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a New Market: a Case Presentation of Functional Food  
Market in Indonesia**

**Jofi Puspa, Rainer Kühl**

University of Justus Liebig, Germany

[Jofi.Puspa@ernaehrung.uni-giessen.de](mailto:Jofi.Puspa@ernaehrung.uni-giessen.de)



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# **Quality Assurance and other Marketing Management Elements as Key Success Factors for Entering a New Market: a Case of Functional Food Market in Indonesia**

Jofi Puspa, Rainer Kühl  
University of Justus Liebig, Germany  
[Jofi.Puspa@ernaehrung.uni-giessen.de](mailto:Jofi.Puspa@ernaehrung.uni-giessen.de)

## **Summary**

Based on its distinctive profiles functional-food (FF) can be considered as a mixture of food and pharmaceutical items. Apparently, these different characteristics that exist beyond conventional food products contribute success of the commercialization of new innovative FFs. Therefore, assumption can be made by arguing that for the marketing a FF a distinctive marketing-strategic beyond the one usually used for the conventional food products must be employed. This study was pursued with the main aims to understand the consumer's psychological factors and to find out elements important to setting up the marketing strategy. These two findings will be then used as basis for designing a distinctive marketing strategy for a FF. We found that consumer's psychological set varied across different sample groups. Therefore, segmentation plays a significant role. Due to the fact that most of the consumers had a medium to high involvement level, communication strategy becomes a salient means for the marketing of FFs. According to the respondents some important extrinsic/intrinsic quality based elements of FF can be generally incorporated into the communication platforms for FF. From the industry's point of view this study showed that internal organizational and management, market attractiveness and trade capability are the most important elements supporting a firm in developing a new innovative FF in Indonesia.

**KEYWORDS:** product quality, communication, segmentation, key success factors for market entry, functional food in Indonesia.

## **1. Introduction**

In the last two decades international product innovation projects have been directed to redesign conventional food and beverage products in such a way that they can provide additional health benefits beyond their basic nutritive function. As an example, researchers have tried to influence the systemic immune reaction by specific nutrients and food ingredients directly (e.g. by triggering immune cell activation or altering immune cell interactions) or indirectly (e.g. by changing substrate for DNA synthesis, altering energy metabolism, changing physiologic integrity of the cells or altering signals or hormones) (Deibert and Berg, 2002).

This innovative development is triggered by improvement of people' interest in the nutrition and health prevention. Researchers and industry have continuously pursued discussions that try to find out about clear definition of "functional food". In short, functional food describes products similar in appearance to conventional food (and beverage) products, consumed as a part of the usual diet. They come from natural sources or have been enriched with natural substances or other components with a specific physiological preventive and/ or health promoting effect (Backgrounder, 1998; ILSI, 1999; Health Canada, 2004). However, there has been a long-standing debate about the definition and limitations of health promoting effects of functional foods and about how to prove

those effects. Apparently, these issues relate to legal aspects, especially, concerned with the commercial uses of health claims for marketing of functional food products. In many Western countries there is a strict dividing line between food and medicine. Health effects such as prevention-, treatment- and reduced risk of chronic diseases are, more or less, considered as the domain of medical and not of nutritional intervention. Principally, through establishing a legal regulation the government or food authority intends to protect the consumers from the abuse of a health claim. But from the view of industry, this legal regulation is often being seen as a rigid construct limiting their marketing creativity. It is not surprisingly, that industry pays much attention to this issue, because, it is a fact that the presence of a health claim for functional foods endows an important distinctive trademark, which differentiates a functional food from conventional food items. For marketing purposes a health claim is a valuable unique selling proposition, which is beneficial for establishing product positioning and segmentation.

The other distinctive characteristics of functional food over conventional foods beyond the above mentioned features are (1) the presence of disparity in terms of consumers' psychological set (perception, knowledge, attitude, motivation and involvement level) in the society; (2) the present of moderate to high cost of investment, (3) the presence of an asymmetrical market structure. The concept of functional food especially for finished and packed food and beverage products is relatively newly introduced and communicated to the public. Apparently, consumers' reactions towards this concept depend on their perception and motivation towards general health- and prevention of diseases concept. Possibly, we can argue that consumers, who have a relatively high awareness level or interest on a healthy life style and who have a high motivation level towards disease prevention measures will tend to have a positive attitude and acceptance towards functional foods. And contrarily, consumers with low awareness and low motivation level towards a healthy life style and diseases prevention measures will ignore or pay no (or less) attention to functional food products. Beyond that, we can find that quite a lot of people, who show their negative or skeptical perceptions about functional food, will possibly have a low acceptance level towards the consumption of functional food. Due to these facts we can argue that people have different psychological settings towards functional food and that this issue can be considered as one specific characteristics of the functional food field. According to Henderson and Clark's (1990) classification of innovation, functional food can be classified as a "strategic innovation" group, because functional food is perceived as having a new design but being otherwise based on established technologies. To develop such innovation a firm may require higher financial and management capability, especially when this is compared to the financial means required for developing a conventional food product. The main cost-created-activity in developing a functional food is related to R&D activities, especially to the investigation of the ingredient supposedly delivering the health effect and to prove its efficacy in that respect. Developing a functional food product carries a much higher risk than developing a conventional one especially when and if the product faces a flop. As has been mentioned above, an improvement of awareness of general health problems can be observed, although, people's inherent knowledge concerning medical perspectives of health and nutritional sciences varies. Considering its distinctive design and function, we can argue that the functional food represents a mixture of food and pharmaceutical product. In order to understand the concept of functional food and its offered health effects, a certain level of medical knowledge is absolutely required. Considering the variety of people's inherent knowledge level and the sophistication of the functional background of functional food, we further observed the presence of asymmetrical information in the field of functional food. There seems to be a large discrepancy between medical experts and industry as information holders and consumers on the likely effects and benefits of the consumption of functional food.

