

Sustainability and health in Portuguese canteens: an overview of the implementation of international and governmental guidelines

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ABSTRACT

The growing societal urgency toward adopting more sustainable and healthier lifestyles and

consumption motivates organizations to modify their practices and take on new ones. The food

sector plays an extremely relevant role since food directly influences health, and food

production causes significant pollution levels. Several guidelines are produced to mitigate these

issues. Nonetheless, there is a gap in literature regarding which guidelines apply to the food

industry and the process through which they are implemented within the sector. This thesis

examines how Portuguese canteens implement sustainable and healthier guidelines produced

by the Government and international organizations. To answer the research question, I

conducted a multiple case study on two canteens and two collective catering companies. The

phenomenon of how canteens translate sustainable and healthier guidelines in the

implementation process was studied in light of the Scandinavian institutionalism theoretical

framework. Results show that Portuguese canteens have been placing great effort into

promoting sustainability and health. However, they tend to focus more on Portuguese

guidelines rather than international ones. Interestingly, Portuguese guidelines are inspired by

international ones.

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SUMÁRIO

A sociedade enfrenta uma urgência para a adoção de um estilo de vida e consumo mais

sustentável e saudável. O setor alimentar um papel importante, dado que a comida impacta

diretamente a saúde e a sua produção causa níveis elevados de poluição, levando à produção de

diretrizes para mitigar estes temas. Todavia, existe uma lacuna na literatura existente, relativa

às diretivas aplicáveis à indústria alimentar e ao processo de implementação das mesmas.

Assim, esta tese procura compreender como é que as cantinas portuguesas estão a implementar

diretrizes de sustentabilidade e saúde produzidas pelo Governo e organizações internacionais.

Para responder a esta questão de pesquisa, usei um método de análise de múltiplos casos, duas

cantinas e duas empresas de restauração coletiva, com o objetivo de explorar o fenómeno de

como estas cantinas traduzem diretrizes mais sustentáveis e saudáveis no processo da sua

implementação, fenómeno esse que foi estudado à luz do institucionalismo escandinavo.

Os resultados provam que as organizações têm feito esforços para promover a sustentabilidade

e a saúde, preferindo focar-se em diretrizes portuguesas, que por sua vez foram inspiradas por

internacionais.

Título da dissertação: "Sustentabilidade e saúde nas cantinas portuguesas: uma análise

sobre a implementação de guias internacionais e governamentais"

Autor: Catarina da Cunha Rodrigues Miranda Martins

Palavras-chave: Sustentabilidade, saúde, cantinas, diretrizes

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"I have learned through the years that it is not where you live, it is the people who surround you that make you feel at home."

- J.B. McGee

1. INTRODUCTION

"To eat is a necessity, but to eat intelligently is an art."

-François de la Rochefoucauld (1613-1680) (Fisher, 2022)

As the world evolves, the concern regarding food and nutrition grows accordingly due to their role as causal factors of chronic non-communicable diseases (NCDs), such as diabetes, cardiovascular diseases, cancers, and chronic respiratory diseases (Cambeses-Franco et al., 2021). These issues are the main mortality cause in Portugal (Andrade et al., 2018), and are attributed to unbalanced diets, smoking, sedentarism, and alcohol abuse (WHO, 2021). Furthermore, with the global population estimated to reach 11 billion by 2100 and a constant demand for resources by economies, Earth cannot possibly sustain the continuous exploitation of its resources at the same rate as they are now being exploited (Jaganmohan, 2021). As food production accounts for a third of the planet's heating gases emission (Milman, 2021), food sustainability is essential as an instrument to fulfill the needs and demands of the modern world without further draining Earth's natural resources (Jaganmohan, 2021).

Under the pressure of expectations towards sustainability, Corporate Social Responsibility (CSR) of food companies evolved toward "animal welfare, biotechnology, environment, fair trade, health and safety, and labor and human rights" (Maloni & Brown, 2006, p. 1). Actors in the food industry must be held ethically and socially accountable for their actions and practices. CSR is pursued by organizations worldwide (Maloni & Brown, 2006). In this sector, it includes ensuring food safety and healthiness and the mitigation of practices that harm the environment, hence sustainability (Lerro et al., 2018). Despite thorough research, it was found that no studies emphasize how CSR can be applied to canteens. The existing literature on CSR in the food industry rather focuses on other stakeholders and topics, such as improving farmers' wage conditions (Prewitt, 2002) and animal welfare among food suppliers (Ordonez, 2000).

Studying canteens is relevant, as it is quite common for children and people of active age to spend most of their days away from home. Having lunch at the canteen is often cheaper and more convenient than purchasing a meal elsewhere or bringing food from home. Further, consumers' preferences are changing, with the working class' eating habits becoming more diversified by seeking vegetarian, vegan, organic, and traditional foods (Corvo et al., 2020), alongside increasing environmental and health concerns. Therefore, canteens must adapt their strategies to keep up with demand and ensure their sustainability in terms of profitability and market share (Maloni & Brown, 2006).

Regarding Portuguese studies, some have approached topics such as health promotion within canteens (Silva & Teles, 2019), the evolution of nutrition policy (Graça et al., 2020), and campus decarbonization (Figueiredo et al., 2021), among others. Others choose to approach one issue within sustainability and health, including food waste and food safety. Nonetheless, no researcher has explored Portuguese nor other countries' canteens through the lens of change towards becoming more sustainable and providing healthier food, particularly from a management point of view.

Altogether, the topic presented in this thesis brings novelty because it explores a gap in the literature about the standardization of guidelines, starting with which guidelines apply to the food industry and canteens. Moreover, the phenomenon through which canteens translate the guidelines produced by international and governmental organizations has not been explored. Studies have not been clear on the end-to-end process such organizations follow to adopt further or adapt guidelines, which can be voluntary or mandatory. Similar organizations' managers may find pertinent conclusions on the practices being conducted, changes implemented, and limitations.

This paper will answer the research question "How are canteens in Portugal implementing sustainable and healthier guidelines produced by the Government and International organizations?". It aims to understand how organizations that manage or own canteens acknowledge guidelines produced by external parties and implement them. Ultimately, answering this research question will provide entities such as schools, universities, companies, and food suppliers with essential highlights of the good practices already being conducted, the aspects that can be improved, and consumers' needs, preferences, and behaviors. The conclusions reached will assist in the pursuit of each entity's organizational goals and be of service to managers. Since there is a clear growing global interest in sustainability and adopting healthier habits, managers must pay great attention to these topics to keep pace with customer preferences and thus achieve better results (Scheel, 2021).

To answer my research question, I used a qualitative method and, more specifically, a multiple case studies approach. The cases I studied include the canteens of a school, Salesianos de Lisboa (1st-12th grade), and a public university, Instituto Politécnico de Coimbra, and two collective catering companies, Gertal and Filipa Pereira Gonçalves, Lda.. Further, I also gathered insights on a directorate of the Ministry of Education, Direção-Geral dos Estabelecimentos Escolares. Throughout the research process, I assessed the extent to which sustainable and healthier

guidelines created by organizations such as the United Nations (UN), the World Health Organization (WHO), the European Union, and the Portuguese Government were acknowledged and implemented by the organizations. In addition, I chose Scandinavian institutionalism as the theoretical framework to answer my research question. This theory focuses on the "circulation of ideas and practices" (Waeraas & Nielsen, 2016). It was chosen because it focuses on studying how models, activities, and ideas such as the guidelines presented in this study "become known aspects of management knowledge when they are being collected, distributed, and used in a management context" (Sahlin-Andersson & Engwall, 2002, p. 6).

The results show great efforts have been made over the past years by the canteens studied toward more sustainable and healthier practices in Portuguese canteens, following international and national guidelines. Nonetheless, there are still aspects to improve and limitations to overcome. Additionally, it was clear that international ones inspire the Portuguese guidelines. The first ones are the main stimulus for all the organizations studied, with the latter being less known among them.

This thesis is organized into seven chapters. The Introduction will be followed by a general overview of the literature that covers the pertinent terms of this study: sustainability and health issues, new trends, and the way management approach to addressing sustainability and health in the food industry. This chapter will also explore the theoretical framework through which the topic will be analyzed, Scandinavian Institutionalism. It will be followed by the Methodology section, in which I will further explore the path taken, from the reasoning behind my choice of a qualitative case study method, to how I collected and analyzed the primary and secondary data for the cases using the coding process.

Further, the Empirical Setting introduces the five case studies using information gathered from their interviews and found through research, providing a better understanding of the relevance and contribution of each organization to this study. Next, the Findings section will present the answer to my research question by matching the cases' primary and secondary data to the theoretical framework of Scandinavian Institutionalism. A brief discussion in which the results will be compared to existing literature follows this chapter. To finalize, I will present my research's main conclusions, limitations, suggestions for future research, and contributions to academic and managerial knowledge.

2. LITERATURE REVIEW

This Literature Review shows that environmental sustainability and the improvement of dietary habits are increasingly urgent. In particular, adopting sustainable practices can be subdivided into further actions such as engaging in a vegetarian diet or mitigating food waste. With a growing interest in these topics on a global scale, organizations need to keep pace with consumer preferences and thus adapt to change. Because of that, several guidelines have been produced and spread. Nonetheless, different entities translate them differently, thus leading to dissimilar practices. As research on these subjects has sparsely been applied to the food industry, let alone to canteen practices, from a management perspective, I propose to help fill this gap, detailed throughout this chapter.

Firstly, I will present an overview of the reasoning behind the need for changing eating behaviors, followed by an analysis of management literature regarding sustainable issues in the food industry. Then, I will introduce the concept of translation within the industry. Finally, I will explore the theoretical approach through which the data will be analyzed.

2.1. The necessity to modify eating behaviors

As time passes and technology evolves, the world's population has never been so easily and rapidly bombarded with information as nowadays, a phenomenon often referred to as information overload (Jacoby, 1984). As a result, there is a global phenomenon of increased awareness regarding environmental and health issues, with consumers gaining interest in food that shares social and ethical attributes (Lerro et al., 2018). This section provides an overview of existing literature on sustainability in the food industry and health issues, and new trends regarding these matters.

2.1.1 Sustainability and health issues

Although reverting to the imminent environmental catastrophe is challenging, abstaining from changing behaviors will only worsen the situation humanity has brought on itself. Because of the drastic changes our planet faces and the growing consciousness regarding that matter, global practices have been established across industries over the last years to mitigate the damage caused (Morelli, 2011). The term "sustainability", or "sustainable development", arose to be defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 16).

Sustainability can be subdivided into three pillars established in the Brundtland Report in 1987 (Moldan et al., 2012): environmental, social, and economic (WCED, 1987, p. 16). These are normally perceived as balancing trade-offs with desirable results (Purvis et al., 2018). Nevertheless, these concepts are missing theoretical development, and a handful of works acknowledge the existence of additional pillars. Despite its origins being attributed to the Brundtland Report, none associated documents provided an explicit framework or theoretical background. (Purvis et al., 2018).

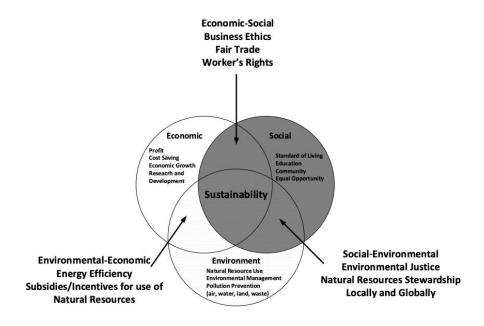


Figure 1 - *The three pillars of sustainability* (Albualfaraa et al., 2020, p. 2)

Further, the Food and Agriculture Organization of the United Nations (FAO) establishes lifestyles and diets as two key determinants of worldwide sustainability (Lorenz & Langen, 2017). Out-of-home food consumption is facing an ongoing growth compared to in-home consumption, making the food sector, particularly group catering, an important setting in which sustainable-food behaviors should be promoted and encouraged (Lorenz & Langen, 2017; Heiskanen & Aalto, 2012).

Earlier views on sustainability perceived it as a constraint to a business' economic goals and vice-versa, almost if committing to one compromised the other completely (Sharma et al., 2010). More recent studies show that organizations will be at a competitive disadvantage if they are not concerned about sustainable practices (Lash & Wellington, 2007). Figure 1 shows that a company can reach sustainable results by concomitantly boosting economic, environmental, and social performances (Abualfaraa et al., 2020).

