Factors Affecting Customers' Intentions to Patronize Healthy Food Restaurants

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Abstract

Purpose: Nutrition plays a significant role in preserving health and preventing diseases, as is well-acknowledged and well-documented. Moreover, people are taking charge of their own eating patterns and health attitudes during this time to upkeep a range of nutritional and healthful behaviors. This study aims to determine factors affecting customers' intentions to patronize healthy food restaurants in Greater Cairo.

Design/methodology/approach: A quantitative research method was used in this research using a survey questionnaire with customers of health food restaurants in greater Cairo (The number of healthy restaurants is not rated separately in Greater Cairo). A questionnaire survey on 301 random sample of healthy Restaurants' customers has been conducted to determine factors influencing their behavioral intention toward these restaurants using purposive sampling technique for the restaurants, the questionnaire was given to customers of healthy food restaurants hand in hand.

Findings: The research results show that lifestyle, food quality, and personal health concerns are the main factors in the formation of customers' behavioral intention toward healthy restaurants.

Keywords: Customers' Intentions; Healthy Food; Restaurants.

Introduction

Health is the only factor that determines your capacity to wake up, think clearly, communicate, hope, dream, attend school, learn, work, make a living, and engage in all activities you enjoy. Good health means you can operate normally and work hard to achieve your life goals (Zimmerman & Snow, 2012).

Consuming more fruits, vegetables, whole grains, and healthy fats is said to be the key to success for who have made a "green lifestyle" their way of life. It is a good beginning, but it is also crucial to assess the food items' safety, nutrition, and sustainability.

In 1826, Antheime Brillat-Savarin, the French lawyer, and politician, published in his book (Physiologie du Gout, ou Meditations de Gastronomie Transcendante) "*Tell me what you eat, and I will tell you what you are*". Nearly a century has passed; in a 1923 advertisement, nutritionist Victor Lindlahr said Cheap foodstuffs cause ninety percent of the diseases known to mankind. "*You are what you eat*". Today, mankind this as just "*You are what you eat*". Good nutrition entails getting enough (but not too much) of the macronutrients (proteins, carbohydrates, fats, and water) and micronutrients (vitamins and minerals) to keep the body healthy, grow properly, and function properly. "*You are what you eat*" relates to the idea that your body will react to the food it consumes, either positively or negatively. (Zimmerman & Snow, 2012).

Malnutrition is still a significant public health issue in developing countries, especially in southern Asia and sub-Saharan Africa (Müller & Krawinkel, 2005). According to Shetty (2003), the word 'malnutrition' is a general term referring to "*all deviations from adequate and optimal nutritional status*" due to specific nutrient deficits or diets that use the wrong food combinations or ratios; overnutrition and undernutrition are the two types of malnutrition (Rosenberg, *et al*., 2015).

Meal skipping, sugary snacks, soft drinks, and sweets are all examples of poor eating habits. Saturated fat consumption rising due to fast food. Food eating habits and being overweight are linked to a number of serious consequences that can develop quickly, including heart disease, obesity, diabetes, hypertension, stroke, cancer, tooth decay, asthma, and other psychological disorders such as depression (Ishaq et al., 2020).

Additionally, Egyptians have poor eating habits, they eat food with bread rather than bread with food. In recent years, the trend of consuming white bread made in Europe as sandwiches, particularly among kids, has become widespread. Among the fillings utilised are cheese, processed, tinned, or cooked meats, fried potatoes, pickled aubergines, eggs, and even bananas. The hamburger, pizza, and the lavishly adorned modern composite sandwich are becoming more and more popular among those who can afford them (Hassan Wassef, 2004).

The overall aim of this study is to find out factors affecting customers' intentions to patronize healthy restaurants and to establish a conclusion and a set of recommendations for the Egyptian healthy restaurants in greater Cairo. To reach this overall aim, the research has five specific objectives to Provide an overview of healthy food restaurants and healthy food, Determine the concept of nutrition, its importance, and its development, Determine the relationship between bad eating habits and diseases, Identify the extent of fear of obesity and its impact on customers going to healthy eating restaurants, Explore the reasons for their intentions to patronize healthy food restaurants in greater Cairo and Develop recommendations for healthy food restaurants to increase the number of customers in greater Cairo. Additionally, this research consists of 5 chapters.

Among the reasons for choosing the topic: presenting a new topic and scientific addition, finding a solution to the problem of the study, highlighting important topics such as nutrition, healthy food, obesity and diseases resulting from it, trying to contribute to future studies, trying to determine customers' intentions towards healthy food restaurants and seeking to increase restaurants' knowledge of marketing.

Literature Review
An overview of healthy food restaurants
A restaurant serving healthy foods is known as a 'healthy food restaurant.' These restaurants may provide vegetarian, vegan, raw, macrobiotic, organic, and low-fat menu items. Unfortunately, there is no clear definition or legislation regarding healthy food restaurants because the market for healthy trends is now beginning to develop. Customers may occasionally enter a restaurant believing it serves healthy food only to discover that the menu includes many deep-fried meals. At the same time, the cooking technique is essential for the products (Stetciuk, At the same time). When eating out, Consumers look for nutritional benefits other than fat and energy. Customers are interested in information on the amount of saturated fat, polyunsaturated fats, fiber, and sodium in the healthy foods offered in hotels have found that consumers look for other factors in the dishes they sample when dining out, such as the amount of salt and saturated fat (Mackison *et al*., 2009; Onyango, 2018). Customers consequently anticipated that the restaurant items would align with what they considered healthy food. Where customers reported that these items included those that were preventives, those that helped treat illnesses, were low in fat, salt, sugar, and calories, as well as those that were organic, native, and high in fiber, other customer perspectives included healthy cooked food as well as nutritional products that were quicker to consume (Onyango, 2018).

Restaurant is the primary segment of the food service sector. Today, the restaurant industry is a sizable one that is well-known globally. Saturates are more than just a way to avoid cooking and save time; they are also a part of the experience: a pleasant atmosphere, a delicious dinner, impeccable service, and new emotions. Fusion cuisine is the latest intriguing idea that is grabbing consumers' attention, and it can only be made possible with the correct components and culinary skills. The food service sector includes any location where food is served. Because of this, there are some differences between the restaurant and the food service industries. Typically, the food service sector portrays food delivery as a complex system. One central instance is catering, which has gained popularity in hotels and restaurants (Stetciuk, 2015).

