

A Conceptual Framework of Differentiated Food Consumption: The Case of northern Greece

Evangelia Karamani

Department of Agricultural Economics, School of Agriculture Aristotle University of Thessaloniki,
54124Thessaloniki,Greece

Tel:+3(0)2324084095

Email:ekaramani@agro.auth.gr

Eleftherios Alamanos

Newcastle University Business School, Newcastle University
Newcastle Upon Tyne, UK NE1 4SE, United Kingdom

Tel: +44 (0) 191 208 1555

Email: eleftherios.alamanos@ncl.ac.uk

Eirini Tzimitra Kalogianni

Department of Agricultural Economics, School of Agriculture Aristotle University of Thessaloniki,
541 24 Thessaloniki, Greece

Tel: +3(0)2310 998818

Email:tzim@agro.auth.gr

Karamani,Alamanos,Kalogianni

Abstract

The study introduces a conceptual framework explaining consumer behaviour towards differentiated food (natural/traditional, organic, functional, and luxury foods). A sample of 400 participant drawn from Thessaloniki, northern Greece, was used in the study. The result of a regression analysis showed that health consciousness, environmental consciousness, consumer attitudes to exploring new tastes, quality, and consumers' eating habits influence consumer behaviour. The antecedents of consumer behaviour can inform food related policies developed by stakeholders involved in the supply chains of differentiated products.

Keywords: consumer behaviour, differentiated foods, multiple regression, Greece

1. INTRODUCTION

The evolution of technological innovation in the food industry to produce and launch new products onto the market is driven by consumers' preferences for quality foods, new flavours, and healthy eating (Ronteltap et al., 2007). Such consumer preferences are the motivating factors recognized by food manufacturers to meet the needs of consumers and the success of the product in the market (Keisidou et al., 2011; Jongen and Meulenber, 2005; Kock, 2011). In recent years, consumers have played an important role in setting parameters for the production of innovative food products. The modern way of life as influenced by technological developments and social media has greatly shifted the food market and led consumers to adopt differentiated food products (Chountalas et al., 2009).

The aim of this research is to create a conceptual framework that clarifies the reasons why consumers are turning to the market for differentiated food products. The conceptual framework is tested on four types of differentiated products, namely, i) organic food ii) functional food, iii) traditional and finally, iv) luxury food. These food categories are treated (considered) as "differentiated" food categories because they contain the concept of innovation (CEC, 1997). Innovative processes in the food sector range from manufacturing new products, new composition of products (new types of preservation, additives and flavours), improved/new forms of packaging (with consumer information), marketing and administrative processes to facilitate production (Nielsen, 2008). Innovative marketing is of particular interest in the food and beverage industry (Pacheco, 2017) as it provides improvement in product packaging and facilitates communication with businesses and consumers of the product. They can also play a key role in product development processes, which are driven by customer demand. Previous studies have suggested that consumers' preferences (consumers' attitude) for different types of food vary, and are mostly influenced by factors such as economic, health, environmental and social factors (e.g. air pollution, biodiversity reduction), as well as food safety management systems (Capitano et al., 2009). The following sections discuss the four food categories included in this study and explain the innovative characteristics that characterize them as differentiated foods, the main factors influencing their consumption, the methodology and the results of the study, as well as the main theoretical and practical implications.

2. LITERATURE REVIEW

There is increasing interest in food safety and health training among young adults, with a focus on food quality and sustainability (Byrd-Bredbenner et al., 2007). This shift in the quality of the food and sustainability is not due to a successful marketing strategy but based on a healthy lifestyle (Deshpande et al., 2009). This has led to the production of new products which represent a new fashion – a trend that emphasizes the lifestyle of consumers daily, thus meeting these new consumer needs (Donskova et al., 2019). Due to the new possibilities of facilitating the management of food security, the provision of healthier food, improving efficiency and greater environmental sustainability, technological advancement in the food industry has now attracted the attention of stakeholders in the food supply chain, traders, the media, and policy makers (Baourakis et al., 2011). The sections below present a review of the relevant literature, which informs the analysis of the factors influencing the consumption of natural / traditional, organic, functional, and luxury foods.

2.1 Natural - Traditional Foods

While today's society is faced with industrialization and globalization in agriculture, food safety is now a global issue. This is because food processing and consumption standards differ, and this has the potential of causing significant nutritional diseases that may lead to serious illnesses due to inadequate processed foods reaching the final consumers (Bamgboje-Ayodele et al., 2019). With growing consumer demand for natural/traditional foods, these foods have been modernized with innovative features to withstand fierce competition within the food industry and to meet the current consumer trends (Fagerberg & Mowery, 2005). Traditional foods are associated with a specific geographical origin (region, local area), specifically prepared and consumed seasonally or on special occasions, with strong beliefs about their nutritional characteristics passed from generation to generation (Boncinelli et al., 2019). Also known for their high quality, hygiene standards, and consumption over the years, these foods are part of the culture, tradition, and identity of a local area (Ferguson et al., 2017; Silvestri et al., 2019).

Innovations involving traditional food products are accepted by consumers providing that they add tangible benefits, improve safety and health, and do not affect the traditional character of the products even from different backgrounds and cultures (Guerrero et al., 2009). In addition, cost can be a determining factor for the acceptance of innovation (Ronteltap et al., 2007). Traditional Italian Cheese

such as Gorgonzola, Parmigiano-Reggiano and Mozzarella di Bufala have undergone modernization over time but still retain their traditional identity and culture (Di Monaco et al., 2005). In order to support the production of quality traditional foods, special attention is paid to the promotion and protection of traditional products within the European Union (European Regulation 1151/2012) by attributing labels such as Protected Designation of Origin (PDO) and Protected Geographical Indications (PGI). Protected Geographical Indications (PGI) is a means of certifying a product derived from a specific region or locality, where the quality, reputation or other essential characteristics of the product are attributable to its geographical origin (Chinedu et al., 2017). In other words, it is an instrument used to identify products associated with their origin. Typical examples are Mediterranean products (Lepellere et al., 2019), which are produced from the Mediterranean countries and are associated with the Mediterranean diet. Although these products have no specific geographical origin, they have, however, shaped the way of life (culture) of the people in the Mediterranean over time. According to the European Union's database (DOOR, 2018), countries of Southern Europe (Italy, France, Spain, Portugal and Greece) have the most registered PDO and/or PGI products; with fruits, vegetables, cereals and cheese the most frequently entered foods in terms of quality systems.