Despite eating habits affecting the environment, the environment also takes its toll on dietary choices. For that reason, a diet that is both sustainable and healthy would be key to mitigating the consumption of "energy-dense and highly processed and packaged foods, include less animal-derived foods and more plant-based foods" (Alsaffar, 2015), thus promoting sustainability. Society faces several issues regarding eating habits, including the overconsumption of processed foods (Monteiro, 2009), fat, and sodium, which increase the risk of non-communicable diseases, and obesity and can lead to premature death (Thomas, 2010). Additionally, out-of-home food consumption combined with a lack of physical activity has been correlated with growing rates of obesity and overweight individuals (Alsaffar, 2015).

2.1.2 New sustainable trends from organizations and consumers

Growing concern over sustainability has been pressuring businesses within the food industry to be alert to environmental and resource consequences of their processes (Pullman et al., 2009). This concern is translated to behaviors from both the organizations and the consumers. From the stakeholder theory perspective, which approaches the way organizations interact with their stakeholders, studies show that organizations face increased demand from their external stakeholders, including suppliers, customers, regulators, competitors, and the general public, regarding sustainability (Wijethilake & Upadhaya, 2020). According to this theory, these stakeholder groups can be considered the main market drivers of sustainability, meaning organizations shall engage in more sustainable practices and keep pace with demand and regulations to succeed.

One of the main practices conducted is food waste management, which aims to "decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers, and consumers." (FAO, n.d.). Food waste is a big problem because 1/3 of the world's produced food is either lost or wasted every year, while 820 million people remain hungry globally (FAO, n.d.). Food waste is an environmental and financial burden for the food industry players, making its mitigation important to optimize time and costs (Vizzoto et al., 2021). It inflates food prices, weakens the food supply chain, and increases costs (Kor et al., 2017). Studies propose a variety of food waste mitigation strategies, which include implementing new menus, prioritizing healthier cooking methods, employee training, allowing customers to choose their portion size, providing customers with satisfaction questionnaires, creating awareness campaigns and initiatives about food waste and sustainability (Aires et al., 2021) and better preparation and storage strategies (Tóth et al., 2017). Having the customers be aware and

conscious of healthy eating and sustainable practices is key to improving their habits and ultimately impacting the world (Lagorio et al., 2018).

As the world's population is predicted to hit at least nine billion people by 2050 (Statista, 2019), there will be a substantial increase in food demand in a way that Earth cannot sustain, as certain food and food processes require too many resources, such as water and land use (United Nations/DESA, n.d.). Since the production of meat and animal-sourced protein for human consumption has a considerable impact on climate change (Stuart, 2009), being responsible for more greenhouse gas emissions than all other human enterprises apart from energy production (Beverland, 2014), individuals act upon this concern by adopting more sustainable eating habits. With environmental, health, and religious concerns in mind, there is a growing trend of veganism and vegetarianism and its many types (lacto-vegetarianism, fruitarianism, among others) (Piper, 1996). While some organizations proactively engage in sustainable activities, others would rather follow existing regulations (Wijethilake & Upadhaya, 2020).

2.2. How management has addressed sustainability issues in the food industry

In this subchapter, I will further analyze the existing management literature addressing sustainability and the applicability of the translation concept in the food industry.

2.2.1 Management research regarding food and sustainability

Firstly, the food industry has been subject to public scrutiny over the last decades because it must consider environmental sustainability beyond quality and cost, like many other industries (Pullman et al., 2009). Despite some researchers in the supply chain management field claiming the basic goals of strategic competitive advantage are "cost, quality, delivery, flexibility and innovation" (Pullman et al., 2009), others propose the inclusion of environmental variables (Angell & Klasse, 1999). Sustainability researchers profess that supply chain performance should be measured by its environmental and social consequences rather than only on profit (Sharma & Henriques, 2004). Embracing sustainable practices, such as reducing food waste and packaging, can have a positive financial impact, as it reduces the amount of money spent and optimizes existing resources, thus proving that achieving better results is often aligned with sustainable practices (Sharma et al., 2010).

Further, Corporate Social Responsibility (CSR) reinforces the idea that organizations must be held socially and environmentally accountable for their actions. They share ethical responsibilities beyond performance (Maloni & Brown, 2006). Studies show that consumer

reactions correspond to positive attitudes towards purchasing from organizations that apply environmental CSR. Overall, they prefer lower prices. However, when an organization adopts a proactive initiative towards sustainability (beyond regulations), price plays a much smaller role (Kim, 2015). CSR is a relevant field for this research, as the organizations further analyzed hold social responsibility within society due to increasing out-of-home consumption habits (Lorenz & Langen, 2017; Heiskanen & Aalto, 2012). The figure below presents a comprehensive framework of CSR implementations in the food supply chain.

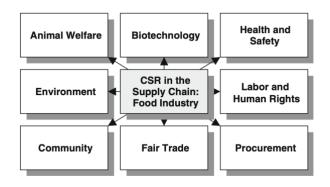


Figure 2 - Dimensions of CSR in the Food Supply Chain (Maloni & Brown, 2006, p. 38)

2.2.2 Standardization

Governments, companies, and non-governmental organizations (NGOs) are partnering to mitigate global supply chains' environmental and social impacts by producing sustainable voluntary standards, which are proliferated across contexts (Lambin & Thorlakson, 2018). Due to the lack of intergovernmental regulations on sustainability, these standards emerged to address the sustainability issues that were otherwise not tackled (Bernstein & Cashore, 2007). They influence several fields within the food industry, such as cocoa, coffee, and other agricultural, horticultural, textile and forestry products (Reinecke et al., 2012). These voluntary standards differ from transnational regulations and legislation because the rule-making power does not come from sovereign authority (Bernstein & Cashore, 2007). Different organizations can produce standards to address the same issue, with the possibility for the standard to become dominant or not (Reinecke et al., 2012).

As previously mentioned, there are three pillars to sustainability. Sustainability standards can plausibly emphasize all of them. In the coffee industry's example, organizations such as AN/Rainforest and Bird Friendly's standards focus on preserving wildlife habitats closer to coffee farms' locations, hence focusing on environmental sustainability. Fairtrade rather focuses on the social aspect, promoting small farmers' access to health and education. In order

to promote better conditions for producers and their communities, fairtrade requires buyers to pay a premium, which refers to economic. Only by charging higher prices can companies afford to finance long-term contracts with farmers (Reinecke et al., 2012).

Organization studies distinguish between three aspects of standardization. Firstly, the standardization of organizations refers to the process through which "standards are adopted, diffused, implemented, avoided and altered in the course of their implementation" (Brunsson et al., 2012, p. 614). Secondly, standardization by organizations refers to how the majority of standards are the product of formal organizations. Lastly, standardization can be perceived as a form of organization, meaning standards can provide organization. The first aspect fits this research's purpose.

In addition, there are many theories on why voluntary standards are adopted, considering that they are not mandatory. From a functionalist perspective, they can be adopted to improve efficiency or for economic reasons (Brunsson et al., 2012). It is suggested that adopters comply with standards when they cause positive network externalities (Katz & Shapiro, 1996). On the other hand, institutional theories emphasize the role of mimetic, coercive, and normative isomorphism pressures in adopting standards (DiMaggio & Powell, 1983), further explained in the following subchapter.

Altogether, there is very little knowledge on the travel of standards within organizations and sectors and how they impact intra-organizational practices. Additionally, the standardization of CSR has not been sufficiently explored (Vigneau et al., 2014). The standardization research in this chapter allowed for identifying a gap in the literature since it has not focused on how voluntary and mandatory sustainable standards are adopted in the food industry or the various types of organizations within this sector. The end-to-end process has yet to be explained. The present research aims to fill this gap by addressing how a specific type of organization within the food industry, canteens, adopts or adapts sustainability and health-related voluntary and mandatory standards produced by external parties during the implementation process.

2.3. Scandinavian institutionalism as the theoretical framework

Institutionalism is the most common perspective in comprehending organizations, making it considerably relevant in organizational studies (Boxenbaum & Pedersen, 2009). It arose in the 1970s from the realization that outlooks within organization theory depicted organizations as "agentic actors responding to situational circumstances" (Greenwood et al., 2008, p. 3), thus adapting to change. Meyer and Rowan defined institutionalization as how "social processes,

obligations, or actualities come to take on a rule-like status in social thought and action" (Meyer & Rowan, 1977, p. 341), alluding to the translation of ideas into practice. Further, DiMaggio and Powell suggest three mechanisms for diffusion, which aim to explain institutionalization and the motivation for adoption. According to their proposal, diffusion could be coercive when powerful organizations such as the State drove organizations to adopt an organizational element, normative in professionalization projects, and mimetic, when organizations imitate others' actions due to being more rational or because they do not want to deviate from the norm nor appear outdated (DiMaggio & Powell, 1983). The institutional theory's main concepts are isomorphism, decoupling, and diffusion (Boxenbaun & Jonnson, 2008), which are explained in the table below.

Theory	Concept	Main ideas	Reference
	Isomorphism	"Organizations become similar through adaptation to a socially constructed environment."	
	Decoupling	"Meyer and Rowan (1977) proposed that organizations decouple their practices from their	3183
Institutionalism		formal or espoused structure to solve these two problems of institutional pressures. In effect, decoupling means that organizations abide only superfi- cially by institutional pressure and	Boxenbaun & Jonnson, 2008, p. 81
		adopt new structures without necessarily implementing the related practices."	
	Diffusion	Literature has been emphasizing isomorphism as a driver of diffusion rather than an outcome.	Boxenbaun & Jonnson, 2008, p. 79

Table 1 - Ideas behind the main concepts of Institutionalism (Boxenbaum & Jonsson, 2008, pp. 79-80)

Meyer and Rowan's ideas became a subject of interest to Swedish researchers, particularly due to the decoupling concept (Greenwood et al., 2008). A new theory named Scandinavian institutionalism emerged from these studies, discerning what would become later known as the translation process. It was developed by Scandinavian institutional scholars, assisted by American ones (Czarniawska and Sevón, Sahlin-Andersson and Engwall, among others) (Sahlin & Wedlin, 2008. This perspective perceives the "circulation of ideas and practices as highly interactive, following various routes and enabled by different' idea carriers'" (Waeraas & Nielsen, 2016), with management ideas traveling routes and then being translated into objects or practices (Waeraas & Nielsen, 2016). While institutional theory highlights homology, standardization, and isomorphism in a highly globalized world, Scandinavian institutionalism emphasizes organizational distinctness and variation (Boxenbaum & Pedersen, 2009).

In other words, this theory highlights the diffusion of ideas through translation, meaning that instead of copying others' practices "as is", translation leads to patterns and ideas being "interpreted and reformulated during the process of adoption" (Greenwood et al., 2008, p. 17). Scandinavian institutionalism's literature is based on the idea that as ideas travel, a process which can also be known as the "circulation of ideas". When they travel, ideas are subject to translation and therefore change.

This theory argues that copying other organizations and acting upon others' guidelines is not a copying process but rather a changing and innovating one. Ideas are thus adapted and then implemented in a new context (Sahlin & Wedlin, 2008). Organizations tend to mimic more successful ones regarding knowledge, practices, and ideas (Levitt & March, 1988). In implementing the constructs learned from other organizations, they must "adapt, translate and make sense of the constructs" (Waeraas, 2020). There are reasons for organizations not to follow the most effective practices. Firstly, the high costs implied, which some may perceive as not beneficial enough to make up for the upgrade. Secondly, the greater effort associated, and lastly, heterogeneity (Bloom & Van Reenen, 2008).

Scandinavian research has focused on the emergence of "soft" regulations and not so much on the role of the State (Djelic & Sahlin-Andersson, 2008), meaning these theorists disassociate from coercive and State-wide directives in favor of more voluntary ones, like standards, rankings, and accreditations (Brunsson & Jacobsson, 2002). These forms of softer regulation are produced and implemented by non-governmental agencies such as the ones presented throughout this paper that provide them with credibility (Djelic & Sahlin-Andersson, 2008).