Healthy food concern
Definitions and concepts of Nutrition
The English dictionary defines nutrition as 'The branch of science that deals with (especially human) nutrients and nutrition'. The definition in the British government manual in the mid-20th century is 'The science of nutrition entails the study of all processes of growth, maintenance, and repair of the living body which depend upon the intake of food'. Aft.' 40 years, it has become. 'The study of all processes of growth, maintenance and repair of the living body which depend upon the digestion of food, and the study of that food' (Great Britain, 1995; Beauman, 2005).

Additionally, dictionaries in French, German, Italian and Spanish define nutrition as 'a biological process concerning all living organisms, both animals and plants'. In Spanish, nutrition is considered a biological function, not a science. In France, nutrition has recently been recognised a science. While there is a specific word in Italian (nutrizionistica) and in German, nutrition as a

science and nutrition as a research discipline have different two of view**.** Obviously, nutritionists in Italy, France, and Spain need medical degrees. (Beauman, 2005).

The World Health Organization (WHO) stated that "Good health is as essential to nutritional wellbeing, as good nutrition is crucial for maintaining healthy growth and development. Preventing infection and managing infectious diseases-minimizing their incidence, duration and severity-are essential for optimizing nutrition". Everyone needs to use sufficient health care to ensure priority intervention. This includes early diagnosis and management of immunizations, particularly health and nutrition education and growth monitoring of infections, particularly diarrhea, respiratory diseases, measles, malaria and tuberculosis. (World Health Organization, 2000). As well, "Nutritional well-being depends upon four main factors: food and nutrient security, care for the vulnerable, health for all, and safe environment". (World Health Organization, 2000).

The factors that influence customers' intentions to consume healthy food
Behavior Intention
An established definition of intention was a plan to carry out a specific behavior. It was considered the most significant aspect of anticipating behavior (Ajzen, 1991; Hussein, 2020). The underlying premise was that the formation of behavioral intention preceded activity and was classified into three categories of cognitions: attitude, arbitrary standard, and perceived behavioral control, which they influence (Ajzen, 2002). As a result, the behavioral intention used in the current study, which employs behavioral intention as an outcome, has a favorable impact on eating nutritious meals at restaurants. (Hussein, 2020).

When choosing meals, food consumers' actions are influenced by several factors, according to Healthy wise (2017). These elements were: the food that was accessible, eating habits, marketing, cultural and societal connotations associated with food, feelings, information, and meal timing. However, the Healthy wise (2017) research on behavioral impacts only partially relates to healthy eating. The concept of healthy eating may not apply to factors including the user's proximity to various food types, eating habits, marketing, and mealtimes. This is because food consumers take a very objective perspective. Some choose this product category to regulate their weight, while others prefer to avoid meals high in cholesterol or adopt the idea of healthy eating to treat ailments. As a result, the availability of various food types in the environment may not be consistent with different timing and emotions that a person may experience. (Wasike et al., 2017) As a result of this factor, several others out:
Lifestyle
A large portion of the population still finds it difficult to lead a healthy lifestyle, and other parts of one's social and economic life are also impacted by it. The choice of lifestyle is influenced by factors such as socioeconomic situation, education level, family, kin, network, gender, age, and other people's opinions (Ochieng, 2006). Social and cultural ideals, partly influenced by the media, are connected to body image. (Deliens et al., 2014). According to Lappalainen et al. (1998); Eikenberry and Smith (2004) indicated that Persons with lower earnings should focus on staying in shape. Additionally, women's desire for a better body image is connected to low-fat dietary choices (Satia et al., 2001). Because women are frequently more concerned with their physical appearance than males (Bellisle et al., 1995; Harris et al., 1990; Jeonj et al., 2018).
H1: There is a positive effect of lifestyle on customers' intention to patronize healthy food restaurants.

Nutrition value

The health benefits of doing so influence customers' intentions to consume nutritious meals at restaurants. When customers acknowledged that eating nutritious food was a means of achieving their health goals, their intentions to choose low-fat foods were reinforced. They subsequently continued their healthy eating habits (Chen *et al*., 2006). Customers were willing to avoid high fat or high calorie foods, even though they were excellent, and choose healthier options because of growing health concerns (Sualakamala & Huffman, 2010). If customers thought healthy foods were delicious or palatable, they were more likely to choose them from the menu. The likelihood of consuming nutritious food was affected by hedonistic expectancy (Saba et al., 2010). Customers choose healthy options due to the success they have the past with consuming healthful foods and their understanding of those foods (Varela et al., 2010). Health value was the main factor that sparked consumer interest in healthy eating and sparked expectations of hedonic and positive results, which in turn encouraged intentions to consume healthy food items (Kang et al., 2015; Hussein, 2020).

H2: There is a positive effect of nutrition value on customers' intention to patronize healthy food restaurants.

Weight Control

The definition of overweight and obesity was described as accumulating excess fat that poses a health risk. The body mass index (BMI) is a straightforward measure of weight relative to height used to categorise as underweight, overweight, or obese. Overweight was defined as having a BMI of 25 or higher, and obesity as having a BMI of 30 or higher (World Health Organization, 2020). 603.7 million adults and 107.7 million children worldwide were obese in 2015. High BMI was associated with 4.0 million deaths worldwide. (Massachusetts Medical Society, 2017). At least once a week, about 75 percent of people ate out. Moreover, then of them went to fast food and full-service restaurants. (Stewart *et al*., 2006). Although some fast food franchises offered nutritional information, it was challenging to find and read when it was available. On their menus or websites, full-service restaurants rarely display nutritional information. (Josiam & Foster, 2009).

H3: There is a positive effect of weight control on customers' intention to patronize healthy food restaurants.

Personal Health Concerns

Personal health can also be a driving force behind healthy eating. Due to their lack of concern for the long-term advantages of good health, research among teens has indicated that personal health is not a primary motivation for healthy eating. (Horacek and Betts, 1998; Jeong *et al*., 2018). According to several searches with adult samples, people are highly motivated to eat healthful meals to improve their personal health. (e.g., staying healthy, living longer, and controlling/maintaining health) are essential explanations for healthy eating (Eikenberry & Smith, 2004; Michaelidou *et al*., 2012). Satia et al. (2001) state that men and elderly adults value their health the most.

H4: There is a positive effect of personal health concerns on customers' intention to patronize healthy food restaurants.