Understanding the clear distinctive features of functional food, therefore for the view of marketing, we argue that a firm needs a different marketing approach than the one used for marketing of conventional food products, because, obviously a distinct strategy will ensure the success of the commercialization of the newly developed functional food products. For that purpose this study has the main aim to understand and study elements important for the marketing of functional food products. In this study two main anchors, i.e. consumers' and company's perspectives will be deliberately investigated.

## **2. Background**

Since year 2000 plenty of food and beverage products were marketed with different health claims in Indonesia. Most of them are produced and marketed by locally or even regionally based companies. The significant trend of the functional-food market in Indonesia follows the fast market development of supplement products and it is strongly influenced by international functional food market developments. Increasing people's awareness of following a healthy life style through nutrition consumption upholds the positive movement of the functional food market. Actually, for the Indonesian people the concept of functional food is not really new because of the fact that consuming food which provides health benefits is a part of their ancient traditional eating habit. An example of a traditional functional food worthy to be mentioned is a fermented product of soybean called Tempeh. There are many published scientific studies that confirmed the health benefits of Tempeh and those studies supported Tempeh to be classified into the functional food category (Karyadi & Lukito, 2000, Wilcox, et al., 1990 and Sudarmadji et al. 1997). However, due to the absence of a consistent regulation, which is supposed to be issued by the Indonesian food authority, we find that many so-called functional food products have been improperly marketed. The usage of a health claim as marketing instrument was wrong and many advertising campaigns were misleading and elusive. Without any single supportive scientific argument or relevant scientific finding some companies used health claims as product selling propositions. Therefore, it is not surprising that one can find a product, which is claimed to be beneficial for treating a broad range of diseases such as from skin infection to cancer. This development is aggravated by a strong trajectory competition in this market.

Consumer behavior studies have emphasized the importance of consumers' psychological factors such as attitude, perception; knowledge, involvement level and attitude are fundamentals for developing the marketing strategy for a product (Solomon, 1996; Chisnall, 1994; Foxall and Goldsmith, 1994). Attitude is defined as a learned predisposition to respond in a consistently favorable and unfavorable manner with respect to a given object (Sarnoff, 1960 and Thurstone, 1931 in Fishbein & Ajzen, 1975). It is typically viewed as a latent or underlying variable that is assumed to guide or influence behavior. The individual attitude is predisposed toward performing a type of behavior, all of which are either favorable or unfavorable with respect to the object. Unfortunately, till now a consumer study concerned with attitude towards functional food in Indonesia is absent. Our assumption regarding people's attitude towards functional food suggests that due to massive deceptive marketing programs launched by companies the consumer's acceptance and attitude towards functional food products may be negatively influenced. We assumed that consumers will have a negative perception towards functional foods. This tendency can hamper the development of new functional food market.

While, involvement level is perceived as level of perceived personal importance, feeling of interest, enthusiasm, familiarity, normative, commitment, excitement about product specific that is evoked by a stimulus within a specific situation (Solomon, 1996; Bloch and Richins, 1986; Freedman, 1964; Howard and Sheth, 1969, Lastovicka and Gardner, 1979).

Depending on the importance of the product, significant risk, emotional appeal and norm identification, the consumer involvement can be classified i.e. low, medium or high involved consumers). In this study, attitude and involvement level of prospected consumers towards functional food were investigated. The results will be then used as prominent platforms for developing the other marketing concepts.

Communication is a core in the marketing program and it can play different roles determining the product success. The important purpose of the communication is to contribute to brand equity (Keller, 1998). Communication is a media that helps to position the product image in the consumers' mind. Communication can put something in consumers' mind or change consumer's attitude or get consumer into a buying action. It is a bridge that connects between product and consumer and it is a means by which it can establish dialog and build relationship with consumers. Through communication marketer can be seeking a cognitive, affective or behavioral response from the target consumers. Researcher have been argued that understanding target consumers' perception, attitude and inherent knowledge level is required as basis for set up appropriate, efficient and interesting communication messages. Communication message can be established through emphasizing what the targeted consumer want to reach and what response they want (Kotler, 1994). Consumers will hear the messages that fit into their belief system. Communication effects are greatest where the message is in line with the existing opinions, beliefs, and dispositions of the consumers (receivers) (Fiske and Hartley, 1980 in Kotler 1995). In the food and beverage market, basically, we can observe that, communication platform for food and beverage products follows the one usually used for the commodities. In this case consumers are assumed to have low involvement towards all products. Most of consumers buy a product without comparing actively all available brands or product alternatives and without making a long process of decision making (inertia). They just pick a familiar brand or make a decision based on trial and error principal. Therefore communication of these products is usually simpler and more animated, which suitable for passive learning consumers. It has little opportunity for reflection or making connection, and it often deals with unimportant matter (Assael, 1995). Further, apparently, for currently marketed foods and beverage products the main communication messages often relate to emotional or affective issues such as taste, freshness, great pleasure or enjoyment, and newness. Due to the fact that functional foods have clear distinctive comparisons over the conventional foods, therefore, consequently, we can further argue that communication strategy is a prevalent marketing tool. Through communicating the unique features and benefits a firm can position a functional food differently from conventional food products. In this study we aimed to find out idea concerned with communication messages suitable in general for functional food from the view of consumers.

