

# Do We Care about What We Buy or Eat? A Practical Study of the Healthy Foods Eaten by Jordanian Youth

Muhammad Turki Alshurideh<sup>1</sup>

<sup>1</sup> Marketing Department, Faculty of Business, The University of Jordan, Jordan

Correspondence: Muhammad Turki Alshurideh, Marketing Department, Faculty of Business, The University of Jordan, Amman 11942, Jordan. E-mail: m.alshurideh@ju.edu.jo

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## Abstract

Scholars and practitioners have taken a deep interest in the food choice of young Jordanians and found that it has been influenced by a variety of determinants that affect consumers of what they buy and eat. Such determinants have not tested practically from scholars within the Jordanian market context. By reviewing large numbers of food choice studies, four factors are found essential and chosen to be investigated practically which are: food products' availability, cost, benefit and sensory appeal. Quantitative analysis approach has been used in this study to collect the suitable data. Convenience sampling and regression analysis was employed to test the hypotheses. Additional explanations can be found of how the hypotheses have been developed and tested.

Results indicated that the main healthy food products choice and purchase determinants are food availability, food cost, benefits and sensory appeal. Additional explanation of data collection methods, analysis and findings can be found in more details.

**Keywords:** food choice, food cost, food benefits, food availability, food sensory appeal

## 1. Introduction

Nowadays, people are paying more attention to what they eat and are trying to change their eating habits by including more healthy food products and beverages in their daily meals, as they understand that the food choices they make affect their overall health and well-being in both short-term as well as long-term perspectives.

A large number of studies, such as those done by Ferrari & Torres (2003) and Nestle & Jacobson (2000) have shown that there are certain types of food products that can prevent many chronic diseases (such as obesity). Thus, consumers usually develop their own system to buy what they need which reflects their personal ideology and beliefs from food products (Asp, 1999). Food decisions have usually been affected by combinations of factors or determinants. Healthy food choice determinants usually differ not just from country to country, but also from one family or from one person to another. Therefore, this study has been planned to define and study the main healthy food choice determinants for Jordanian consumers.

## 2. Background

People usually doubt that the best healthy food needs to be bought and consumed. Any food believed to be 'good for you' (especially those high in fiber, natural vitamins, fructose and related dietary vitamins and minerals) are included in the category of 'healthy food'. 'Healthy foods' may refer to many benefits such as reducing cholesterol, helping control glucose, reducing atherosclerosis and the risk of stroke, halting the progression of osteoporosis and reducing the risk of infections. It is said that by eating a variety food products such as apples, cranberry juice, carrots, fish, garlic, ginger, nuts, oats, olive oil, beans, soy foods, tea and yogurt, may help maintain a healthy diet (Farlex, 2012). Healthy food choice is connected directly with healthy lifestyles or healthy behaviour. At the time writing, there is no clear agreement among scholars and practitioners of what healthy behaviour means or even what healthy food really is. Kasl and Cobb (1966, p. 246 cited Aarø et al., 1995) had defined healthy behaviour as 'any activity undertaken by a person believing himself to be healthy for the purpose of preventing disease or detecting it in an asymptomatic stage'.

Public and private organizations are nowadays much more concerned about public health and well-being and the phenomenon of unhealthy food choices that may have adverse effects on health for the short-term and the long-term. Issues related to food choices are currently at the forefront of public health and are embodied in

documents such as *Saving Lives: Our Healthier Nation* (Department of Health, 1999). That is because comprehensive medical and scientific evidence now exists and is provided by many scholars (e.g., Warren, 2009) which concerns the proven effect of healthy food products (e.g., fruit and vegetables) against a set of diseases such as cardiovascular diseases and certain forms of cancer. Thus, it is the job of the health professionals and all societal institutions to take such scientific information and apply it in planned programs in a meaningful way in order for behavior to change and achieve health goals for the public (Pollard et al., 2002). Based on previous literature, this research tends to provide a rigorous exploration into the main factors affecting food choice of adults in relation to the purchase and consumption of healthy food products in the Jordanian market.