Food Quality

Food quality has generally been considered a crucial element in the functioning of any restaurant. As a result, it significantly impacts patron satisfaction the desire to make additional purchases (Namkung & Jang, 2007). There is broad consensus among academics that food quality is crucial in determining consumer loyalty and brand perception. To put it another way, excellent food quality is an essential marketing strategy that can be used to satiate and keep clients and further guarantee their great shopping experience. Sulek and Hensley (2004) showed that consumers are likely to think about food quality when deciding whether to visit a restaurant since it is important in reflecting the fundamental characteristics of that establishment. According to Vangvanitchyakorn (2000), consumers' evaluations of restaurants are primarily based on how well the food is prepared. Peri (2006) also showed that high-quality food is a crucial component that restaurants should supply to satisfy patrons' requirements and desires. The common attributes of good food emphasise it consists of a variety of factors, including: food presentation, flavor, and variety of selections, healthy options, freshness, and temperature (Hanaysha, 2016).

H5: There is a positive effect of food quality on customers' intention to patronize healthy food restaurants.

Research framework

An integrated conceptual model has been developed based on a thorough literature analysis to evaluate the customers' behavior toward consuming healthy food in healthy restaurants and the factors influencing this behavior. According to Kim et al. (2013) the current study incorporated the planned behavior theory used. Thus, the current model focused on the factors affecting the intention of customers' behavior to patronize healthy food restaurants. These factors have a positive effect on customers' intention to consume healthy food. As the behavioral intention has an impact on the behavior of customers when they visit healthy food restaurants (see figure 1).
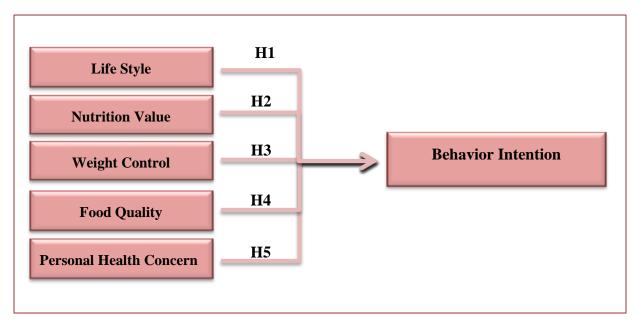

Figure 1; a conceptual framework of factors affecting customers' intentions to patronize healthy food restaurants adopted from (Hussein, 2020; Chun & Nyam-Ochir, 2020; James et al., 2018; Jeong et al., 2018; Cheng et al., 2018; Hong, 2009; Soriano, 2002).

Research Methodology
Survey instrument
To gather data, questionnaires have been used, and statements have been adopted from previous studies (i.e., Hussein, 2020; Chun & Nyam-Ochir, 2020; James *et al*., 2018; Jeong *et al*., 2018; Cheng *et al*., 2018; Hong, 2009; Soriano, 2002) Table 1 shows the questionnaire items, beside with the sources. The final version of the survey was divided into four main sections. The first part asks about participants' previous experience "Screening Question". In the second section, customers were asked to rate twenty-six items on a five-point Likert-type scale ranging from: 'Strongly disagree' (1); to 'Strongly agree' (5) about factors affecting their intention to patronize healthy food restaurants. The response is based on the question: to what range do you agree or disagree with each item? The 26 items are divided into five variables: Lifestyle (7 items), Nutrition Value (4 items), Weight Control (5 items), Food Quality (6 items), Personal Healthy Concern (4 items). The third part measured the behavioral intentions to visit healthy food restaurants. Finally, the forth one asks customers for profiling information (See table 1).

Table 1: Construct and sources				
Construct	Factors	Items	Measure	Source
Independent	Lifestyle	L1	I eat healthy food to have a healthy lifestyle	James et al., (2018); Jeong et al., (2018)
		L2	I eat healthy food to reduce accumulated stress	
		L3	I eat healthy food to have a lot of energy	
		L4	I eat healthy food to be in good form	
		L5	I eat healthy food to look younger	
		L6	I eat healthy food to be attractive	
		L7	I eat healthy food to keep me healthy for life	
	Nutrition Value	N1	I eat healthy food to balance the nutritional value of my daily meals	Cheng et al., (2018); Hong, (2009)
		N2	I eat healthy food because the food fortified with vitamins	
		N3	I eat healthy food because ingredients are fresh and organic	
		N4	I eat healthy food for the consistency of food ingredients	
	Weight Control	W1	I eat healthy food to get slender	Jeong et al., (2018)
		W2	I eat healthy food to minimize calorie intake	
		W3	I eat healthy food to stay fit longer	
		W4	I eat healthy food to reduce my risk for disease	
		W5	I eat in healthy food restaurants because they accommodate my dietary restrictions	

	Food Quality	F1	I eat healthy food because I like the way the food is cooked	Chun & Nyam-Ochir, (2020); Soriano, (2002)
		F2	I eat in healthy food restaurants because the menu has enough variety for me	
		F3	I eat in healthy food restaurants because they use fresh herbs and spices which add flavor to food	
		F4	I eat healthy food because the meals have excellent and distinct flavors	
		F5	I eat in healthy food restaurants because the food is good as I expect	
		F6	I eat in healthy food restaurants because they have good culinary expertise	
	Personal Health Concern	C1	I eat healthy food to ensure benefits to health	Jeong et al., (2018); Hong, (2009)
		C2	I eat healthy food to maintain my health	
		C3	I eat healthy food to avoid tension	
		C4	I eat healthy food to stay healthy longer	
Dependent	Behavioral Intention	B1	I intend to continue visiting the healthy restaurant	Hussein, (2020)
		B2	I consider the healthy restaurant as my first choice	
		B3	Even if another restaurant runs a special, I will still patronize the healthy restaurant	
		B4	I will spread positive word-of-mouth about healthy restaurant	
		B5	I will recommend healthy restaurants to my friends and family members	

Sample Design and Sample Size

During this phase, a measurement tool in the form of a questionnaire was utilized to evaluate the factors affecting customers going to healthy eating restaurants (Ali, 2012). As a result, a quantitative research method was used in this research using a survey questionnaire with customers of health food restaurants in greater Cairo. The questionnaire was created and given to customers of healthy food restaurants (The number of healthy restaurants is not rated separately in Greater Cairo). Initial testing of the questionnaire was conducted among a panel of 350 customers of healthy food restaurants (see table 2), where the content, measurement, phrasing,

and structure of the questionnaire scale were discussed. The revised questionnaire consisted of six scales for measuring: behavior intention, lifestyle, nutrition value, weight control, food quality, and personal health concern. Three hundred fifty questionnaires were randomly distributed to customers' healthy food restaurants. A total of 325 complete questionnaires were received, representing a response rate of 86 percent.

