

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI - GHANA**

**Assessing Consumers' Behaviour Towards Food Supplements: A Case of Forever
Living Products.**

By

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Built Environment in Partial Fulfilment of the Requirement for the Degree of**

MASTER OF SCIENCE

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DECLARATION

I, the under-signed do hereby declare that, this research work, under the supervision of Dr. T. Y Baah-Ennumh is my own and that, to the best of my knowledge, it contains no material already published by someone else nor material which has been accepted for the honor of any other degree of the University, aside from where due affirmation has been made in the content.

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I am most thankful to God Almighty who by His grace, direction, protection and wisdom granted me the chance to carry out this research work. For all these, I say thank you Father! This is how far you have brought me.

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My profound gratitude likewise goes to all friends who encouraged me to pursue the programme. Without their participation and support, this work would not have come this far. To every one of you, I say Ayekoo!

DEDICATION

Dedicated to the memory of my son John Ayimasu

ABSTRACT

Considerable media attention has focused on the value of food supplements. Informational articles and studies report associations between supplement use and health conditions. Marketing data gleaned in the United States show a dramatic increase in sales of dietary supplements since 1997 displaying some approximate total sales of \$20.3 billion in 2005. At the same time, survey conducted by the National Health and Nutrition Examination indicate that between 2003 and 2006, half of the U.S. population which made up of 70% of adults 71 years of age or older, patronised dietary supplements. The impact of nutrition information food supplements preferences corresponds to the consumer competence regarding the understanding of nutrition information on food supplements. The current study Assessing Consumers' Behaviour towards Food Supplements: A Case of Forever Living Products. The conceptual framework compose of environmental and individual differences that affect the consumption of food supplements. The study targeted one hundred and six (106) consumers in Oforikrom District. The instrument for the data collection was developed by the researcher, preceded by a pilot study. The pilot study was initially conducted in a similar district to ascertain its validity and reliability. The data for the study was basically from primary source in that closed-ended questionnaire was designed and distributed to consumers of Oforikrom District. Standing on the shoulders of Yamane (1967), the study used eighty-three (83) respondents constituting all consumers in Oforikrom District, with an alpha level of 5% and a confidence level of 95% to gather data for analysis. The data generated was analysed using the mean score ranking. Descriptive statistics was used to test the data. The study concluded by saying that environmental and individual differences have strong influence on consumers and the decision to purchase food supplements is determined by these factors. The recommendation the study gave was that consumers' knowledge, environmental influences, individual influences and consumer's evaluation influence decision of purchase. Therefore, it is recommended that health institutions, network marketing companies and individual consumers take cognisance of these factors. Again, the study suggested that environmental influences, individual influences critical must be looked at carefully by health institutions, network marketing companies in order to convince consumers to consume food supplements. This can be done through thorough

understanding and interpretation of the benefits and negative effect food supplements by health institutions, network marketing companies.

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DEDICATION

I dedicate this research work to my parents, my boss, love one and the most high God who made all things possible.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Significant media consideration has concentrated on the estimation of nourishment supplements. Enlightening articles and studies report relationship between supplement utilize and wellbeing conditions. Showcasing information gathered in the United States demonstrate an emotional increment in offers of dietary supplements since 1997 showing some rough aggregate offers of \$20.3 billion out of 2005 (Nutrition Business Journal, 2005). Study led by the National Health and Nutrition Examination demonstrate that somewhere in the range of 2003 and 2006, half of the U.S. populace which made up of 70% of grown-ups 71 years old or more seasoned, belittled dietary supplements (Bailey et al., 2011). Blendon et al., (2001) set that larger part of supplement clients have solid trust that sustenance supplements items are "useful for wellbeing and prosperity. Radimer et al., (2004), contend that the utilization of nourishment supplements is expanding nonetheless, it doesn't appear to be in relationship with change in general wellbeing.

