA	4 2 - 3 years	4.6667	.4924	12
YEARS_CA	5 3 or more years	4.7561	.4348	41
COUNTRY	4 Germany	4.5000	.9469	122
YEARS_CA	1 none	4.5000	.7071	2
YEARS_CA	3 1 - 2 years	4.7500	.4629	8
YEARS_CA	4 2 - 3 years	4.5345	.8829	58
YEARS_CA	5 3 or more years	4.4259	1.0746	54

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and years of practical experience in the Hotel and Catering Industry

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
YEARS_PR	1 less than 1 year	5.0000	.0000	3
YEARS_PR	2 1 - 2 years	4.8889	.3333	9

YEARS_PR	3 2 - 3 years	4.7273	.4671	11
YEARS_PR	4 3 years or more	4.8670	.4721	188
COUNTRY	2 France	4.6897	.5769	87
YEARS_PR	1 less than 1 year	5.0000	.	1
YEARS_PR	2 1 - 2 years	4.3333	.5774	3
YEARS_PR	3 2 - 3 years	5.0000	.	1
YEARS_PR	4 3 years or more	4.6951	.5814	82
COUNTRY	3 Italy	4.7703	.4235	74
YEARS_PR	2 1 - 2 years	5.0000	.0000	2
YEARS_PR	3 2 - 3 years	4.0000	.	1
YEARS_PR	4 3 years or more	4.7746	.4208	71
COUNTRY	4 Germany	4.5000	.9469	122
YEARS_PR	2 1 - 2 years	4.0000	.	1
YEARS_PR	3 2 - 3 years	4.2500	1.0351	8
YEARS_PR	4 3 years or more	4.5221	.9458	113

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and job position

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
POSITION	1 manager	4.8545	.5558	110
POSITION	2 supervisor	4.8214	.3900	28
POSITION	3 head chef	4.9032	.3005	31
POSITION	4 chef	4.8000	.4140	15
POSITION	5 waiter	4.8571	.3780	7
POSITION	6 other	4.9500	.2236	20
COUNTRY	2 France	4.6897	.5769	87
POSITION	1 manager	4.6364	.6742	11
POSITION	2 supervisor	5.0000	.0000	4
POSITION	3 head chef	4.6154	.6504	13
POSITION	4 chef	4.8333	.3892	12
POSITION	5 waiter	4.8000	.4472	5
POSITION	6 other	4.6429	.6177	42
COUNTRY	3 Italy	4.7703	.4235	74
POSITION	1 manager	4.8000	.4140	15
POSITION	2 supervisor	5.0000	.0000	6
POSITION	3 head chef	4.6250	.5000	16
POSITION	4 chef	4.6667	.4924	12
POSITION	5 waiter	4.5714	.5345	7
POSITION	6 other	4.9444	.2357	18
COUNTRY	4 Germany	4.5000	.9469	122
POSITION	0 no response	4.0000	.	1
POSITION	1 manager	4.5893	.8899	56
POSITION	2 supervisor	4.3684	.7609	19
POSITION	3 head chef	4.5263	1.1723	19

POSITION	4 chef	4.1429	1.2150	7
POSITION	5 waiter	4.7143	.7559	7
POSITION	6 other	4.3846	1.1209	13

Inadequate cleaning has the potential to cause food poisoning by levels of country of hotel and hotel star rating

Variable	Value Label	Mean	Std Dev	Cases
For Entire Population				
		4.7287	.6459	494
COUNTRY	1 UK	4.8626	.4630	211
HOTEL_ST	3 3 star	4.9500	.2236	20
HOTEL_ST	4 4 star	4.8456	.5289	136
HOTEL_ST	5 5 star	4.8727	.3363	55
COUNTRY	2 France	4.6897	.5769	87
HOTEL_ST	2 2 star	5.0000	.0000	2
HOTEL_ST	3 3 star	4.6667	.4851	18
HOTEL_ST	4 4 star	4.6667	.6222	63
HOTEL_ST	5 5 star	5.0000	.0000	4
COUNTRY	3 Italy	4.7703	.4235	74
HOTEL_ST	3 3 star	4.8421	.3746	19
HOTEL_ST	4 4 star	4.7143	.4572	42
HOTEL_ST	5 5 star	4.8462	.3755	13
COUNTRY	4 Germany	4.5000	.9469	122
HOTEL_ST	0 no response	4.0000	.	1
HOTEL_ST	3 3 star	4.3913	1.1575	23
HOTEL_ST	4 4 star	4.8696	.4005	46
HOTEL_ST	5 5 star	4.2308	1.0957	52