### 3. Goals and Objectives

Analyzing the effect of the young people environment has interested the scholars in the United States and Europe regarding many interrelated health issues such as physical activity, diet, and weight outcomes (Chaloupka & Powell, 2009). While some scholars in The United States and Europe put much effort into healthy eating, Jordanian scholars prove to put this serious matter in a less important category. The research is aimed to investigate the main drivers of the healthy food choices of Jordanian youth.

By reviewing a large number of food choice determinants studies, it has been concluded that food purchase has been controlled by a variety of reasons which consist of: appeal of food, food smell and taste, preferred food and specific food products, family and family members characteristics, hunger and food cravings, time considerations, food availability, product cost, convenience of food purchase, family size, family income, family culture, family religion, benefits, purchase situational factors, transportation availability, mood, body image, habit, attitude, psychological issues, media and promotion, vegetarian beliefs, level of knowledge of parents, adolescents and children, lack of a sense of urgency, family food preferences, health and diet concerns, weight control, the variety of food products, food colour, food shape, familiarity, sensory appeal, the availability of unhealthy food items and their costs, the information available of food benefits and disadvantages, food products' labels and packages, social norms and pressure, personal ideology, food policy and governmental regulations, and food politics (Duffy & Hay, 1991; Clydesdale, 1993; Drewnowski, 1995; Frust et al., 1996; Solheim & Lawless, 1996; Devine et al., 1998; Drewnowski, 1998; Glanz et al., 1998; Neumark-Sztainer et al., 1999; Oliver et al., 2000; Booth et al., 2001; Pollard et al., 2002; Bower et al., 2003; French, 2003; O'Dea, 2003; Drewnowski & Specter, 2004; Lusk et al., 2004; Verbeke, 2005; Denk et al., 2005; Eertmans et al., 2005; Popkin et al., 2005; Drewnowski & Darmon, 2005; Ares & Gámbaro, 2007; Carlsson et al., 2007; Chen, 2007; Story et al., 2008; Lawless & Heymann, 2010; Nestle, 2013).

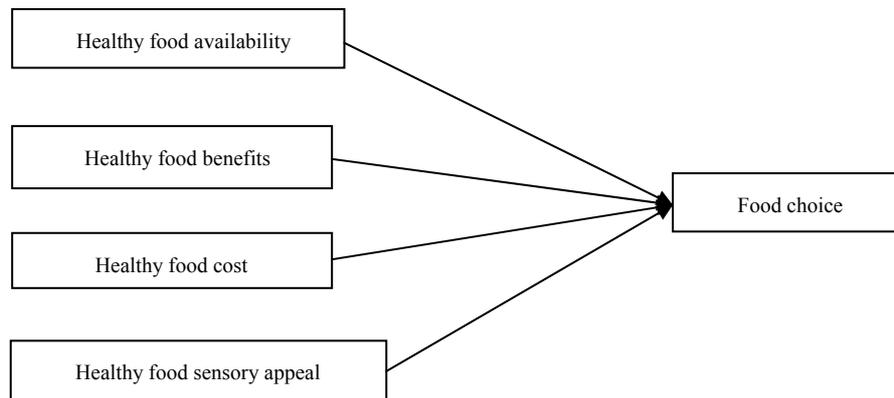
Some of these determinants relate to parents and others have been allocated to children and adolescents. Others have been referred to the purchase environment. Also, by taking another view and counting the frequencies of such facts, it has been found that the main food purchase influencers that affect healthy food purchase are: food availability, food products cost, and food products benefits. This study is planned to investigate these three factors within the Jordanian context.

Why should youth be studied in the Jordanian market? There are many logical reasons for studying such a phenomenon. The majority of promotions of unhealthy food are directed mainly towards youths. Also, the policy that is directed to minimizing unhealthy food marketing is not working properly (Goren et al., 2010). In addition, the majority of unhealthy food products' producers and retailers are framing and providing unhealthy food as sources of fun and entertainment for children and youth (Elliott, 2009).