2.2 Organic Foods

Food produced without the use of fertilizers, pesticides, synthetic hormones, and artificial colours are referred to as organic foods (Fotopoulos, 1996). Organic foods may be considered as differentiated products as they have special characteristics in terms of reputation and image, design features, reliability, and quality compared to their conventional counterparts (Sashi & Stern, 1995; Mtimet et al., 2020). Organic farming emphasizes cultivation practices requiring locally applied systems, thus promoting the wellbeing of the agricultural ecosystem, including biodiversity, biological cycles, and soil biological activity.

According to Guerrero et al. (2009), food innovation refers to a new product resulting from the modification of its ingredients, preparation, and packaging. The IFOAM-Organics International (TIPI) Technology Innovation Platform is aimed at promoting innovation in organic farming and the production of organic food through research and development (Arbenz et al., 2015). As a global platform for research and innovation, TIPI has identified three strategies for developing innovation: (1) developing research methods suitable for organic food and farming systems; (2) Renewal of partnerships between farmers, farm consultants, scientists, and consumers; and (3) integration of the technological, social, and ecological dimensions of innovation. Organic products are labelled 'Organic' in line with EU Regulation 2092/91. When an organic farm has been operating for less than two years, labelling on the product is indicated as "Organic Agriculture Products in a Transitional Stage". Also, labelling must indicate the organization from which the control has come at any stage of the production process.

Studies suggest that consumers of organic food are young women with young children, with a high educational and income level (Schifferstein & Oude Ophuist, 1998; Cicia et al., 2002). Although younger consumers tend to have a more positive attitude towards organic food, older consumers can afford the cost of organic products and are more likely to buy these organic products, which are expensive for the younger consumers (Magnusson et al., 2001). Studies have shown that when it comes to having children, pregnant women frequently consume organic food as a desirable choice for their babies and families, which ultimately impacts on family eating habits as they start consuming organic products (Samolińska et al., 2017; Przybyłowicz & Kalinowska, 2011). In the present study, the pregnant women were ready to accept the higher expenses related to the purchase of organic food.

Organic foods are generally welcomed as they are considered to be more nutritious, healthier, safer, and environmentally friendly. Previous studies have shown that consumers are more likely to pay more for the superior quality and taste of organic food, as well as for their certified "safety" by regulatory bodies, such as the National Medical Product Administration (NMPA) in China and the U.S Food and Drug Administration (FDA) (Chen & Lobo, 2012). Several studies have investigated the motivations for buying organic foods, with the main motivating factors being health, the environment, food safety and animal welfare, desire to support the local economy and a healthy lifestyle, nostalgia for the past, and the pursuit of fashion (Mondelaers et al., 2009; Teng & Wang, 2015). Health and the environment have been the leading factors impacting food choices in recent years (Rana & Paul, 2017). This has also increased farmers' interest in producing and supplying organic food to the market in response to the increasing consumer demand due to the positive impact on health (de Boer et al, 2009).

2.3 Functional Foods

Although no universally accepted definition of functional foods exists in the literature, functional foods include a variety of ingredients that are natural or enriched and are believed to improve the

overall health and well-being, reduce the risk of certain diseases or minimize the effects of other health concerns (Keservani et al., 2010). In addition to their natural elements, these foods are usually supplemented with nutrients such as vitamins, minerals, probiotics, omega 3, sterols, etc, and hence are referred to as "Nutritional Therapies" by health and nutrition scientists (Lobo et al., 2010). For the food to be able to undergo further additions, there has to be an innovation process. An innovation process refers to a new process during production that will improve product quality and speed the production process while reducing production costs for better financial capabilities for the business (Dobni, 2010; Feigl & Menrad, 2008).

The reasons for people buying and consuming functional foods are numerous and complex, thus it is becoming one of the most interesting areas of research and innovation in the food industry (Pappalardo & Lusk, 2016). Although the findings are mixed and contradictory, the acceptance of functional foods is closely related to consumer confidence in the overall health benefit or perceived reward of consumption; hence, understanding consumer perceptions, attitudes, and purchasing behaviour in relation to functional foods is very important (Keller & Siegrist, 2015; Grunert et al., 2010; Annunziata et al., 2015).

Due to the huge variations of functional foods across Central and Northern European countries, accepting and consuming functional foods is lower in these countries compared to Mediterranean countries, where consumption is not widespread; this has a huge impact on the European market for functional foods (van Trijp & van der Lans, 2007). The global food market of functional food, which has been stagnant in recent years due to economic recession, has now experienced rapid growth over the last decade. Addressing the shift of consumers to foods that offer wellness and health can bring financial benefits to food companies if they are able to convince consumers that consuming functional foods will contribute in the long run to reducing their health care costs and will improve their overall health (Karelakis et al., 2019).

2.4 Luxury Foods

Consumption of luxury foods is associated with the purchase motives. Some individuals tend to purchase luxury foods to impress others, a perception that is strongly influenced by a favourable social image (Tsai, 2005). For this reason, luxury product marketing programs do not put much emphasis on the nutritional benefits of these products, but on their importance as symbols of status.

Innovation is also promoted by the fierce competition in the food industry, both on the part of producers and on the part of retailers (Hartmann et al., 2017). In this case, innovation is more on research and development costs and the ability to create new products in the lab. Even so, those costs remain additional to the innovative and commercial success in the marketing of the product.

It is worth noting that only approximately 3% of all newly introduced food products can be considered truly innovative, as innovation can also be found in companies constituting product ingredients, packaging etc. (European Commission, 2014).

3. HYPOTHESIS DEVELOPMENT

Taking into account the discussion presented in the previous sections, the present study aims to: identify the most important factors affecting the shift in consumer choice in the adoption of differentiated foods (natural / traditional foods, organic foods, functional foods and finally -sugars) versus conventional food; investigate the effect of health awareness on consumer attitudes toward differentiated foods; explore the impact of environmental concerns on consumer attitudes toward differentiated foods; study the attitude of consumers to exploring new flavours; investigate the impact of quality, and consumer eating habits. The following sections introduce the hypotheses of the study presented in Figure 1.