Nevertheless, it is relevant to point out that this approach has some limitations, such as the scarcity of cross-references. One of the reasons is that this is still a quite recent sub-discipline of institutionalism that has not been broadly studied (Waeraas & Nielsen, 2016). Plus, earlier studies focused on traveling ideas' travel routes and manners instead of their content (Sahlin & Wedlin, 2008). Although there is vast literature on how the change in constructs is conveyed from one setting to another, with several researchers approaching this topic, there seem to be few communications between them, limiting the potential enrichment of each other's work (Waeraas, 2020). Furthermore, Scandinavian Institutionalism has been proven to focus more on "how ideas change as they travel from one context to another" (Reay et al., 2013), often avoiding how the accepted ideas are indeed materialized into actual practices (Reay et al., 2013). Others point out that the theory is not explicitly focused on connecting the "ideas adopted at the organizational level and front-line practice" (Reay et al., 2013).

Due to its emphasis on organizational practice, Scandinavian institutionalism was led to more practice-oriented literature, from which come concepts such as translation of ideas, loose coupling, and sense-making arose (Boxenbaum & Jonsson, 2008). Scandinavian institutionalism's key concept is translation, and it refers to the transformation of constructs within and throughout the "process of adoption, diffusion, and/or institutionalization"

(Greenwood et al., 2008, p. 24). Nonetheless, it is not used as a linguistic term but rather points out transformation and movement (Sahlin & Wedlin, 2008). The table below further presents the main concepts of this theory.

Theory	Concept	Definition and main ideas	Reference
		"the modification that a practice or an idea undergoes when it is implemented in a new organisational context"	Boxenbaum & Pedersen, 2009, p. 190-191
	Translation	"process in which an idea is abstracted from its original context and converted into a new context, where it is materialized into practice and can become institutionalized over time "	Boxenbaum & Pedersen, 2009, p. 190-191
		"translation assumes that ideas and practices are interpreted and reformulated during the process of adoption"	Greenwood, Oliver, Sahlin & Suddaby, 2008, p. 17
		"Instead of treating institution- ally prescribed structures and practices as 'out there' and as adopted more or less 'as is', translation assumes that ideas and practices are interpreted and reformulated during the process of adoption"	Greenwood, Oliver, Sahlin & Suddaby, 2008, p. 1
Scandinavian Institutionalism		"implies deliberate and accidental or unintended transformations of ideas as they transfer from one setting to another, and the potential for continuous adjustment and change"	Greenwood, Oliver, Sahlin & Suddaby, 2008, p. 17
	Loose coupling	"disconnect between organizational practice and organizational structure, where the former is determined by perceived efficiency concerns and the latter results from institutional pressure for conformity"	Boxenbaum & Jonsson, 2008, p. 81
		"describe the evident reality of the situation, as this concept does not stipulate the existence of a single organizational core"	Kraatz & Block , 2008, p. 251
	Sense-making	"the ongoing retrospective development of plausible images that rationalise what people are doing"	Weick, Sutcliffe & Obstfeld, 2005, p. 409
		"how meanings materialize that inform and constrain identity into action"	Weick, Sutcliffe & Obstfeld, 2005, p. 409
		"Individuals convert circumstances into action through the reciprocal interpretation of who they are and how they understand their environment"	Powell & Colyvas, 2008, p. 282

Table 2 - Definition of the main concepts of Scandinavian institutionalism. Source: the author

This theory has been applied to many studies within organization studies. Some focus on translation as a process leading to changes in the diffused construct and the adopting organization, hence analyzing how individual organizations take up, adopt, and implement conceptual ideas. This includes applications on reputation management, MBA models, hospital management innovations, and Total Quality Management. Other studies rather focus on how concepts are translated into different meanings, with some highlighting how technology-enabled ideas can be translated into everyday practices (Waeraas & Nielsen, 2016).

I propose to use Scandinavian institutionalism as the theoretical framework to answer the research question for several reasons. First, this framework is consistent with the methodology choice, as institutional theories are traditionally associated with qualitative studies, emphasizing case studies and "close studies of individual decision-making processes, organizational change processes, and reforms" (Sahlin & Wedlin, 2008). Secondly, the translation concept fits the process through which international ideas and guidelines are picked up by organizations and later adapted and implemented, the phenomenon explored in answering the research question. Additionally, translation is commonly associated with a change in management constructs (Waeraas & Nielsen, 2016), which assists in finding the way these

constructs are adopted, meaning implemented "as is", or adapted, meaning they are subject to translation and then implemented.

Altogether, this approach has never been used regarding the food industry, making this study relevant to this sector's literature and Scandinavian institutionalism itself. There is no literature regarding how Portuguese organizations with canteens and companies who manage them come across certain constructs, translate, adapt, and implement them. Concurrently, it can be helpful for other canteen managers to discover more about the advances and issues in matters of sustainable and healthier practices of other organizations so they can learn from them.

3. METHODOLOGY

In this chapter, I will address the reasoning behind my methodological choices and the process for data collection and analysis.

3.1. Methodological choices

My research aims to provide an in-depth understanding of the organizational phenomenon of adapting and implementing sustainable and healthier guidelines in Portuguese canteens by answering the following research question: "How are canteens in Portugal implementing sustainable and healthier guidelines produced by the Government and International organizations?".

Portuguese population exceeds WHO's recommended limits for salt, sodium, sugar, and transfatty consumption (Goiana-da-Silva et al., 2018). As of 2019, about 54% of the Portuguese population above 15 years old was overweight or obese (OECD, 2019). In addition, non-communicable diseases are the leading mortality cause in Portugal (Andrade et al., 2018). The foremost causes of these diseases include having an unhealthy diet, smoking, sedentarism, and alcohol abuse (WHO, 2021). There was a certain urgency to enact a broader nutritional strategy that would aim not only for the prevention of disease but for an overall healthier lifestyle (Graça et al., 2020).

The Portuguese population's health-related issues led to the Government's implementation of a national food and nutrition strategy influenced by international guidelines throughout the 2010-2020 decade (Graça et al., 2020). The procedures followed were set by organizations such as the European Commission (EC), the World Health Organization (WHO), and the United Nations (UN). In particular, the United Nations has set up global Sustainable Development Goals (SDGs) to achieve by 2030 to protect the planet. Some of the goals include responsible consumption and production, climate action, sustainable cities and communities, and cleaner energy (United Nations Foundation, n.d.). Portugal has incorporated the 2030 agenda into its own national strategies, emphasizing the aim to do better for the planet, thus supporting sustainability (European Environment Agency, 2020).

To answer the research question, I chose a qualitative approach. While qualitative studies are often underestimated, as quantitative methods have become the norm, both have positive and negative aspects. It is not advised to completely exclude one, as a mixture of both can better

triangulate facts (Birkinshaw et al., 2011). The qualitative approach is relevant to answering my research question. It plays a crucial role in further exploring a plurality of contexts brought about by globalization (institutional, cultural, organizational, among others) (Birkinshaw et al., 2011). As the subject of this study consist of the travel and translation of guidelines across countries and contexts, it is a good fit. A qualitative approach brought me closer to the organizations studied in ways that would not have been possible with other methods (Birkinshaw et al., 2011). It allowed me to focus my research on specific cases and thus obtain more complete insights into each one's practices. Due to the proximity this type of research brings to the cases, I believe individuals feel more comfortable sharing their subjective experiences and interpretations by being near them (Graebner et al., 2012).

Moreover, multiple case study research was selected to compare several cases. This method was chosen due to its applicability in studies in which the phenomenon does not have one clear and a single set of outcomes, the research question is a "how" or "why" question, and the focus lies in interpreting the phenomenon in a real-life context (Yin, 2009). As I aimed to understand how each entity adapted to general guidelines and more specific ones while discovering common practices and differences among them, along with distinct goals and target audiences, it was only logical that there would not be a single outcome.

The process began by establishing the type of organizations I aimed to study. Schools, universities, and companies in Portugal typically have a canteen for students and employees, which are either explored by collective catering companies or the organization itself, with the first option being the most common. After selecting the type of cases, the first step was identifying potential ones by researching companies that catered and managed canteens in Portugal using a search engine. The results included newspaper articles and reports of several businesses that fit the research question, as they worked with schools, universities, and companies. Out of that research, the thirteen companies found (see table below) were contacted via e-mail or website forms, with only two accepting interview requests: Gertal and Filipa Pereira Gonçalves, Lda.

Name of Organization	Type of organization
GestyRest	Collective catering company
Eurest	Collective catering company
SASNOVA	Collective catering company
Gertal	Collective catering company
ITAU	Collective catering company
Uniself	Collective catering company
ICA	Collective catering company
Meigal	Collective catering company
Totalis	Collective catering company
Procatering	Collective catering company
Nutrir	Collective catering company
Multirerst	Collective catering company
Filipa Pereira Gonçalves, LDA	. Collective catering company

Table 3 - Collective catering companies contacted. **Source**: the author

After selecting and contacting the collective catering companies, a search engine groundwork was conducted on schools and universities with canteen services. Once the process was completed and the contacts of each organization collected, dozens of relevant institutions (see Appendix 1), including public and private schools and universities, were further approached by e-mail, with only two accepting to be interviewed, Salesianos de Lisboa and Instituto Politécnico de Coimbra (IPC). After beginning the interview process, I found the need to approach further stakeholders, such as these organizations' suppliers, to analyze their adaptation to changes in demand. Alas, the interviewees were not open to providing me with contacts.

Four cases were identified and became the subject of this study. Firstly, Gertal is well-known for catering canteens in Portuguese schools and universities. Due to its experience in the market, they were one of the first potential cases I contacted. Although Filipa Pereira Gonçalves, Lda. is a collective catering company, it only serves one university canteen now, making its insights useful in understanding canteens not only from a company point of view but also from a university one. Further, Salesianos de Lisboa represented the perspective of a private school (1st-12th grade). Lastly, IPC stood for the point of view of a public university.

3.2. Data collection

To find more about how Governmental organizations get inspiration for the guidelines and legislation they produce regarding sustainability and health, I found it relevant to contact Direção-Geral da Educação (DGE), a directorate of the Ministry of Education. Under its supervision, this government agency is responsible for setting guidelines for public school

menus and canteens, among other activities. Unfortunately, they were not available for an interview.

Nevertheless, Direção-Geral dos Estabelecimentos Escolares (DGEstE), also a directorate of the Ministry of Education, agreed to be studied. It is responsible for ensuring the Ministry's measures are being applied in schools and producing food quality and quantity guidelines, further elaborating on food hygiene and safety (Interview of the nutritionist and dietitian of DGEstE). It is comprised within DGE (DGEstE, n.d.), meaning they are part of the decision-making process of the main stakeholders of this organization. In addition, the guidelines it produces are only applicable to public schools and a few private ones with association contracts. These contracts imply the allocation of some students into private institutions under the conditions of public ones (free education) (Interview of the nutritionist and dietitian of DGEstE).

My main goal to achieve broader and more relevant results in searching for cases was to analyze at least one for each type of organization established at the beginning. The primary data consists of eight in-depth semi-structured interviews, which were recorded and later transcribed. Out of the four cases and the Governmental organization studied, it was possible to have two interviews with two different members, apart from Salesianos de Lisboa, for which it was only possible to get one interview.

Type of Data	Name of the interviewee	Organization	Type of organization	Position in the organization	Date of the interview	Length of the interview
			Private school (1st-12th			
Interview	Cláudio Ferreira	Salesianos de Lisboa	grade)	Executive chef	25/10/21	50 minutes
			Collective catering company			
			(responsible for managing			
Interview	Joana Santos	Gertal	canteens)	Nutritionist and quality technician	03/11/21	40 minutes
			Collective catering company			
			(responsible for managing			
Interview	Ângela Almeida	Gertal	canteens)	Nutritionist and quality technician	14/12/21	40 minutes
			Collective catering company			
		Filipa Pereira Gonçalves	(responsible for managing			
Interview	Filipa Pereira Gonçalves	Unipessoal, Lda.	canteens)	Founder	29/11/21	40 minutes
			Collective catering company			
		Filipa Pereira Gonçalves	(responsible for managing	use se se se se	4.00000000	90 8
Interview	Rute Rodrigues	Unipessoal, Lda.	canteens)	Administrative assistant	09/02/22	45 minutes
20-17-21				Technical Director of the Food	200000000000000000000000000000000000000	
Interview	Ana Paula Baeta	Politécnico de Coimbra	Public University	and Nutrition Department	13/12/21	55 minutes
Interview	Cristiana Lopes	Politécnico de Coimbra	Public University	Nutritionist	23/02/22	35 minutes
Interview	Cristiana Lopes	Tomecineo de Comora	I done oniversity	Truti III Oliot	23/02/22	55 mmacs
		Direção-Geral dos				
Interview	Catarina Solnado	Estabelecimentos Escolares	Ministry of Education	Dietitian and nutritionist	05/03/22	50 minutes

Table 4 - Primary data. Source: the author

Due to the Covid-19 pandemic and the interviewees' time constraints, all the interviews were conducted via Zoom. Before starting the questions, I asked all participants for their consent to record the audio, which allowed me to be more present and focus less on taking notes and potentially miss out on relevant information. Nevertheless, I took some minor notes of relevant

aspects or even new questions I had not written down but remembered halfway through the interviews.