The effect of nourishment data sustenance supplements inclinations relates to the customer capability with respect to the comprehension of sustenance data on nourishment supplements. Study led by Lähdenmäki et al. (2010) uncover that purchasers have general information of right sustenance. Be that as it may, they infrequently utilize their insight in sustenance basic leadership and acquiring. Annunziata and Vecchio (2012), report that purchasers reject utilize sustenance data made in nourishments bundles and specifically on nourishment names. This reason come from the way that shoppers have low understanding. In the psyches of Grunert et al., (2010) the level of purchaser learning on nourishment data, its utilization in

sustenance decisions appear to a huge degree impacted by abstract highlights and individual conditions, for example, enthusiasm for sound propensities, age, and economic wellbeing. Quite, the buying driving forces most occasions start from both inside and outer signs and individual feelings (Shepherd 1989). Certainty remains that tactile and non-tangible elements impact nourishment inclinations which consent to shape buyer discernment (Ares et al. 2010).

Always Living Products was established by Mr. Rex Maughan in the year 1978 at Scottsdale, Arizona with just 48 members. Today, the organization works in 162 Countries worldwide having in excess of 9 Million members. Perpetually Living Product is the biggest maker of Aloe Vera on the planet. It controls around 85% of the world's business circulation of Aloe Vera. The Aloe ranches are situated in Mexico, Dominican Republic and Arizona contain 7500 sections of land of land. It is again perceived as the biggest maker of the results of the Bee Hive with a zone of 550 sq. miles in the Sonaran Deserts. It puts forth a strong effort and just known LEAD FREE HONEY from the desert plants. 90% of our items are Aloe based/detailed. Our Dietary and Food Supplements are made with Natural and Organic vegetables, natural products, leaves, trees, herbs and lentils.

1.2 Problem Statement

Nourishment supplements utilization is on the expansion in every single industrialized economy. Enthusiasm for sustenances supplements and beverages have been driven by a craving for wellbeing, and additionally wellbeing. As per European Commission Regulations (2010), nourishment supplement is characterized as will be as an expansion to a typical eating regimen which are concentrated wellsprings of supplements (or different substances) with a wholesome or physiological impact. Such sustenance supplements can be advertised in "dosage" frame, for example, pills, tablets, cases, and

fluids in estimated measurements. Frewer et al. (2003) contend that the improvement of supplement nourishments will develop in industrialized nations. This is driven by expanding higher predominance of non-transmittable sicknesses, future, and acknowledgment of the solid connection among eating routine and wellbeing and the expanding social insurance costs. In any case, buyers stay careful about wellbeing related cases on sustenance supplements items and incredulous of their adequacy. In this manner, accomplishment in the sustenance supplements advertise is progressively reliant after setting up a relationship of trust with the purchaser.

The market of sustenance supplements has expanded. General pattern can be spotted on wellbeing market. Around the world, Western Europe and the United States are believed to be the greatest areas of sustenance supplements advertise - speaking to around 43% of the deals in the part. Despite what might be expected, the genuine pushers of the progressions are Latin America, South-East Asia, and the developing economies of Central-Eastern Europe, particularly the V4 nations. Concerning the difference in the use, the most vital improvement is taken by Russia and Poland (Tisman, 2010).

The previous contentions show that various investigations have been done on the advantages of nourishment supplements in the industrialized economies and that there is a deficiency of writing on the estimation of sustenance supplements in creating nations like Ghana. In such manner, the investigation totally leaves from the examinations and discoveries in the created nations and focuses on how purchasers assess the estimation of sustenance supplements in creating nations. The investigation likewise concentrates more on wellbeing establishments in Ghana to find out customers' inspirations introductory preliminary of nourishment supplements, social and

characteristic impacts that influence proceeded and submitted utilization of sustenance supplements and assessment of the effect and benefit of taking nourishment supplements.

1.3 Research Questions

1. What are the environmental influences that affect the purchase of food supplements?
2. What are the individual influences that affect the purchase of food supplements?
3. How do consumers evaluate food supplements?