Consumers' psychological set is not only important as a basis argument for establishing product communication, but it is also useful to be used as a platform for segmenting the products. Our above mentioned assumptive preposition stated that consumers of functional food have a wide variation in term of their behavior, personal characteristic and value with regards to the healthy life style and prevention measures. Therefore, we further assumed that market segmentation is relevant for a functional food, because it will give an opportunity for a firm to base its strategy on a more relevant and prospective segment and to allocate more efficiently their resources and capability on focused target segment. In the case of functional food, when a firm want cover a mass market as they usually do to market conventional foods it seems that a substantial financial resources is required especially for improving or upgrading people's awareness and acceptance. According to its capacity and capability a firm may cover segment which is large enough to bring an optimal turn over. Marketing theory has emphasized that the traditional segmentation model, which bases on consumers' social-, economical and demographical-characteristics such as age, income,

gender, location, often fails to perform an optional return on investment because, apparently, consumers can not be easily segmented based on those profiles. Non-demographic segmentation, which is based on people's need-want, perception, and value, may serve as a good basis for marketing strategy (Yankelovich and Meer, 2006). Reynolds (2006) argued that essentially focusing on the potential "need-and-want hot buttons" is most likely to be successful for product extension development and new product development. Understanding consumers' need, value, and behavior associated with the product can help the marketer to develop segments around brand loyalty, price-sensitive, or feature-sensitive respondents (Feldman, 2006). Understanding the different market structure and different characteristics of functional food, therefore in this study we assumed that segmentation plays important role for the success of marketing of a functional food. This study is aimed also to find out and propose a segmentation model required for marketing of a functional food especially in the Indonesian market.

Although communication and segmentation are considered as the most central issues for marketing strategy, intrinsic and extrinsic product profiles also contribute significantly to the success of marketing of a product. Intrinsic (such as taste, color, texture, appearance, quality) and extrinsic profiles (such as packaging, brand name, name of producer, price, labeling) are relevant for differentiating a product from their competitors and for defining the unique selling proposition of the product. Apparently, these factors are attributed as indicators for general product quality. Consequently, intrinsic and extrinsic quality cues can be used as one possible communication themes, depending on the consumers' attention, interest, awareness and desire towards the product. Since continuous and consistence communication messages or called product-positioning will occupied the consumers' top of mind, therefore, it will help the consumer to easily recognize the product and finally it will influent consumer's buying decision. Considering the importance of intrinsic and extrinsic quality cues, in this study we intended to identify the consumers' perception regarding the importance of intrinsic and extrinsic elements related to buying decision of functional food products.

### **3. Objectives**

Understanding the past and current development of functional foods and beverages in Indonesia this study was designed to investigate the following research objectives:

- finding out the consumers' attitude towards functional food concept,
- investigating marketing elements (intrinsic and extrinsic quality cues, possible communication message and segmentation) importance for influencing consumers' buying decision of functional food and,
- understanding marketing management elements important for developing innovative functional food from the view of the industry (firms).

### **4. Data and methodology**

In order to accomplish the research objectives, this study's framework was designed, which consists of a combination of an exploratory and a descriptive research. We conducted a consumers' study using an in-depth personal interview method. This field study was being conducted in Indonesia (Jakarta and its surroundings) starting in October 2002 and was finished in September 2003. Jakarta was selected, because it represents a rapidly developing city where the market for such functional products is widely open up.

Respondents were recruited based on a judgmental sampling method, which selects certain respondents according to the presumable representation of the population of interest (target segment) (Dillon et al., 1994). In general, the inclusive criteria for selecting respondents were as follows:

- Persons with ages of 16 years and older.
- Persons, who are living in the selected region.
- Persons, who have selected diseases such as CHD, hypertriglyceridemia, obesity, medical care providers and a healthy group.

In recruiting respondents we used a priory segmentation method, which targets respondents prior to the study by establishing the following groups (A) patients with coronary heart disease (confirmed by angiography, PTCA, bypass operation or myocardial infarction. (B) patients with high serum triglyceride level (all hypertriglyceridemic patients with plasma triglyceride levels of > 200 mg/dl- or according to the NCEP (National Cholesterol Education Program ATP II guideline), with or without the metabolic syndrome. (C) patients with obesity (according to the ITFO (International Task Force on Obesity) guideline, overweight and obese patients is defined when the patients have BMI (Body Mass Index) more than 30 kg/m<sup>2</sup>) with or without other metabolic diseases. (D) medical experts, including Physicians (Internists, Cardiologists and General Practitioners), Nutritionists, and Pharmacists, and (E) healthy persons as controls. Groups of patients were selected as respondents in order to represent a direct target group for functional foods and to represent motivated consumers, who are dealing directly with the diseases and are aware of food-diseases relation and who have direct access to the scientific information. A Healthy person group as control represents unmotivated consumer, it was our initial assumption, who are less aware of disease prevention and healthy diet patterns. In this study we intended to compare these two groups of consumer especially in term of their attitude toward functional foods and to compare their response toward product innovation. Medical experts were also included in this study, because of their important role in passing through the scientific and product information and in influencing the patients' diet pattern. Respondents were interviewed by using a prepared questionnaire. A total number of recruited respondents were 237.