Jordanian citizens were around 6,388,000 in the year 2012 (3,095,000 females and 3,293,000 males) according to the Department of Statistics (DS-YB, 2012A). About 67.78 % of the total Jordanian population is less than 29 years old (DS-YB, 2012B). It is apparent from these figures that the majority of Jordanian citizens are under 29 years old. It is preferable to facilitate the healthy development of Jordanian youth. Accordingly, many scholars such as McGinnis et al. (2006) have focussed on helping youth grow up healthy and adapt healthy life styles. Thus, this study is planned to explore the extent to which Jordanian youths plan what to eat, and to highlight the importance of exploring the determinants of healthy food product purchase, cooking and consumption.

This research is an exploratory study which aims to explore the main food choice determinants in order to have a closer look at such a critical social marketing phenomenon. The unit of analysis are the Jordanian youths who have a variety of categories (such as college students and high school students). The main objective is to measure the main influences on what an individual chooses to buy and consume.

#### 4. Study Model



#### 5. Lecturer Review

This part is aimed to provide an overview of previous literature on the main effects of food choice determinants.

##### 5.1 Food Product Availability and Food Choices

Healthy food availability has been researched well from a large number of scholars such as Pollard et al. (2002). Food products availability includes many issues such as: food stores availability, convenience food stores access, transportation available, fresh food availability, the availability of healthy food products during the days, weeks or months of the year, seasonality, and transportation mean cost. For example, it has been mentioned in Stagl (2002) that due to limited transportation means, many low-income families usually rely mainly on local food stores for their routine shopping, which in turn limits their purchase options to the food products sold in the local food stores daily offers.

Some scholars mentioned that food product environment plays an important role on healthy food selection and purchasing (Morland et al., 2006). Food store availability, for example, is an essential influence on a population-wide improvement in healthy eating. Story et al. (2008) claimed that as much as healthy food products available, as much as the chance of buying such food is increase. Healthy food choice and quality of diet are both associated with where a consumer lives (Laraia et al., 2004). By another mean, the availability of healthy foods was associated with quality of diet. The possibility of having a good diet is associated with having a full range of healthy food products to choose among and buy. Even so, the more food outlets are available, the greater the possibility of buying such products increases. Steptoe et al. (1995) studied the food convenience factor (including both the purchase and preparation of food), and sensory appeal (the smell, taste and appearance of food). The study found that health was not significantly associated with convenience, while health and sensory appeal showed a small but reliable positive correlation.

Availability of healthy food products is linked to convenience, which in turn facilitates food purchase, preparation and consumption. Convenience is related to providing easy access to both healthy food and beverages. Transportation availability also helps change food buying habits while people have the proper and less-costly means to travel to food stores easily. Much care has been exerted by scholars to study the effect of the food purchase environment (e.g., small stores and small food shops) on food choice. The availability of food stores plays an essential role in food choice and eating habits. It has been found that affordable healthy food is less available and less expensive in low-income urban neighbourhoods than high income and wealthier suburbs (Mikkelsen & Chehimi, 2007). The scholars also found that small markets are ubiquitous in urban neighbourhoods and contribute much to buying and eating unhealthy food products while they provide an easy access to non-nutritious and inexpensive food products and beverages. Another notable interrelated issue was that the lack of local transportation leads to families relying on local stores for the purchase of their usual food products. To sum up, many scholars highlighted the importance of the availability of fresh and healthy food products to behaviour (choice, purchase and consumption) (Cummins & Macintyre, 2006). Types of available food store are considered important to study because they influence where the target market shop. Thus, the first hypothesis can be drawn as:

H1: There is a positive relationship between healthy food products' availability and what a consumer chooses to buy and consume.

### 5.2 Food Cost and Food Choice

Consumer behaviour usually tends to rely mainly on decreasing the perceived risk that an individual may attain. The risk has been divided into many facets such as social, psychological, and monetary risks. A consumer's choice usually builds on minimizing the amount of risk, especially monetary. Thus, the probability of the repetition of a behaviour is built on the assumption that it reduces the aversive consequences or increases the positive outcomes of a repetitive choice. In turn, customer experience plays an important role in avoiding any harm or unneeded behaviour due to any previous negative behaviour (Alshurideh et al., 2012). Thus, it has been mentioned by Foxal (2003) that the main punishment (e.g., monetary risk) is the main behaviour outcome that prevents or reduces the chance of a specific behaviour being repeated in any further or similar situation. Therefore, one of the main healthy food purchase and consumption determinants is high prices and the main reason for purchasing unhealthy food products is that they are being priced low. It has been explained by Lovelock et al. (2007) that pricing strategy stands on three foundations which are: cost, competitors' prices, and value.

