Identifying Market Strategies for Greek Specialty Products in the United States

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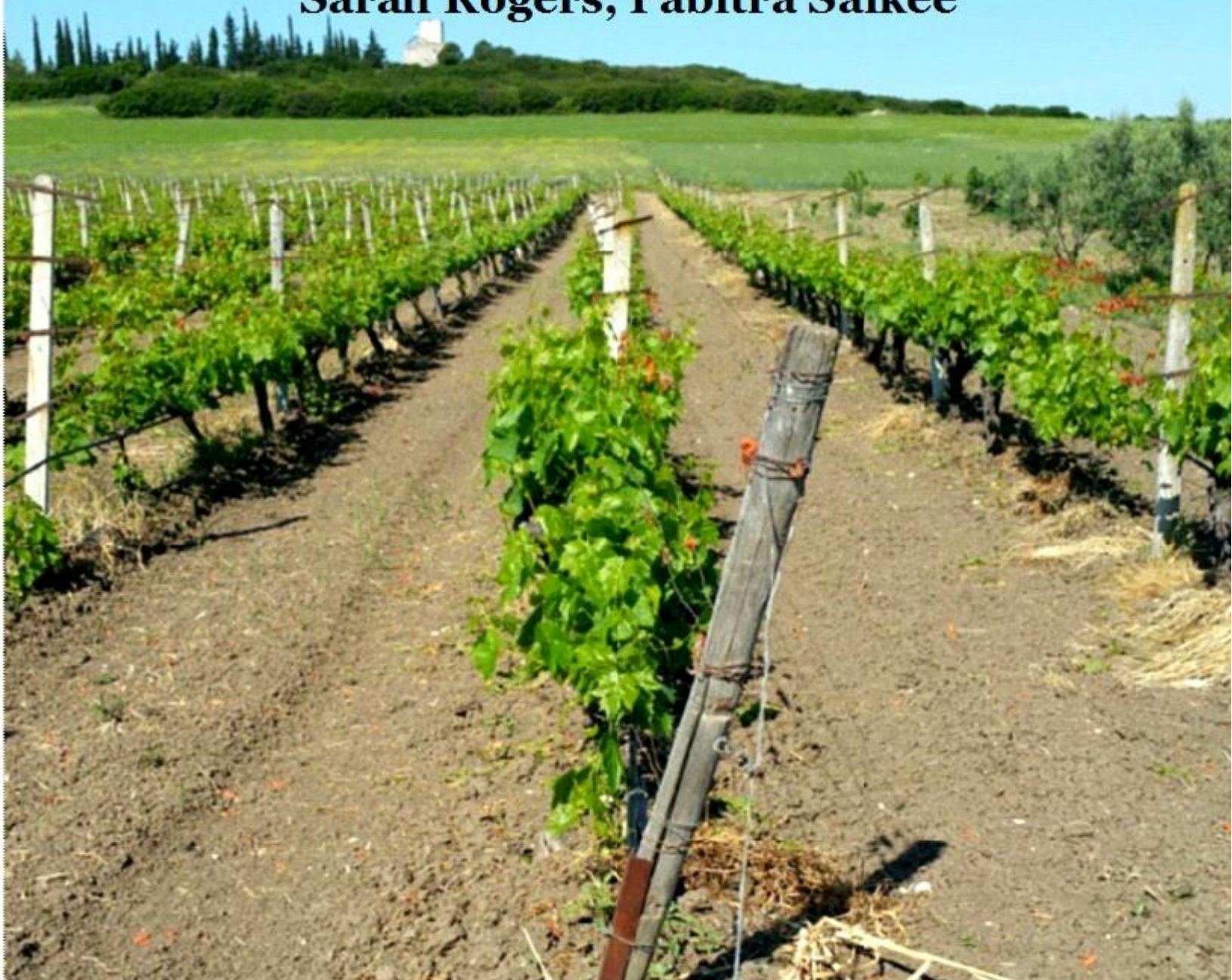

Abstract

Stagnant sales of specialty food items within the domestic market in Greece have increased the need for small-scale artisanal food businesses to seek new markets abroad. ‘Marianna’s Vineleaves,’ a small, family-owned enterprise in Thessaloniki, Greece, is one such business looking to expand its international exports of viticulture products, such as stuffed vine leaves –ntolmadakia. Through a mix method study, we assessed United States consumer preferences towards Greek specialty food products and examined existing promotional strategies, in an effort to identify key elements for a new product label directed at the United States market.

Authorship

Liliana Almonte, Tyler Leighton, Sarah Rogers, and Pabitra Saikee all contributed to the research and writing of this report. In addition to writing individual sections of this report, all members edited the paper for grammar, content, and flow as a group. The following is a breakdown of how the report was written for this project.

Liliana Almonte contributed to this paper by writing the introduction chapter, a section of the background containing consumer motivations, free listing and product descriptions on the methodology, and free listing findings. Furthermore, in collaboration with Sarah Rogers, completed the abstract and conclusion chapters. Ms. Almonte also formatted the entire paper into a single cohesive document. Along with Tyler Leighton and Pabitra Saikee, Ms. Almonte developed the WPI consumer segmentation survey in Appendix B.

Tyler Leighton contributed to this paper by writing the theories section of the background, the code book methodology, taste test survey findings and sections of the discussion. Additionally, Tyler helped edit the findings and conclusion chapters and organized the sections of the report. Along with Liliana Almonte and Pabitra Saikee, Mr. Leighton developed the WPI consumer segmentation survey in Appendix B.

Sarah Rogers contributed to this report by writing the demographic motivations section of the background, taste test methods, findings of the focus group discussions, and half of the conclusion. Sarah performed editing on all sections of the background and discussions. Additionally, Ms. Rogers formatted the taste test and consumer segmentation survey in Appendices A and B. Furthermore, in collaboration with Liliana Almonte, completed the abstract and conclusion chapter.

Pabitra Saikee was responsible for writing the consumer segmentation part of the background, sections of methodology concerning focus group, pile sorting and survey, part of the findings section relating to perceptions of specialty food product aesthetics, and half of the discussion chapter. She also edited the sections of methodology, findings and conclusion. Additionally, Ms. Saikee formatted all the citations in the report. Along with Tyler Leighton and Liliana Almonte, Ms. Saikee developed the WPI consumer segmentation survey in Appendix B.

This report represents the work of WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the projects program at WPI, please see *http://www.wpi.edu/academics/ugradstudies/project-learning.html*.

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Introduction

Assessing consumers' food choices is challenging given the large number of factors that affect purchasing decisions (Lappalainen, Kearney, & Gibney, 1998). Food consumers can be segmented according to lifestyle, a mixture of habits, conventional ways of doing things, and reasoned behavior (Nie & Zepeda, 2011). Consumer behavior is also driven by socioeconomic factors and demographics. By understanding food buying motivations, specialty food producers can classify and segment market clusters, and develop appropriate marketing strategies for a competitive advantage (Rong-Da Liang & Lim, 2011).

'Marianna's Vineleaves,' a small, family-owned enterprise in Thessaloniki, Greece, seeks to expand its exports, specifically *ntolmadakia* (stuffed vine leaves) to the United States market. Once a backyard business, Marianna's Vineleaves has developed a reputation for its quality food products throughout Thessaloniki and the northern Greece region. This family business now aspires to enter a larger market, joining the "new, rising trend" of Mediterranean cuisine, which has consistently outperformed categories such as 'ethnic food' and 'food and drinks,' is a growing sector of interest in the U.S. (Organization for Economic Co-operation and Development, 2014). As noted by Mr. Sakis Kazakis, a co-owner of Marianna's Vineleaves, successfully entering the U.S. market would be a "prestigious attainment" for the business. Nevertheless, Marianna's Vineleaves faces the challenge of not having adequate market intelligence concerning consumer preferences and competing products. *Ntolmadakia,* an existing product in the U.S., originate from different cultures and are not perceived as a unique Greek food product by U.S. consumers. By introducing their high-quality products to the US market, Marianna's Vineleaves aim to expand their reputation and their business globally.

In this paper, we assess consumer expectations of Greek specialty food products and currently employed promotional elements to guide Marianna's Vineleaves marketing strategies. This work is guided by the following four questions:

1. Do demographic variables affect food consumption behaviors?

2. Which particular motives drive consumers to purchase and consume Greek specialty food products?

3. What advertising elements regarding labeling aesthetics can attract targeted specialty food consumer segments?

4. What buzzwords would best motivate targeted food consumer segments to buy Greek specialty food products, specifically *ntolmadakia*?

Background

What motivates consumers to buy specialty foods?