According to an explanation of the scope and goals of this research, the organizations contacted were the ones who selected one or more of their employees to attend the interviews in response to my e-mail contacts. In terms of position within the organization, it was crucial for me to interview someone with knowledge of international guidelines and practices and their own canteens' operations, especially from a management point of view, specified when approaching potential cases.

Concerning the interviews, I prepared a discussion guide with open-ended questions for each organization based on the position of the person to be interviewed and a background check. It also depended on whether it was a school, university, or collective catering company. While some questions were similar, most differed from organization to organization. The interviewees were questioned about their knowledge of international and national guidelines, the drivers of their practices, menus and menu planning, sustainability, dietary restrictions, vegetarianism, food waste, nutritional education, adherence, and adaptation to change from the organizations and their customers. The questions followed the same guidelines and topics, but I ensured they were adapted to each organization's interviewee's position and the research conducted before each interview.

Secondary data include documents provided by the organization and documents found either produced by the organization or external parties, newspaper articles, and blog posts. The interviewees have sent me the first ones upon request, and the latter two have been found via search engine research. The information gathered complemented and was consistent with the primary data.

Case	Type of Data	Title	Name of the author	Name of his/her organization	Date of Publication	Observations
	Internal document	"Capitações DGE"	Gertal	Gertal	N.A	Document which specifies the recommended maximum amounts of each type of food/ingredient; by the municipality and the Education Ministry
	Internal document	Example of a weekly menu	Gertal	Gertal	N.A	Document which shows a sample weekly menu with all the calories, salt, protein values (among others)
1.01			Gertal		N.A	Technical sheet for a specific dish, which specifies allergenics, time and method for cooking, ingredients and the amount of each one
1. Gertal			Gertal		N.A	Presentation of Gertal's management system (food quality, safety, social responsibility, environment)
		Corporate report - Structural information of a company			N.A	Bought report; Description of the company
	Ranking	"Ranking de Empresas do setor Outras atividades de	Dinheiro Vivo	Dinheiro Vivo	N.A	Presents the top companies in the collective catering business
	Internal document	Example of a weekly menu (2nd November-5th Novemb	Salesianos de Lisboa	Salesianos de Lisboa	N.A	Specification of each planned dish for this specific week (more detail)
	Internal document	Template of a dish's technnical sheet	Salesianos de Lisboa	Salesianos de Lisboa	N.A	Template to be filled for each dish prepared
2. Salesianos de Lisboa	Internal document	Example of a dish's technical sheet	Salesianos de Lisboa	Salesianos de Lisboa	N.A	Technical sheet for a specific dish, which specifies allergenies, time and method for cooking, ingredients and the amount of each one
	Internal document	Weekly map for November	Salesianos de Lisboa	Salesianos de Lisboa	N.A	Specification of each planned dish in November (more detail)
			Salesianos de Lisboa	The state of the s	N.A	Prevision of costs for each dish prepared from 2nd November until 5th November
			Filipa Pereira Gonçalves	Filipa Pereira Gonçalves Unipessoal, Lda	N.A	Menu predicted for a certain week, highlighting vegan options and the price for each meal
		Example of a dish's technical sheet	Filipa Pereira Gonçalves	Filipa Pereira Gonçalves Unipessoal, Lda.	N.A	Technical sheet for a fish dish, which specifies allergenics, time and method for cooking, ingredients and the amount of each one
3. Filipa Pereira	Internal document	Example of a dish's technical sheet	Filipa Pereira Gonçalves	Filipa Pereira Gonçalves Unipessoal, Lda.	N.A	Technical sheet for a meat dish, which specifies allergenics, time and method for cooking, ingredients and the amount of each one
Gonçalves Unipessoal, Lda.	Internal document	Example of a dish's technical sheet	Filipa Pereira Gonçalves	Filipa Pereira Gonçalves Unipessoal, Lda.	N.A	Technical sheet for a vegan dish, which specifies allergenics, time and method for cooking, ingredients and the amount of each one
	Internal document	Track of all purchases 2020	Rute Rodrigues	Filipa Pereira Gonçalves Unipessoal, Lda.	N.A	Quantities of all food purchased over the year, discriminated by month (Dec2019-Dec2020)
	Internal document	Track of all purchases 2021	Rute Rodrigues	Filipa Pereira Gonçalves Unipessoal, Lda.	07/03/22	Quantities of all food purchased over the year, discriminated by month (Dec2020-Dec2021)
	Corporate report	Corporate report - Structural information of a company	Racius	Racius	N.A	Bought report; Description of the company
	Internal document	"Relatório de Atividades"	Instituto Politécnico de Coimbra	Instituto Politécnico de Coimbra	01/06/21	Management tool that evaluates the accomplishment of established goals and activities according to the existing resources
4. Instituto	Internal document	Meal plan for February	Instituto Politécnico de Coimbra	Instituto Politécnico de Coimbra	01/02/22	Monthly meal plan for February
Politécnico de Coimbra	To an all documents	V-1-1-6-V-1	Instituto Politécnico de Coimbra	Later British Later Color	01/03/22	V di
	Internal document	Meal plan for March "Politécnico de Coimbra usa moscas para reaproveitar		Instituto Politécnico de Coimbra		Monthly meal plan for March Newspaper article which talks about a pilot project conducted by researchers from the university in which they use black soldier flies to decompose the
5. Ministry of Education/Direção	Newspaper Article	resíduos das cantinas"	Fernando Veludo Pedro Graça, Rui Matias Lima	Público	30/10/18	Canteens' food waste Strategic vision report of the Education Ministry on food in a school
Geral da Educação/Direção	Internal report	"A alimentaçação escolar em Portugal - visão estratégica" "Ministério da Educação avança com a notícia da	and Maria João Gregório.	Direção-Geral de Educação	01/09/21	environment in Portugal Posted on an online newspaper (Püblico); Reposted by the Portuguese
Geral dos Estabelecimentos			Inês Moura Pinto	Público	16/10/21	Nutritionists Association; Mentions Salesianos de Lisboa
Escolares	Guidelines	"Orientações sobre ementas e refeitórios escolares"	Rui Matias Lima	Direção-Geral de Educação	01/07/18	Guidelines applicable for public schools in Portugal
	Newspaper Article	"A indústria está a fazer um esforço enorme para suprir a escassez de materiais"	Diário de Notícias	Diário de Noticias	25/12/21	Posted on an online newspaper (Diário de Noticias); emphasizes the impact of the price increase in fuel and raw materials on the food industry Newpaper article which talks about a study that concluded that the main
	Newspaper Article	"Most people consider becoming vegetarian for their health"	Karen Nikos-Rose	University of California	02/04/20	motivation for nonvegetarians to consider being vegetarian is health, with environmental and animal concern being less common
	Blog post	"How the E in ESG creates business value"	Tim Koller, Robin Nuttall	McKinsey Sustainability	29/06/20	Blog post from a consulting firm that explains the importance of sustainability for businesses from an economic point of view
	Newspaper Article	"Why Corporate Strategies Should Be Focused On Sustainability"	Talal Rafi	Forbes	10/02/21	Newspaper article that explains the importance of sustainability for businesses from an economic point of view
	Newspaper Article	"Sustainability In 2021: Everything Companies Should Know"	Rebecca Scheel	Forbes	04/02/21	Newspaper article that explains the importance of sustainability for businesses from an economic point of view
6. Others	Newspaper Article	"Sem carne de vaca nem plástico. U, Coimbra quer liderar a luta contra o carbono"	Catarina Reis	Diário de Noticias	17/09/19	Article about how the University of Coimbra aims to become the first carbon neutral university in Portugal until 2030
	Newspaper Article	"Sobras de comida em escolas transformadas em adubo"	Diana Garcia	Jornal de Noticias	06/01/20	Newspaper article about a food waste mitigation project aimed for 100 schools in Portugal with kitchens and canteens
		"Why the world is becoming more allergic to food"	Alexandra Santos	BBC News	13/09/19	Newspaper article about the increase in food allergies and intolerances
	Newspaper Article	"Leave it out: are food intolerances fact or fad?"	Linda Geddes	The Guardian	16/08/15	Newspaper article about food allergies and intolerences
	Newspaper Article	"Meat accounts for nearly 60% of all greenhouse gases from food production, study finds"	Oliver Milman	The Guardian	13/09/21	Newspaper article about the pollution caused by the production of meat

Table 5 - Secondary data. Source: the author

To answer the research question, collecting primary and secondary data from multiple sources was essential. Data triangulation provides corroboration over findings, making them more compelling and precise since conclusions are based on different sources of information (Yin, 2009). More specifically, I chose data source triangulation as the method to triangulate data, which is mostly used in qualitative studies. It consists of collecting data from different sources at different locations and times. (Denzin, 1978). Additionally, research on case study methods showed that case studies that used several sources of evidence tended to be rated more highly quality-wise when compared to those that focused on a single source of information (Yin,

2009). Through effective triangulation of primary and secondary, it was possible to analyze data and produce stronger corroboration of the findings.

3.3. Data analysis

To begin the data analysis process, which consisted of coding the data, I started by building each case's report, meaning writing the story of each one in order to transcribe the process and find the interconnections of events in time (Rashid et al., 2019). All interviews and secondary data were placed in primary and secondary data tables with notes. Secondly, I transcribed eight in-depth interviews from the audio recordings to be more familiar with the data and ensure no detail went missing. It proved to be key in recalling relevant insights.

I followed a two-step process in which I first categorized primary and secondary data and concepts from the theoretical framework and then linked them together. I analyzed all the data collected by creating codes, categories, and themes to organize them further. Establishing first-order codes started by reviewing the literature review, specifically the theoretical framework, which led to the emergency of said codes. The concepts were "translation", "sensemaking," and "loose coupling". Additional concepts used within this theory are "adoption", "adaptation", and "implementation". Afterward, I used back the terms of my research question in the definition of codes.

Subsequently, I moved on to the interview transcriptions and notes, creating new codes from raw data. Following this step, I examined the newspaper articles, reports, and internal documents provided by organizations. I proceeded to add the quotes to the respective code based on their topic, thus guaranteeing triangulation of data from multiple sources. This process led to the creation of twenty-one codes. Afterward, I used axial coding to place first-order codes into intuitive categories (more generic terms), allowing me to build linkages between them (Allen, 2017) based on their commonalities. As it often occurs in coding within qualitative research, this was not a one-shot process, as it required many cycles of coding data. New codes developed from "in vivo" quotes, while some early-on codes were dropped, requiring relabeling. The process was iterative as more data was being gathered.

From the theoretical framework, the concept of translation was first viewed as a first-order code. Nonetheless, since I wanted to assess and better understand the process end-to-end, I turned the actions of acknowledging, producing, adopting, and adapting guidelines into first-order codes, leading to the translation of guidelines category. As I was studying the translation processes, many limitations and challenges were shed to light by interviewees, which were

further corroborated by secondary data. These issues led to creating three first-order codes: problems identified for schools, resource and location limitations, and sustainability challenges. They were converted into the category of facing limitations and challenges.

To finalize, I compared the categories gathered with my research question, which allowed me to get a clearer grasp on how my data analysis was supporting me in answering my research question. In the end, I organized the data into a three-step procedure, assigning it to twenty-one first-order codes, congregated into six categories, leading to one theme: "Translating sustainable and healthier guidelines" (Corbin & Strauss, 2014). More detailed information on the coding process can be found in <u>Appendix 2</u>.

4. EMPIRICAL SETTING

This chapter provides the contextual elements needed to understand the present research's findings, starting with Portuguese canteens' regulations. Several interviews were conducted to assess the adaptability of canteens to sustainable and healthier guidelines, food trends, and dietary restrictions. To understand the findings brought to light in the next chapter, the companies and entities analyzed throughout this paper must be presented in-depth. As previously mentioned, the organizations studied were schools and universities with canteens, companies managing those canteens, and a Ministry of Education's directorate.