The cost of healthy food products is considered one of the main food determinants that minimize the chance of buying and consuming such products. This is because there is knowledge among people that healthy food products are more expensive to buy than fast food products, which in turn is a core determinant in such an issue. Food products' cost affects some groups of customers more than others when paying extra money to buy healthy food (Mintel, 2001). Many scholars such as Giskes et al. (2006) have mentioned directly or indirectly that food choice is determined by many factors especially economic ones. Consumers have started paying more attention to choosing food products that do not cause obesity. Such products' costs have been increased considerably in last decade (Drewnowski, 2004).

Food choices are strongly influenced by many constraints especially economic ones. The monetary costs of foods, especially the foods that are associated with a lower risk of obesity, have considerably increased during recent years (Schröder et al., 2006). Proof was found mentioning that individuals and even facilities with low income are appreciating healthy behaviour in food choices and buying and the benefits related to healthy choices, but they try to minimize the expenditure and spend less in order to fulfil other requirements (Kortzinger et al., 1994). While price was found in many places as the core factor that influences food choices, a study has been done by Steptoe et al. (1995) that also found that women showing dietary restraint were less influenced by price than the unrestrained.

Sometimes, some people doubt that there is a difference between direct and indirect costs associated with eating healthy products or unhealthy products. To remove such doubts, Cade et al. (1999) conducted their study relying on a proper analysis of data from the UK of women, including a food frequency questionnaire (FFQ) supported by telephone interviews. Suitable numbers of subjects were studied and their ages were distributed between 35-69 years who have similar meat, fish, and vegetarian indicators. Based on WHO dietary recommendations, a Healthy Diet Indicator (HDI) was used and their values were ranked from lowest (0) to the highest (8). Also, based on the 1995 National Food Survey (NFS) and Tesco shopping guidance, the direct monetary cost of the diet was calculated. The study found that the groups of healthy fit women were about four times better by being vegetarians; and their education levels were higher. Results showed that about 49% of food budgets were spent on buying fruit and vegetables in HDI group 8 while it was 29% in HDI group 0. While for the direct cost, the difference between HDI groups was found (£540 year<sup>-1</sup>) (equivalent to £1.48 day<sup>-1</sup>) and the main items that take a big portion of expenditure were fruit and vegetables.

A lot of evidence has been found to support the effect of monetary cost on healthy food products purchase. As an example of the evidence, Chung and Myers (1999) provided an empirical analysis of grocery store access and prices across inner city and suburban communities within the Minneapolis and St. Paul metropolitan areas. Both scholars found, as other scholars found, that poor people can pay only slightly more for buying healthy food products. Also, the study found that the main factor contributing to raise grocery store food prices in poor neighbourhoods was that large chain stores (where prices are likely to be lower) were not located in or were close to these neighbourhoods. However, this does not mean that people or families who have the financial capability and have easy access to purchase and cook healthy food products, can buy and eat such products three times a day (Wanless, 2004 cited Turner et al., 2006). Thus, the second hypothesis can be drawn as:

H2: There is a positive relationship between healthy food products' cost and what a consumer chooses to buy and consume.

### 5.3 Food Health Benefits and Food Choice

A study has conducted by Steptoe et al. (1995) on a sample of 358 adults between the ages of 18 to 87 years in order to develop a Food Choice Questionnaire (FCQ) through using factor analysis techniques. Nine factors were

included which were: health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity and ethical concern. Three of these factors are related directly to the health benefits of food which are health, natural content and weight control. The study suggested that people make healthy food decisions because of their benefits such as fruits and vegetables, and because of their power in preventing chronic diseases such as food that is high in fibre, which leads to increased consumption of foods such as beans and some flour products. Another item included in the health factor was that healthy food is associated with healthy appearance, like healthy hair, nails, skin and teeth. It was found that women pay more attention to the health factors than men do. Natural content was a factor in determining what food to choose and it reflects concern for the use of additives, as well as for the use of natural ingredients. Some respondents argued that additives can be good because they preserve food and the vitamins and minerals in it, but others viewed them as toxic ingredients.