Consumers are driven by numerous and varied factors when purchasing and consuming food products. Extensive research in the area of food market segmentation indicates that attitudinally based variables have far greater influence on food selection habits than socioeconomic factors, knowledge, or context (Cranfield, Henson, & Blandon, 2012). Attitude variables are identified as related to lifestyle, reflecting general and observable values and characteristics of consumers (Demby, 1974; Wells, 1975). Segmenting the food market by lifestyle is often combined with a clustering approach to identify consumers as whole persons rather than isolated fragments (Plummer, 1974). Research has identified five food-related lifestyle (FRL) clusters: adventurous, rational, careless, conservative, and uninvolved food consumers (Nie & Zepeda, 2011)

According to the FRL approach, there are five components of lifestyle that explain food-purchasing habits within these clusters: ways of shopping, quality aspects, cooking methods, consumption situations, and purchasing motives (O'Sullivan, Scholderer, & Cowan, 2005; Scholderer, Brunsø, Bredahl, & Grunert, 2004). Consumer clusters vary in their preferences with regards to these indicated lifestyle components; see Table 1. For example, the adventurous consumer values the social aspects of food, including cooking and eating with friends or family. Convenience is of little importance, while value for money, health, taste, freshness, and organically produced foods are more important, as compared to other consumer segments. One could hypothesize that these consumers are more likely to purchase specialty food products. Conservative consumers, on the other hand, are resistant to trying anything new, this is likely to include specialty food products (Lone & Bech, 2001). Conceptualizing the specialty food market in this manner, as lifestyle clusters, provides one approach to understanding the attitudes and motivations of consumers (Nie & Zepeda, 2011). In addition, it offers a scaffolding upon which to develop marketing strategies that can best target potential consumers. Cranfield, Henson and Blandon (2012) note that "attitudes rather than socioeconomic factors … make it difficult to distinguish easily consumers; [as such], we have to delve into the broader attitudes of consumers

to begin to understand the appeal … and how these attitudes must be changed if the consumption of such products is to be promoted."

Table 1. Five food-related lifestyle (FRL) consumer groups and their traits. (Lone & Bech, 2001; Wycherley, McCarthy, & Cowan, 2008)

Type of Consumer	Traits
The Adventurous Food Consumer	Greatest interest in food, including specialty foods. Enjoys eating out and with friends. Not interested in convenience. Interested in cooking, looks for new ways to cook and involve the whole family in the cooking process. Regards health, quality, taste, freshness and value for money to be important.
The Rational Food Consumer	Has planned meals and shopping. Regards product information to be important. Enjoys shopping and uses a shopping list. Enjoys meal preparation more than other segments. Not convenience oriented. Regards health, quality, taste, freshness and value for money to be important.
The Careless Food Consumer	Least interested in shopping. Little or no interest in cooking. Most emphasis on quick and easy cooking. Least likely of all segments to plan their meals and shopping in advance. Least interested in basically all food quality aspects.
The Conservative Food Consumer	Traditional in their attitudes towards cooking and shopping. Least interested in organic foods or anything new, such as specialty food. Most price conscious. Value for money is important. Carefully plans meals and shopping.
The Uninvolved Food Consumer	Uninterested in food and anything food related such as shopping, eating specialty food etc. Attach little importance to quality, taste, price and freshness when purchasing food. Least interested in cooking. Emphasize on quick and easy cooking. Don't plan their meals.

Although "ambiguous" (Cranfield et al., 2012) in their role in influencing food choices, research indicates that socioeconomic factors such as age, gender, income, and regional background should still be considered. A survey study of 137 males in the United States National Guard conducted by Tepper and colleagues (1997), examined the effect of socioeconomic or demographic variables on selected food choice, as well as restrained eating, nutrition knowledge, and beliefs about selected foods. The findings indicated a negative correlation between age and

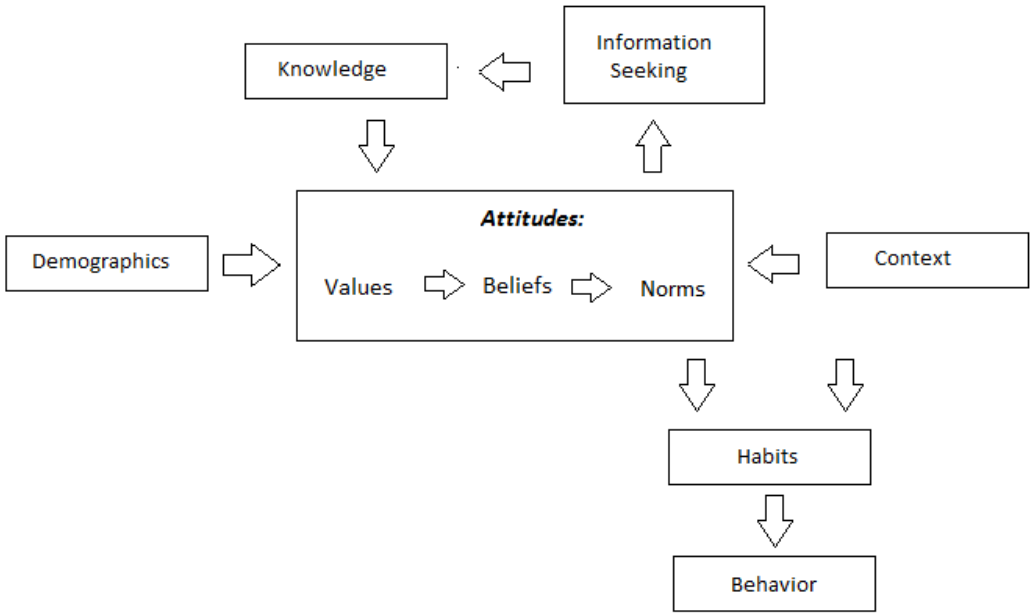
soda consumption ($r=-0.07$, $p<0.05$), and a positive correlation between income and meat consumption ($r=0.112$, $p<0.05$). Additional studies indicate that place of residence influences consumptions of "healthy" foods. Participants living in a rural area were less likely to consume healthy foods as compared to those in a suburban area (Tepper, Choi, & Nayga, 1997). In a study conducted among 358 adults in the U.S. by Steptoe and colleagues (1995), a difference in how consumers rate food on a 'health scale' by gender was assessed using a Food Choice Questionnaire. Women appeared to pay more attention to how healthy a food product is as compared to men. As these studies indicate, while food market segmentation by lifestyle clusters offers a holistic perspective of consumers, although potentially ambiguous, the influence of demographics on food preferences must not be dismissed.

Finally, the specialty food market is likely to present unique attributes as compared to general food market segments. According to the Specialty Food Association (2015), the desire to try new things is a significant motivation to experiment with unusual and costly specialty foods. In addition, specialty foods are seen as higher quality and healthier than other standard food items (Specialty Food Association, 2015). Consequently, some consumers perceive specialty foods as a treat, or reward for good behavior, justifying the higher cost, but a self-indulgence in small portions, in moderation, or only on occasion (Wycherley, McCarthy, & Cowan, 2008). Research also suggests that consumer's desire new experiences in eating; a craving satisfied through the consumption of specialty foods from new and different food cultures (Datamonitor, 2005; Vignali-Ryding, Sanchez, & Vignali, 2003). Collectively, this evidence suggests that intentions to purchase specialty food products depend, to some degree, on how the product meets and satisfies the needs and desires of the consumer (Lai, 1991). This does not mean that only specific FRL clusters are likely to purchase specialty food products. In fact, consumers who purchase specialty foods may be distinct from general FRL clusters.

In this light, strategies to identify, understand, predict, and motivate consumers of specialty foods require a more comprehensive approach. One approach known as the Alphabet Theory, considers consumers' attitudes, values, beliefs, and norms collectively as a way to predict food-purchasing behavior. Zepeda and Deal (2009) successfully applied the Alphabet Theory to determine consumer motivations for purchasing organic and local foods. In addition to combining the Value Belief Norm Theory (VBN), which explores activism, public behaviors,

private behaviors, and behaviors within organizations, and the Attitude Behavior Context (ABC) theory, which proposes that attitudes and behaviors are linked to contexts, Zepeda and Deal (2009) added knowledge, information seeking, habits, and demographic indictors to better understand consumer food selections, see Figure 1. As these elements have been found essential in describing food consumption, Alphabet Theory was selected as a framework for this study. It also provides an opportunity to explore interactions between the different elements, namely attitudes, values, information seeking, context, and demographics, which might prove useful in drawing conclusions about how to market specialty food products.

Figure 1. Conceptual framework of Alphabet Theory (modified from Zepeda & Deal, 2009).



How can product packaging direct specialty foods buying practices?

Understanding the elements that motivate specialty food buying behaviors allows for more targeted marketing strategies, including product packaging (Wang, 2013). Packaging can provide visual and verbal cues that attract attention, provide information, and set expectations (Silayoi & Speece, 2007) that can be directed at specific market clusters or consumer characteristics. For example, adventurous food lifestyle consumers are likely to be attracted to products that appear unique and unusual, that stimulate the senses, but are well made and

healthy. Visual package elements are known to play a significant role in affecting consumer-buying decisions, especially in low-involvement products (Silayoi & Speece, 2004). Packaging shape, color, graphics, and layout have been shown to have stronger influence on purchasing decisions than either convenience or product information, collectively accounting for almost 75% of the likelihood to buy (Silayoi & Speece, 2007). However, given that consumers are motivated by diverse factors, the impacts of these packaging characteristics are likely to vary.