This study conducted pilot study was carried out in June and July 2021. A solid research study with an appropriate experimental design and precise performance is needed to produce high-quality results. Before carrying out the main study (also known as entire full study or large-scale main trial), it might be quite helpful to analyze its feasibility (Arnold *et al*., 2009). A pilot study, which is typically a smaller-scale study that aids in planning and modifying the major study, is the initial step of the complete research methodology (Thabane et al., 2010).

Four major sections were selected for this study in order to identify the survey scale components and identify the factors affecting customers' intentions to patronize healthy restaurants in greater Cairo. The first section, screening question, lets a survey creator target questions to a specific audience by filtering respondents. The second section is divided into five individual factors influencing healthy eating, which are lifestyle, nutrition value, weight control, food quality, and personal health concern. Therefore, the third section included one of the main factors that asked some questions concerning behavioral intention. Finally, the fourth section asked all participants about personal data such as (age, gender, education level, and monthly income; this section has been concluded to prevent customers from getting bored when filling out the questionnaire.

SPSS version 20 was used for the descriptive analysis. In addition, AMOS 4 was utilized to test the measurement model of safety culture and employees' safe behavior using structural equation modeling (SEM). Furthermore, structural fit of the proposed model was assessed using goodness-of-fit methods.

The study was conducted in Seven healthy food restaurants in Greater Cairo using purposive sampling technique. August 2021, three hundred and fifty questionnaires were distributed to a random sample of customers patronized healthy food restaurants, three hundred and twenty-five questionnaires were returned, of which three hundred and one were valid a response rate of 86 percent, twenty-four were invalid and twenty-five were missed (See table 2).

Table 2: customers' response rate					
Code	**Distributed No.**	**Returned**	**Response Rate**		**Valid Percentage**
			Valid	**Invalid**	
R01	50	48	43	5	86%
R02	50	47	44	3	88%
R03	50	45	43	2	86%
R04	50	49	42	7	84%
R05	50	41	40	1	80%
R06	50	46	43	3	86%
R07	50	49	46	3	92%
Total	**350**	**325**	**301**	**24**	**86%**

Results
Profile of Respondents
Table 3: displays the age of respondents, 26.2; 26.29) of them ranging between 18 and 35 years, which represented the ages of young people and was the largest percentage among the groups. They are followed by 24.3% (n=73) of them ranging between 46 and 55 years, 22.6% (n=68) of them ranging between 36 and 45 years, and 15.0% (n=45) less than 18 years. While 12.0% (n=36) of them were more than 55 years so, this is the lowest percentage. Additionally, 74.8% (n=225) of the respondents were female this is a very high percentage compared with male respondents, 25.2% (n=76). Regarding educational level, two high categories were categories that were very close in their percentage, 38.2% (n=115) University degree and 37.9% (n=114) Postgraduate degree. Then the high school degree Came in third place with 15.6% (n=47). While the lowest percentage was in Elementary school, 8.3% (n=25). Finally, concerning respondents' monthly income, it was 32.6% (n=98) of their monthly income ranging from 10000 L.E. up to 15000 L.E. Also, 24.3% (n=73) of the respondent's monthly income ranged from 5000 L.E. up to 10000 L.E. Therefore; they are very reasonable percentages of the income for the customers frequenting to healthy food restaurants constantly. However, 23.3% (n=70) they are a monthly income from 1000 L.E. up to 5000 L.E., while the lowest percentage was 19.9% (n=60) with a monthly income more than 15000 L.E. (See table 3).

Table 3: Profile of respondents (N=301)			
Demographic Data		**Frequency**	**Percentage**
Age	Less than 18	45	15.0 %
	18 up to 35	79	26.2 %
	36 up to 45	68	22.6 %
	46 up to 55	73	24.3 %
	More than 55	36	12.0 %
Gender	Male	76	25.2 %
	Female	225	74.8 %
Educational Level	Elementary School	25	8.3 %
	High School	47	15.6 %
	University	115	38.2 %
	Postgraduate	114	37.9 %
Monthly Income	1000 up to 5000	70	23.3 %
	5000 up to 10000	73	24.3 %
	10000 up to 15000	98	32.6 %
	More than 15000	60	19.9 %

Confirmatory factor analysis (CFA)

Code	Construct	Factor Loading	CR	AVE
Table 4: Factor loadings, validity analysis, and reliability test of the measurement model				
Factors Influencing Healthy Eating				
1- Lifestyle			0.758	0.512
L1	I eat healthy food to have a healthy lifestyle. (deleted)	----		
L2	I eat healthy food to reduce accumulated stress	.658		
L3	I eat healthy food to have a lot of energy	.779		
L4	I eat healthy food to be in good form	.705		
L5	I eat healthy food to look younger. (deleted)	----		
L6	I eat healthy food to be attractive. (deleted)	----		
L7	I eat healthy food to keep me healthy for life. (deleted)	----		
2- Nutrition Value			0.782	0.547
N1	I eat healthy food to balance the nutritional value of my daily meals	.677		
N2	I eat healthy food because the food fortified with vitamins	.839		
N3	I eat healthy food because ingredients are fresh and organic	.692		
N4	I eat healthy food for the consistency of food ingredients. (deleted)	----		
3- Weight Control			0.713	0.556
W1	I eat healthy food to get slender. (deleted)	----		
W2	I eat healthy food to minimize calorie intake. (deleted)	**----**		
W3	I eat healthy food to stay fit longer	.674		
W4	I eat healthy food to reduce my risk for disease	.811		
W5	I eat in healthy food restaurants because they accommodate my dietary restrictions. (deleted)	----		
4- Food Quality			0.894	0.584
F1	I eat healthy food because I like the way the food is cooked	.732		
F2	I eat in healthy food restaurants because the menu has enough variety for me	.720		
F3	I eat in healthy food restaurants because they use fresh herbs and spices, which addflavor to food	.748		
F4	I eat healthy food because the meals have excellent and distinct flavors	.796		
F5	I eat in healthy food restaurants because the food is good as I expect	.847		
F6	I eat in healthy food restaurants because they have good culinary expertise	.734		