3.1 Health Consciousness

Health consciousness is the tendency of a person to focus on health, which is reflected in his responsible choices based on health. In other words, it is the willingness of an individual to demonstrate appropriate compliance behaviour for their personal health (Frash et al., 2015; Yan-Hwa et al., 2000). Health Consciousness has been recognized as one of the primary motivators in the consumption of healthy foods, such as local traditional foods and organic foods (Frash et al., 2015; Kim et al., 2009). Health consciousness serves as a tool for assessing willingness to take health actions (Becker et al., 1977). Health-conscious consumers are both aware of and concerned about their state of well-being and are motivated to improve and/or maintain their health and quality of life, while also preventing ill health by adopting healthy behaviours and being conscious of their health (Gould, 1988; Plank & Gould, 2008; Rupert & Katie, 2012). Such individuals tend to be strongly aware of and

occupied with nutrition and physical fitness (Rupert & Katie, 2012). This discussion leads to the following hypothesis:

H1. Health consciousness will positively affect the frequency of purchase of differentiated foods.

3.2 Environmental Consciousness

Environmental consciousness is the awareness that the environment is in a deplorable state, with depleted natural resources and pollution attributable to human activity and the willingness to protect the environment from harmful human activities (Ali & Kumar, 2011). In this era of global warming, green products are considered eco-friendly, non-toxic, recyclable, made up of organic constituents and substances having a positive effect on human beings, and thus can reduce the environmental deterioration. As consumers prefer green products from popular and recognized firms, green products are becoming global market leaders day by day with increasing demand (Suki, 2013; Wahid & Rahbor, 2011). Consumers also tend to have the right attitude and are responsive to the environmental movement. Due to the changes in consumer behaviour resulting from environmental awareness and intentions to do better in terms of ecology, all the eco-friendlier products are being launched to the market (Shruti, 2014). A study conducted by Law et al. (2017) indicated that environmental consciousness and environmental knowledge could cause positive changes in environmental attitudes and further affect green consumption and purchasing behaviour. Similarly, an international green survey revealed that individual environmental consciousness, green attitude, and green consumption were positively correlated. This study also pointed out that environmental consciousness could nurture the real green consumers. As a result, consumers with a deeper environmental knowledge and consciousness could more easily demonstrate positive green attitudes, which would then bring about market competition arising from green consumption behaviour (Chen, Chan, & Wei, 2015; Law et al., 2017) Hence, we hypothesize that:

H2. Environmental consciousness will positively affect the frequency of purchase of differentiated foods.

3.3 New flavours

The stronger the competition between food production industries, the greater the demand for food differentiation by consumers (Guiltinan, 1993). The flavour of foods at times of intense competition plays a decisive role (Philip, 1994). Therefore, the higher the standards of consumers searching for new flavours, the more likely it is for a product to be a commercial success on the market (Nijssen, 1999).

The demand for processed foods that are modified to reduce their calorie content (sugar, salt, etc.) has been increasing in recent years (Stieger & Van de Velde, 2013). A higher nutrient density is found in unprocessed or moderately processed foods than in highly processed foods (van Dongen, 2012). This function is performed by taste, an important regulator of nutrient intake and determinant of consumers' choice of the product they intend to purchase, irrespective of the nutritional contribution of the product (van Langeveld et al., 2017). Hence, we suggest that:

H3. Consumers' attitudes to exploring new flavours will have a positive effect on the purchase of differentiated foods.

3.4 Quality

The term quality, both in food and elsewhere, has had many different definitions assigned to it (see the 1995 special issue of Food Quality and Preference for a broad range of proposals). It is generally agreed that there is both an objective and subjective dimension to quality. Objective quality refers to the physical characteristics built into the product and is typically the dimension that is dealt with by engineers and food technologists. Subjective quality is quality as perceived by consumers. The relationship between the two is at the core of the economic importance of quality: only when producers will be able to translate consumer desires into physical product characteristics, and when consumers will be able to draw desired qualities from the way the product has been built, will quality be a competitive parameter for food producers.

Food quality is one of the most important factors influencing consumer behaviour (Grunert, 2005; Miglietta & Morrone, 2018). The goal in the food industry is to create loyal customers that will make repeated food purchases; this is at the expense of quality (Sulek & Hensley, 2004). Due to the lack of consumer satisfaction resulting from the food industry not being able to provide quality food to consumers with a perceived quality of food and services, there is a shift that negatively impacts on the repurchase intentions of consumers (Joseph & Taylor, 1992). Today, consumers set different parameters in food demand with increasing demand for differentiated foods (natural, traditional,

organic, functional and luxury food) (Grunert & Wills, 2007). The discussion leads to the following hypothesis:

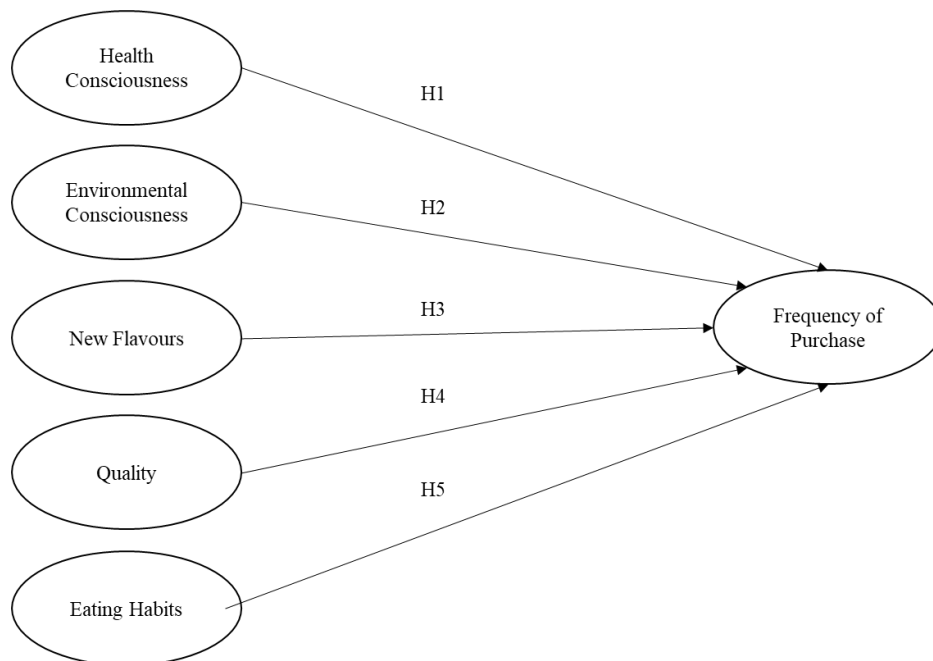
H4. The quality of differentiated foods will have a positive effect on the frequency of purchase.