Consumers can be convinced to purchase food products through the manipulations of one or more packaging variables, including packaging color, clear packs that allow viewing the food within, incident light, nomenclature, and brand name appearance (Silayoi & Speece, 2007). Certain words and phrases are often used in product labeling to psychologically influence the thoughts and behaviors of consumers during the food buying process (Northup, 2014). Recent work in cognitive and social psychology has demonstrated that some judgments, including food purchases, may be particularly sensitive to the cognitive context (Herr, 1989). In this regard, priming, or the activation of a concept using specific words to influence thoughts and behaviors (Northup, 2014), can be applied to food product packaging. For example, in a study of food products available in major supermarkets in the United Kingdom, the word ‘Mediterranean’ (used more frequently than country/region of origin) on food product packaging influences consumers’ subjective criteria, such as perceptions of authenticity, that are not always borne out in product ingredients or preparation methods (Cannon, 2005). Such research indicates that elements included in product packaging can be manufactured to persuade clusters of consumers, or consumers with certain characteristics, to purchase specialty food products.

Methodology

To assess consumer expectations of Greek specialty food products and existing packaging elements as a way to guide marketing strategies directed at the northeastern U.S. market, the study was divided into the following two objectives.

- Identify and understand factors that influence US consumer preferences for specialty imported food products.
- Examine marketing approaches of other specialty Greek food producers in order to identify key marketing components.

A mix method approach was taken to achieve these objectives. This chapter explains the blueprint of the methods and how they were executed.

Objective 1: Identify and understand factors that influence U.S. consumer preferences for specialty imported food products.

The study aimed to understand the perception of U.S. consumers towards specialty food products, specifically towards Marianna Vineleaves' *ntolmadakia*, including perceptions of taste, quality, and preference. Through a series of blind taste tests involving free listing and focus group discussions, insights were gained on the general awareness of *ntolmadakia* among different U.S. demographics (26 participants: U.S. consumers and Greek consumers living in the U.S.).

In order to obtain details on U.S. consumer perceptions of Greek food, a free listing exercise was conducted prior to taste testing *ntolmadakia*. Free listing is one of several structured interviewing techniques designed to elicit systematic data about a cultural domain (Gravlee 1998). Free lists contain information about how people perceive the relationships among items in a domain, as items listed first on the list are more important to individuals, and items occurring more frequently across many lists have a shared importance for the collective (Gravlee 1998). Free listing can help understand how a domain is perceived across a group of people by examining the average psychological salience of items (Sinha, 2013). Participants in this study

were prompted with the question: “What is your general perception of Greek food?” The resulting free list words were organized and analyzed by ANTHROPAC version 1.

Following the free listing exercise, a ‘blind’ comparison taste test was conducted using three different, unlabeled *ntolmadakia*, which were presented to participants on a single sampling plate. Marianna’s Vineleaves *ntolmadakia* were included within the samples given to tasters. The other two samples included the brands Aegean, which was purchased from a supermarket chain in the U.S., and Onassis, which was bought from a local Mediterranean specialty store in Worcester, MA. In addition to the taste test, participants were asked to complete an associated survey (Appendix A), which contained questions regarding taste, look, texture, and overall impressions of the different samples. The survey also inquired whether the participants had *ntolmadakia* before and which sample they favored.

Following the taste test, a focus group discussion was directed. Tasters were prompted to freely discuss their overall perceptions and preferences regarding the samples. Focus group discussions allow for vetting of differences in opinions, consideration of agreements, and the reaching of a general consensus among a group of people (Bernard, 2006). Through this open discussion, questions were posed specifically related to the perceived quality of Marianna’s Vineleaves *ntolmadakia*, the appearance of the packaging, expectations of price, and the willingness to pay per jar. The following questions were asked to direct the conversation:

1. Have you ever eaten *ntolmadakia* before?
2. Do you think that this [Marianna’s Vineleaves *ntolmadakia*] is an authentic Greek product?
3. Do you believe this [Marianna’s Vineleaves *ntolmadakia*] is a high-end or high quality product?
4. How much would you pay for this [Marianna’s Vineleaves *ntolmadakia*] product?

Objective 2: Examine marketing approaches of other Greek specialty food producers in order to identify key marketing components.

In order to direct alterations to Marianna's Vineleaves *ntolmadakia* product labeling and description, key marketing components were identified. By examining different high-end specialty food products, words and themes were noted that are used by Greek products currently in the U.S. By examining how different *ntolmadakia* brands and other Greek products are marketed in the U.S., key words were identified. This process included collecting descriptions from online catalogues used by high-end distributors and retailers to advertise the products. Products descriptions were retrieved from: Formaggio's Kitchen, Yoleni's, Titan Foods, Trader Joes, Hellenic Farms, Christos Market, and Optima Foods. A table was produced using these descriptions to display the information obtained, which included a picture of the product and its description. Content analysis was carried out on these descriptions, and the language was coded for key words known to influence specialty food preferences.

In addition to utilizing words obtained from free listing and focus group discussions, a codebook containing words from product descriptions was developed. Coding the text data obtained, focus group discussions, and product descriptions using this comprehensive codebook allowed for the identification of descriptive categories: taste, texture, technique, quality, culture, and company traits. These categories provided insight on what U.S. consumers think are important aspects of Greek food and *ntolmadakia*. The words found within the codebook were to direct changes to Marianna's Vineleaves product labeling, description, and website.

In addition to examining product descriptions from different *ntolmadakia*, the aesthetics of the product labelling for various specialty food products were analyzed. Drawing from websites displaying high-end Greek import products, 37 different specialty food products were identified. Using the images of the food products, an exercise called pile sorting was conducted with 18 U.S. students. The purpose of this activity was to understand how U.S. consumers perceive certain aesthetics of specialty food products. Participants were instructed to sort the images in different piles taking into consideration the appearance of the product only. No other guidelines or instructions were given. Concluding the exercise, discussion was carried out to

understand how the participants chose to categorize each pile and the characteristics behind them. Based upon the words used to describe each pile's theme, cluster names were constructed.

Using ANTHROPAC, cluster analysis (multidimensional scaling) was carried out to assess the relative closeness of items, or likelihood of one item appearing in the same pile as another pile, across participants. The process revealed related product clusters. From these clusters, key labeling and design components were assessed to identify particular characteristics unique to each cluster's theme. Through this process, labeling elements used by various high-end brands were identified for use by Marianna's Vineleaves to guide the redesign of their product labels for the U.S. market.

Finally, a self-administered, electronic Qualtrics Research Suite survey was conducted to identify consumer segment groups and their labeling preferences towards Greek specialty food products, specifically Marianna's Vineleaves *ntolmadakia*. The survey was distributed to WPI faculty and staff via email listservs. The survey consisted of three sections: socio-demographics (6 questions), food related lifestyle (69 questions), and preference for three different Marianna Vineleaves' ntolmadakia labels (4 questions).

The complete, validated food related lifestyle (FRL) instrument, developed by Brunsø and Grunert (1995; 1998), was used in the survey. The instrument consists of 69 Likert-type items, measuring 23 dimensions, each belonging to one of five food related lifestyle aspects: ways of shopping, quality aspects, cooking methods, and purchasing motives. The ways of shopping dimension includes statements to understand consumers' decision-making process when purchasing. Do they read labels and other product information, or do they rely on the advice of experts, like friends or sales personnel? The quality aspects section refers not to concrete attributes of individual products, but to attributes that may apply to food products in general. Sub dimensions include price, health, organic, taste, and freshness. The cooking methods dimension inquires how interested a consumer is in cooking, and if they are looking for new ways to prepare the food. Is it a social activity, or one characterized by incorporating the whole family in preparation tasks? The consumption situation dimension relates to how the meals are spread throughout the day, and if it is important to eat out. Finally, the purchasing motives dimension includes statements to understand what is expected from a meal, and the

relative importance of these various consequences. How important is self-fulfillment, and security, and social aspects?

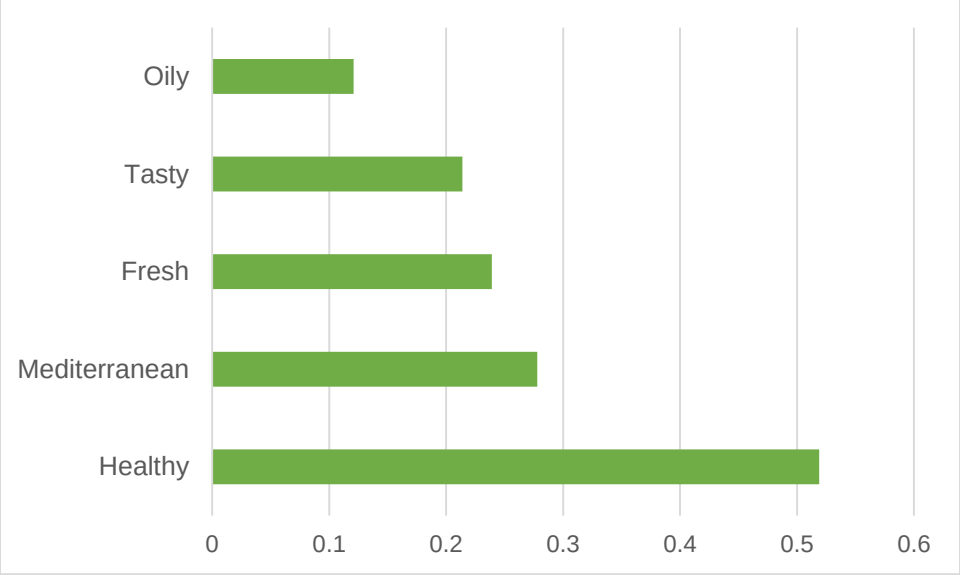
Each dimension is measured by three-item scales, see Appendix B. Respondents were asked to rate their attitude towards the statements on a Likert scale, ranging from (1) ‘strongly disagree’ to (7) ‘strongly agree.’ Food related lifestyle (FRL) aspects correspond with food cluster groups. By including the complete instrument, we aimed to determine if consumer preferences for Marianna’s Vineleaves *ntolmadakia* product labels differed by FRL or demographic.