4.1. Regulations

Understanding how the Portuguese Government adapts to international guidelines regarding sustainable and healthier practices is relevant to addressing the regulations canteens must follow.

First, the *Regulation (EU) No 1169/2011 of the European Parliament and the Council of October 25 2011 amended* previous regulations on providing food information to consumers. It aimed to ensure a higher level of security for consumers and attribute more responsibility to food business operators (FBOs). They were required to provide information on product quality, thus allowing consumers to make more informed choices (FAO, 2011).

Moreover, the information in all labels used in packaging needed to be truthful, making FBOS responsible at all levels of a product's supply chain. This European law established for all European Union countries created a common language regarding labeling and contributed to the free circulation of goods and fair trade (Cheftel, 2005). Portugal follows this regulation, meaning products used in Portuguese canteens do as well.

In like manner, canteens also follow the Hazard Analysis and Critical Control Point (HACCP) system, based on a preventive methodology. It aims to prevent potential risks that may be harmful to consumers (Mil-Homens, 2007). The system is based on technical and scientific production practices to ensure no biological, chemical, or physical dangers to consumers. As of 2006, the *Regulation (EU) No 852/2004 of the European Parliament and the Council of April 29 2004* regarding food hygiene established that all food industry operators should create, apply, and maintain a process or various processes drawn on the policies of the HACCP system. The guidelines include water supply, personal hygiene, plague control, and control over every step of food preparation (Mil-Homens, 2007).

In 2017, a law produced by the Portuguese Government (*Law No 11/2017*) made it mandatory for canteens to have a vegetarian option on their menus in all public institutions, such as schools, universities, prisons, and hospitals. The definition provided for a vegetarian option is food that does not come from any sort of animal source (Diário da República Eletrónico, 2017). As previously mentioned, there is a growing trend of vegetarianism worldwide, with the population following it due to environmental and health reasons. By implementing this law, the Portuguese Government showed that it valued international guidelines and increased public demand for alternatives to meat and fish, which are highly consumed in Portugal.

Despite this paper being based on different sorts of canteens and companies managing them, the school segment is the most impacted by Portuguese legislation produced by the Government through Direção-Geral da Educação (DGE), a directorate of the Ministry of Education. Students spend a significant part of their days at school, where they take most of their meals. It has been proved that healthier eating habits are correlated with school success (DGE, 2018). DGE is responsible for establishing guidelines for public schools in Portugal. The one currently being implemented is called "Orientações sobre ementas e refeitórios escolares", which can be translated to "Orientations on menus and school canteens". It summarizes mandatory regulations and the ones that are prone to adaptation.

In 2021, the Government published another law (*Dispatch No 8127/2021*), which was directed at schools and became highly controversial, with nutritionists praising it but students feeling dissatisfied with the changes. It aimed to limit the Portuguese students' access to unhealthy food from snack bars and vending machines. This law prohibited schools from selling pastries, chocolates, ice cream, sodas, candy, and quick meals, such as pizza, hot dogs, burgers, and lasagna (Diário da República Eletrónico, 2021).

Likewise, it reinforced the need for schools' snack bars to serve tap water for free and seasonal fruit, milk, and yogurts. To encourage students to eat proper and complete meals, the snack bars can only stay open during lunchtime if the school is exclusive for secondary education students (10th-12th grade) (Diário da República Eletrónico, 2021). Most existing regulations are only applicable to schools until the 12th grade, leaving more margin for other organizations to adapt the orientations they follow.

The Portuguese Government implemented measures to improve the population's dietary habits and overall health, leading to a national strategy influenced by international guidelines implemented throughout the 2010-2020 decade (Graça et al., 2020). The procedures followed

were set by organizations such as the European Commission (EC), the World Health Organization (WHO), and the United Nations (UN). The figure below makes it possible to understand the integration of some of these guidelines with European and international ones through this program's implementation time frame.

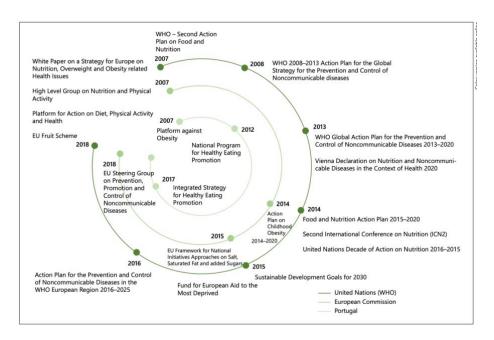


Figure 3 - Stategic documents and historical markers in the field of nutrition during the period 2007-2019 (Graça et al. 2020, p. 113)

International organizations and the Portuguese Government produce many other guidelines and norms. Alas, they are too many to explore in this research further. Nonetheless, the most widely used and relevant ones are mentioned within this study. The table below summarizes the types of guidelines considered in this research.

Type of guidelines	Organizations responsible for guidelines	Topics
		Information on product quality
European guidelines	European Commission	HACCP System (food safety and hygiene)
		Food safety
		Sustainability
		Food safety
Guidelines for schools	Direção-Geral da Educação (directorate of the Ministry of Education)	Nutritional education
		Nutrition
	Food and Agriculture Organization (FAO)	Food loss and food waste
		Food sustainability
International guidelines	United Nations	Sustainability
		Nutrition
	World Health Organization (WHO)	Education and health
Portuguese guidelines	Government (supported by the Ministry of Health)	Vegetarian meals
	ricaitii)	Improving eating habits of university students

Table 6 - Summary of guidelines. Source: the author

4.2. Cases

4.2.1 Salesianos de Lisboa (Private School)

Firstly, a private school in Lisbon called Salesianos de Lisboa was analyzed. The Salesian Society was founded in 1859 by St. John Bosco, and its schools are spread worldwide (Salesian Missions, 2018). This school was founded in 1896 and aimed to provide students with a Catholic pedagogical education (Salesianos de Lisboa, n.d.).

To understand more about the adaptation of this school's canteen, which serves about 1000/1100 meals per day (Interview of the executive chef of Salesianos de Lisboa), to sustainable and healthier guidelines, the executive chef and manager of the canteen was interviewed. The individual, who had much experience working in hotels and has been working at this school since 2017, was asked about his knowledge of sustainable and healthier food guidelines from international, European, and Portuguese organizations and the efforts to comply with those. Additionally, the interviewee promptly provided some useful insights on managerial aspects.

Despite being a private school, therefore not needing to comply with the Ministry of Education's 2021 dispatch, Salesianos is one of the few that abolished the food comprised in that law from its snack bars and fully embraced it (Pinto, 2021). It was important for the context of this paper to further investigate the school segment's consumer preferences and behavioral

change, as well as the response on behalf of the schools to healthier and sustainable guidelines, requirements, or both.

4.2.2 Gertal (Collective catering company)

A collective catering company called Gertal was also studied, as it is responsible for managing canteens across the country for both schools and companies. Analyzing a company in this business provides important insights into past, present, and future practices within the industry. It is ranked number two among collective catering companies in Portugal (eInforma, n.d.) and has been in the market for more than forty years. It serves more than thirty million meals annually, employing more than five thousand employees within its more than one thousand three hundred units. The managerial responsibilities in each unit consist of ordering raw materials, managing stocks and human resources, meal planning done by nutritionists and preparing and plating the dishes (Gertal, 2021).

Two nutritionists and quality technicians who have been working at Gertal for ten and seven years were interviewed to gather information. Although one of the interviewees works solely in the company segment, the insights are vastly pertinent to this topic. Interviewing a second individual who operates in both segments was key to getting more information.

Further, companies and schools in need of a concession of their canteens set up public contests with the specifications they are looking for when managing their canteens. Collective catering companies answer with a proposal, and if they are chosen, they get to govern the canteen. Gertal has responded to and won many public contests, including schools, companies, training academies, and camps, among many others (Racius, 2022). To summarize, studying a company that caters to different segments and holds a long existence and experience in the market seemed relevant. It provides a better grasp on the overall behaviors of consumers and technical aspects of managing a canteen and preparing the dishes. It is the only case in which the organization can provide insights into companies' canteens.

4.2.3 Filipa Pereira Gonçalves, Lda. (Collective catering company)

Filipa Pereira Gonçalves Lda. was established in 2017 (Racius, 2022). It currently employs 24 people and, because of its novelty and smaller size than other collective catering companies, it is only managing one university's canteen: ISCTE (Lisbon University Institute) (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.). The founder Filipa Pereira Gonçalves and the administrative assistant, Rute Rodrigues, were interviewed to gather

information on the company. Their current exclusivity towards ISCTE is due to Filipa's experience in similar companies, which taught her that rapid changes within a well-established team and aiming for a quick expansion often led to undesirable results. Growth might be on their horizon in the future (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.).

The company joined ISCTE at the request of the Students' Union to back up the existing canteen and provide a "social meal", meaning the price of the meals for students needed to be low and could not surpass a certain value (Interview of the founder of Filipa Pereira Gonçalves, Lda.). Apart from that menu, they also serve grilled food and other dishes (falafel, meat, and vegetarian lasagna...) and pastries for their chosen prices (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.). In ISCTE, the meals served per day are around 600/650. On some days, it can get to 800. With a student population of over 10.000 people, the company is the only one providing canteen services in this university now (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.). The organization is a relevant case for this research as it provides insights into both the collective catering company and the university.

4.2.4 Instituto Politécnico de Coimbra (Public University)

Instituto Politécnico de Coimbra (IPC) is a public university located at Coimbra, in the central region of Portugal. Because it integrates six learning units, it has five canteens (four in Coimbra), with more than nine hundred seats which provide students with balanced and affordable meals (Instituto Politécnico de Coimbra, n.d.). IPC is composed of around 11.000 students and 50 employees. The food and nutrition department employs 27 people. The canteens work with a direct exploitation system, meaning the university manages its canteens (Interview of the technical director of the food and nutrition department of IPC). Out of the 11.000 students, only around 1% attend the canteens daily. It is believed to be due to students coming from impoverished backgrounds. Since they are often studying away from their hometowns, they prefer to eat at home and save some money (Interview of the technical director of the food and nutrition department of IPC).

The technical director of the food and nutrition department, Ana Paula Baeta, was interviewed to cast light on the Food and Nutrition department of the social action unit. The interviewee has been working there since 2016. The nutritionist responsible for elaborating the menus was later interviewed. Her name is Cristiana Lopes, and she has been working there since 2021. Out of

all the cases, IPC is the only one not established in Lisbon, apart from Gertal, which works across the country. The conclusions drawn from this case can help understand other issues that organizations in Lisbon do not face.

5. FINDINGS

5.1. Introduction

The present chapter aims to answer the research question "How are canteens in Portugal implementing sustainable and healthier guidelines produced by the Government and International Organizations?" and present the results of this study. The extent to which they are translating ideas and practices produced by international, European, and Portuguese organizations will be assessed through the lens of Scandinavian institutionalism.

This chapter starts with a presentation on how organizations view the need to implement changes and their willingness to adopt and adapt to those changes. Next comes the topic of *Translating change*, which is the most relevant one to answer the research question. Various subtopics are comprised within this one. To finalize, the summary resumes and explains the findings with a table.

5.2. Sensemaking of change

This subchapter explores the main drivers of change for organizations, further explaining the extent to which they acknowledge and interpret guidelines. It was essential to assess their awareness of said guidelines and understand their willingness to translate and implement them. From the studied cases, it was clear that several adjustments have been made over the last years towards becoming more sustainable and providing healthier options for their customers. In fact, organizations felt a certain degree of obligation to the changes in consumers' demand and general guidelines and orientations provided by external parties. Consumers are more conscious of sustainability and its importance in preserving the planet. In fact, food production is "responsible for a third of all planet-heating gases emitted by human activity, with the use of animals for meat causing twice the pollution of producing plant-based foods" (Milman, 2021). Hence, there is an increasing tendency of opting for vegetarian meals that cause less impact on the environment.

"I believe (...) people are more conscious about the concept of sustainability and reducing excessive consumption of meat especially. (...) The healthy factor is also important to them, but I think it is more about sustainability." (Interview of a nutritionist and quality technician from Gertal)

In addition, economic sustainability was highlighted by most organizations. They recognized that aiming for more sustainable practices benefits them in cost reduction. In fact,

"Sustainability strategy can reduce costs substantially and can affect operating profits by as much as 60%." ("How the E in ESG creates business value McKinsey", 2020).