3.5 Eating Habits

Eating habits are a key factor in global public health interventions. This helps reduce obesity and encourage consumers to incorporate more healthy foods in their diet such as fruits and vegetables. Although limited success has been recorded, healthy eating habit can be achieved through educational campaigns and advertising healthy foods and eating habits (National Health Service, 2018, 2019). Through campaigns and health information, people are informed about what is seen as unsuitable or wholesome to eat. Living in a society with these norms, Lupton (1996) suggests that some people choose their food from a health perspective and not primarily in accordance with what they like. The results suggest that ‘heavy’ or ‘stodgy’ food was considered unhealthy and ‘light’ food healthy. Foods rich in fat were considered unhealthy, especially if the fat was visible. Consumers also play a significant role in improving eating habits and ultimately improving overall health (Vladas et al., 2012; WHO, 2004; Walsh, 2014). Hence, we hypothesize that:

H5. Consumers' eating habits will positively influence the frequency of purchase of differentiated foods.

Figure 1: Conceptual Framework



4. METHODOLOGY

The study is based on primary data and adopted a mixed methods approach (both qualitative and quantitative). The first stage (qualitative) involved a series of focus groups to investigate the opinions of consumers about differentiated foods (Kitzinger, 1995). This was achieved using 50 Open Type Questions and 4 demographic questions. Five people participated in each of the three focus groups. The aim of the interviews was to inform the design of the questionnaire for the quantitative stage of the study. The questionnaire consisted of four parts, accessing: a) Knowledge (subjective) of differentiated food. b) Consumption of differentiated food c) Reasons for consumption /non- consumption of differentiated food d) socio-demographic questions.

The quantitative data were analysed using the IBM SPSS statistics, version 22. Multiple regression was performed for each food category to identify the antecedents influencing purchase intention for each category (natural/traditional, organic, functional, and luxury food).

4.1 Measurement development

The quantitative research questionnaire consisted of a set of questions for each category: natural-traditional foods, organic foods, functional foods and finally luxury foods. Snail consumption has been

known since antiquity and snails have been consumed by millions of people worldwide (S. JESS, 1995). Snails, which are a delicacy for connoisseurs, are in high demand in many countries in Europe and America, and have been shown to have several advantages over other meats due to their high economic value, they are considered luxury food, they have low caloric content and are suitable for people who pay attention to their diet (Milinsk et al., 2003). In the category of luxury food, we focused on snails because, snails are a food of high nutritional and economic value that do not have enough research data. With the data, we include snails as a representative food of the luxury food category. Dependent variables included the frequency of purchase of natural traditional foods, organic foods, functional foods, and luxury foods. The independent variables in this study (health consciousness, environmental consciousness, new flavours, quality of product and eating habits) were measured with a Likert Scale of five categories (I totally agree, I agree, neutral, I disagree, I strongly disagree). The mean scores of the responses were calculated and used to determine the attitude of the respondents using the scale.

4.2 Sample selection and data collection

Data collection for the quantitative part of study was carried out via a consumer survey. A non-probability quota sampling approach was followed to recruit the respondents, leading to 400 responses. The selection of respondents was carried out in two stages. In the first stage, non-probability quota sampling (Daoutopoulos, 2005) was applied, with proportional distribution of the sample among the Municipalities of the urban complex of Thessaloniki. Each Municipality was considered as one layer. In the second stage, non-probability quota sampling was applied in each Municipality to reflect the demographic characteristics of the residents within it. Respondents were selected by stopping consumers at sale points (mall interception technique) (Gelperowic & Beharrell, 1994).

5. RESULTS

Most respondents were male (65.4%), 36-45 years old (27.8%), held a postgraduate degree (41.5%), and were married (47.3%) without children (60.5%). In addition, most participants were working in the public sector (47.3%) and earned between 1001-1500 euros / month (26.3%).

Table 1: Knowledge of differentiated foods

| | Mean | Std. Deviation |
|--------------------------------|------|----------------|
| Natural / traditional products | 2.75 | 0.468 |
| Organic food | 2.89 | 0.332 |
| Functional food | 2.08 | 0.867 |
| Luxury food | 2.09 | 0.993 |

Answers given by participants are ranked from 1 to 3 (1-No, 2-Not sure, 3-Yes). Increase in the average rate implies an increase in the knowledge of the respective category of innovative foods.

The result from Table 1 above shows variation in the knowledge of differentiated food. A greater quantity of participants know what organic food is (2.89), followed by natural / traditional products (2.75). The result also shows that snails as a luxury food is known by few (2.09) as well as functional foods (2.08).

Table 2: Intentions of purchase of differentiated foods

| | Mean | Std. Deviation |
|--------------------------------|------|----------------|
| Natural / traditional products | 3.38 | 0.963 |
| Organic food | 2.81 | 1.068 |
| Functional food | 2.13 | 1.090 |
| Luxury food | 1.44 | 0.747 |

Answers given by participants are ranked from 1 to 5 (1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Very often). Increase in the mean rate is reflective of an increase in the purchase frequency of each product.

The result from Table 2 shows that, among the differentiated foods, the intention of purchase of natural/traditional products ranked the highest (3.38), followed by organic food (2.81), and rarely functional food (2.13) and luxury food (snails) (1.4).

Table 3: Regression analysis of independent and dependent variables purchase frequency of: natural/ traditional foods, organic foods, functional foods, and luxury foods

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------------------------|--------------------|----------|-------------------|----------------------------|
| Natural / traditional products | 0.656 _a | 0.430 | 0.412 | 0.738 |
| Organic food | 0.687 _a | 0.471 | 0.454 | 0.789 |
| Functional food | 0.593 _a | 0.352 | 0.324 | 0.875 |
| Luxury food | 0.472 _a | 0.222 | 0.198 | 0.889 |

Multiple regression analysis to identify the most important factors that affect the consumption of differentiated foods.

The result from Table 3 shows organic food has the highest coefficient of multiple correlation (R = 0.687) compared to the other food categories. Hence, organic food has the most representative sample between the predictions and the result. This is followed by natural traditional foods, functional foods, and luxury foods.