Findings

Free listing and product descriptions

The free listing exercise was used to identify which words U.S. consumers most associate with the concept of Greek food. Frequency and salience index scores were calculated. Salience measures take into account the open-ended nature of free listing, and incorporate both how often and how early items occur in respondents' lists. The terms healthy (0.519), Mediterranean (0.278), fresh (0.239), tasty (0.214) and oily (0.121) had the highest salience score, see Figure 2. These words represent the viewpoints most associated with Greek food.

Figure 2. Free listing salience scores on perceptions of Greek food.



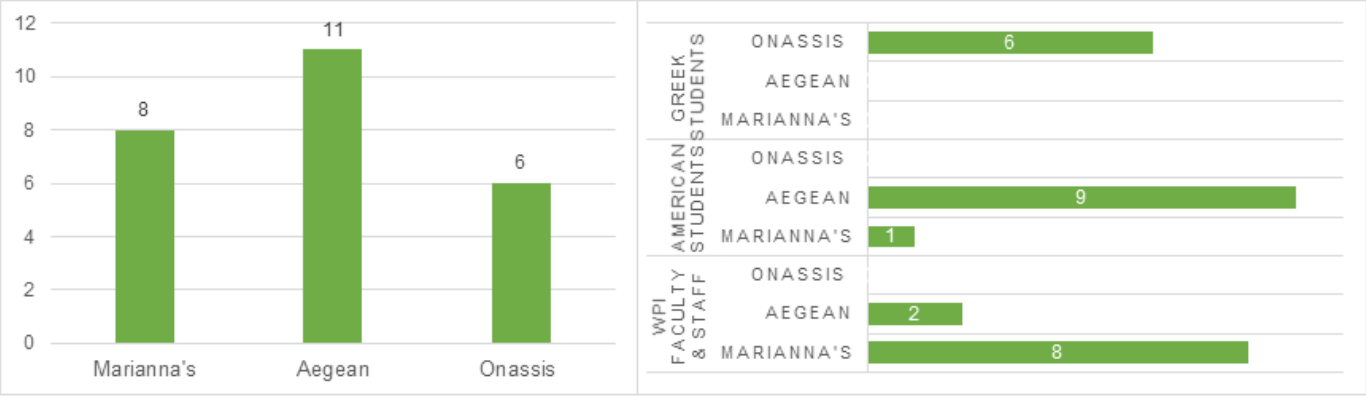
By examining marketing approaches of current specialty food producers, current keywords being used to market *ntolmadakia* in the U.S. were identified. Through content analysis of the descriptions of seven different *ntolmadakia*, the top six words used by producers were recognized: Greek, tender, soft, fresh, and specialty. Many of the words that identified during the free listing exercise were consistent with the words used by producers to appeal to U.S. consumers. The common terms from both the free listing and examination of product

descriptions include: marry flavors, fresh, all natural, delicious, unique, Mediterranean diet, and healthy.

Taste test and focus group discussions

Taste testing revealed that 21 of the 26 participants had eaten *ntolmadakia* before (80.7 percent). Out of 26 taste testers, 11 preferred Aegean, 8 preferred Marianna's Vineleaves and 6 preferred Onassis, see Figure 3. However, when examining individual demographic groups, preferences for the three different *ntolmadakia* samples varied. In the case of U.S. college students (n=10), 90 percent preferred Aegean, while 10 percent (one individual) preferred Marianna's Vineleaves. A U.S. college student expressed those preferences for the Aegean brand is likely because they are "used to American food and American type cuisine that fakes other countries products." Greek college students (n=6), which were the most familiar with *ntolmadakia*, all preferred Onassis. Of the WPI faculty and staff (n=10), 80 percent liked Marianna's Vineleaves while 20 percent liked Aegean.

Figure 3. Blind taste test revealing overall favorite *ntolmadakia*.



The focus group discussion revealed additional perceptions related to the perceived quality of Marianna's *ntolmadakia*, the appearance of its packaging and the willingness to pay per jar. Discussions related to the glass jar, the organic nature of the vine leaves, the product origin, color, and stuffing revealed how the different participants would value Marianna's Vineleaves product over competitors.

Marianna's Vineleaves glass jar was an aspect of the product that many participants preferred. Participants liked that they could see the product through the jar, and some even thought, "it felt almost more personal if you can see [the product]" (WPI faculty and staff). Glass jars are perceived to be healthier and "higher quality" (WPI faculty and staff). It is important to note that most *ntolmadakia* are sold in a can. Participants were in agreement that they would purchase "a jar over a can".

The vine leaves Marianna's uses for their *ntolmadakia* are organic. After the participants were made aware of this fact, it did not change their preference or willingness to purchase the product, but it did change their perception of price and willingness to pay for the product. All groups agreed that they automatically perceive organic to be more expensive. One participant mentioned that "[they] would tack on a couple more dollars for organic" (WPI faculty and staff).

Most consumers participating in the taste tests were unaware of the product's origin. When asked if they thought Marianna's Vineleaves product was an authentic Greek product, many expressed that they would use the term 'Greek' and 'Mediterranean' interchangeably. A participant from the WPI faculty and staff focus group remarked, "I don't know whether I would call it very Greek because I don't know what Greek versus Mediterranean is." When inquiring about the product origin, various responses were received including Middle-Eastern, Lebanese, and European.

The color of Marianna's *ntolmadakia* was an aspect that participants disliked. Compared to the competitors' samples, Marianna's was a much lighter color. Although some participants suggested that "[Marianna's] tasted very good," they also thought "it was a really weird color" (Greek college student). A member of the WPI faculty and staff stated that the "color might throw people off." Data from the associated taste test survey revealed that the phrase "unusual color" was mentioned 10 different times while "light" was mentioned 5 times. The consensus among the Greek college students was that Marianna's Vineleaves *ntolmadakia* was not an authentic Greek product because of its "unusual color." Overall, participants utilized the phrases "light" and "unusual color" in a negative context during focus group discussions. A Greek college student said "it taste good [Marianna's *ntolmadakia*] but it was a really unusual color".

Finally, the stuffing of Marianna's *ntolmadakia* was discussed in all focus groups. The rice was described as "a little bit tougher" when compared to the competitors (U.S. college

student). An U.S. college student mentioned that he "[didn't] know if it was properly cooked but the rice was not as soft was the other ones." Several participants among the different focus groups also described the rice to be grainy. On the associated taste test survey, participants frequently used the terms "sour" and "salty" to describe Marianna's *ntolmadakia*. A Greek college student wrote: "too sour, kind of dry and tasteless other than being sour."

After showing the participants Marianna's *ntolmadakia* product in the glass jar, willingness to pay for the product was discussed. The U.S. college students were willing to pay, on average, 5 USD per jar (range: 3-8 USD, n=10). The Greek college students were willing to pay an average of 5.50 USD per jar (range: 5-6 USD, n=6). The WPI faculty and staff were willing to pay an average of 5.61 USD per jar (range: 4.5-6.95 USD, n=10).

Perceptions of Specialty Food Product Aesthetics

The primary purpose of the pile-sorting activity was to understand how U.S. consumers perceived certain aesthetics of specialty food products. U.S. consumers distinguish product aesthetics based upon their individual preferences for certain attributes. Even though each participant's appearance description and categorization was unique, there were common aesthetical categories.

Using cluster analysis (multidimensional scaling) to assess the relative closeness of items or likelihood of one item appearing in the same pile as another pile across participants, related product clusters were identified. Six clear thematic clusters emerged which were labeled based upon participant descriptions as following: high end, elegant, artisanal, modern, homemade, and cheap (see Figure 4). Each cluster has unique characteristics, including distinct fonts and font sizes, size and transparency of product package, and graphics. Table 2 describes the highlight characteristics of the products from each cluster.