1.4 Research Objectives

The objectives of the study are:

1. To examine the environmental influences that affect consumers' purchase of food supplements.
2. To examine the individual influences that affect consumers' purchase of food supplements.
3. To understand consumers evaluation of food supplements.

1.5 Brief Overview of Research Methods

The study used quantitative approach. The method was selected because of its ability to facilitate the collection of data from large groups of respondents. Data collected was analyzed quantitatively using descriptive statistics. The data collected was edited initially to remove errors. It was then coded. The data obtained was analysed using SPSS software.

1.6 Scope of Study

This study chooses some of the health sector in Kumasi Metropolis as its focus. Given that the health sector in developing-economy markets is noted for their contribution to

development and GDP, and in view of the argument that the health sector performance in many developing-economy markets like Ghana is poor in terms of services provided, this study concentrates on how consumers, in maintaining their health, perceive food supplements provided by health organisations in Ghana. The research will be limited to the Kumasi Metropolis and therefore the findings from the study will not be generalized to other part of the world.

1.7 Significance of Study

Taking into consideration the dearth literature on benefits of food supplements in Africa and particularly Ghana, the outcome of the research will serve as a useful literature for other researchers who want to work in this field of study. The study will highlight new knowledge to literature regarding the importance of food supplements. Furthermore, the findings from this work will enable health institutions to know consumers' motivations, social and intrinsic influences on continued and committed use of food supplements. Public and private health institutions, networking marketing companies, health professionals will also benefit from this research work making them aware of the issues of consumer behavior toward food supplements.

Most important, the study will serve as an important guide, source of knowledge and reference work for academicians, practicing health professionals, network marketers project management, the general public, students and development partners. On the whole, the study offers both managerial and theoretical understanding of the value of food supplements in the health sector.

1.8 Limitations of Study

The relevance of this study could not be overestimated due to the handful of works in this area of research in Ghana. However, the robustness of the findings of this study could be underestimated due to certain limitations encountered. First and foremost, the availability of respondents to answer questionnaires to aid in rigorous analysis was a crucial problem. The study was limited by a very small sample size drawn from 100 respondents in Oforikrom District. Furthermore, the ease to retrieve questionnaires from respondents was also a great limitation. Most of these respondents have no experience in the use of food supplements. This affected the further inclusion of all 100 respondents in the District.

1.9 Organisation of Study

The study is organized into the following chapters. The first chapter one outlines in the background to the study, problem statement, research questions, research objectives, brief overview of research methods, scope of study and the significance of study.

Chapter two talks about the literature. The concept of food supplements, health benefits of food supplements, Theoretical and empirical literatures on food supplements, conceptual framework for the study and hypothesis development.

Chapter three covers the methodology of the study. Research design, target population, sample size, sampling technique, and data collection methods.

Chapter four deals with the presentation and analysis of data and finally, chapter five contains summary of findings, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter focuses on the contextual review concentrating on the history and current issues in food or dietary supplements. Again, the chapter reviews the theoretical and empirical literatures. Better still, the chapter develops conceptual framework as well as hypothesis to guide the study. Overall, the chapter provides a summary of the issues raised by identifying the gaps in the literature.

2.2 Contextual Review

Albert Szent-Györgyi previously found Vitamin C (ascorbic corrosive). Individuals utilized vitamin C to fix scurvy indications successfully and proficiently in light of the fact that sustenances like citrus contained vitamin C. Vitamin C inadequacy caused outrageous fatigue, sickliness, swelling in specific territories of the body, and tooth misfortune. In the 1920s, vitamins A and B were famous. Vitamin B2 wound up hot item in the 1930s. All the more as of late, vitamin C is still in the framework with vitamins E and D.

Unadulterated Food and Drugs Act, the 1938 Food, Drug, and Cosmetic Act (FDCA) rested in the Food and Drug Administration (FDA) the official obligation to direct the security of nourishment, medications, and beautifiers. Unadulterated Food and Drugs Act was insufficient to determine the snappy increment in dietary-related items with the reason that in excess of 100 individuals crosswise over 15 states kicked the bucket from Elixir Sulfanilamide harming. What's more, the FDCA gave FDA control for makeup and therapeutic gadgets boosting the office's capacity to authorize these laws.