"(...) if companies start thinking a bit more about their own sustainability, they can become sustainable just like that." (Interview of the founder of Filipa Pereira Gonçalves, Lda.)

"I do believe sustainable practices are correlated with an organization being sustainable for itself." (Interview of the nutritionist and dietitian of DGEstE)

Some organizations in Portugal, such as the University of Coimbra, are pursuing environmentally efficient alternatives in the construction of new buildings, as well as installing solar panels and replacing older illumination with led lights ("Sem carne de vaca nem plástico. U. Coimbra quer liderar a luta contra o carbono", Diário de Notícias, 2019).

"It also lowers energy consumption and water intake. Building sustainability into business units can increase an organization's chance of profiting from its sustainability activities." ("Why corporate strategies should be focused on sustainability", Forbes, 2021).

On the other hand, the Portuguese population desperately needs to keep improving its eating habits due to the persistence of non-communicable diseases. Much work still needs to be done regarding this matter, which can be primarily achieved by nutritional education.

"The main goal of the canteens is to provide safe, healthy and nutritionally balanced meals." ("Orientações sobre ementas e refeitórios escolares", Direção-Geral da Educação, 2018)

While the implementation of guidelines by the Portuguese Government is the main motivation to change, organizations such as Salesianos de Lisboa and Filipa Pereira Gonçalves Lda. proved to be ahead of the system by implementing changes in their procedures before they were required.

Firstly, Salesianos de Lisboa is a private school that does not need to comply with the Ministry of Educations' guidelines on canteens, as they are meant for public schools. Nonetheless, they implemented positive changes towards providing more balanced options to their students in the canteen and the snack bars, inspired by the 2021 dispatch.

"(...) admitting that new orientations for public schools led to changes in private ones. This is the case of Salesianos de Lisboa (...)" ("Um mês sem croissants e loucura no bar: nesta escola, a comida saudável já ganhou", Público, 2021)

Secondly, Filipa Pereira Gonçalves Lda.'s interviewees recognize that they are unaware of most international guidelines mentioned throughout this research. In addition, there are not many regulations for education institutions that go beyond the 12th grade. Nonetheless, they take the initiative and implement change without being compelled.

"We opted for vegan dishes instead of vegetarian because they are suitable for a greater number of people, including those with dietary restrictions. The law only requires us to serve vegetarian dishes. (...) realized it would be a win-win situation for the company and the students to serve vegan instead of vegetarian, as we save money on some ingredients. They are happier because they feel more included." (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.)

As students often move away from their families to pursue higher education in cities such as Lisbon, Porto, and Coimbra, eating at the canteen is frequently the only complete and balanced meal they have during the day, making it increasingly relevant for universities to put an extra effort into their meals.

"For some students, the lunch or dinner they have here is the only proper and balanced meal they have the whole day, so we do our best to make it as balanced and tasty as possible." (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.)

5.3. Translating change

To better understand this subchapter, it is relevant to distinguish the terms "adaptation" and "adoption".

Firstly, the term "adaptation" is the process through which something is adapted, meaning adjustment to changing circumstances in the organization's environment. It implies the "modification of an organism or its parts that make it fitter for existence under the conditions of its environment", to improve the survival or fitness of the organism (Merriam-Webster Dictionary, n.d.). On the other hand, "adoption" infers the acceptance of practices and their implementation (Merriam-Webster Dictionary, n.d.). It also means taking something as your own (Cambridge Dictionary, n.d.).

5.3.1 Adopting change

Adopting practices occurs when the orientation leaves no room for the construct to be modified and adjusted to one specific organization. From what is observed, the mandatory guidelines are

the ones that tend to be adopted "as is". These tend to come from a national scope (e.g. mandatory vegetarian dish) or a European one (e.g. HACCP system).

"(...)we try to have that control even because of the norms that come through, and even the customers themselves are very interested. Changes have always been made according to the documentation that has been coming through." (Interview of a nutritionist and quality technician from Gertal)

When providing a vegetarian dish became mandatory in 2017, all organizations had to become aware of producing nutritionally balanced vegetarian meals. There was no negotiation on implementing this measure in schools, universities, and companies. Nonetheless, as will be explored later, the way vegetarian meals are prepared and their ingredients are subject to adaptation.

Additionally, all canteens have the same mandatory orientation on the menu composition.

"We have to fulfill some requirements such as serving a full meal with soup, a dish, bread, salad, and dessert, just like any other canteen." (Interview of the founder of Filipa Pereira Gonçalves, Lda.)

Further, there are mandatory limitations for salt amounts that can be used while cooking, which depend on the type of organization, demographics of the consumers, and type of contract (in the cases of organizations that are not public schools).

DGEstE conducts periodic visits to all public schools to assess whether the guidelines produced are being correctly implemented or not.

"Our main job has been monitoring the food quality served in all school canteens. We take the rules produced by Direção-Geral da Educação and the general ones regarding food quality, hygiene, and security, go to schools and assess whether they are delivering according to that or not." (Interview of the nutritionist and dietitian of DGEstE)

The HACCP was also imposed on all food industry operators by establishing the 2006 European regulation. Other regulations regarding food safety are also mandatory.

"Cooking in school canteens and higienization and maintenance of equipment and installations must respect the HACCP system." ("Orientações sobre ementas e refeitórios escolares", Direção-Geral da Educação, 2018)

Regarding the 2021 Portuguese dispatch, which prohibited selling food such as pizza, hot dogs, and chips, all public schools were required to comply without leaving room for negotiation and adaptation on their parts.

5.3.2 Adapting change

As practices and ideas travel the increasingly globalized world, they are translated before being implemented in other contexts. Portugal is influenced by other countries, in particular the European ones.

It can be concluded that most organizations studied do not directly follow international guidelines and rather focus on the ones produced by the Government. For the most part, they are not aware of the orientations mentioned in this research.

"To be completely honest, I have never read those guidelines, but we are in fact taking actions regarding salt, fat, and others" (Interview of the nutritionist of IPC)

However, it can be said that Portuguese guidelines are rather inspired by what is recommended and practiced globally. Direção-Geral da Educação produced a document in which they compiled the information on the last two decade's implementations in school canteens. It further explains their scientific backbone according to international guidelines ("A alimentação escolar em Portugal - visão estratégica", Direção-Geral da Educação, 2021).

This document contains some graphs from the World Health Organization (WHO) and refers to European guidelines on pricing, food hygiene, and safety.

"On the other hand, the fact that internationally recognized plans from the European Union and World Health Organization are followed contributed to the progressive adoption and integration of measures in our strategy, such as: i) 'Promoting healthy environments in school context'; ii) 'Turning the healthier option into the easier one'; iii) 'Restricting certain types of marketing and food advertising directed at children'". ("A alimentação escolar em Portugal - visão estratégica", Direção-Geral da Educação, 2021)

Furthermore, public schools are provided some orientations on the food they should be made available, frequency, and other recommendations (see <u>Appendix 7</u>). However, it is up to the schools to adapt to their own circumstances regarding the maximum and minimum quantities, which are the same for all of them.

As previously mentioned, some organizations even go beyond the existence of guidelines and start implementing change without being required. This includes hiring nutritionists when the Government only recommends organizations to do so without a specific guideline, which is the case of Instituto Politécnico de Coimbra. Filipa Pereira Gonçalves Lda. is also planning on hiring someone in the future.

Throughout this research, one of the topics approached revealed impressive results. Although the existing food waste mitigation guidelines focus more on recycling and providing recommended quantities of food on plates, organizations found creative ways to prevent or process their waste, thus adapting practices to their own context.

Some practices include transforming leftovers into different dishes the next day (Interviews of the representatives of Instituto Politécnico de Coimbra, Sales ianos de Lisboa, Gertal, and Filipa Pereira Gonçalves, Lda.).

"With the older kids and school staff, we often transform the leftovers from the previous day into a completely new dish." (Interview of the executive chef of Salesianos de Lisboa)

"Things we previously threw away were not registered and accounted for. Now we try to use those leftovers to make new and different dishes." (Interview of a nutritionist and quality technician from Gertal)

Instituto Politécnico de Coimbra attributes its success in reducing its food waste percentage from over 40% to 7% in a few years to limiting the amount of food cooked and served and managing stocks, which prevented them from throwing away food due to its expiration date (Interview of the nutritionist of IPC)

Further, some organizations hold partnerships with Refood, a charity that collects leftovers from restaurants, stores, cafés, supermarkets, and canteens and gives them to people in need. This is the case of Gertal and Instituto Politécnico de Coimbra. The latter also provides meals to students on social support (Interview of the technical director of the food and nutrition department of IPC).

Salesianos de Lisboa also supports 50 homeless individuals every day and an internal charity organization called SolSal (Interview of the executive chef of Salesianos de Lisboa).

Filipa Pereira Gonçalves promotes a different strategy.

"At the end of the day, the worst-case scenario is that all 24 employees get to bring the leftovers home to their families." (Interview of the founder of Filipa Pereira Gonçalves, Lda.)

Nonetheless, all organizations work towards the minimum food waste possible by creating awareness among students and carefully choosing the amount of food served, according to the technical sheets and guidelines on that matter.

"Firstly, the technical sheets tell us the ingredients in each dish (...). The sheet tells us how much of each ingredient is needed for each person. Then you just have to multiply it by the number of meals scheduled for that day. And that is the average of how much we need. So that we do not lack food nor have food waste." (Interview of a nutritionist and quality technician from Gertal)

In conclusion, universities have more room to adapt constructs to their daily practices and, surprisingly, aim for more than required.

5.3.3 Adhering to change

Adherence to change by all consumers regarding sustainable and healthier practices is overall positive. There is an increased awareness of these topics through the media and guidelines implemented.

"Our clients recognize that it is in their best interests to change according to the guidelines that have been released." (Interview of a nutritionist and quality technician from Gertal)

The increasing demand for vegetarian dishes surprised all organizations in terms of adherence to sustainable practices. Gertal acknowledged that they feared it would be a source of food waste (Interview of a nutritionist and quality technician from Gertal).

There are many reasons people consume vegetarian dishes, with the main ones being health, environment, and animal rights ("Most people consider becoming vegetarian for their health", UCDavis, 2020).

In the cases explored, it became clear that this growing demand was motivated by the first two and the desire to try different food.

"I do not see a lot of people concerned about the environmental part. I see them being more concerned about eating something healthier." (Interview of the technical director of the food and nutrition department of IPC)

"Right now, it is clear that (...) customers are looking to diversify their eating habits and are more willing to try different things. They tend to opt more for vegetarian options. (...) people are more conscious about the concept of sustainability and reducing excessive consumption of meat especially (...)." (Interview of a nutritionist and quality technician from Gertal)

As Gertal works with multiple organizations, including schools and companies, they better grasp tendencies.

"I can tell you that in factories and companies where there is a mainly feminine and/or younger audience, the tendency for adhering to vegetarian dishes has grown a lot. There is not much adherence in companies whose workers are mostly male and/or older. Companies with more offices are more prone to care for these topics and adhere." (Interview of a nutritionist and quality technician from Gertal)

Nevertheless, there is still a long way to go regarding food waste mitigation. Despite the organizations' efforts to create awareness on the topic and the strategies implemented, consumers still generate waste by taking more food than they plan on eating and booking meals while failing to show up.

Regarding the 2021 dispatch that prohibited serving certain types of food in public schools nationwide was very polemic among consumers, with nutritionists praising it as a necessary step towards encouraging healthier eating habits ("Um mês sem croissants e loucura no bar: nesta escola, a comida saudável já ganhou", Público, 2021)

"With the 2021 law, the demand in the snack bars decreased, and more people started bringing food from home. Nevertheless, the director of the Administrative Services of Private Schools believes students will get used to it." ("Um mês sem croissants e loucura no bar: nesta escola, a comida saudável já ganhou", Público, 2021)

The nutritionist and dietitian of DGEstE, who has been hands-on with changes in schools' canteens over the past twenty-three years, believes dramatic changes cannot be implemented this quickly without providing schools with alternatives.