The most significant factor in food choices was weight control, in the light of the prevalent cultural preference for thin bodies. Based on the study, weight control is linked to natural ingredients and this is reflected by the fact that many people practicing caloric restriction favour natural foods such as raw vegetables over prepared dishes. Differences in motives for food choice associated with sex, age and income were found. For example, two indices were constructed for each individual based on the correlation between healthiness and taste. The healthiness index was higher in older women than either their adult sons or daughters.

A study was conducted in the USA by IFIC (2011), and showed that more Americans perceive their overall diet as somewhat healthful and the majority is concerned with their weight statuses. Appearance and health problems were found to be the motives for Americans to make a change in their food choices and weight. The study found that 88% of the respondents believe that fortified foods and foods with added health benefits have some impact on their overall health. Based on this study, Americans are trying to limit their consumption of sugars and that low-calorie sweeteners are the best option for people with diabetes which can also be used for weight control and weight management. Two thirds of respondents agreed that protein helps build muscles and showed an awareness that it is found in animal sources. However less than half of them were aware that it can also be found in plant sources such as soy products, beans, nuts and seeds. Moreover, the study found that 69% of respondents said that their consumption of caffeine is moderate. Thus, the third hypothesis can be drawn as:

H3: There is a positive relationship between healthy food products' benefits and what a consumer chooses to buy and consume.

#### *5.4 Food Sensory Appeal and Food Choice*

Food products' natural ingredients, smell, taste, colour, texture, and the absence of additives and artificial ingredients are important factors that have been found to be important to what people buy and consume (Clydesdale, 1993; Steptoe et al., 1995; Drewnowski, 1997; Lockie et al., 2004; Stroebele & De Castro, 2004). Such factors also affect consumers' mood or are used to improve mood and can help to cope with stress (Steptoe et al., 1995). Part of the aim of this study is to investigate the effect of healthy food products' sensory appeal on food choice within the Jordanian context. Food sensory appeal can be considered part of the enrichment that enhances the level of healthy food acceptance and willingness to purchase (Ares & Gámbaro, 2007). Some scholars such as Lawless and Heymann (2010) have considered that sensory appeal dimensions are forms of motives that underlie food choice for many consumer categories such as children and adolescents. For example, Clydesdale (1993) found that there is a direct correlation between beverage consumption and their colours. Colour and food appeal is different from one consumers' segment to another.

A study has been executed by Chen (2010) targeting and investigating Swedish consumers' attitude to Chinese food based on the Food Choice Questionnaire (FCQ). Eleven factors were involved in the questionnaires which were sensory appeal, image, mood, familiarity, labelled, natural content, price, convenience, weight control, culture and safety. According to the results of this study, it was found that Swedish consumers have positive attitudes towards Chinese food on factors of sensory appeal, natural ingredients, mood, health, price, safety, but relative negative attitudes regarding factors of familiarity and convenience. Some authors such as Pollard et al. (2002) have found a strong relationship between sensory appeal and familiarity. In some cases, some individuals are unfamiliar with some healthy food products that are usually eaten in both ways, fresh or cooked. After a while, experience helps such people to adapt and consume more of these food items. When eating in a restaurant, taste and price are the most important factors for Americans when deciding what to order, and the overall healthiness of the meal was more important than how much calories it contains (IFIC, 2011). Based on that, the resistance to eating healthy food products has decreased over time. Thus, the fourth hypothesis can be drawn as:

H4: There is a positive relationship between healthy food products' sensory appeal and what a consumer chooses to buy and consume.

In conclusion, many sets of food choice and purchases influencers have been defined and studied. The core of this paper is to investigate the main four which are: food benefits, healthy food availability, food price and food products' sensory appeal effect on food choice.