Attributes and beliefs evaluation necessary for attitude evaluation was measured according to the Fishbein model. It was further confirmed by the five scale model of Likert's attitude measurement technique. Functional food attributes necessary for the attitude measurement were evaluated and determined prior to the study by using the full rank method of attributes selection, thus providing a basis for finding out and presenting fairly all of the important attributes (which included positive and negative characteristics) of functional foods to the respondents. In order to evaluate the correlation between attitude and intention to buy we used a non-parametric correlation analysis of Kendall-Tau-b and Spearman-Rho. Involvement level was determined by measuring certain indicators such as (1) people's intention to search for information (2) type and number of sources of information usually used and (3) quality of information usually collected. Involvement level towards functional foods was measured using a theoretical construct model presented by some authors (Assael, 1995). People's motivation level towards healthy life style and disease prevention was measured by using some life style parameters such as (1) sport activity, (2) healthy food and supplement consumption, (3) vegetarian behavior.

Factor analysis was used in order to find out some important new factors, which could be extracted from collected multi-attributes of functional foods. The new factors found by factor analysis would then be useful to determine further the communication concept of a functional food. Further, using a multivariate regression model all new factors were analyzed in order to obtain information regarding the importance of each factors for influencing the buying behavior. Cluster analysis using K-means clustering was used in order to segment the market of functional food.

In order to understand the internal and external elements important for a firm or company in developing functional food products, opinions of the selected managers responsible for product launching in some food companies (such as Business Development Manager, Marketing Manager, Research and Development Manager, Product Manager) were collected. The company study was focused on the evaluation of success and risk factors when launching a new food product. We have done in-depth interviews with some managers and staff using a guided questionnaire. The main theme declared in the questionnaire was concerned with the evaluation of success and risk factors in developing and launching a new product. It was designed in accordance with Standard Performance Measures from Cooper and Cooper (1984), Kleinschmidt and Cooper (1991), Weiss et al., (1994), and the Risk Evaluation List from Keizer et al., (2002) and self modification. A total of 11 managers from two companies were interviewed. The selected companies had different or opposite profiles in terms of size, organizational and managerial capability and culture.

## **5. Results**

### **5.1 Consumers' psychological set**

Although both attitude models are using different and separate questioning techniques and different measurement scoring the final calculation of both methods showed a quite identical result of measuring consumer's attitude. The mean value of the Likert model indicated that people's overall attitude toward functional food was close to the quite positive value (mean value of 3.6) and the Fishbein analysis agreed (see FIGURE 01 and 02). In spite of aggressive and negative marketing campaign concerned with the health claims for food and beverage products done in the past, consumers apparently still displayed a positive feeling, desire and perceptual tendencies towards functional food products. They learned to evaluate functional foods in a consistently favorable way. The Fishbein attitude evaluation basically measures a person's perception regarding the importance of all possible attributes of an object and a person's belief in that object. This model showed that people have a positive perception towards the attributes of functional foods, but that their belief was inadequate. The respondents are in favor of the health features of functional foods, but they, apparently, did not have an adequate belief that such food and beverage products can perform those health benefits. The low belief in benefits of the product was as result of an aggressive misleading and elusive health campaign done in the past. As the belief in a product is a key success factor determining future consumption behavior, therefore in the future industry needs to improve the image of the functional food concept through empowering people's belief. Improving people's belief will give a positive impact on attitude and finally on intentional buying behavior. The healthy control group showed the lowest attitude score as compared to the other groups. The attitude of healthy people in this group was varying. Most of the healthy respondents had a lower level of awareness of the necessity of prevention than participants of the patient groups. The correlation analysis showed that there is a pertinent relationship between attitude and people's intention to buy in a medium scale (Table 01). People with a positive attitude tend to consume functional food better than people with a negative attitude.

The other findings concerned with consumers' psychological factors such as involvement level showed that quite a number of respondents had a medium to high involvement toward functional foods. Only 3% of the Indonesian respondents showed to have a low involvement (FIGURE 03). This finding indicates that most of the respondents paid attention toward product information and that they spent some time to search for, process, evaluate, and learn the product profiles. The above-mentioned discussion allows us to accept our previously stated hypothesis of this study, which mentions that the involvement



level towards functional foods was medium to high and that it is different from the involvement level towards conventional foods, which is usually perceived as low. The consequence of this finding for a firm is that product information and communication will be beneficial for the consumers' buying decision process.

Moreover, this study argued that respondents, who have a higher motivation, tend to have a better knowledge level concerning health aspects as compared to respondents with a lower motivation level. This study showed that the actual and perceived knowledge level was relatively good, but that product class familiarity was low. In general, the before mentioned group had a more positive attitude towards different attributes that can possibly be offered by functional foods. For marketing purposes this finding suggests that people vary in term of their psychological set towards functional food. Patients groups have a higher motivation level, a more positive attitude and a higher knowledge level than healthy young respondents. Consequently, this group is supposed to have a higher readiness to consume functional food. For a firm, this segment is an adequately potent target group of consumers for such functional foods, because they already have positive behavior foundation such as knowledge, motivation, attitude and perception important for determining product acceptance.