Figure 4. Multidimensional Scaling clusters of Greek specialty food product packaging

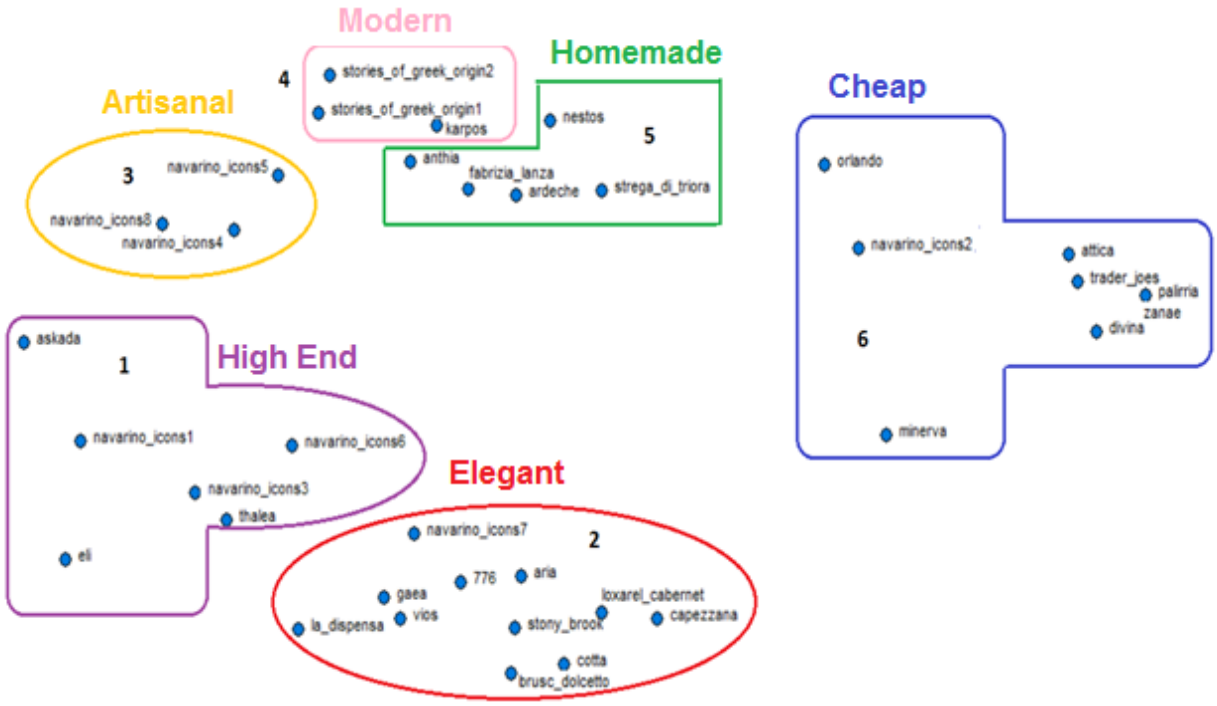


Table 2. Distinct packaging characteristics by identified clusters.

High End	
	• Minimal design – Simple, clean looking and not too busy • Color combination – Neutral, earthy and light tones • Visually striking – Big product font (white ink lettering) with simple and smaller surrounding font • Modern graphics – Two to three color blocking • Glass bottle
Elegant	
	• Thoughtful but intricate design • Big labels – Covers most of the surface • Color combination – Use of multiple colors • Tall and dark bottles

Artisanal	
	• Clean - Small but clear font • Minimal design – Simple, clean looking and not too busy • Color combination – Neutral, earthy and beige tones • Modern graphics – Mini chevrons and two-color blocking • No picture of the product, all text. • Yarn on the top
Modern	
	• Open space – The label doesn't cover the entire jar • Big text with simple and fine font • Unique graphics on the jar • Color combination - Solid colors
Homemade	
	• Small but busy labels • Standard, not visually striking fonts. • Color combination – Usually white with very bright colors on top • Clear Jar
Cheap	
	• Cheap – Because of the can • Busy – Due to font and design alignment • Unattractive color combination – Yellow and green • Unappealing – A lot of pictures on white background. • Dull, plain design

Survey

Based on the literature, it was hypothesized that label preferences would likely vary by FRL, with adventurous consumers more drawn to a label characterizing higher-end qualities, while rational and conservative consumers drawn more to a label characterizing artisanal qualities. The survey was sent to all WPI faculty and staff, using the 'employee' email listserv. This listserv reaches 2,434 individuals. The response rate was 4.58% with 111 surveys returned. Respondents were 61.3% female; a mean age of 35.2 with 20-29 year olds comprising 23.4% of the sample; 38.7% reported a household size of two people; a household income of between 100,000 and 200,000 USD (39.6%); and graduate education (64.9%). Respondents were also characterized into their food lifestyle cluster (i.e., adventurous, rationale, conservative, careless, or uninvolved), using results from the FRL instrument. The majority of respondents appeared to fall into the 'conservative' (53.2%), and the 'rational' (25.2%) food lifestyle clusters. Demographics of the sample are shown in Table 3.

The reliability of the food-related lifestyle dimensions adopted in this survey were measured through Cronbach's alpha calculations. Cronbach's alpha is a measure of internal consistency and is considered to be a measure of scale reliability (University of California, n.d.). A value larger than 0.7 must be attained to ensure reliability (Cronbach, 1951). Through Table 4, which shows Cronbach's alpha values for food-related lifestyle dimensions, it is concluded that only 'ways of shopping' and 'quality aspects' achieve reliable values.

Table 4 also shows a variance in mean values for each identified cluster in regards to food-related lifestyle (FRL) dimensions. For the FRL dimensions of ways of shopping and quality aspects, the uninvolved segment group obtained the lowest mean scores while the adventurous segment group obtained the highest mean scores, excluding the sub-dimensions of price criteria, shopping list and health. For the 3 remaining food-related lifestyle dimensions, cooking methods, consumption situation and purchasing motives, the adventurous segment group obtained the highest mean values. The lowest mean scores for these same 3 food-related lifestyle dimensions were distributed among the conservative, careless, and uninvolved segment groups.

Table 3. Sample of total respondents.

Demographics	Item	Total (n=111)	Adventurous (n=7)	Rational (n=28)	Conservative (n=59)	Careless (n=12)	Uninvolved (n=5)
Gender	Male	43 (38.7%)	4 (57.1%)	8 (28.5%)	27 (45.7%)	3 (25.0%)	1 (20.0%)
	Female	68 (61.3%)	3 (42.8%)	20 (71.4%)	32 (54.2%)	9 (75.0%)	4 (80.0%)
Age	20-29	26 (23.4%)	5 (71.4%)	3 (10.7%)	16 (27.1%)	1 (8.3%)	1 (20.0%)
	30-39	16 (14.4%)	1 (14.2%)	4 (14.2%)	8 (13.5%)	2 (16.6%)	1(20.0%)
	40-49	23 (20.7%)	0	11 (42.8%)	9 (15.2%)	3 (25.0%)	0
	50-59	25 (22.6%)	0	7 (25.0%)	13 (22.0%)	4 (33.3%)	1(20.0%)
	60+	21 (18.9%)	1(14.2%)	3 (10.7%)	13 (22.0%)	2 (16.6%)	2 (40.0%)
Education	High school	7 (6.3%)	1(14.2%)	0	5 (8.4%)	1 (8.3%)	0
	Undergraduate	32 (28.8%)	2(28.5%)	7 (25.0%)	15 (25.4%)	5 (41.6%)	3(60.0%)
	Graduate	72 (64.9%)	4(57.1%)	21 (75.0%)	39 (66.1%)	6 (50.0%)	2(40.0%)
Household Size	1	14 (12.6%)	1(14.2%)	3 (10.7%)	9 (15.2%)	1 (8.3%)	0
	2	43 (38.7%)	3 (42.8%)	7 (25.0%)	27 (45.7%)	4 (33.3%)	2(40.0%)
	3	17 (15.5%)	1(14.2%)	5 (17.8%)	9(15.2%)	1 (8.3%)	1(20.0%)
	4	23 (20.7%)	1(14.2%)	10 (17.8%)	6 (10.1%)	4 (33.3%)	2(40.0%)
	5	10 (9.0%)	1(14.2%)	2 (7.1%)	6 (10.1%)	1 (8.3%)	0
	6	2 (1.8%)	1(14.2%)	0	1(1.6%)	0	0
	7	3 (2.7%)	0	1 (3.5%)	1(1.6%)	1 (8.3%)	0
Income	< $50,000	15 (13.5%)	2 (28.5%)	1 (3.5%)	11(18.6%)	1 (8.3%)	0
	$50,001 - $75,000	10 (9.1%)	1 (14.2%)	2 (7.1%)	5 (8.4%)	1 (8.3%)	1(20.0%)
	$75,001-$100,000	20 (18.0%)	2 (28.5%)	7 (25.0%)	7 (11.8%)	3 (25.0%)	1(20.0%)
	$100,001-$200,000	44 (39.6%)	2 (28.5%)	11(39.2%)	25 (42.3%)	5 (41.6%)	1(20.0%)
	$200,000+	22 (19.8%)	0	7 (25.0%)	11(18.6%)	2 (16.6%)	2 (40.0%)

Table 4. Descriptive statistics and overall reliability of FRL dimensions.