Table 4. Natural /traditional products

| Coefficients ^a | | | | | | |
|---------------------------|--|-----------------------------|------------|---------------------------|--------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -0.388 | 0.352 | | -1.103 | 0.271 |
| | Are healthier | 0.239 | 0.079 | 0.166 | 3.029 | 0.003 |
| | Are made with pure ingredients without chemical additives | -0.155 | 0.069 | -0.119 | -2.232 | 0.026 |
| | I really enjoy buying various products | 0.132 | 0.056 | 0.114 | 2.359 | 0.019 |
| | They taste and smell good | 0.054 | 0.061 | 0.040 | 0.881 | 0.379 |
| | They are part of my eating habit | 0.481 | 0.056 | 0.430 | 8.614 | 0.000 |
| | I prefer to choose the best | 0.140 | 0.069 | 0.116 | 2.024 | 0.044 |
| | They are products with great nutritional value | 0.096 | 0.071 | 0.078 | 1.354 | 0.176 |
| | I enjoy buying new products | -0.117 | 0.052 | -0.111 | -2.275 | 0.023 |
| | I spend enough on quality for my diet | 0.082 | 0.052 | 0.078 | 1.570 | 0.117 |
| | I take the price into consideration when buying food products | 0.029 | 0.048 | 0.026 | 0.606 | 0.545 |
| | Packaging maintains freshness in the product | -0.007 | 0.052 | -0.006 | -0.135 | 0.892 |
| | I believe that different types of food offer different tasting experiences | 0.071 | 0.056 | 0.058 | 1.265 | 0.207 |

a. Dependent Variable: Natural/traditional products

The result from the regression analysis (Table 4) for natural traditional foods shows that consumer eating habits and health consciousness (they are healthier) are the factors that mostly influence consumer preferences when purchasing natural / traditional foods.

Table. 5 Organic food

| Coefficients ^a | | | | | | |
|----------------------------------|--|-----------------------------|------------|---------------------------|--------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -0.388 | 0.352 | | -1.103 | 0.271 |
| | Are healthier | 0.239 | 0.079 | 0.166 | 3.029 | 0.003 |
| | Are made with pure ingredients without chemical additives | -0.155 | 0.069 | -0.119 | -2.232 | 0.026 |
| | I really enjoy buying various products | 0.132 | 0.056 | 0.114 | 2.359 | 0.019 |
| | They taste and smell good | 0.054 | 0.061 | 0.040 | 0.881 | 0.379 |
| | They are part of my eating habits | 0.481 | 0.056 | 0.430 | 8.614 | 0.000 |
| | I prefer to choose the best | 0.140 | 0.069 | 0.116 | 2.024 | 0.044 |
| | They are products with great nutritional value | 0.096 | 0.071 | 0.078 | 1.354 | 0.176 |
| | I enjoy buying new products | -0.117 | 0.052 | -0.111 | -2.275 | 0.023 |
| | I spend enough on quality for my diet | 0.082 | 0.052 | 0.078 | 1.570 | 0.117 |
| | I take the price into consideration when buying food products | 0.029 | 0.048 | 0.026 | 0.606 | 0.545 |
| | Packaging maintains freshness in the product | -0.007 | 0.052 | -0.006 | -0.135 | 0.892 |
| | I believe that different types of food offer different tasting experiences | 0.071 | 0.056 | 0.058 | 1.265 | 0.207 |
| | I believe that different types of food offer different tasting experiences | 0.031 | 0.066 | 0.025 | 0.479 | 0.632 |
| Dependent Variable: Organic food | | | | | | |

Result from the regression analysis (Table 5) for organic food shows that consumer eating habits and health consciousness (they are healthier) are the factors that most influence consumer preferences when purchasing organic food, just like natural/traditional foods.

Table 6. Functional Food

| Coefficients ^a | | | | | | |
|---------------------------|---|-----------------------------|------------|---------------------------|--------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -0.388 | 0.352 | | -1.117 | 0.265 |
| | Are healthier | 0.239 | 0.079 | 0.166 | 3.900 | 0.000 |
| | Are made with pure ingredients without chemical additives | -0.155 | 0.069 | -0.119 | -4.548 | 0.000 |
| | I really enjoy buying various products | 0.132 | 0.056 | 0.114 | 2.101 | 0.036 |
| | They taste and smell good | 0.054 | 0.061 | 0.040 | -1.182 | 0.238 |
| | They are part of my eating habits | 0.481 | 0.056 | 0.430 | 3.883 | 0.000 |
| | I prefer to choose the best | 0.140 | 0.069 | 0.116 | 1.089 | 0.277 |
| | They are products with great nutritional value | 0.096 | 0.071 | 0.078 | 2.218 | 0.027 |
| | I enjoy buying new | -0.117 | 0.052 | -0.111 | 0.744 | 0.458 |

| | | | | | |
|--|--------|-------|--------|--------|-------|
| products | | | | | |
| I spend enough on quality for my diet | 0.082 | 0.052 | 0.078 | -2.338 | 0.020 |
| I take the price into consideration when buying food products | 0.029 | 0.048 | 0.026 | 1.601 | 0.110 |
| Packaging maintains freshness in the product | -0.007 | 0.052 | -0.006 | 3.163 | 0.002 |
| I believe that different types of food offer different tasting experiences | 0.071 | 0.056 | 0.058 | 1.307 | 0.192 |
| I believe that different types of food offer different tasting experiences | 0.031 | 0.066 | 0.025 | -0.633 | 0.527 |

a. Dependent Variable: Functional Food

The result from regression analysis (Table 6) for functional foods shows that health consciousness (they are healthier), followed by dietary habits of consumers are the major factors that mostly influence consumer preferences when purchasing functional foods.

Table 7. Luxury foods

| Coefficients ^a | | | | | | |
|---------------------------|---|-----------------------------|------------|---------------------------|--------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.376 | 0.251 | | 5.474 | 0.000 |
| | Are healthier | 0.063 | 0.094 | 0.050 | 0.671 | 0.503 |
| | Are made with pure ingredients without chemical additives | 0.238 | 0.122 | 0.187 | 1.949 | 0.052 |
| | I really enjoy buying various products | 0.348 | 0.101 | 0.297 | 3.449 | 0.001 |
| | They taste and smell good | -0.260 | 0.077 | -0.217 | -3.384 | 0.001 |
| | They are part of my eating habits | -0.386 | 0.083 | -0.267 | -4.623 | 0.000 |
| | I prefer to choose the best | -0.106 | 0.111 | -0.084 | -0.958 | 0.338 |
| | They are products with great nutritional value | 0.289 | 0.111 | 0.239 | 2.605 | 0.010 |
| | I enjoy buying new products | -0.225 | 0.127 | -0.161 | -1.772 | 0.077 |
| | I spend enough on quality for my diet | -0.025 | 0.094 | -0.019 | -0.266 | 0.790 |

| | | | | | |
|--|-------|-------|-------|-------|-------|
| I take the price into consideration when buying food products | 0.066 | 0.090 | 0.053 | 0.731 | 0.465 |
| Packaging maintains freshness in the product | 0.053 | 0.103 | 0.038 | 0.516 | 0.606 |
| I believe that different types of food offer different tasting experiences | 0.110 | 0.112 | 0.089 | 0.984 | 0.326 |
| a. Dependent Variable: Luxury foods | | | | | |

The result of regression analysis (Table 7) for luxury foods shows that new flavours (they have a nice taste and aroma) followed by health consciousness (they are healthier) are the major factors that mostly influence consumer preferences when purchasing luxury foods.