"We must go there and explain the reasons and how to replace these foods. That is essential for these guidelines to truly work". (Interview of the nutritionist and dietitian of DGEstE)

5.3.4 Facing limitations and challenges

It was found that although the organizations studied are different regarding aspects such as mission, target audience, scope, and geography, some of the problems and limitations faced were common, with some of them being distinct. The limitations were divided into sustainability challenges, others such as location and resources, and problems identified in schools.

To begin with, there appears to be a lack of clear guidelines to follow for organizations to become more sustainable. The public sector cases claim there is not enough concern from the Government regarding this matter, which one of its directorates confirmed.

"We have not focused a lot on sustainability yet. That is one of the areas I wanted to approach, but since it has only been me for so long, it has not been possible. I am hoping that with the help of more colleagues that are getting hired, we will be able to address this." (Interview of the nutritionist and dietitian of DGEstE)

In addition, sustainable materials often come at much higher costs due to the inability to purchase them in bulk, as they are not standard, widely used materials, which makes it difficult for companies that aim for more sustainable materials to be able to purchase them (Interview of the nutritionist and dietitian of DGEstE).

Furthermore, an inflation phenomenon makes it increasingly difficult for organizations not to overgo their established food cost. Repercussions are expected to affect the entire chain: production, industry, distribution, and consumers ("A indústria está a fazer um esforço enorme para suprir a escassez de materiais", Diário de Notícias, 2021).

The rise in fuel, energy, packages' prices combined with scarcity of raw materials affect overall production costs ("A indústria está a fazer um esforço enorme para suprir a escassez de materiais", Diário de Notícias, 2021). These are external factors the studied organizations cannot control and must adapt to.

"Ever since the beginning of December, my life has been dedicated to bargaining prices." (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.)

Despite impacting the whole sector, this challenge is more significant to independent companies such as Filipa Pereira Gonçalves, Lda. They do not have any support from the Government. Their contract establishes that the price of the social menu cannot surpass the current value (Interview of the administrative assistant of Filipa Pereira Gonçalves, Lda.).

On the other hand, Salesianos de Lisboa can sustain the inflation level to a certain degree due to the price their meals are sold for. With a selling price of 7€, they aim for a 50% food cost. Although price matters, their priority is quality (Interview of the executive chef of Salesianos de Lisboa).

A problem all organizations could agree upon was the difficulty in hiring labor in this sector, which is mainly due to most employees earning minimum wage ("Trabalhadores das cantinas em greve na segunda-feira", Jornal de Notícias, 2021).

"Our main issue is the lack of labor. It is very physical labor that is poorly paid. Most people only earn minimum wage. Between being there for 7/8h or being at home and getting the unemployment fund, they prefer the latter option." (Interview of the nutritionist and dietitian of DGEstE)

"It is very hard to hire people in this area. There are not many people wanting to work at canteens." (Interview of the technical director of the food and nutrition department of IPC)

Several problems were identified in the school segment due to the target audience being students ages five to eighteen. The Food-Based Dietary guidelines establish the need for nutrition education programs that encourage healthy eating habits (FAO, n.d.), which is also the main goal of the Direção-Geral da Educação's guidelines ("Orientações sobre ementas e refeitórios escolares", Direção-Geral da Educação, 2018).

Nutritional education is part of the global and national strategy to promote a balanced diet among the younger generations. Despite the schools' effort to educate them and their parents on topics by implementing campaigns and healthy menus, kids still show some reluctance towards vegetables and fish.

In some cases, it was noticeable that the reluctance to adhere to a more balanced diet comes from the home, where habits are supposed to start.

"We try to provide information to the parents regarding healthy eating habits, but most parents who show up are the ones who already implement good habits at home. Not as much the parents who actually need to learn." (Interview of the nutritionist and dietitian of DGEstE)

5.4 Summary

The following table summarizes the findings of this research.

Theme	Topic	Main findings			
	Sensemaking of change	The changes in consumers' demand and general guidelines and orientations provided by external parties influenced organizations' implementations Consumers are increasingly adhering to vegetarian meals in all types of organizations studied Adopting more sustainable practices benefits organizations economically Some organizations go beyong the existing guidelines and implement change by their initiative			
	Adopting change	· All canteens have the same mandatory orientation on the menu composition · Canteens are required to follow some standard hygiene guidelines (HACCP system) · All organizations must have a vegetarian dish · There are mandatory limitations for salt amounts that can be used while cooking, which depend on the type of organization and demographics of the consumers			
Translating sustainable and healthier guidelines	stainable healthier Adapting change	· Most organizations studied do not directly follow international guidelines and rather focus on the ones produced by the Government · Most organizations are not aware of the orientations mentioned in this research · Portuguese guidelines are rather inspired by what is recommended and practiced globally · Food waste mitigation guidelines focus more on recycling and recommended quantities of food in plates, meaning organizations found creative ways to prevent or process their waste · Universities have more room to adapt constructs to their daily practices and surprisingly aim for more than they are required to · Public schools are provided some orientations on the food they should be made available, frequency, and other			
		· Adherence to change by all consumers regarding sustainable and healthier practices is overall positive, due an increased awareness of these topics through the media and guidelines implemented · Dramatic change should not be implemented suddendly, to give the consumers and canteens the chance to adapt · Measures such as the 2021 dispatch which prohibited seeling certain types of food at schools can be very problematic			
	Facing limitations and challenges	Scarcity of clear guidelines to follow for organizations to become more sustainable Inflation that affects the entire chain: production, industry, distribution, and consumers Difficulty in hiring labor in this sector Students' eating habits, which are not always positively influnced by their homes Sustainable materials come at higher costs			

 Table 7 - Main conclusions of the findings. Source: the author

6. DISCUSSION

The findings presented in this research are consistent with the vast literature on the need to modify eating habits, considering that lifestyles and diets are perceived as key determinants of global sustainability (Lorenz & Langen, 2017). This urgency leads to the emergence of new trends and sustainable practices. Nonetheless, it was surprising that most organizations are not looking directly at what is being recommended and practiced in other countries. A representative of the Ministry of Education admits to focusing on what already exists in Portugal in terms of practices.

"We have been basing our practices on what already exists in Portugal and try to improve those without further thinking about guidelines. Right now, we focus more on perfecting our practices rather than thinking about certain guidelines because there is a gap between guidelines and reality." (Interview of the nutritionist and dietitian of DGEstE)

Further, CSR studies within the food industry reinforce the importance of holding organizations accountable for their social and environmental actions (Maloni & Brown, 2006). Portuguese canteens hold responsibility for promoting healthier eating habits and sustainable practices amongst the population they serve, so some of them implement voluntary standards instead of waiting for mandatory ones to be imposed. As stakeholders in the food industry increasingly demand more sustainable practices and healthier alternatives (Wijethilake & Upadhaya, 2020), organizations must leverage the topic with the importance placed on "cost, quality, delivery, flexibility and innovation" (Pullman et al., 2009).

Concerning Scandinavian institutionalism, a clear connection was made between the guidelines produced in European and global settings and the Portuguese ones, which the studied organizations tend to follow, proving ideas traveled through countries before reaching Portugal (Waeraas & Nielsen, 2016). It was proved that organizations adapt to some constructs without purely implementing them "as is", in the process of interpretation and reformulation that later leads to adoption (Greenwood et al., 2008), meaning the concept of translation is applicable. Analyzing the cases through this theory's lens led to relevant findings regarding the translation of international, European, and Portuguese guidelines regarding healthier food and sustainability, particularly promoting healthier and more balanced diets which do not compromise the environment.

7. CONCLUSION

This exploratory research allowed me to answer the proposed research question, thus understanding how canteens in Portugal are implementing sustainable and healthier guidelines produced by the Government and international guidelines and exploring how these implementations are consistent with the theoretical framework, Scandinavian institutionalism. The findings presented in this research provide an original contribution to academic knowledge on a topic that has been neglected by scholars, with very scarce literature available.

Furthermore, this research moves beyond the notion of being environmentally sustainable. It provides insights into how adopting sustainable practices allows these organizations to be more economically sustainable and cater to changes in demand. Besides its academic relevance, this study highlights the practices conducted by each type of organization, and their struggles and inspirations, thus setting an example for others in similar businesses who aim to promote a healthier diet and sustainability.

Nonetheless, the research has some limitations. As elucidated in the methodology chapter, only four cases were explored, which decreases the conclusions' generalization potential. The output would have been more complete if more organizations had accepted to be interviewed. There was a clear gap in studying the view of public schools, more collective catering companies, private schools, and universities, as well as Direção-Geral da Educação, the entity responsible for elaborating guidelines. It would have been increasingly valuable to contact these organizations' suppliers and managers to gather different perspectives on sustainability and health topics. Further, the lack of public data clearly explaining the guidelines' establishment process and which orientations apply to each type of organization compromised the generalization of the conclusions.

Future research can overcome these limitations by studying other organizations within similar contexts (schools, universities, collective catering companies, and Government directorates) while expanding the scope in terms of geography and position of interviewees. It would allow the understanding of whether these conclusions are derived from contextual factors and which conclusions can be generalized. With the hiring of fifteen more nutritionists to the Ministry of Education, more change may be implemented in the future, as predicted by the current sole nutritionist, hence not further grasping sustainable practices. Moreover, combining this qualitative approach to the topic with a quantitative one could lead to a better understanding of this topic. It has been proved to lead to a better triangulation of facts (Birkinshaw et al., 2011).

8. APPENDICES

Appendix 1: Organizations contacted

Name of Organization	Type of organization	Additional info. regarding organization
GestyRest	Food annuides	Early manifes and management at ISEC contains
	Food provider	Food provider and management at ISEG canteen Food provider and management at Católica-Lisbon
Eurest	Food provider	canteen Food provider and management at NOVA campuses'
SASNOVA	Food provider	canteens
Hotel Mundial	Hotel	Hotel with canteen
Gertal	Food provider	Food provider at schools and companies
ITAU	Food provider	Food provider at schools and companies
Uniself	3 38	
	Food provider	Food provider at public institutions
ICA		
	Food provider	Food provider at public institutions
Calculance de Linkes	Cab and	Deinote ask and anisk contains associate
Salesianos de Lisboa	School	Private school with canteen services
E.S. Pedro Nunes	School	Public school with canteen services
E.S. do Restelo	School	Public school with canteen services
Agrupamento de Escolas D. Filipa de Lencastre	School	Group of public schools
Universidade Católica		
Portuguesa (Reitoria) Faculdade de Direito da	University	Private university with canteen services
Universidade de Lisboa (FDUL)	University	Public university with canteen services
Universidade de Coimbra	University	Public university with canteen services
Ministry of Education	Other	Organization responsible for producing orientations and regulations for schools
Jardim Escola João de Deus	0.11	Private school with canteen services (kindergarten and
	School	1st-4th grade)
Meigal	Food provider	Food provider for canteens, restaurants, bars
Totalis	Food provider	Food provider for canteens, restaurants, events
Procatering	Food provider	Food provider for canteens, events
		Food provider for canteens (schools, companies,
Nutrir	Food provider	universities) Food provider for canteens (schools, companies,
Multirerst Reitoria da Universidade de	Food provider	universities)
Lisboa- Serviço de Ação Social	University	University with many canteens across Lisbon
Universidade Lusófona	University	Private university with canteen services
Y	***	
Instituto Politécnico de Coimbra	University	University with canteen services in Coimbra
Colégio São Tomás	School	Private school with canteen services
Escola Secundária Rainha D. Amo	School	Public school with canteen services
Hotel Marquês de Pombal	Hotel	Hotel with canteen for employees?
Filipa Pereira Gonçalves, LDA.	Food provider	Food provider for canteens, events
Universidade do Algarve	University	University with canteen services in the Algarve
Colégio Militar	School	Military school
Cologio minitai	201001	

Source: the author

<u>Appendix 2</u>: Coding table

First-order code	Category	Theme		
Acknowledging guidelines				
Adapting guidelines	Translation of guidelines			
Adopting guidelines	Translation of guidennes			
Production of guidelines for schools				
Implementing change	Change			
Adherence to change				
Implementing vegetarian/vegan meals				
Sustainable practices				
Tendencies in vegetarian/vegan food consumption	Sustainability	Tanadatia - matricaldo and		
Economic sustainability				
Food waste strategies		Translating sustainable and healthier guidelines		
Problems identified for schools				
Resources and location limitations	Facing limitations and challenges			
Sustainability challenges				
Menu composition				
Healthy/healthier practices	Health			
Adapting to dietary restrictions				
Nutritional education				
School specifics				
Company specifics	Organization-specific relevant facts			
University specifics				