## 6. Methodology

The study uses both primary and secondary data. Secondary data was taken by reviewing suitable previous studies that have been done in various circumstances and different food choice literature and a variety of consumption settings and products. The main food choice determinants have been summarized and reshaped to be used and tested within a new study context and study field such as Jordan. Primary data was collected by designing the survey and using it as the main means of data collection. The survey has been designed, and witnessed face validity by reviewing the previous literature related and amended according to scholars and practitioners notes in the Jordanian market. The survey has been tested within the pilot stage and some items were removed and amended. 100 questionnaires had been distributed for the pilot study and 86 were used in the initial analysis stage. In the final data collection stage, 720 questionnaires were distributed and the return rate was 54%. 389 questionnaires were used in the analysis stage. The study survey had been planned to be distributed to youths only, mainly university students.

## 7. Analysis

The analysis gives more light on testing the study model and hypothesis in addition to presenting a view of respondents' demographical status including both age and gender, especially when this study is targeting youths. The returned survey was distributed between 218 females and 171 males. The study sample ages were distributed between the ages of 18 and 38. The data was collected during January and May 2013 mainly from university students. About 307 students were studying Bachelor degrees and 82 students were studying higher degrees (MA, MBA and PhD students). The next section tests the studied hypotheses supported by suitable discussion.

### 7.1 Food Products' Availability

Cronbach's Alpha has been used to test the study factors reliability. Cronbach's Alpha for the food availability factor is 0.78, which is very good, indicating good internal consistency among the factor items. Also, the correlation analysis has been tested among the factor's items. The correlation values have been found to be good enough while they distributed between 0.644 and 0.650. The regression analysis has been used to test the effect of product availability on healthy food purchases. The p-value is 0.00, which is less than 5%. This indicates that there is a statistical proof confirming the effect of food product availability on the purchasing of healthy food products. This result is not a new fact, while many scholars such as Yiridoe et al. (2005) have found that healthy food products' cost and availability are the key factors that hamper consumer purchase and demand of healthy food products. Thus, food availability should have special interest from a variety of governmental institutes that organise food products availability during the year, not just in the main cities but also in more isolated villages. It has been mentioned that improving the availability of healthy food may enhance the chance of healthy food items purchases and consumption. This might be one of the influential approaches that may lead people to follow and adapt dietary systems (Nestle et al., 1998). Even within dynamic and complex shopping and eating environments, parents attempt to stimulate and foster their family members' healthy eating behaviours. It has been found that healthy food appearance and availability were found essential determinants of children and adolescents healthy food intake and adaptation (Birch & Fisher, 1998).

### 7.2 Food Cost

Cronbach's Alpha has been used to test the food cost variable's reliability. Cronbach's Alpha was high at 0.824. Also, the correlation test has been used among the variable's items and has been found distributed within the acceptable levels between 0.727 and 0.763. The regression analysis has been used to test the effect of food products cost on healthy food choice variances. The p-value is 0.00, which is less than 5%. This indicates that there is statistical proof confirming the effect of food product cost on what to buy and eat. While some food products prices are too high for the majority of people, some customers might move to buy other alternatives, low quality alternatives, less expensive ones or sometimes minimize the quantity of purchased items of healthy food products (Hughner et al., 2007; Silayoi & Speece, 2004). It has been found that food access and high convenience, food products good taste, and the low cost of energy-dense foods are the main reasons for overeating and weight gain (Drewnowski & Darmon, 2005). Thus, according to Steenkamp (1997), food has been seen as central to consumers' life and is serviced by both social and cultural functions, and accounts for the major share of individual expenditure, which in turn means that the effect of food cost needs deeper analysis, while it is affected by many interrelated aspects and needs deep knowledge of wide ranges of sciences such as social science, marketing, sociology and even economics.

The claim that health food products' prices are high does not mean a definite conclusion that the possibility of low income families purchasing such products does not exist (Andreyeva et al., 2010; Yiridoe et al., 2005). There are many practical proofs that have been found and confirmed that some high price food items are usually bought by low income consumers (Drewnowski & Specter, 2004).