In summary, the initial hypotheses about differentiated foods have been confirmed by the results above, and this shows that health awareness, environmental awareness, consumer attitudes to exploring new flavours, the effect of quality and eating habits of consumers significantly influenced consumer behaviour.

6. DISCUSSION

The results of this study show that consumers have developed a healthy consumption pattern that emphasizes food quality, environmental awareness, and good eating habits with the intention of exploring new flavours. We therefore find that the hypotheses that were initially made are in line with the results of the present research. They are influenced by common factors.

The present study shows that the demand for organic food has been increasing in recent years (Table. 5). This study reports that health consciousness is the highest contributor to consumer purchase choice of organic food (Table.5). Knowledge of organic food (Table.1) is also high in this study. The findings from this study are consistent with the result of Anisimova. (2016), who reports that personal attitude and health awareness (consciousness) are the most important factors that influence consumer organic food purchase intention (Dimitri et al., 2017). This shows that when there is a positive consumer attitude toward organic brands, the level of organic product purchase of consumers will increase likewise (Mohd, 2016).

The rapid growth of the luxury market has created reasonable academic research interest in the consumption of luxury products. Previous studies which have tried to answer this question have reported multiple motivators for being involved in luxury-seeking behaviours. Although there is a dearth in the literature for the chosen luxury food in this study, findings from this study nevertheless corroborate previous studies which observed that material needs, dietary requirements, personal reasons, and social identity significantly influenced consumers' luxury seeking behaviour (Lee & Hwang, 2010; Truong, 2010; Amaldoss & Jain, 2005).

7. CONCLUSION

The main theoretical contribution of this study is the development of a conceptual framework that explains the consumption of differentiated food. Results demonstrated that the four multiple regressions were all significant in the context of differentiated food. Specifically, the consumption of differentiated food is influenced by health consciousness, new flavours, environmental consciousness, quality and eating habits. This study shows the reasons why consumers buy differentiated food, so the food industry can direct its efforts. Consumers are health conscious, which is the main reason for choosing differentiated food aiming for future health benefits. Furthermore, the findings of this survey show that consumers are now aware of the environment and have developed both an environmental and ecological consciousness, which is indicated by their choice of environmentally friendly products. Furthermore, it was found that the increase in the frequency of purchase of differentiated food is

directly linked to the desire of consumers to explore new flavours, as well as the tendency to consume quality food. Lastly, it is concluded that the eating habits of consumers are one of the most important factors influencing the frequency with which they purchase differentiated food.

This study also contributes to the creation of the consumer profile of this new category of foods and reveals the reasons why consumers buy differentiated food or hesitate to do so. This study also reports that different factors influence consumers' behaviour when it comes to purchasing a differentiated food, a piece of information that is valuable to food producing companies.

The study has practical implications for the professionals involved in the production of differentiated foods. Companies producing differentiated foods should seriously take into account the five aforementioned factors affecting the purchasing frequency of this type of food. Specifically, quality-foods should be created to provide long-term health benefits to consumers who choose differentiated foods. It would also be good for food companies to emphasize the new tasting experiences that differentiated food could potentially offer as consumers might be willing to explore new flavours. Finally, differentiated food manufacturers can enhance the environmental awareness of their potential customers by focusing on environmental sustainability in their messages when they communicate with them.

In addition, the results of the present research should be taken equally seriously into account by the competent policymakers, in order to formulate a corresponding information campaign for the benefits of differentiated foods. Specifically, they can organize training seminars delivered by food experts or by relevant government agencies to enhance the health consciousness of consumers, which could subsequently lead to frequent purchases of differentiated foods. Also, initiatives can be designed by relevant policy stakeholders to enhance the environmental awareness of consumers and highlight the contribution that differentiated foods have in this area. Finally, food regulators should develop a rigorous process of testing the quality and sustainability of differentiated food to reassure consumers about the quality of such products. Hence, food quality assurance systems must be created to ensure the quality of foods and the safety of products reaching consumers. Furthermore, thorough standardization and packaging systems must be created to keep the nutrients contained in differentiated foods intact, thus ensuring that they provide consumers with future health benefits, while also maintaining their authentic original flavour. These standardization and packaging systems can lead to the creation of environmentally friendly packages with recyclable materials to further enhance the environmental consciousness of consumers. By placing the necessary emphasis on the aforementioned systems (quality assurance systems and standardization and packaging systems), it will be possible – with the help of the supply chain (Papagiannidis et al., 2019) – to get differentiated foods to supermarket shelves more easily, thus making it easier for consumers to integrate differentiated foods into their daily diet and eventually to make them part of their daily eating habits.

However, the study has some limitations. Specifically, it has focused on specific parameters affecting the frequency of purchase of differentiated food. Similar surveys may be conducted subsequently on a larger sample and on different types of foods with a new, more extensive conceptual framework that will include more parameters. This could facilitate the exploitation of the true needs of consumers for new foods, while also helping the food production industry gain a better understanding of the new needs of contemporary consumers.

REFERENCES

- Ali, J., & Kumar, S. (2011). Information and communication technologies (ICTs) and farmers' decision-making across the agricultural supply chain. *International Journal of Information Management*, 31(2), 149–159. <https://doi.org/10.1016/j.ijinfomgt.2010.07.008>
- Amaldoss, W., & Jain, S. (2005). Pricing of conspicuous goods: A competitive analysis of social effects. In *Journal of Marketing Research*. <https://doi.org/10.1509/jmkr.42.1.30.56883>
- Anisimova, T. (2016). Integrating Multiple Factors Affecting Consumer Behavior Toward Organic Foods: The Role of Healthism, Hedonism, and Trust in Consumer Purchase Intentions of Organic Foods. *Journal of Food Products Marketing*, 22(7), 809–823. <https://doi.org/10.1080/10454446.2015.1121429>
- Annunziata, A., Vecchio, R., & Kraus, A. (2015). Awareness and preference for functional foods: The perspective of older Italian consumers. *International Journal of Consumer Studies*, 39(4), 352–361. <https://doi.org/10.1111/ijcs.12202>
- Bamgboje-Ayodele, A., Ellis, L., & Turner, P. (2019). Developing a Framework for Understanding and Enhancing Consumers' Safe Food Management Behaviors—A Literature Review. *Journal of Agricultural and Food Information*. <https://doi.org/10.1080/10496505.2019.1610659>