## **5.2 Marketing elements important for the buying decision of functional foods (from the viewpoint of consumers)**

Product profile is one of the important elements in a marketing mix. Especially for functional food and beverage products both intrinsic and extrinsic elements contribute significantly to the influence on consumers' acceptance. In general, product quality can be represented by both intrinsic and extrinsic features. Examples of extrinsic profiles of functional food importance to be mentioned are labeling, brand name, packaging size and outlook, and price. In this study we intended to evaluate whether some of these elements provide equal or different roles for influencing consumers' buying decision. We did not intend to compare the role of each element. According to the respondents quality and safety guarantees provided by the manufacturer and the presence of a logo or a label as proof of quality from external institutions were the most important profile items determining the buying decision (positive correlation coefficients of 0.300 and 0.107 respectively). The Indonesian respondents perceived that brand name and company name as the second most important extrinsic profile item of functional food. This study confirmed that product quality and safety are the most important issue determining consumers' trust. Consumers can easily recognize the product quality through brand name and company name. The consumers' demand for product quality guarantee is mainly due to the negative perception and low confidence in food quality control measures currently implemented by the government. People do not see that there is any significant and serious improvement in the government's or food authority's engagement with regard to food quality assurance and control. Therefore, it is not surprising that many food scandals are now emerging there in the public such as the use of formalin and borax (sodium borate) as a preservative components and the use of prohibited coloring materials such as Rhodamin for some traditional food products. A low level of sanitary and quality control of traditional foods contributes to decreasing people's confidence and trust in food and beverage products. Thus, this development is a challenge for local, regional wide-, and home-made- food companies, because they are asked to improve and establish a high quality image in order to maintain their position and to win the consumers' trust. While international food companies, which are perceived to have high sanitary standard and adequate quality assurance measurement will have a better opportunity to market new functional food products through the company's name umbrella-branding. Taste is another one of the important elements for functional food. We did a trade off analysis by asking the respondents about the importance

of the health claim versus the taste. They argued that although, a product may have important health effects but it will no longer be attractive (32.9% of total respondents) or may be not attractive (52.7%) when its taste is marginal. Therefore, we further assumed that taste, quality, safety and efficacy are the most importance intrinsic elements of functional foods, while, labeling, company name, brand name are importance extrinsic features. For the marketing process this finding can offer some ideas how to position a functional food product in the Indonesian market. Possibly, these are also some issues which consumers want to hear about from the industry.

In the previous section this study has identified a medium to high involvement level of respondents towards functional foods. Consumers pay much attention to product information. It is different with the involvement level toward conventional food products, which is suggested to be low. In order to make a buying decision in favor of such functional foods products, the consumers went through a medium intensity high buying decision process. They needed more products' information in order to perform an intensive attribute evaluation and for establishing a positive motivation, belief and attitude toward the object. Finally this will direct the buying decision. These findings confirm the importance of the communication strategy within the whole marketing process of functional foods. Factor analysis of several attributes of functional foods has identified 9 new factors of the communication messages appropriate for a functional food according to the respondents' opinion. In general we have classified two major communication themes in relation to the functional foods attributes: (1) affective components, which cover all communicative messages emphasizing the emotional aspects of consumers, such as feeling, passion, fear, happiness etc. (2) cognitive components, which cover all logical reasons for buying or consuming a product. The affective components cover two major issues (a) internal usage consequences, which cover all emotional factors, resulting from the functional consequence of having used or consumed a functional food product. Examples of this are the feeling of satiety (feeling full), feeling good, and looking good (cosmetic feeling) and (b) immediate intrinsic association, which includes other emotional factors resulting from the intrinsic features of functional food, such as confidence of outlook (resulting from good product appearances), confidence of efficacy (resulting from product effectiveness in performing the health claim), confidence of safety (resulting from product assurance of minimal or no side effects), confidence of usage (resulting from the presence of guarantee of quality and appropriate applications). The cognitive components are covering two main other issues (a) health benefits sought (relating to all health benefits offered by the functional food product). The health benefit sought can be divided into two parts based on the length of the product reaction time to achieve the health claim, i.e. (a1) short term effects, such as achieving expected nutritive the expected nutritive value, improving health and fitness, improving the body's defense mechanisms etc., and (a2) long term effects, such as lowering the risk of disease, prevention of disease, treatment of disease and reduction of the cost of drugs, and (b) non-health benefits sought. This relates to all other aspects beyond the offered health aspects, which are perceived as product features important for influencing consumers' belief. The non-health benefits include many other cognitive components such as (b1) providing a natural base of foods, (b2) convenience of usage including features, which offer ease of handling of the product (easy pouring or opening, easy packaging design for keeping purposes, easy disposing of, (b3) freedom of choice, presenting functional food in a variety of end products, (b4) potency and efficacy, the product offering a strong effectiveness regarding the health claim (as potent as a drug), (b5) fast onset of action, performing health benefits in a short period of time.

For a new product launching, the cognitive components seem to be more important to be emphasized in the communication message rather than the affective components. According to our multiple regression analysis the affective components did not successfully

influence the intentional buying behavior. In the first launching period of a functional food product it appears that the affective components would fail to build the consumers' belief toward the product. They could not clearly explain and convince the consumers to what extent, the product can solve what the consumer tries to get done. The cognitive components seem to be more appropriate for convincing the consumer to intentionally make a choice decision. This finding confirms the existing theories, i.e. consumer-response stage models or response-hierarchy-models such as ``Hierarchy-of-Effects``, ``Innovation-Adoption``, ``Communication`` and ``AIDA model``. All of these models assume that consumers pass through a cognitive, affective and then behavioral stage, in that order (Kotler, 1994). In these models a cognitive stage leads to the establishment of attention, awareness, reception and knowledge level towards an object.