Source: the author

Appendix 3: Example of a menu - Salesianos de Lisboa

MAPA SEMANAL DE EMENTAS A ELABORAR NA COZINHA



	1 NOVEMBRO- 2ªfeira	2 NOVEMBRO- 3ªfeira	3 NOVEMBRO- 4ªfeira	4 NOVEMBRO- 5ªfeira	5 NOVEMBRO- 6ºfeira
SOPA		Canja de Galinha	Sopa de Feijão Verde	Creme de Couve-Flôr	Sopa de Feijão
GUARNIÇÃO		Massinha	Cenoura e Feijão Verde	Espinafres	Lombardo
GUARNIÇÃO	1000	Hortelä	x	×	x
PRATO PRINCIPAL	F	Choco Frito c/ Arroz Feijão	Pernas de Frango no Forno	Bacalhau à Brás c/ Salada Mista	Empadão de Atum de Arroz
GUARNIÇÃO	•	Choco, Ovo, Farinha, Limão	Mel e Alecrim	Bacalhau, Batata Palha	Atum, Tomate, Cebola
GUARNIÇÃO		Arroz de Feijão	Batata Assada e Arroz	Salsa, Azeitona, Ovo	Arroz, Chourição
PRATO DE DIETA	E	Espetadas de Perú	Pescada Grelhada	Costeletas de Borrego	Frango Cozido c/ Arroz e Leg.
GUARNIÇÃO		Massa Farfale	Cenoura, Nabo, Courgette	Alecrim e Limão	Arroz Branco
GUARNIÇÃO	R	x	Batata Cozida	Arroz Manteiga	Legumes Variados Cozidos
PRATO VEGETARIANO	•••	Gratinado de Couve-Flôr	Caril de Legumes	Pimentos Recheados c/ Espinafres	Arroz de Boletos e Tomilho
GUARNIÇÃO	1	Seitan e Nozes	Legumes Variados	Pimentos , Queijo e Espinafres	Arroz, Cogumelos Varios
GUARNIÇÃO		Bêchamel, Queijo Mozzarella	Arroz de Coentros	x	Tomilho e Cebola
LEGUMES NA LINHA		Brócolos Cozido	Leg. Mediterrâneos Assados	Grelos Salteados	Feijão Verde e Cenoura
SALADA NA LINHA	Α	Alface e Tomate	Alface e Tomate	Alface e Tomate	Alface e Tomate
SALADA NA LINHA		Cebola Roxa	Cenoura Ralada	Cebola Roxa	Beterraba Ripada
SALADA COMPOSTA	D	x	x	x	х
SOBREMESA	U	Gelatina	Gelados	Uvas	Bolo
FRUTA		Pêra e Maça	Pêra e Maça	Pêra e Maça	Pêra e Maça
FRUTA	U	Clementina, Banana e Kiwi	Clementina, Banana e Kiwi	Clementina, Banana e Kiwi	Clementina, Banana e Kiwi
FRUTA					

Source: Salesianos de Lisboa

Appendix 4: Example of a menu - Gertal

			the same		100		A COK 11 APP	ger	F te	
		Município								
		Semana de								
		Almoco								
+	Segunda	•	VE	VE		dos quais AGS				
	Jogoriaa	Sana da nanaa (sam sanaura	(kJ)	(kcal)	(g)	(g)	(g)	(9)	(g)	(5
	Sopa	Sopa de penca (com cenoura, abóbora e cebola)	131	31	0,4	0,1	5,1	2,3	1,1	0
	Prato	Ensopado de vitela com salsa c/ brocolos salteados ¹²	320	77	4,0	1,3	3,6	0.4	6,1	0
	Vegetariano	Soja a bolonhesa com cogumelos e esparguete com oregãos ^{1,3,6}	277	65	1,1	0,2	6,9	0.4	6,5	0
	Salada / horticolas	Salada de alface, cenoura e beterraba	92	22	0,0	0,0	3,2	3,1	1,1	0
	Pão	Pão de mistura 1,3,6,7,8,12	937	234	1,4	0.7	47.0	2.7	8,3	1
	Sobremesa	Uvas brancas	329	78	0,5	0.1	17,3		0,3	
	Sobremesa ii	Diospiro	274	65	0,0	0,0	14,8	14,8	0,6	0
	Sobremesa iii	Framboesa	202	48	0,6	0,0	5,1	5,1	0,9	0
	Terça		VE (kJ)	VE (kcal)		dos quais AGS	HC (g)	dos quais AÇ	Prot.	
	Sopa	Sopa de agrião e feijão branco (com nabo, cebola e couve-flor)	192	45	0.7	0.1	6,5	1,4	2,2	
	Prato	Tranches de cherne ao vapor com ervas aromáticas c/ ovo cozido e massa espiral tricolor ^{1,3,4}	588	140	4,4	1,0	9,7	0,0	14,8	0
	Vegetariano	Empadão de legumes (cogumelos, milho, ervilhas e couve branca)	185	44	0,4	0,0	7,0	0,2	2,8	0
	Salada / horticolas	Feijao verde, nabo e courgete	99	24	0,3	0,1	2,8	2,4	1,5	0
	Pão	Pão de mistura 1.3.6,7,8,12	937	234	1,4	0,7	47,0	2,7	8,3	1
	Sobremesa	Pêra	199	47	0,4	0,0	9,4	9,4	0,3	0
	Sobremesa ii	Laranja	201	48	0,2	0,0	8,9	8,9	1,1	0
	Sobremesa iii	Maça golden	269	64	0,5	0,1	13,4	13.4	0,2	0

Source: Gertal

Appendix 5: Example of a menu - Filipa Pereira Gonçalves, Lda.



Ementa Semanal (De 25 a 29 outubro 2021)

PRATO DO DIA	INFORMAÇÕES IMPORTANTES
• 2ª feira	
C: Carne de porco	COMPRA ANTECIPADA DE SENHAS:
P: Paloco Tricolor	Bar/Cafetaria:
V: Feijoada de Legumes 🕜	Bary Sarstaria.
• 3ª feira	Das 07.30 às 11.00
C: Empadão de vitela	
P: Arroz de peixe	O Menu Estudante é composto por:
V: Caril de grão com legumes 🕜	
4ª feira	Sopa + Prato + Bebida a copo + Pão
1 1000	+ Sobremesa
C: Arroz de aves	2.70€ Alunos do ISCTE
P: Feijoada de pota	3.50€ Restantes
V: Ervilhas com cogumelos (e ovos escalfados)	JISS THESTAINES
• 5ª feira	PAGAMENTO NO ACTO DA COMPRA
C: Almondegas com puré	(SEM SENHA):
P: Paloco com espinafre	+ 0.30€*
V: Legumes com couscous <u>₹</u>	*Complemento remuneratório para compensação de
• 6ª feira	destacamento de funcionária.
C: Perninhas de frango com esparguete	Edifício II - Piso 3
P: Feijão frade com atum	Editicio II - Piso 3
V: Valenciana de soja <u>♀</u>	12h – 15h / 19h – 21h

- Os preços incluem a taxa de IVA em vigor.
- Nenhum prato, produto alimentar ou bebida pode ser cobrado se n\u00e3o for solicitado pelo cliente ou por este for inutilizado (Lei 10/2015).
- Este estabelecimento tem Livro de Reclamações.
- Os produtos alimentares não embalados, uma vez escolhidos e entregues, consideram-se comprados, não sendo permitidas trocas ou devoluções.
- Se é <u>alérgico ou intolerante a algum alimento ou substância alimentar</u> e tem dúvidas se este foi utilizado na preparação/confeção daquilo que pretende consumir, por favor solicite informação a um dos nossos colaboradores.

Source: Filipa Pereira Gonçalves, Lda.

Appendix 6: Example of a menu – Instituto Politécnico de Leiria



Unidade de Alimentação e Nutrição (UAN) Plano de Ementas Cantinas SAS

Dia	Sopa	De 07.03. a 11.03.2022				
Dia	Sopa	Almoço Jantar				
2ªF	Couve-flor	Pelixe: Tintureira assada com molho de tomate, Acompanha com puré de labatale e hrócolos cozidos Carne: Alheira assada e ovo. Acompanha com arroz de cenoura e brócolos cozidos Vegetariano: Jardineira de ervilhas e milho. Acompanha com brócolos cozidos Vegetariano: Cozidos Vegetariano: Carne: Espetada de peru grelhada. Acompanha com arroz de couve e salada mista.*		Laranja Maçã Ananás em calda		
3*F	Feijāo-vermelho e couve coração- de-boi	Peixe: Tentáculos de pota ensalsados (azeite, cebola e salsa). Acompanha com batata a murro e salada mista" (Carne: Bochecha de potro assada. Acompanha com arroz de ervilhas e salada mista" Vegetarlarian: Selitan à Brás. Acompanha com salada mista"	Peixe: Pescada à Gomes de Sá (batata e ovo). Acompanha com salada mista* Carne: Strogonoff de porco (natas e cogumelos). Acompanha com massa esparguete e salada mista* Vegetariano: Corão à Gomes de Sá. Acompanha com salada mista*	Pera Kiwi Leite-creme		
4ªF	Caldo-verde	Peixe: Salmão greihado. Acompanha com arroz branco, couve-de-Bruxelas cenorura bably cozidas Carne: Lasanha de penu. Acompanha com couve-de-Bruxelas e cenoura bably cozidas Vegetariano: Feijoada de cogumelos (feijão-branco). Acompanha com arroz branco e couve-de-Bruxelas e cenoura bably cozidas	Peixe: Carapau greihado com molho à espanhola. Acompanha com batata cozida e salada mista* Carne: Franço assado. Acompanha com batata frita e salada mista* Vegetariano: Hambúrguer de espinafres. Acompanha com batata frita e salada mista.	Banana Laranja Maçã assada		
5*F	Lentilhas	Peixe: Feljoada de marisco. Acompanha com arroz branco e salada mista* Carne: Coxa de franço assada. Acompanha com arroz de legumes (cenoura, milho e couve) e salada mista* Vegetariano: Lasanha de soja. Acompanha com salada mista*	Peixe: Arroz de tamboril (coentros). Acompanha com brócolos cozidos Carne: Carne de porco estifiada com macedónia. Acompanha com puré de batata e trocios cozidos Vegetariano: Saliada russa de fejião-preto. Acompanha com brócolos cozidos	Maçã Pera Gelatina		
6ªF	Creme de brócolos	Peixe: Perca assada. Acompanha com batata assada e salada mista* Carme: Greihada mista (enfremeada, febra e salsicha de porco). Acompanha com fejilo-preto estufatod, armoz branco e salada mista* Vegetariano: Hamburguer de grão-de-bloo. Acompanha com fejilo-preto estufado, armoz branco e salada mista*	Peixe: Lulas recheadas estufadas. Acompanha com arroz de cenoura e salada mista? Carne: Bife de frango estufado com cogumelos. Acompanha com arroz de cenoura e salada mista? Vegetariano: Alheira vegetariana assada. Acompanha com arroz de cenoura e salada mista?	Tangerina Kiwi Pudim		

Source: Instituto Politécnico de Coimbra

Appendix 7: Orientations on menu composition for schools

Component of the menu	Recommended	Maximum	Mininum	Frequency
Creamy soup		2		Weekly
Legumes-based soup			1	Weekly
Dish including legumes			1	Weekly
Poultry meat dish	1			Weekly
Non-fractioned fish dish			1	Weekly
Non-fractioned meat dish			1	Weekly
Dish with fractioned fish or meat (small portions)		2		Weekly
Dish including eggs			1	Biweekly
Dish including sausage-like products		1		Monthly
Dish including fried ingredients		1		Biweekly
Seasonal fruit	1			Daily
Sweet dessert or stewed/baked fruit		1		Weekly
Water				Daily

Component of the vegetarian menu	Recommended	Maximum	Mininum	Frequency
Creamy soup		2		Weekly
Legumes-based soup			1	Weekly
Legumes or legumes-derived dish	1			Daily
Dish including fried ingredients		1		Biweekly
Seasonal fruit	1			Daily
Sweet dessert or stewed/baked fruit		1		Weekly
Water				Daily

Source: Direção-Geral da Educação ("Orientações sobre ementas e refeitórios escolares") (adapted by the author)

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