### *7.3 Food Health Benefits*

Cronbach's Alpha has been used to test food benefits variable reliability. Cronbach's Alpha is 0.795 which is very good, indicating good internal consistency among the factor items. Also, the correlation test has been used to test the relationship among the variable's items. The correlation values have been found to be distributed between 0.660 and 0.681 which is seen to come within the acceptable levels. Moreover, the regression analysis has been used to test the effect of healthy food products' benefits on healthy food purchase and choice. The p-value is 0.00, which is less than 5%. This indicates that there is a statistical proof that confirms the effect of food benefits on food choices. This result is not contradicted with what other researchers found in studying the major food purchase and consumption determinates. Neumark-Sztainer et al. (1999) studied the main factors affecting food choice in two urban schools in St Paul, Minnesota using qualitative methods employing 21 focus groups. The scholars found that benefits of food were considered one of the main food choice and purchase influencers in addition to other determinants which are food craving and hunger, appeal of food, food convenience, food availability, parents' and adolescents' time availability, culture and religion of families, mood, body image, situational purchase factors, cost, media and vegetarian beliefs. Steptoe et al. (1995) found that the perceived benefits of food are playing a core role in food choice especially when such benefits are connected directly with specific diet programmes or diseases.

### *7.4 Food Sensory Appeal*

Cronbach's Alpha has been used to test the food sensory appeal items' reliability. Cronbach's Alpha was high at 0.879. Also, the correlation test has been used among the variable items and found to be within the acceptable levels between 0.776 and 0.785. The regression analysis was used to test the effect of food products sensory appeal on healthy food choice variance. The p-value is 0.00, which less than 5%. This indicates that there is a statistical confirmation of the effect of food product sensory appeal on what to buy and eat regarding healthy food products. Based on previous results, some literature had been found mentioning and confirming the effect of sensory appeal on food choice. It has been mentioned by many scholars such as Ares and Gámbaro (2007) that food sensory appeal is considered to be one of the enrichment elements that enhance the level of healthy food acceptance and willingness to purchase (Ares & Gámbaro, 2007) and motivate food choice especially for children and adolescents. Some food products are seen to be more appealing to one consumer segment than other segments based on food colour (Clydesdale, 1993). Some scholars such as Lawless and Heymann (2010) have mentioned that some consumers gauge products' quality, and make their choice based on food products' sensory appeal elements such as colour and size. Pollard et al. (1998) found a low relationship between food choice and sensory appeal food elements and explained that the low relationship does not mean that the sensory appeal is not important in food choice. Practical indications found in different research contexts highlighted the importance of different sensory appeal dimensions while they directly drive food choice and food intake (Eertmans et al., 2005).

Some consumers link between food acceptance and sensory appeal elements such as food shape, taste and colour. Thus, the level of some food products' acceptance increases while a consumer is repeatedly seeing, buying and consuming such products (Meiselman et al., 2000). This shows that some consumers, especially children, express high refusal rate for new food products and in some cases for cooked and healthy cooked products (Aheam et al., 2001; Mahajan et al., 1990).

## **8. Recommendations and Study Implications**

This study analysis and results denote many recommendations and practical implications that can be useful to both practitioners and scholars. Food benefit and value is one of the critical issues that institutions, individuals and societies should give more attention to, especially how to highlight food values, information and how it should be delivered to the customers to be perceived well and adapted in later stages. That is because the majority of consumers have started caring about what to eat and what to do in order to maximize the value of food and so access to information has started being easy, especially through using both the Internet and mobile phones.

It has been suggested by many scholars such as Drewnowski and Darmon (2005) to apply taxes on low-quality food products in order to minimize the purchasing and consumption of these food products. While the strategies that were confirmed show that low income families and consumers buying high cost food products is not active and workable, additional studies are needed to investigate the link between diet quality and food costs (Drewnowski, 2004). In addition, French (2003) found that individual dietary choices are primarily influenced by

a set of considerations such as foods' value, price, taste, cost and convenience. Thus, French claimed that reducing healthy food products prices can be used as a successful public health strategy to enhance adapting healthy diet programs by teaching people good healthy eating habits, especially at early stages in life and limiting the unhealthy food items available. Additional studies are needed to investigate diet quality and food cost in addition to other demographical elements that can be taken into consideration such as social class which can predict diet quality (Darmon & Drewnowski, 2008).

Another note has been found from literature and results which also need additional explanation: the effects of repeated buying and food acceptance. Some literature has mentioned that there is a link between familiarity and food acceptance. Also, additional explanation and evidence are needed to see if the relationship between repeated food buying and food acceptance differs from one consumer group to another as well as between one geographical area to another.

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