Until 1976, the FDA had the capacity to decreasing the vitamin and mineral power found in sustenance supplements. Once more, the FDA had the ability to manage drugs in light of this rule. Then again, on April 22 of that year, the supplements business took it turn in 1979 to hit gold with the entry of the Vitamins and Minerals Amendment. In Vitamania, Catherine Price clarifies that the VMA are unlawful for the FDA and that FDA can't build up models for supplements, arrange them as medications, or necessitate that they just contain valuable fixings. FDA was rushed from setting limits on the amount or blend of vitamins, minerals, or different fixings that a supplement contain. Notwithstanding, FDA need to demonstrate the outrageous imperative move of duty.

There came Nutritional Labeling and Education Act (NLEA) in 1990 giving an oversight capacity to FDA to manage and name supplement content cases. Congressperson Orrin Hatch of Utah proclaimed the Health Freedom Act of 1992 in case of the FDA was working perseveringly to follow the Act 1993 due date. Bring forth's given a lot of energy for Congress to passed a law on the vigorously campaigned Dietary Supplement Act of 1992, expressing that the FDA's prospective marking rules apply not to dietary supplements until the finish of 1993.

The Dietary Supplement Health and Education Act (DSHEA) of 1994 was instituted to offer shoppers opportunity to later and certified data on supplements. Three primary segments are embraced by DSHEA - the meaning of a supplement (barring supplements named nourishment added substances or contaminated sustenance), required data on names (net amount, nourishment data, name of business or producer, and supplement makers don't need to get FDA endorsement before advertising their items.

DSHEA enables organizations to plan with their details utilizing Generally Recognized as Safe (GRAS) fixings. Genuinely, after the section of DSHEA, dietary supplements experienced less administrative oversight than customary nourishment.

As per Ruth Kava, Senior Nutrition Fellow at the American Council on Science and Health, DSHEA's section moved supplements to the domain of sustenance as opposed to drugs. DSHEA states that the supplements business is in charge of self-direction.

Among 2007 and mid-April of 2012, around 6,300 genuine negative occasions identified with dietary supplements were accounted for to the FDA from customers, supplement organizations, medicinal services suppliers, and others. More to that were 1,000 genuine sicknesses, 115 passings, and more than 2,100.

Geller et al, (2015), gauge that somewhere in the range of 2004 and 2013 in excess of 23,000 individuals visit offices to gripe of negative responses of devouring dietary supplements. The attestation given by these individuals don't substantiate regardless of whether supplements make the issues.

2.3 Theoretical Review of Literature

The review focuses on the theories of dietary or food supplements consumption and consumer behavior theories. Theories reviewed relate to the study.

2.3.1 Food Supplements Theories

Dietary or sustenance supplements utilize is imperatively recorded. It utilizes has been polished by grown-up and immature competitors (Sobal et al., 1994). Joining complex factors, for example, mental, monetary and social are associated with supplement sustenances utilization (Coner et al., 2001). Confirmation given by restorative specialists demonstrate that nourishment supplements ought to be devoured by specific

people, for instance, pregnant ladies to support the substance of iron in bodies, babies and kids, calcium for youthful young ladies and young ladies (ADA Position Statement, 1994/8).

2.3.1.1 Reasoned Action Theory

Understanding and foreseeing conduct of people is the main objective of contemplated activity hypothesis. The suspicion behind the hypothesis is that people are normal and that they have capacity to utilize accessible data to touch base at behavioural choice in a way sensible. Once more, the hypothesis gather that the individual has the power and has a volitional control to pick intrigued conduct. This implies execution or abstaining from an activity is under the control of the person.