FRL Dimension	Adventurous (n=7)		Rational (n=28)		Conservative (n=59)		Careless (n=12)		Uninvolved (n=5)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Ways of Shopping										
Cronbach's α 0.766										
Importance of product information	18.143	1.574	18.759	2.182	16.695	3.175	14.833	4.041	10.2	2.28
Attitudes to advertising	16.429	3.69	13.034	3.55	11.593	3.359	11.583	2.575	11	3.391
Enjoyment of shopping	18.429	2.76	16.172	3.665	13.068	4.597	7.917	2.61	7.4	2.074
Specialty Shops	15.429	3.101	14.793	3.342	13.22	3.119	10.25	3.132	8.4	2.191
Price criteria	14.286	3.546	15.103	3.726	13.881	4.391	10.667	3.312	8.2	4.324
Shopping list	15.143	2.61	16.379	3.886	16.186	3.641	13.667	4.479	11.4	4.037
Quality Aspects										
Cronbach's α 0.846										
Health	18.143	3.848	18.276	3.172	15.508	3.359	15	3.934	9.4	4.336
Price/Quality relation	19.571	1.134	18.207	2.783	16.966	3.162	14.75	2.633	10.2	5.07
Novelty	18.286	0.488	16.828	2.508	14.932	2.612	12.583	2.193	9.6	3.578
Organic Products	16.429	4.198	15.414	4.119	12.136	4.244	12.75	2.667	9.2	2.775
Taste	17.143	2.116	16.069	2.235	15.525	2.843	15.417	2.392	13.4	4.159
Freshness	20	2.236	18.655	2.595	17.627	2.722	16.333	3.312	13.6	4.506
Cooking methods										
Cronbach's α 0.556										
Interest in cooking	17.286	3.773	15.966	4.093	13.593	4.227	10.25	4.495	11	2.236
Looking for new ways	19.286	2.215	17.276	2.186	14.678	3.707	11	3.668	9.4	3.13
Convenience	8	4.123	7.552	3.269	7.576	3.519	8.75	3.934	10	4.062
Whole Family	15.714	6.02	13.655	4.143	12.305	4.219	9.417	3.678	11.6	1.14
Planning	12	2	10.724	2.153	10.542	2.054	12.083	1.443	11.6	1.14
Woman's Task	6.571	4.237	5.448	3.776	5.203	2.709	5.333	2.708	5	3.937
Consumption Situation										
Cronbach's α 0.484										
Snack versus meals	9.857	4.413	9.483	3.45	8.288	3.135	8.917	2.275	9.8	6.419
Social Event	16.714	2.812	14.621	3.509	12.847	3.552	11.667	3.447	11.4	4.93
Purchasing Motives										
Cronbach's α 0.528										
Self-fulfillment in food	18.429	2.07	16.276	2.359	14.051	9.068	10.917	3.029	9	2.55
Security	10.286	5.469	9.207	3.913	9.068	2.982	9.917	3.088	9.6	3.362
Social relationships	19.286	1.254	17.793	3.167	16.542	2.674	14.417	2.811	12.8	2.049

To have a better understanding of how the sub-dimensions of the five components in the food-related lifestyles (FRL) instrument are affected by key socio-demographic categories

(gender, age, income, education and household size) of the respondents; one-way ANOVAs were performed. See Table 5, given the small sample size, statistical significance was determined at $p<0.10$.

In the FRL dimension, 'ways of shopping,' the six sub-dimensions do not differ significantly with respect to gender, income, and household size. 'Enjoyment of shopping' is, however, significantly different by age with the younger age groups indicating greater enjoyment of shopping. Shopping at 'specialty shops' and using 'shopping lists' were significantly different by education. Overall, respondents with a graduate degree purchase more at specialty stores, followed by respondents with undergraduate degree and high school degree respectively. While the use of shopping list was the highest among high school degree holders then graduate degree holders, and lastly undergraduate degree.

The six sub-dimensions of food quality are not significantly different by income and household. 'Health' is, however, significantly different by gender with women being more interested in health aspects than men. Preference in 'taste' is also different by age. Overall, older age groups (30 and older) regarded 'taste' to be more important. While 'organic-products' is considerably different by level of education. Respondents with a graduate degree purchase more organic products compared to respondents with an undergraduate or high school degree.

In regard to cooking methods, Table 5 shows that its six sub-dimensions don't differ by gender and education. However, 'convenience' and 'women's task' considerably differ by age. The younger age groups seem to be searching and using more convenient methods of cooking. However, the older age groups regard women's role to be more important in the kitchen. Convenience also differs by income. Although preference for convenience differs by age groups, there appears to be no pattern as to how. Also, the 'whole family' is the only sub-dimension affected by household size.

For consumption situation, the two sub-dimensions don't differ by household size but 'social event' does differ by gender, income and education. This shows that how people associate foods importance with social interaction depends upon multiple socio-economic factors.

'Snack versus meal' is the only dimension differing by age, where the younger age groups are more inclined towards snacking with the age group 20-29 snacking the most.

The two sub-dimensions of purchasing don't differ by any of the socio-demographic categories, except for age. 'Security' is the only sub-dimension that significantly differs by age, where the youngest age group (20-29) is the most secure about their food choices. The age groups of 30-39 and 40-49 are less secure than the age groups of 50-59 and 60 and older.

Among the demographics, there seems to be no difference in the preference for labels. As Table 6a shows, Label 1, 2 and 3 don't differ within any of the demographical sub-aspects of gender, age, income, education and household size.

Table 6b displays the 5 consumer segmentation clusters and each their preferred label. A valid response had a definite preference with no equal options. The adventurous cluster consisted of eight valid responses. Within these 8 responses, 4 participants preferred label 2 (50%), 3 participants liked label 3 (38%), and only one liked label 1 (12%). Looking at the rational cluster, 16 participants preferred label 2 (50%), 6 participants liked label 3 (38%) and only 2 participants preferred label 1 (12.5%). The conservative cluster had a dominant preference, where 35 of the 46 participants preferred label 2 (76%), 7 participants liked label 3 (15%), and 4 participants liked label 1 (9%). 50 percent of the careless cluster preferred label 1, 4 of the 10 participants liked label 1 (40%), and one participant preferred label 3 (10%). Coincidentally, 50 percent of the uninvolved participants also preferred label 2, 1 participant liked label 1 (25%), and 1 participant liked label 3. It was concluded that label 2 was preferred by most of the participants among the clusters.

Table 5. ANOVA test of the FRL dimensions.

FRL Dimension	Gender		Age		Income		Education		Household	
	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F
Ways of Shopping	**0.078**	**0.781**	**1.639**	**0.17**	**0.526**	**0.717**	**1.045**	**0.355**	**0.337**	**0.916**
Importance of product information	2.625	0.108	3.206	0.016*	0.728	0.575	1.306	0.275	0.632	0.705
Attitudes to advertising	1.951	0.165	2.703	0.034*	0.21	0.932	0.33	0.72	0.34	0.914
Enjoyment of shopping	0.243	0.623	2.329	0.061*	0.67	0.614	0.104	0.901	0.848	0.536
Specialty Shops	1.107	0.295	1.326	0.265	0.115	0.977	3.492	0.034*	0.908	0.492
Price criteria	1.122	0.292	1.852	0.124	0.824	0.513	1.922	0.151	0.254	0.957
Shopping list	0.105	0.746	0.221	0.926	0.321	0.864	3.62	0.030*	1.229	0.298
Quality Aspects	**0.527**	**0.469**	**1.764**	**0.142**	**0.436**	**0.782**	**1.895**	**0.155**	**0.423**	**0.863**
Health	3.107	0.081*	1.483	0.213	0.104	0.981	0.66	0.519	0.266	0.951
Price/Quality relation	0.345	0.558	1.794	0.135	0.401	0.808	0.978	0.379	0.59	0.738
Novelty	0.007	0.932	0.361	0.836	0.426	0.79	2.334	0.102	0.362	0.901
Organic Products	0.034	0.855	0.869	0.485	0.394	0.813	2.593	0.079*	0.7	0.65
Taste	0.254	0.615	4.833	0.001*	1.87	0.121	1.173	0.313	1.5	0.185
Freshness	0.516	0.474	0.961	0.432	1.059	0.381	0.157	0.855	0.81	0.564
Cooking methods	**0.025**	**0.875**	**2.872**	**0.026***	**0.063**	**0.992**	**0.788**	**0.458**	**4**	**5**
Interest in cooking	1.43	0.234	0.79	0.534	2.372	0.057*	0.043	0.958	0.42	0.864
Looking for new ways	0.047	0.829	0.607	0.659	0.974	0.425	0.428	0.653	0.804	0.569
Convenience	2.201	0.141	2.662	0.037*	3.517	0.010*	1.418	0.247	0.88	0.512
Whole Family	1.404	0.239	1.673	0.162	1.149	0.338	0.422	0.657	4.003	0.001
Planning	0.517	0.474	0.805	0.524	0.063	0.992	1.003	0.37	0.751	0.61
Woman's Task	0.151	0.699	4.222	0.003*	1.412	0.235	1.633	0.2	0.827	0.551
Consumption Situation	**3.491**	**0.064***	**2.396**	**0.055***	**1.429**	**0.229**	**0.949**	**0.39**	**0.611**	**0.721**
Snack versus meals	0.007	0.933	2.214	0.072*	1.471	0.216	0.602	0.549	0.76	0.603
Social Event	6.839	0.010*	0.705	0.59	2.09	0.087*	3.006	0.054*	0.529	0.785
Purchasing Motives	**1.112**	**0.294**	**1.812**	**0.132**	**1.188**	**0.32**	**1.54**	**0.219**	**0.599**	**0.73**
Self-fulfillment in food	0.367	0.546	1.491	0.21	0.297	0.88	0.727	0.486	0.515	0.796
Security	3.598	0.060*	0.468	0.759	1.202	0.314	1.743	0.18	1.305	0.261
Social relationships	0.431	0.497	1.242	0.298	1.514	0.203	0.17	0.844	0.468	0.83

The preferred label among survey respondents was assessed using a Likert-scale rank for each label individually. These individual preferences were combined to identify a single preferred label (label rank). Using ANOVA to assess differences in mean variance, there was no difference in the preference for the three presented labels by demographic and FRL (see Table

6a, Table 6b). Within the adventurous, rational, careless, and uninvolved clusters, 50% preferred label 2. Label 2 was preferred by the conservative cluster (76%). These findings indicate that while there was no significant differences in preferred label by demographic or FRL, the shared collective most often liked label 2.