5- *Personal Healthy Concern*			**0.821**	**0.606**
C1	I eat healthy food to ensure benefits to health	.787		
C2	I eat healthy food to maintain my health	.853		
C3	I eat healthy food to avoid tension. (deleted)	----		
C4	I eat healthy food to stay healthy longer	.687		
Behavioral Intention				
			0.762	**0.521**
B1	I intend to continue visiting the healthy restaurant	.754		
B2	I consider the healthy restaurant as my first choice	.812		
B3	Even if another restaurant runs a special, I will still patronize the healthy restaurant. (deleted)	----		
B4	I will spread positive word-of-mouth about healthy restaurant	.580		
B5	I will recommend healthy restaurants to my friends and family members (deleted)	----		

In this study, a test for the reliability and validity of constructs was carried out using a confirmatory factor analysis (CFA) model fit. The structural model results with factor loading are given in Table 4. In this view, not all factors loading is suitable, which means that the initial model was not a satisfactory fit. Hence, some modification indices are necessary before the testing to improve the model fit. More specifically, modification indices suggested remedies to seven items from the research scale (i.e., Lifestyle1, 5, 6, 7; Nutrition4; Weight1, 2, 5; Concern3; and Behavioral3; 5 have been deleted to achieve model fit indices). To significantly decrease the model fit, standard residual covariance was tested. So, few items were covariate in latent variables. Food1 and Food2; Food2 and Food3; Food2 and Food5; Food3 and Food4; Food3 and Food5 in Food latent variables were covariates.

Moreover, results from the model estimate showed that total fit indicators for the good model fit for the acceptable threshold were achieved, with X2 (150) = 321.645; p < 0.0001, 2/df = 2.144 lower than the acceptable value of 3. The model is well fitted to the evaluation criteria-based data, including GFI, CFI, TLI, and RMSEA. To determine the model fit, at least three indices must be fitted well (Hair et al., 2010). GFI=0.902, AGFI=0.862, within the upper threshold of >0.80 (Hu & Bentler, 1999). IFI= 0.940, CFI= 0.939, and TLI= 0.923, indicating a model Good Fit within the upper threshold of > 0.90 (Tucker & Lewis, 1973; Hu & Bentler, 1999). RMSEA = 0.062 (<0.08, Hair et al., 2010; Arbuckle, 2011).

Reliability, Convergent validity, and Discriminant validity
To test the reliability, firstly, for the reliability of customers' perception towards factors affecting their intentions to patronize healthy food restaurants, the customer should have dined at healthy food restaurants at least one time to consider as a valid sample. Furthermore, table 4 presents the results of CFA, which showed that the lowest value of CR and Cronbach's α for all of the constructs was 0.70, which exceeded the minimum acceptable value of 0.70 (Pallant, 2005), proving that data are considered to be reliable. Similarly, to test the convergent validity, CR and AVE were used. Correspondingly, to test the discriminant validity, MSV and ASV were used. Convergent Validity with the indices of CR and AVE exceeded the minimum acceptable level representing good convergent validity. On the other hand, The AVE of each study construct was

larger than the squared correlation for the two constructs, showing good discriminant validity (See table 5). This means that the measures are satisfactorily cohesive, and there are several common convergence points (Hair *et al*., 2010).

Table 5: Discriminant Validity for the Measurement Model					
Variables	Life Style	Nutrition Value	Weight Control	Food Quality	Health Concern
Life Style	0.512				
Nutrition Value	0.371	0.547			
Weight Control	0.203	0.423	0.556		
Food Quality	0.130	0.079	0.074	0.584	
Personal Health Concern	0.236	0.409	0.310	0.135	0.606

The Hypothesized Relationships

The linear regression analysis was conducted between the five independent factors (Life Style; Nutrition Value; Weight Control; Food Quality; and Personal Health Concern); and customers' behavioral intentions as the dependent variable. Table (6) indicates that R is equivalent to .645 (64.5 %). This value demonstrates the regression model of the five factors affecting customers' intentions to patronize healthy food restaurants and customers' behavioral intentions indicating a good fitting degree. "R" square" is another significant outcome, which demonstrates the level of determination between the five factors can be clarified and determined by the independent variables. Hence, R square is equivalent to 0.416 (41.6%).

Table 6: The fitting degree of factors affecting customers' intentions to patronize healthy food restaurants and their behavioral intension				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.645[a]	0.416	0.406	0.64871

a. Predictors: (Constant), Nutrition, Food, Weight, Lifestyle, Concern

As shown in table (7), the regression model showed that the result variable is highly significant. In addition, it was shown that the significance value (Sig.) in the regression row is 0.000. This value means that the model is highly significant. The "F" value (42.018) is considered to be another important outcome, indicating the strength of the relationship between variables.

Table 7: factors affecting customers' intentions to patronize healthy food restaurants and their behavioral intension					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	88.413	5	17.683	42.018	0.000[b]
Residual	124.144	295	.421		
Total	212.557	300			

a. Dependent Variable: Behavior

b. Predictors: (Constant), Nutrition, Food, Weight, Lifestyle, Concern

Table 8 shows that only three of the factors have proved to be significant predictors of customers' behavioral intention in healthy restaurants. These provide strong support to the hypotheses H1, H4, and H5 that a relatively positive relationship exists between Life Style, Food quality personal health concerns, and customers' behavioral intentions in healthy restaurants. Meanwhile, the second factors of Nutrition Value and Weight Control do not have a significant relationship with customers' behavioral intention in healthy restaurants, reject H2 and H3.

Table 8: Research hypotheses testing for factors affecting customers' behavioral intention to patronize healthy food restaurants						
	Unstandardized Coefficients		Standardized Coefficients			Hypotheses Test
Model	B	Std. Error	Beta	T	Sig.	
Restaurants						
(Constant)	0.380	0.294		1.290	0.198	
Life Style	0.183	0.059	0.164	3.097	0.002**	**Supported**
Nutrition Value	-0.005-	0.071	-0.004-	-0.068-	0.946	Rejected
Weight Control	0.000	0.057	0.000	0.005	0.996	Rejected
Food Quality	0.516	0.048	0.510	10.669	0.000**	**Supported**
Personal Health Concern	0.167	0.065	0.142	2.559	0.010**	**Supported**

** Significant at the 0.01 level (2-tailed).

Discussion and Conclusion

The researcher examined the factors influencing customers' behavioral intention toward healthy food restaurants. The behavioral intention was analyzed by five measures (lifestyle, nutritional value, weight control, food quality, and personal health concern). Among the most important results reached by this study are: There were statistically significant differences between women and men; it was concluded that the women who frequented healthy food restaurants were more than the men; the reason for this is that women care about fashion and their personal appearance as a result of being more prone to obesity, especially after pregnancy, and as a result of their exposure to diseases such as breast and uterine cancer. Additionally, the results of the study indicated that there are motives among customers towards preferring to eat healthy food in order to preserve their health. Also the presence of a set of obstacles that some people have when eating healthy food, which has the greatest impact on the occurrence of obesity; among these constraints: the low income of some people who are exposed to obesity, as they must follow up with nutrition doctors to obtain a balanced diet, and this will exceed more than their income and the cost of healthy eating that is followed in the diet. Furthermore, customers have a behavioral intention to consume and eat healthy foods. In addition, Society's lack of awareness programs on healthy nutrition; Such as little educating people to pay attention to their health through television programs, website videos, magazines and newspapers. The results showed that these three factors (lifestyle, food quality and personal health concern) had a positive effect on the intention of customers' behavior.