- Boncinelli, F., Dominici, A., Gerini, F., & Marone, E. (2019). Consumers wine preferences according to purchase occasion: Personal consumption and gift-giving. *Food Quality and Preference*, 71(July 2018), 270–278. <https://doi.org/10.1016/j.foodqual.2018.07.013>
- Brunner, T. A., van der Horst, K., & Siegrist, M. (2010). Convenience food products. Drivers for consumption. *Appetite*, 55(3), 498–506. <https://doi.org/10.1016/j.appet.2010.08.017>
- Bu, O. B., & Go, A. S. (2008). Perceived trustworthiness of online shops. *Journal of Consumer Behaviour*, 50(October), 35–50. <https://doi.org/10.1002/cb>
- Capitanio, F., Coppola, A., & Pascucci, S. (2009). Indications for drivers of innovation in the food sector. *British Food Journal*, 111(8), 820–838. <https://doi.org/10.1108/00070700910980946>
- Chen, J., & Lobo, A. (2012). Organic food products in China: determinants of consumers' purchase intentions. *International Review of Retail, Distribution and Consumer Research*, 22(3), 293–314. <https://doi.org/10.1080/09593969.2012.682596>
- Chountalas, P., Tsarouchas, D., & Lagodimos, A. (2009). Standardized food safety management: The case of industrial yoghurt. *British Food Journal*, 111(9), 897–914. <https://doi.org/10.1108/00070700910992835>
- Churchill A.G., 1995. (n.d.). *Marketing Research:Methodological Foubdations*. The Dryden Press
Harcourt Brace College.
- Daoutopoulos. (2005). *Social research methodology.Thessaloniki:zygos*
- Dobni, B. C. (2010). Achieving synergy between strategy and innovation: The key to value creation. *International Journal of Business Science and Applied Management*, 5(1), 48–58.
- Feigl, S., & Menrad, P. K. (2008). Innovation activities in the food industry in selected European countries Project report “ Traditional United Food Europe ” (TRUEFOOD) WP 7 . 5 : Traditional products and the economic impact of innovation. *Methodology, April*.
- Ferguson, M., Brown, C., Georga, C., Miles, E., Wilson, A., & Brimblecombe, J. (2017). Traditional food availability and consumption in remote Aboriginal communities in the Northern Territory, Australia. *Australian and New Zealand Journal of Public Health*, 41(3), 294–298. <https://doi.org/10.1111/1753-6405.12664>
- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics 2* (5th ed.).
- Fotopoulos, C. (1996). Strategic planning for expansion of the market for organic products. *Agricoltura Mediterranea*, 12(6), 260-9.
- Gelperowic, R., & Beharrell, B. (1994). Healthy Food Products for Children: *British Food Journal*, 96(11), 4–8. <https://doi.org/10.1108/00070709410074623>
- GOULD, S. J. (1988). Consumer Attitudes Toward Health and Health Care: A Differential Perspective. *Journal of Consumer Affairs*, 22(1), 96–118. <https://doi.org/10.1111/j.1745-6606.1988.tb00215.x>
- Grunert, K. G. (2005). Food quality and safety: Consumer perception and demand. *European Review of Agricultural Economics*, 32(3), 369–391. <https://doi.org/10.1093/eurrag/jbi011>
- Grunert, K. G., & Wills, J. M. (2007). A review of European research on consumer response to nutrition information on food labels. *Journal of Public Health*, 15(5), 385–399. <https://doi.org/10.1007/s10389-007-0101-9>
- Guiltingan, J. P. (1993). A strategic framework for assessing product line additions. *The Journal of Product Innovation Management*, 10(2), 136–147. [https://doi.org/10.1016/0737-6782\(93\)90005-B](https://doi.org/10.1016/0737-6782(93)90005-B)
- Hassan, H. F., & Dimassi, H. (2014). Food safety and handling knowledge and practices of Lebanese university students. *Food Control*, 40(1), 127–133. <https://doi.org/10.1016/j.foodcont.2013.11.040>
- J. Joseph Cronin, J., & Taylo, S. A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56(6), 55–68.
- J Fagerberg, DC Mowery, R. N.-. (2005). *The Oxford handbook of innovation*.
- Karelakis, C., Zevgitis, P., Galanopoulos, K., & Mattas, K. (2019). Consumer Trends and Attitudes to Functional Foods. *Journal of International Food and Agribusiness Marketing*, 0(0), 1–29. <https://doi.org/10.1080/08974438.2019.1599760>
- Keisidou, E., Sarigiannidis, L., & Maditinos, D. (2011). Consumer characteristics and their effect on accepting online shopping, in the context of different product types. *International Journal of Business Science and Applied Management*, 6(2), 31–51.