Table 6a. ANOVA analysis of label preference by demographics and FRL.

	Gender		Age		Income		Education		Household		FRL	
	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F
Label 1	0.047	0.83	0.844	0.724	0.864	0.488	0.196	0.823	1.027	0.412	0.701	0.593
Label 2	0.23	0.63	1.007	0.483	0.081	0.988	1.58	0.211	1.847	0.097	1.55	0.193
Label 3	0.23	0.63	1.006	0.485	1.269	0.287	0.039	0.962	0.777	0.59	1.145	0.34
Label rank	3.494	0.07	0.709	0.869	0.204	0.935	0.468	0.628	0.747	0.613	0.49	0.743

Table 6b. Segmentation clusters label rankings.

Consumer Segment	Adventurous	Rational	Conservative	Careless	Uninvolved	Total	Percent of Total Preferences (%)
Label 1	1	2	4	4	1	12	14.3
Label 2	4	8	35	5	2	54	64.3
Label 3	3	6	7	1	1	18	21.4
Total Valid Responses	8	16	46	10	4	84	

Discussion

Do demographic variables affect food consumption behaviors?

The results of the present report indicate food-related lifestyle dimensions are not significantly different by demographics including gender, education, income, and household size. The dimension 'cooking methods' is, however, significantly different by age (F-value=2.872; p=0.026). Two key components of this dimension, convenience and woman's task, influence this outcome. It is likely that generational differences in progress related to the role of women in society influences this outcome. In addition, younger individuals with more family commitments are likely to prefer convenient approaches to cooking.

The data indicate that gender influences concerns around health (F-value=3.107; p=0.081), food as a social event (F-value=6.839; p=0.01), and food providing security (F-value=3.598; p=0.06). Research suggests that women tend to pay more attention to how healthy a food product is as compared to men (Tepper et al., 1997). Women tend to buy more natural food with fewer additives compared to men; women also tend to be more secure towards their food choices; and men regard food importance with social interactions higher than women. Age influences enjoyment of shopping (F-value=2.329; p=0.061), taste (F-value=4.833; p=0.001), convenience (F-value=2.662; p=0.037), women's tasks (F-value=4.222; p=0.003) and snacks versus meals (F-value=2.214; p=0.072). Older demographics perceived women to be responsible for kitchen jobs and taking care of family nutrition. The younger demographics perceive men and women both equally responsible for family nutrition. This can be attributed to the fact that the current view of women's role in the society has evolved. Younger demographics are also replacing meals with snacking, but regard taste to be of lower importance than older demographics. Research suggests that frequent snacking may be replacing standard daily meals among young adults (Wile, 2015). The lead motivations for snacking among young adults are energy and convenience (Wile, 2015). The data in this report indicates that young people have high preference towards convenience, which explains why younger demographics also seem to be more inclined towards snacking. Income only affects convenience (F-value=2.09; p=0.01) and social event (F-value=2.09; p=0.087), however, there was no distinct pattern on how income

shapes individuals perception on convenience and social involvement with food. Education influences specialty shops (F-value=3.492; p=0.034), shopping list (F-value=3.62; p=0.03), organic product (F-value=2.593; p=0.079) and social event (F-value=3.006; p=0.054). Graduate degree holders seem to be more likely than the rest to shop at specialty stores because they like to ask questions, know what they are buying and get expert advice. Household size seemed to affect only one of the FRL sub-dimensions, whole family (F-value=4.003; p=0.001). The household size determines how individuals cook and how their family members help them out in the kitchen. Typically, it was seen that the more members in the house, the more the whole family is involved in the cooking process.

Analyses of the survey data reveal that although demographics do not affect all food preferences directly, they do influence certain aspects of it. As mentioned previously, while the influence of demographics on food preferences is ambiguous, they cannot be dismissed.

Which particular motives drive consumers to purchase and consume Greek specialty food products?

The adventurous and rational food consumer segments are the two key segments interested in purchasing and consuming specialty food products and are driven by health, quality, taste, freshness and value for money. Through the taste test and focus group activities, it was identified that most of these factors are indeed the driving motivations for consumers, regarding their expectation and preference for Greek specialty food products. In addition, it was identified that there exists variation in preference within certain driving motivations depending on the individual's' socio-demographical factors.

Taste was one of the biggest contributing factors recognized for consumer's preference for specialty food products. One of the major recurring themes in the focus group discussions were the participants opinions of the stuffing of the *ntolmadakia*. Participants who preferred Marianna's *ntolmadakia* described the stuffing to be flavorful, balanced and delicious. On the contrary, participants who did not prefer Marianna's *ntolmadakia* described it to be salty, sour and grainy. All the participants who preferred Marianna's belonged to the older demographics (WPI faculty and staff). Those who preferred other brands belonged to the younger

demographics (American and Greek college students) along with a couple of older demographic members. This shows that there is a noticeable difference in the taste preference among demographics, which affects their willingness to buy specialty food products.

Quality and freshness were also recognized to be important factors for consumer's willingness to purchase a specialty food product. Regardless of which *ntolmadakia* brand the participants preferred, they all agreed that if they had to pick a *ntolmadakia* brand solely based upon the packaging they would pick Marianna's. The contributing factor in this decision was that Marianna's *ntolmadakia* came in a glass jar compared to the American competitors, which were mostly canned. The participants perceived a glass jar to be fresher and of higher quality.

Research suggests that specialty products are perceived to be healthy, which was verified through the free listing exercise. Overall, the term 'healthy' obtained the highest rank and was repeated the most during our free listing exercise. It can be concluded that health, a positive motivation, is a factor considered by American consumers when purchasing specialty food products.

Value for money was another significant factor recognized for consumer's willingness to purchase a specialty food product. Initially, participant's estimated willingness to pay was no more than 4-5 USD on average, among all demographic groups. But after revealing that Marianna's *ntolmadakia* came in a glass jar and that its vine leaves are organic, the participants' willingness to pay increased to a range of5-5.61 USD. The participants were willing to pay a little more since they perceived organic food to be premium and glass jars to be high-end. It can be concluded from this observation that consumers prefer to buy the best quality for the best value. If a product costs more than their expected value, the willingness to purchase declines. Another observation was that the older demographic (WPI faculty and staff) average willingness to pay was higher than the younger demographics (American and Greek college students). This infers that older demographics with a higher disposable income are willing to pay more for the same product.

What advertising elements regarding labelling aesthetics can attract targeted specialty food consumer segments?

Research suggests that, in relation to different consumer clusters, packaging aesthetics influence purchasing decisions. For example, when considering adventurous and careless clusters, these consumers look for different elements on product packaging. The adventurous consumer seeks new products advertised by exotic packaging, whereas the careless consumer is the least interest in food shopping and food-quality aspects. However, survey data suggests that there is no variation on label preferences for each different consumer cluster. The survey contained three modified label samples for Marianna's *ntolmadakia,* which participants had to rank based on preference. Almost one third (64.3%) of participants preferred label 2, while label 1 and label 3 were preferred by 14.3% and 21.4% of participants, respectively. This suggest that label 2 had unique qualities that appealed to all consumer clusters. In addition, demographics such as age, gender, household income, and education play a role in consumer's product aesthetic preferences. The survey data also suggests that label preferences do not vary in relation to demographic variables. Although findings demonstrate there is not a noticeable difference of preference towards labels among different demographic variables and consumer clusters, this could be a result that the labels do not have strong distinctions.

The labels included in the survey were generated using the data from the pile sorting exercise, which can suggest what product label characteristics appeal to the American consumer. The goal of pile sorting was to create a list of characteristics to give to Marianna's Vineleaves graphic designer to redesign the current label for *ntolmadakia* shown in Figure 5.

Figure 5. Current package and label of Marianna's Vineleaves *ntolmadakia*

Six clusters were formed based upon the aesthetics of the Greek specialty food products during the pile sorting exercise. Two distinct product clusters were identified, the high-end and artisanal. The high-end and artisanal characteristics are highlighted in Table 2. Marianna's Vineleaves graphic designer produced three labels modeled after the high-end and artisanal

cluster, displayed in Figure 6. There are certain characteristics within these new labels that featured aesthetics that American consumers found to be visually appealing.

Figure 6. The recommended new labels for Marianna's Vineleaves

The first of the three labels was aimed to represent a high-end design, with its minimal design, open space, and small size of the label. The background to this label is shown to be grey to display the writing, but would be transparent on the product. Participants commented that it was more "personal" to see the product (WPI faculty and staff). The second and third labels represent an artisanal design. These two labels share the following characteristics: spaced fonts, neutral colors, descriptive text, and the phrase "A step in the Mediterranean healthy diet." The third label also incorporates modern graphics (swirls).