Recommendations

Based on these results, the study reached several recommendations, the most important of which are: Preparing an innovative marketing strategy for marketing healthy food restaurants to increase the number of customers (i.e. search engine optimization 'SEO' to improve the local exposure of the restaurant online). Also, customers should increase their knowledge; Intentions and behavior toward eating healthy food in healthy restaurants. They should read nutrition and public health books, magazines, watch television programs and browse websites. Additionally, customers should have a healthy eating behavior; to fight diseases and obesity. Furthermore, customers should help and persuade their friends, children and family to improve their healthy eating behavior. Moreover, healthy restaurants should post a calorie rating for each menu item to make it easier for those who visit restaurants to choose. As well as, healthy restaurants should motivate their target group; by offering discount coupons, free fruit platters and natural juices.

Limitations and future Research

This research has only one limitation: the experimental work of this study was conducted through the use of a questionnaire survey investigating seven restaurants in Greater Cairo and 301 healthy restaurants' customers. In addition to that, this limitation includes the factors affecting customers' intentions to patronize healthy restaurants.

This study, as one of the few that investigated the factors affecting customer intentions to patronize healthy restaurants, future research can make use of other quantitative methods, such as focus groups. Because the sampling for this study was a small proportion of the customers of healthy restaurants, more research with a larger sample size ratio would be required to ensure the appropriate generalization of study findings. Despite these limitations, this study has practical implications for hospitality scholars.

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العوامل المؤثرة علي إرتياد العملاء للمطاعم الصحية في القاهرة الكبرى

المستخلص

الغرض: تلعب التغذية دورًا مهمًا في الحفاظ على الصحة والوقاية من الأمراض، كما هو معترف به وموثق جيدًا. علاوه على ذلك، يتولى الناس مسؤلية أنماط الأكل الخاصة بهم والمواقف الصحية خلال هذا الوقت للحفاظ على مجموعة من السلوكيات الغذائية والصحية. تهدف هذه الدراسة إلى تحديد العوامل التي تؤثر على نوايا العملاء لإرتيادهم على المطاعم الصحية في القاهرة الكبرى.

التصميم / المنهجية / المنهج: تم استخدام أسلوب البحث الكمي في هذا البحث باستخدام الاستبيان مع عملاء مطاعم الأكل الصحي في القاهرة الكبرى (لم يتم تصنيف عدد المطاعم الصحية بشكل منفصل عن باقي المطاعم في القاهرة الكبرى). تم إجراء استمارة استبيان على 301 عينة عشوائية من عملاء المطاعم الصحية لتحديد العوامل التي تؤثر على نواياهم السلوكية تجاه هذه المطاعم باستخدام تقنية أخذ العينات الهادفة للمطاعم، وتم تقديم الاستبيان باليد لعملاء المطاعم الصحية.

النتائج: أظهرت نتائج الدراسة أن نمط الحياة، جودة الطعام، والمخاوف الصحية الشخصية هي العوامل الرئيسية في تكوين نية سلوكية للعملاء تجاه المطاعم الصحية.

الكلمات الدالة: نوايا العملاء ؛ الطعام الصحي؛ مطاعم.

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References

- Abbasalizad Farhangi, M., Dehghan, P., & Jahangiry, L. (2018), Mental health problems in relation to eating behavior patterns, nutrient intakes and health related quality of life among Iranian female adolescents, Plos one, *13*(4), e0195669.

- Abd El-Shaheed, A., Mahfouz, N. N., Moustafa, R. S., & Elabd, M. A. (2019), Alarming eating behaviours among adolescents in Egypt, Open Access Macedonian Journal of Medical Sciences, *7*(13), 2189.

- Adepoju, A. B., & Gabriel, E. (2019), Nutritional Status, Knowledge and Food Habit of Female Students Residing in the Federal Polytechnic IARO Hostel.

- Ajzen, I. (1991), The theory of planned behavior, Organizational behavior and human decision processes, *50*(2), 179-211.

- Ajzen, I. (2002), Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1, Journal of applied social psychology, *32*(4), 665-683.

- Ali, F. (2012), Using information technology to improve service quality in convention activity in Egyptian hotels, PHD.

- Arbuckle, J. L. (2011), IBM SPSS Amos 20 user's guide, Amos Development Corporation, SPSS Inc.

- Arnold, D. M., Burns, K. E., Adhikari, N. K., Kho, M. E., Meade, M. O., & Cook, D. J. (2009), The design and interpretation of pilot trials in clinical research in critical care, Critical care medicine, *37*(1), S69-S74.

- Bellisle, F., Monneuse, M. O., Steptoe, A., & Wardle, J. (1995), Weight concerns and eating patterns: a survey of university students in Europe, International journal of obesity and related metabolic disorders: journal of the International Association for the Study of Obesity, 19(10), 723-730.

- Bernas, M., Czech, A., & Tatoń, J. (2006), Obesity Metabolic Syndrom, PZWL: Warsawa, Poland.

- Black, R. (2003), Micronutrient deficiency: an underlying cause of morbidity and mortality, Bulletin of the World Health Organization, 81(2), 79-79.

- Chen, J. S., Legrend, W., & Sloan, P. (2006), Factors influencing healthy meal choice in Germany, Journal of Tourism, 54 (4), 315–322.

- Cheng, C. C., Chang, Y. Y., Tsai, M. C., Chen, C. T., & Tseng, Y. C. (2018), An evaluation instrument and strategy implications of service attributes in LOHAS restaurants, International Journal of Contemporary Hospitality Management.