The result of the cluster analysis indicated that segmenting the market of functional foods is still beneficial. Cluster analysis has confirmed that there were some specific differences in the consumers' characteristics among different clusters. The consumers with a high intentional buying behavior can be separately defined from groups of consumers with medium or low buying intention. Each cluster has a certain consistent bundle of characteristics, which is totally different from alternative clusters. Segmentation can still be considered as an efficient method in selecting a target consumer group and focusing the promotion for a product. However, our findings suggest that the marketers can not base their segmentation solely on the basis of the traditional segmentation methods, such as geographic location and demographic factors, socioeconomic, psychological and organizational, because those factors did not form the cluster in a consistent manner. As a consequence of this result we would like to suggest another way of segmentation, i.e. based on consumers' perspectives and not based on consumers' characteristics.

We called this segmentation method ``Instrument-Value (I-V) Segmentation``. ``Instrument`` means that a product is being seen as a tool or a stuff that helps the consumer's job to be done. While ``Value`` refers to the relative importance of a product perceived by the consumers. Therefore, the ``Instrument-Value Segmentation Model`` is based on the product as an instrument and on how the consumers value the product. This I-V segmentation emphasizes the necessity to regard the consumers' perceived value of a product or service. It concentrates more on what consumers really do with their product. This covers all cognitive and affective demands. A certain segment can consist of some consumer characteristics such as differences in age (young or old), different education levels and family status etc., but all groups of consumers may have ``the same job to be done`` (Christensen and Raynor, 2003). The advantage of using the I-V Segmentation Method is that the firm can cover prospective consumers with broad characteristics, who have the same way of thinking about the value of the product. The I-V Segmentation Method will avoid being misled by determining sets of consumers' characteristics, especially, when those characteristics are complex. However, if the usage of this I-V segmentation covers too large a market segment, which the firm cannot afford to reach, then hybrid segmentation can be selected. A hybrid segmentation model combines I-V segmentation with other segmentation model using one or two factors related to demographic, geographic, socio-economic profiles with the purpose to limit market coverage. Depending on its capability and goals the firm can decide how broad they want to cover the market. This study suggests the following relationship between a firm's capability and resources and the range of market coverage (see FIGURE 06).

To enter a small and limited market segment can be considered as an appropriate strategy, especially when the firm has only limited financial and non-financial resources, because -in our opinion- entering a large market requires big resources. Without enough support it would be inefficient. For functional food products, segmenting a product to patients, who

can value the product' health benefit, is an example of a narrow but reasonable segmentation strategy. In other cases, e.g. when a firm has higher (moderate) financial resource, covering a larger target market will make much more sense. Based on our I-V segmentation model, a firm can target its functional food to consumers, who have high level of risk factors of certain related diseases. This segmentation can be further developed based on the firm's capability. The final stage will be reached, when plenty of financial capabilities and resources are available. In that situation covering a very huge segment like all healthy people- including those who are unaware of a healthy life style- may be possible. In this last segmentation model the firm is assumed to be willing and ready to invest into changing people's awareness, perception, attitude and acceptance towards a healthy life style, disease prevention measures as a prerequisite for their acceptance of functional food products (see FIGURE 06).

### **5.3. Marketing management elements important for developing innovative functional foods (from the view of industry or firms)**

The result of an in-depth interview with managers and staff working at the selected companies showed that, although the two recruited companies had quite different profiles especially in terms of size, organizational and managerial capabilities, they were in agreement with regards to analyzing important factors for developing and launching new functional food products. Company A represents a small to medium sized company, which has the main business in the food market. Company B represents a big enterprise, which has a wide business interest, such as in the food market, pharmaceutical market, packaging materials, distribution, etc. They perceived that organizational and management problems are the most important internal factors, while market attractiveness and trade capability were the important external elements. In our study organizational and managerial issues consisted of for examples of the following themes: cooperation, team work spirit, leadership and communication and motivation within team members in the development process of new product, collaboration and cooperation with other departments, support from top management, effective sales force to support newly launched product. Market attractiveness covers issues such as degree of competition, number of competitors, size and growth of the market, impact of launching of innovation towards market and company, the consumers' loyalty towards competitor products, timing of product launching, reaction of competitors towards new coming innovative products. Trade capability means trade (wholesaler, retailer) readiness to absorb, sell or distribute new product, company power vs. trade power issue, coverage profile of distributor, financial capability of trade, managerial and man power of trade, procurement management of distributors or retailers.