As stated, there was not a significant difference of the preferred labels among the consumer groups. This may have been because the three labels were not distinct enough from each other. The first label was described by a participant to have a "smooth and slick [design], very confined, [which] highlights the brand name and keeps everything else small." Participants may not have ranked this label to be their favorite because they also described it to be "very hard to read." If it were possible to modify the first label, the font used should be changed to make it easier for the consumer to read. The transparent background of the label should be kept, but the graphics of the design should be excluded to make the label less busy.

The second label was preferred by 54 of the 84 participants (64.3%). One participant described label 2 to be "colorful, visually appealing, vivid." Many participants noted that they

preferred label 2 because “the contrast of color [made it] easy to read.” A participant also mentioned that the “font type and size matters.” Participants emphasized that label 2 and 3 were very similar. One participant stated that they “liked the swirls on #3, but prefer the color of #2.” Another participant wrote, “colors in #3 are more subtle, the spiral set off the actual name of the product.” Participants may have preferred label 2 because of the contrast of colors, but a participant did express that “green makes [them] think of natural or organic food” when indicating why they preferred label 3. If it were possible to modify the second and third label, it would need to be more spacious. This could be achieved by removing the house image from the label. Also, many of the specialty food products in the artisanal cluster were found to have a piece of yarn or a tag on the product that described that product description or family history. Including a tag on Marianna’s *ntolmadakia* product would maximum the space available while also incorporating their unique family history.

All three of the new labels contain the phrase “A step in the Mediterranean diet.” The free-listing data proves that American consumers associate ‘Mediterranean’ to be related to the term ‘Greek food.’ A suggestion to be made for all three labels is to incorporate this phrase into the product description rather than being placed next to the company logo. The free listing data and product description analysis was performed to obtain the trigger words that appeal to the American consumer that could be included in Marianna’s Vineleaves product description.

What buzzwords would best motivate targeted food consumer segments to buy Greek specialty food products, specifically *ntolmadakia*?

Based upon the salience score of the free listing words, the top five words in descending order were healthy, Mediterranean, fresh, tasty and oily. This demonstrates that participants among the demographics and pool of people tested associated Greek food including *ntolmadakia* with the words listed above. These words can be used to promote Marianna’s *ntolmadakia* as a Greek product to the U.S. consumer market.

Product description of *ntolmadakia* in the current market display words such as healthy and Mediterranean, which, as our free lists indicate, serve as trigger words to attract the U.S. consumers. With the growing upward trend of consumers engaging more with the Mediterranean diet, using appropriate buzzwords to draw consumers’ attention to specialty food from the

Mediterranean region is a marketing strategy. Although buzzwords were identified in other products, in this study we did not set out to prove that these words are effectively targeting consumers. Even so, we assume that the commonality of such buzzwords on product descriptions and free lists offer evidence that supports the idea that "healthy" and "Mediterranean" are words that U.S. consumers commonly associate with the Greek food. As a result, any specialty food product from Greece, such as Marianna's *ntolmadakia,* would be wise to incorporate these words into their packaging and labeling to attract the U.S. consumer.

Limitations

A limitation of the study was that it was conducted with a relatively small group of people within a focused geographical setting. Although there were three different demographics covered, they were all part of the same small community. Consequently, participants cannot be consider representative of the U.S., and as such, results from this study must be taken with caution. The approach we used should be applied to a bigger and more diverse community that more appropriately represents U.S. demographics and consumer markets.

Conclusion

This paper uses a mix method study to identify factors that influence U.S. consumer preferences of specialty imported food products and to examine marketing approaches of other specialty Greek food producers in order to identify key marketing components. Through a free listing exercise, particular words were identified that are associated with Greek food by the U.S. consumer. These words were found to be commonly used by current specialty food producers to market *ntolmadakia* in the U.S. A taste testing involving unlabeled samples of *ntolmadakia* was executed to gain insight on U.S consumer preferences towards these products. Marianna's *ntolmadakia* was favored over other commonly available brands, and perceived as a high end product because it is packaged in a glass jar. The aesthetic categories that resulted from the pile sorting activity were used to make the labels, which were integrated into the survey. The survey was administered to identify consumer segment groups and their labeling preferences towards Greek specialty food product.

The results of this study will assist Marianna's Vineleaves to modify the *ntolmadakia* product label to appeal to the U.S. consumer market. A list of suggested words with the highest salience score from the free listing exercise and product description analysis were presented to Marianna's Vineleaves to be incorporated in the *ntolmadakia* labeling. The results from the survey helped identify which *ntolmadakia* packaging participants preferred, influencing the current design of Marianna's product labels. Further research should be conducted among a larger and more diverse U.S. consumer group to determine if the consumer preferences identified in this study are generalizable. Finally, the approach we used to investigate how small-scale artisanal food products are perceived by the U.S. market can guide other organizations in their efforts to expand to new international consumer markets.

Appendices

Appendix A: Taste Test Survey.

Survey : Taste Test

1. Have you eaten dolmades before?

Yes_____ No ____

Sample A

Taste: _____

Look: _____

Texture: _____

Overall: _____

Sample B

Taste: _____

Look: _____

Texture: _____

Overall: _____

Sample C

Taste: _____

Look: _____

Texture: _____

Overall: _____

Sample D

Taste: _____

Look: _____

Texture: _____

Overall: _____

Appendix B: Consumer Segmentation Survey

Ways of shopping

Importance of product information	To me product information is of high importance. I need to know what the product contains.
	I compare labels to select the most nutritious food.
	I compare product information labels to decide which brand to buy
Attitudes to advertising	I have more confidence in food products that I have seen advertised than in unadvertised products
	I am influenced by what people say about a food product.
	Information from advertising helps me to make better buying decisions.
Enjoyment from shopping	Shopping for food does not interest me at all. (R)
	I just love shopping for food.
	Shopping for food is like a game to me.
Specialty shops	I do not see any reason to shop in specialty food stores. (R)
	I like buying food products in specialty stores where I can get expert advice.
	I like to know what I am buying, so I often ask questions in stores where I shop for food.
Price criteria	I always check prices, even on small items.
	I notice when products I buy regularly change in price.
	I look for ads in the newspaper for store specials and plan to take advantage of them when I go shopping.
Shopping list	Before I go shopping for food, I make a list of everything I need.
	I make a shopping list to guide my food purchases.
	Usually I do not decide what to buy until I am in the shop. (R)

Quality Aspects

Health	I prefer to buy natural products, i.e., products without preservatives.
	To me the naturalness of the food that I buy is an important quality.
	I try to avoid food products with additives
Price/quality relation	I always try to get the best quality for the best price.
	I compare prices between product variants in order to get the best value for money.
	It is important for me to know that I get quality for all my money.
Novelty	I love to try recipes from foreign countries.
	I like to try new foods that I have never tasted before
	Well-known recipes are indeed the best.
Organic products	I always buy organically grown food products if I have the opportunity.
	I make a point of using natural or ecological food products.
	I don't mind paying a premium for ecological products.
Taste	I find taste in food products important.
	When cooking, I first and foremost consider the taste.
	It is important to choose food products for their nutritional value rather than for their taste. (R)
Freshness	I prefer fresh products to canned or frozen products.
	It is important to me that food products are fresh
	I prefer to buy meat and vegetables fresh rather than pre-packed.

Cooking Methods

Interest in cooking	I like to have ample time in the kitchen.
	Cooking is a task that is best over and done with. (R)
	I don't like spending too much time on cooking. (R)
Looking for new ways	I like to try out new recipes.
	I look for ways to prepare unusual meals.
	Recipes and articles on food from other culinary traditions make me experiment in the kitchen.
	Frozen foods account for a large part of the food products I use in our household.
Convenience	We use a lot of ready-to-eat foods in our household.
	I use a lot of mixes, for instance baking mixes and powder soups.
	The kids or other members of the family always help in the kitchen; for example they peel the potatoes
Whole family	and cut the vegetables.
	My family helps with other mealtime chores, such as setting the table and doing the dishes.

Planning	When I do not feel like cooking, I can get one of the other members of my family to do it. What we are going to have for supper is often a last-minute decision. (R) Cooking needs to be planned in advance. I always plan what we are going to eat a couple of days in advance.
Woman's task	I consider the kitchen to be the woman's domain. It is the woman's responsibility to keep the family healthy by serving a nutritious diet. Nowadays the responsibility for shopping and cooking ought to lie just as much with the husband as with the wife. (R)

Consumption Situation

Snacks versus meals	I eat before I get hungry, which means that I am never hungry at meal time. I eat whenever I feel the slightest bit hungry. In our house, nibbling has taken over and replaced set eating hours.
Social event	Going out for dinner is a regular part of our eating habits. We often get together with friends to enjoy an easy-to-cook, casual dinner. I enjoy going to restaurants with my family and friends.

Purchasing Motives

Self – fulfillment in food	Being praised for my cooking adds a lot to my self-esteem. Eating is to me a matter of touching, smelling, tasting and seeing, all the senses are involved. It is a very exciting I am an excellent cook.
Security	I dislike anything that might change my eating habits. I only buy and eat foods which are familiar to me. A familiar dish gives me a sense of security.
Social relationship	Dining with friends is an important part of my social life. When I serve a dinner to friends, the most important thing is that we are together. Over a meal one may have a lovely chat.

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