- Keller, C., & Siegrist, M. (2015). Does personality influence eating styles and food choices? Direct and indirect effects. *Appetite*, *84*, 128–138. <https://doi.org/10.1016/j.appet.2014.10.003>
- Keservani, R. K., Kesharwani, R. K., Vyas, N., Jain, S., Raghuvanshi, R., & Sharma, A. K. (2010). Nutraceutical and Functional Food As Future Food: A Review. *Der Pharmacia Lettre*, *2*(1), 106–116.
- Kitzinger, J. (1995). Qualitative Research: Introducing focus groups. *BMJ*. <https://doi.org/10.1136/bmj.311.7000.299>
- Kock, A. B. (2011). Forecasting with Universal Approximators and a Learning Algorithm. *Journal of Time Series Econometrics*, *3*(3). <https://doi.org/10.2202/1941-1928.1084>
- Law, M. M. S., Hills, P., & Hau, B. C. H. (2017). Engaging Employees in Sustainable Development – a Case Study of Environmental Education and Awareness Training in Hong Kong. *Business Strategy and the Environment*, *26*(1), 84–97. <https://doi.org/10.1002/bse.1903>
- Lee, K., Conklin, M., Cranage, D. A., & Lee, S. (2014). The role of perceived corporate social responsibility on providing healthful foods and nutrition information with health-consciousness as a moderator. *International Journal of Hospitality Management*, *37*, 29–37. <https://doi.org/10.1016/j.ijhm.2013.10.005>
- Lepellere, M. A., Chang, T. F. M., Droli, M., & Iseppi, L. (2019). The hidden turning points of the mediterranean diet: A tool for health and agro-food policies. rating out of fifty years, and 22 countries. *New Medit*, *18*(2), 71–88. <https://doi.org/10.30682/nm1902e>
- Loizou, E., Michailidis, A., & Chatzitheodoridis, F. (2013). Investigating the drivers that influence the adoption of differentiated food products: The case of a Greek urban area. *British Food Journal*, *115*(7), 917–935. <https://doi.org/10.1108/BFJ-04-2010-0068>
- Miglietta, P. P., & Morrone, D. (2018). Quality, prices and production efficiency: An exploratory study of italian wines with appellation of origin. *New Medit*, *17*(1), 76–89. <https://doi.org/10.30682/nm1801g>
- Milinsk, M. C., Murakami, A. E., Gomes, S. T. M., Matsushita, M., & De Souza, N. E. (2003). Fatty acid profile of egg yolk lipids from hens fed diets rich in n-3 fatty acids. *Food Chemistry*, *83*(2), 287–292. [https://doi.org/10.1016/S0308-8146\(03\)00094-3](https://doi.org/10.1016/S0308-8146(03)00094-3)
- Mtimet, N., Souissi, A., & Mhamdi, N. (2020). Tunisian consumers perception and behaviour towards organic food products. *New Medit*, *19*(1), 3–18. <https://doi.org/10.30682/nm2001a>
- Mondelaers, K., Aertsens, J., & van Huylenbroeck, G. (2009). A meta-analysis of the differences in environmental impacts between organic and conventional farming. *British Food Journal*, *111*(10), 1098–1119. <https://doi.org/10.1108/00070700910992925>
- Mtimet, N., Souissi, A., & Mhamdi, N. (2020). Tunisian consumers perception and behaviour towards organic food products. *New Medit*, *19*(1), 3–18. <https://doi.org/10.30682/nm2001a>
- Nielsen, R. N. (2008). Feeding food producers with (Regional) knowledge for innovation. *Toward a Theoretical Underpinning of the Feat2015 {...}*, *13*. <http://www.business.aau.dk/wp/08-13.pdf>
- Nijssen, E. J. (1999). Success factors of line extensions of fast-moving consumer goods. *European Journal of Marketing*, *33*(5/6), 450–474. <https://doi.org/10.1108/03090569910262044>
- Pacheco, L. (2017). Investment determinants at the firm-level: The case of Portuguese industrial SMEs. *International Journal of Business Science and Applied Management*, *12*(2), 1–17.
- Papagiannidis, S., Bourlakis, M., & See-To, E. (2019). Social media in supply chains and logistics: Contemporary trends and themes. *International Journal of Business Science and Applied Management*, *14*(1), 17–34.
- Pappalardo, G., & Lusk, J. L. (2016). The role of beliefs in purchasing process of functional foods. *Food Quality and Preference*, *53*, 151–158. <https://doi.org/10.1016/j.foodqual.2016.06.009>
- Plank, R. E., & Gould, S. J. (2008). *Health Marketing Quarterly Health Consciousness, Scientific Orientation and Wellness*. *9683*(March 2015), 37–41. <https://doi.org/10.1300/J026v07n03>
- Rana, J., & Paul, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. *Journal of Retailing and Consumer Services*, *38*(June), 157–165. <https://doi.org/10.1016/j.jretconser.2017.06.004>
- Ronteltap, A., van Trijp, J. C. M., Renes, R. J., & Frewer, L. J. (2007). Consumer acceptance of technology-based food innovations: Lessons for the future of nutrigenomics. *Appetite*, *49*(1), 1–17. <https://doi.org/10.1016/j.appet.2007.02.002>

- Rupert, M., & Katie, R. (2012). Reproduced with permission of the copyright owner . Further reproduction prohibited without. *Journal of Allergy and Clinical Immunology*, 130(2), 556. <https://doi.org/10.1016/j.jaci.2012.05.050>
- Sashi, C. M., & Stern, L. W. (1995). Product differentiation and market performance in producer goods industries. *Journal of Business Research*, 33(2), 115–127. [https://doi.org/10.1016/0148-2963\(94\)00062-J](https://doi.org/10.1016/0148-2963(94)00062-J)
- Schifferstein, H. N. J., & Oude Ophuist, P. A. M. (1998). Health-Related Determinants of Organic Food Consumption in the Netherlands. *Food Quality and Preference*, 9(3), 119–133. https://ac.els-cdn.com/S095032939700044X/1-s2.0-S095032939700044X-main.pdf?_tid=769e4867-fc1c-45d4-9dc4-593ee0cbfe1a&acdnat=1526502056_201ae74167abf31888ac58efa63a52b0
- Silvestri, C., Aquilani, B., Piccarozzi, M., & Ruggieri, A. (2019). Consumer Quality Perception in Traditional Food: Parmigiano Reggiano Cheese. *Journal of International Food and Agribusiness Marketing*, 32(2), 141–167. <https://doi.org/10.1080/08974438.2019.1599754>
- Stieger, M., & Van de Velde, F. (2013). Microstructure, texture and oral processing: New ways to reduce sugar and salt in foods. *Current Opinion in Colloid and Interface Science*, 18(4), 334–348. <https://doi.org/10.1016/j.cocis.2013.04.007>
- Sulek, J. M., & Hensley, R. L. (2004). The relative importance of food, atmosphere, and fairness of wait: The case of a full-service restaurant. *Cornell Hotel and Restaurant Administration Quarterly*, 45(3), 235–247. <https://doi.org/10.1177/0010880404265345>
- Teng, C. C., & Wang, Y. M. (2015). Decisional factors driving organic food consumption: Generation of consumer purchase intentions. *British Food Journal*, 117(3), 1066–1081. <https://doi.org/10.1108/BFJ-12-2013-0361>
- van Dongen, M. V. (2012). Food characteristics and dietary intake : the role taste, eating rate and energy density. In *Doctoral Thesis* (Issue ISBN 978-94-6173-250-7).
- van Langeveld, A. W. B., Gibbons, S., Koelliker, Y., Civille, G. V., de Vries, J. H. M., de Graaf, C., & Mars, M. (2017). The relationship between taste and nutrient content in commercially available foods from the United States. *Food Quality and Preference*, 57, 1–7. <https://doi.org/10.1016/j.foodqual.2016.10.012>
- van Trijp, H. C. M., & van der Lans, I. A. (2007). Consumer perceptions of nutrition and health claims. *Appetite*, 48(3), 305–324. <https://doi.org/10.1016/j.appet.2006.09.011>
- WMF Jongen, M. M. (2005). *Innovation in agri-food systems*.