## **6. Final remarks**

The result of attitude analysis showed that most of the respondents are actually still in favor with the health features possibly can be offered by a functional food, but, apparently they did not have an adequate belief in the efficacy of related health effect supposed to be performed by a functional food. People with a medium and high motivation (patients groups) tend to have a more positive attitude and higher motivation level than the young and healthy control group. However, an adequate number of respondents tend to have a medium to high involvement towards functional foods. These two findings indicate that the prospected consumers of functional food vary in term of their psychological factors especially attitude and motivation. The finding regarding respondent's involvement level enable us to further suggest that basically, a comprehensive product communication program is important for the marketing of a functional food in order to satisfy the needs on information requested by the medium to high consumer group. Based on the collected

consumer' opinions the two major communication themes suitable in general for a functional food can be classified, i.e. (1) affective components, which cover all communicative messages emphasizing the emotional aspects of consumers, such as feeling, passion, fear, happiness etc. (2) cognitive components, which cover all logic reasons for buying or consuming a product. The finding regarding variations in term of people's psychological set suggest that new product introducing can be efficiently achieved through an appropriate market segmentation strategy. Cluster analysis has confirmed the presence of some specific differences in the consumers' characteristics performed by different clusters. This study suggests segmenting the market based on the consumers' perspectives and not based on consumers' characteristics. This study proposed using the "Instrument-Value" (I-V) Segmentation model for the marketing a functional food. This model offers possibility that a firm targets its prospected consumers based on the similarity of the consumer's ways of thinking towards a product. With this model a firm can segment the market based on how the consumers value the product and how the product as instrument can fulfill the consumer's demand and need (and how the product can finish the consumer's job to be done). Moreover, it emphasizes the necessity to regard the consumers' perceived value of a product or service and concentrates more on what consumers really do with their product. Concerning the quality profiles of functional food important for a buying decision process, this study found that taste, quality, safety and efficacy are the most important intrinsic elements of functional foods. While, labeling, company name, brand name are the important extrinsic features. This finding suggests that intrinsic and extrinsic quality based profiles offer some benefits that are relevant for setting up a communication and position strategy for a functional food product. From the point of view of industry to develop a functional food a firm may require adequate organizational and management capabilities. Moreover, the success of marketing of an innovative functional food will also depend on the market attractiveness and the trade capability.

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## Tables

TABLE 01. Correlation of attitude and intention to buy

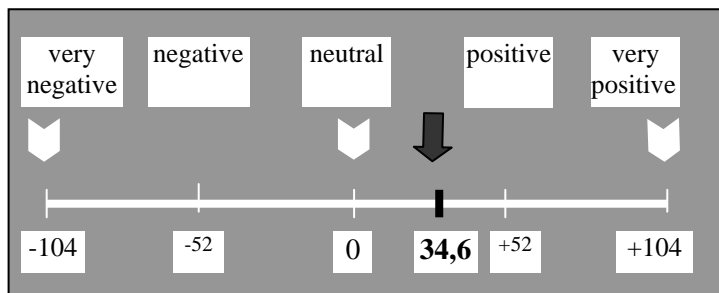
Correlation method	Attitude measurement	Correlation coefficients	Intention to buy
Kendall's tau_b	Fishbein's scale	Correlation Coefficient	.248(**)
		Sig. (2-tailed)	.000
	Likert's scale	Correlation Coefficient	.219(**)
		Sig. (2-tailed)	.000
Spearman's rho	Fishbein's scale	Correlation Coefficient	.309(**)
		Sig. (2-tailed)	.000
	Likert's scale	Correlation Coefficient	.239(**)
		Sig. (2-tailed)	.000
		N	237