- Chun, S. H., & Nyam-Ochir, A. (2020), The effects of fast food restaurant attributes on customer satisfaction revisit intention, and recommendation using DINESERV scale, Sustainability, 12(18), 7435.

- Deliens, T., Clarys, P., De Bourdeaudhuij, I., & Deforche, B. (2014), Determinants of eating behaviour in university students: a qualitative study using focus group discussions, BMC public health, *14*(1), 1-12.

- Dickson, R., Awasthi, S., Williamson, P., Demellweek, C., & Garner, P. (2000), Effects of treatment for intestinal helminth infection on growth and cognitive performance in children: systematic review of randomised trials, Bmj, 320(7251), 1697-1701.

- Eikenberry, N., & Smith, C. (2004), Healthful eating: perceptions, motivations, barriers, and promoters in low-income Minnesota communities, Journal of the American Dietetic Association, 104(7), 1158-1161.

- Fernandez, I. D., Himes, J. H., & Onis, M. D. (2002), Prevalence of nutritional wasting in populations: building explanatory models using secondary data, Bulletin of the World Health Organization, *80*(4), 282-291.

- French, S. A., Jeffery, R. W., Story, M., Breitlow, K. K., Baxter, J. S., Hannan, P., & Snyder, M. P. (2001), Pricing and promotion effects on low-fat vending snack purchases: the CHIPS Study, American journal of public health, 91(1), 112-117.

- Gawęcki, J., & Gerting, H. (2001), Nutritional definitions dictionary, PWN, Warsaw, Poland.

- Glanz, K., Basil, M., Maibach, E., Goldberg, J., & Snyder, D. A. N. (1998), Why Americans eat what they do: taste, nutrition, cost, convenience, and weight control concerns as influences on food consumption, Journal of the American Dietetic Association, 98(10), 1118-1126.

- Glanz, K., Sallis, J. F., Saelens, B. E., & Frank, L. D. (2005), Healthy nutrition environments: concepts and measures, American journal of health promotion, 19(5), 330-333.

- Hair, J., Black, W., Babin, B., & Anderson, R. (2010), Multivariate Data Analysis,7th ed., Prentice-Hall, Inc., Upper Saddle River, NJ, USA.

- Hanaysha, J. (2016), Testing the effects of food quality, price fairness, and physical environment on customer satisfaction in fast food restaurant industry, Journal of Asian Business Strategy, *6*(2), 31-40.

- Harris, M. B., Waschull, S., & Walters, L. (1990), Feeling fat: motivations, knowledge, and attitudes of overweight women and men, Psychological Reports, *67*(3_suppl), 1191-1202.

- Hassan Wassef, H. (2004), Food habits of the Egyptians: newly emerging trends, EMHJ-Eastern Mediterranean Health Journal, 10 (6), 898-915, 2004.

- Healthwise: Healthy Eating: Influences on Eating Behavior; (2017).

- Hong, H. (2009), Scale development for measuring health consciousness: Re-conceptualization, That Matters to the Practice, 212.

- Horacek, T. M., & Betts, N. M. (1998), Students cluster into 4 groups according to the factors influencing their dietary intake, Journal of the Academy of Nutrition and Dietetics, 98(12), 1464.

- Hu, L. T., & Bentler, P. M. (1999), Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives, Structural equation modeling: a multidisciplinary journal, 6(1), 1-55.

- Hussein, M. (2020), Factors Influencing Customers' Behavior toward Eating Healthy Food in Restaurants at Minia Governorate in Egypt, Journal of Association of Arab Universities for Tourism and Hospitality, 19(2), 227-257.

- Ishaq, F., Khan, R., Dar, M., Basharat, S., Ali, M., Yameen, Z., Rana, A. I, Ashraf M, Abbas A, & Zahid S. (2020), Assessment of eating habits and knowledge regarding daily nutritional requirements among university students, Journal of Nutritional Health & Food Engineering, 10(1), 38-41.

- James, B. L., Loken, E., Roe, L. S., Myrissa, K., Lawton, C. L., Dye, L., & Rolls, B. J. (2018), Validation of the diet satisfaction questionnaire: a new measure of satisfaction with diets for weight management, Obesity Science & Practice, 4(6), 506-514.

- Jeong, E., Jang, S. S., Behnke, C., Anderson, J., & Day, J. (2018), A scale for restaurant customers' healthy menu choices: Individual and environmental factors, International Journal of Contemporary Hospitality Management.

- Josiam, B., and Foster, C. (2009), Nutritional information on restaurant menus: Who cares and why restaurateurs should bother, International Journal of Contemporary Hospitality Management, 21 (7), 876-891.

- Kang, J., Jun, J., & Arendt, S. W. (2015), Understanding customers' healthy food choices at casual dining restaurants: Using the Value–Attitude–Behavior model, International Journal of Hospitality Management, *48*, 12-21.

- Kim, E., Ham, S., Yang, I. S., & Choi, J. G. (2013), The roles of attitude, subjective norm, and perceived behavioral control in the formation of consumers' behavioral intentions to read menu labels in the restaurant industry, <u>International Journal of Hospitality Management</u>, 35, 203-213.

- Lappalainen, R., Kearney, J., & Gibney, M. (1998), A pan EU survey of consumer attitudes to food, nutrition and health: an overview, <u>Food quality and Preference</u>, *9*(6), 467-478.

- Mackison, D., Wrieden, W. L., & Anderson, A. S. (2009), Making an informed choice in the catering environment: what do consumers want to know?, <u>Journal of Human Nutrition and Dietetics</u>, *22*(6), 567-573.

- Mahfouz, N. N., Fahmy, R. F., Nassar, M. S., & Wahba, S. A. (2018), Body weight concern and belief among adolescent Egyptian girls, <u>Open access Macedonian journal of medical sciences,</u> 6(3), 582.

- Massachusetts Medical Society, (2017), Health Effects of Overweight and Obesity in 195 Countries over 25 Years, <u>The New England Journal of Medicine</u>, 377 (1), 13-27.

- Merchant, A. T., Dehghan, M., Behnke-Cook, D., & Anand, S. S. (2007), Diet, physical activity, and adiposity in children in poor and rich neighbourhoods: a cross-sectional comparison, <u>Nutrition journal</u>, 6(1), 1-7.

- Michaelidou, N., Christodoulides, G., & Torova, K. (2012), Determinants of healthy eating: a cross-national study on motives and barriers, <u>International Journal of Consumer Studies</u>, 36(1), 17-22.

- Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004), <u>Actual causes of death in the United States, 2000, Jama,</u> 291(10), 1238-1245.

- Monteiro, C. A., Conde, W. L., Lu, B., & Popkin, B. M. (2004), Obesity and inequities in health in the developing world, <u>International journal of obesity</u>, 28(9), 1181-1186.

- Müller, O., & Krawinkel, M. (2005), <u>Malnutrition and health in developing countries, Cmaj,</u> 173(3), 279-286.

- Namkung, Y., & Jang, S. (2007), Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions, <u>Journal of Hospitality & Tourism Research</u>, 31(3), 387-409.

- Nemer, L., Gelband, H., & Jha, P. (2001), <u>Commission on Macroeconomics and Health, The evidence base for interventions to reduce malnutrition in children under five and school-age children in low-and middle-income countries</u>, CMH working papers no WG5: 11. Geneva: World Health Organization.

- Ochieng, B. M. (2006), Factors affecting choice of a healthy lifestyle: implications for nurses, *British Journal of Community Nursing*, 11(2), 78-81.

- Onyango, F. E. V., & Wasike, K. C. (2018), Healthy eating products and customer outcomes in restaurants.

- Oregon WIC Program (2013), Basic Nutrition e-Module Companion Document, Arizona WIC.estaurants.

- Pallant, J. (2005), SPSS survival manual: A step by step guide to data analysis using SPSS version 12. (2nd ed.). Berkshire: Open University Press.

- Peri, C. (2006), The universe of food quality, Food quality and preference, 17(1), 3-8.

- Prado, E. L., & Dewey, K. G. (2014), Nutrition and brain development in early life, Nutrition reviews, *72*(4), 267-284.

- Prakash, S. (2003), Malnutrition and undernutrition. Medicine, 43(2), 18-22.

- Ralston, K. (1999), and Regulations Can Affect Dietary Choices, America's Eating Habits: Changes & Consequences, (750), 331.

- Rice, A. L., Sacco, L., Hyder, A., & Black, R. E. (2000), Malnutrition as an underlying cause of childhood deaths associated with infectious diseases in developing countries, Bulletin of the World Health organization, *78*(10), 1207-1221.

- Rivera Medina, C., Briones Urbano, M., de Jesús Espinosa, A., & Toledo López, Á. (2020), Eating habits associated with nutrition-related knowledge among university students enrolled in academic programs related to nutrition and culinary arts in Puerto Rico, Nutrients, 12(5), 1408.

- Robinson, L., Segal J., W.Paul M., Kemp G., &Segal R (2015), Are Organic Foods Right for You? Accessed on 7 of May 2015. Retrieved from http://www.helpguide.org/articles/healthy-eating/organic-foods.htm

- Rosiek, A., Frąckowiak Maciejewska, N., Leksowski, K., Rosiek-Kryszewska, A., & Leksowski, Ł. (2015), Effect of television on obesity and excess of weight and consequences of health, International journal of environmental research and public health, *12*(8), 9408-9426.

- Saba, A., Vassallo, M., Shepherd, R., Lampila, P., Arvola, A., Dean, M., Winkelmann, M., Claupein, E., & Lähteenmäki, L. (2010), Country-wise differences in perception of health-related messages in cereal- based food products, Food Quality and Preference, 21, 385–393.

- Satia, J. A., Kristal, A. R., Curry, S., & Trudeau, E. (2001), Motivations for healthful dietary change, Public Health Nutrition, *4*(5), 953-959.

- Soriano, D. R. (2002), Customers' expectations factors in restaurants: The situation in Spain, International Journal of Quality & Reliability Management.

- Stetsiuk, K. (2015), The business concept of healthy food restaurant in Moscow.

- Stewart, H., Blisard, N., & Jolliffe, D. (2006), Let's Eat Out Americans Weigh Taste, Convenience, and Nutrition. Available at https://ageconsearch.umn.edu/record/59411/files/eib19.pdf, Retrieved March 24 2020.

- Stoltzfus, R. J., Chway, H. M., Montresor, A., Tielsch, J. M., Jape, J. K., Albonico, M., & Savioli, L. (2004), Low dose daily iron supplementation improves iron status and appetite but not anemia, whereas quarterly anthelminthic treatment improves growth, appetite and anemia in Zanzibari preschool children, The Journal of nutrition, *134*(2), 348-356.

- Sualakamala, S., & Huffman, L. (2010), Value negotiation for healthy food selection in restaurants, Journal of Culinary, Science. Technology, 8 (4), 242–256.

- Sulek, J. M., & Hensley, R. L. (2004), The relative importance of food, atmosphere, and fairness of wait: The case of a full-service restaurant, Cornell Hotel and Restaurant Administration Quarterly, *45*(3), 235-247.

- Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., & Goldsmith, C. H. (2010), A tutorial on pilot studies: the what, why and how, BMC medical research methodology, *10*(1), 1-10.

- Trüeb, R. M. (2020), Nutrition for healthy hair: guide to understanding and proper practice, Springer Nature.

- Tucker, L. R., & Lewis, C. (1973), A reliability coefficient for maximum likelihood factor analysis, Psychometrika, 38(1), 1-10.

- Vangvanitchyakorn, T. (2000), A survey on consumer perception: Southeast Asian restaurants in Minneapolis, Minnesota, Unpublished master's thesis, University of Wisconsin- Stout, Menomonie.

- Varela, P., Ares, G., Giménez, A., & Gámbaro, A. (2010), Influence of brand information on customers' expectations and liking of powered drinks in central location tests, Food Quality and Preference, 21 (7), 873–880.

- Wasike, K. C., Fwaya, E. V., & Kigaru, D. M. D. (2017), <u>Factors Influencing Customer Needs For Healthy Eating Products In Selected Restaurants Of Nairobi City</u>, Kenya.

- What's the meaning of the phrase 'you are what you eat'? Accessed on 21 of Jun (2021), Retrieved from https://www.phrases.org.uk/meanings/you-are-what-you-eat.html

- World Health Organization, (2000), Malnutrition: the global picture, <u>Geneva: World Health Organization.</u>

- Young, L. R., & Nestle, M. (2002), The contribution of expanding portion sizes to the US obesity epidemic, <u>American journal of public health</u>, 92(2), 246-249.

- Zimmerman, M., & Snow, B. (2012), <u>An introduction to nutrition</u>, Independent.