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Model re

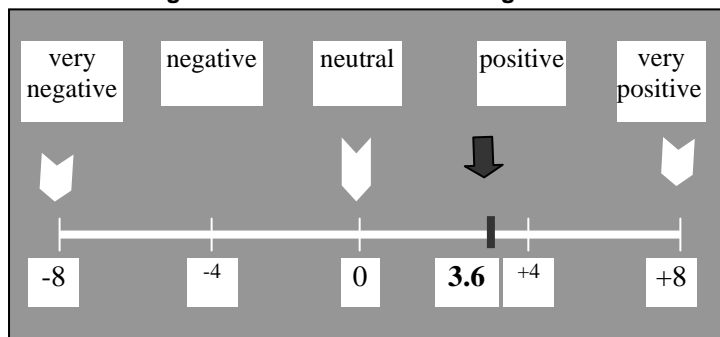
## Graphs and Diagrams

Figure 01. The mean value using the Fishbein model



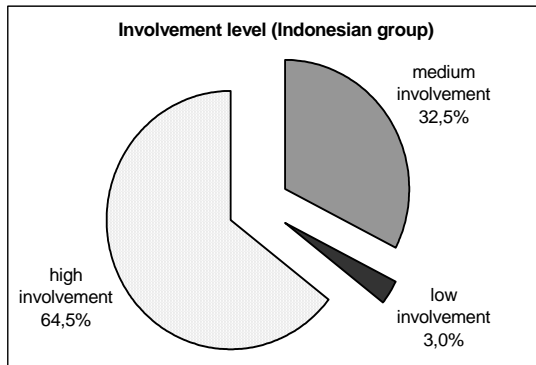
Source: Model result

Figure 02. The mean value using the Likert model

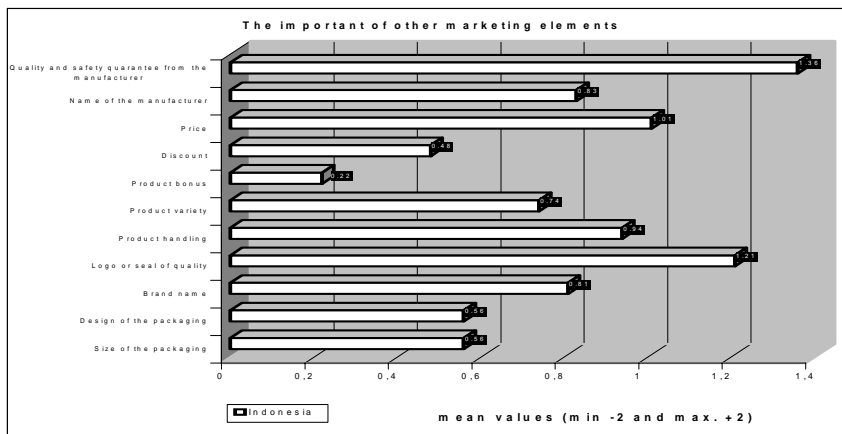


Source: Model result

**FIGURE 03. Respondent involvement level towards functional food**



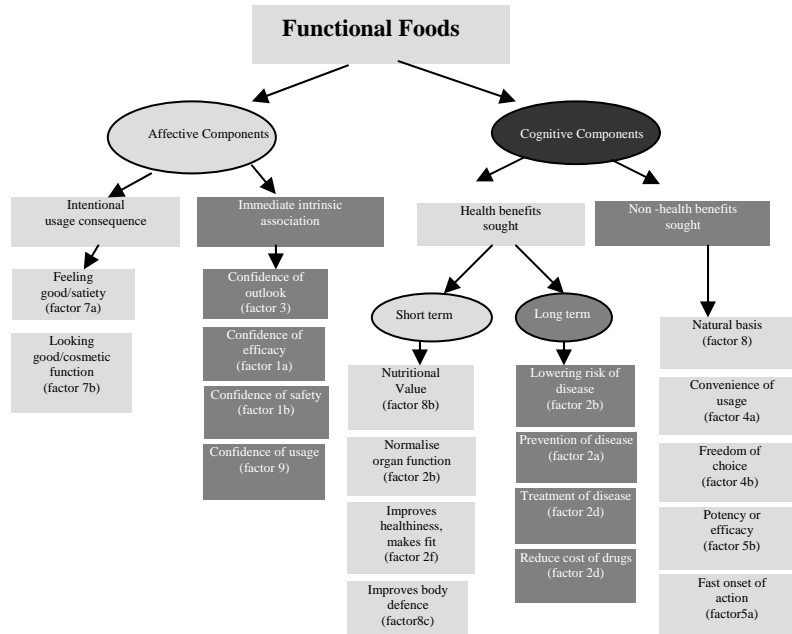
**FIGURE 04. The importance of other marketing elements**



Source: Author's field study

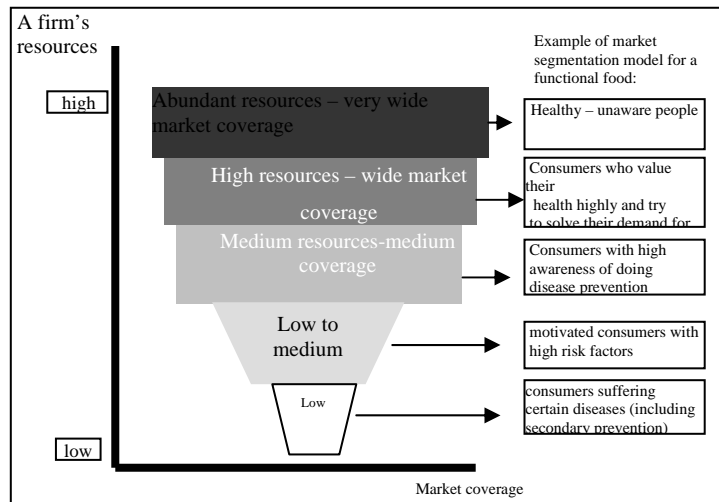


**Figure 05. Communication Messages for functional foods**



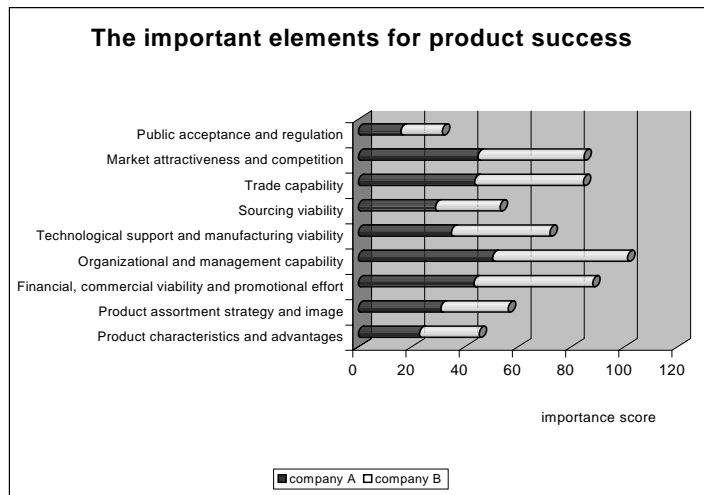
Source: Author's presentation

**Figure 06. Segmentation model for functional foods**



Source: Model result

**FIGURE 07. Important elements for defining the success of new product development**



Source: Author's field study

### **Contact information**

Jofi Puspa  
Department of Agricultural Economics  
Chair of Food Economics and Marketing Management  
Justus Liebig University  
Senckenbergstrasse 3 Giessen  
35390 Germany

Phone. no.: +49-641-9927378  
Fax no.: +49 – 641-9927379  
Email: jofipuspa@yahoo.de