Ajzen and Fishbein (1980), set that there are sure quick determinants of a man's disposition toward conduct – emotional standard and individual factor. These elements reflect social impact. Pessimistic or constructive assessment of execution of individual conduct is behavioural disposition. Standards that are abstract divided impression of individual's noteworthy others respond to the execution set up by the person. Conduct under volitional control consolidate both abstract standards and individual factor (Ajzen et al., 1980).

Contemplated Action Theory is firmly connected to sustenance supplements. Constructive and contrary assessment of execution of a man about conduct decision interface with contemplated activity hypothesis. The essential inquiry by contemplated activity scholars is: is utilizing sustenance supplements a decent or awful decision for juvenile competitor?

2.3.1.2 Planned Behavior Theory

Another build to TRA – saw conduct control to help contain the elements outside the control of the person. There is inspiration (expectation) and behavioural control existing in the execution of conduct. Thinking about nourishment supplements, inquiries on the utilization of supplements by pre-adult, their behavioural control components and goal ought to be tended to by wellbeing specialists (Ajzen, 1985).

2.3.2 Consumer Behaviour Theories

As per Schiffman (2007), shopper conduct alludes to the conduct that customers appear in hunting down, obtaining, utilizing, assessing, and discarding items and administrations that they expect will fulfill their necessities.

Specialists have had enthusiasm for buyer basic leadership hypothesis. It started 300 years back by early market analysts like Nicolas Bernoulli, John Von Neumann and Oskar Morgenstein.

Utility hypothesis is one of the commonest display from buyer conduct hypothesis. It recommends that decision are made by purchasers on the result anticipated from their choices. Shoppers are touted as producers of objective choice worried about self-intrigue (Saw et al, 2005; Zinkhan 1992).

Zinkhan (1992), set that while utility hypothesis considers shoppers to be discerning monetary man that of contemporary buyer conduct examine takes more extensive perspective of elements influencing customers and acknowledge a wide scope of exercises of utilization rising above buying. These exercises ordinarily involve data look, working of procurement goal, require acknowledgment, assessment of options, and the demonstration of obtaining, utilization and transfer.

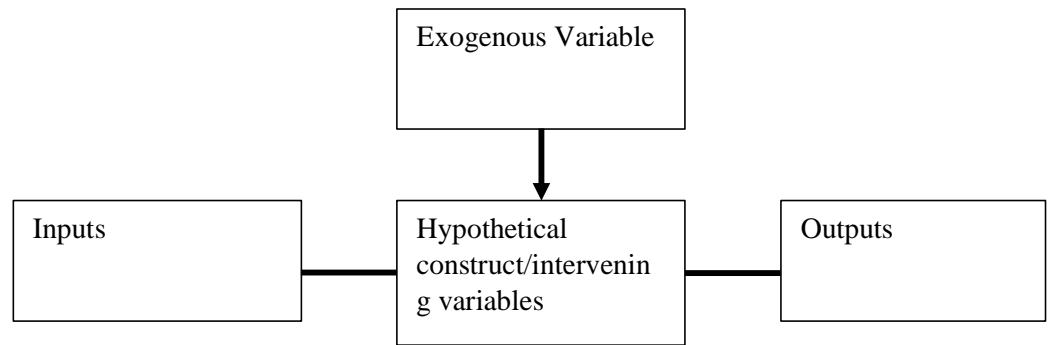


Figure 1: Components of the Buyer Behaviour Theory (*Adapted from Loudon, 1993*)

Environmental boosts are the info factors that shoppers are subjected to. This is imparted from a different source. The real components of an item and its image that buyers come into contact with are significant improvements (Loudon, 1993). The portrayals of an item and its image clarified by advertisers acting and promoting to shoppers by implication is the emblematic improvements (Foxall, 1990; Howard et al., 1969). The impact of family, peers, reference gatherings and others is the social upgrades. The impact of such upgrades is disguised by the customer before they influence the choice procedure.

The Hypothetical Constructs (or Intervening Variables) are comprised of two builds - Perceptual develops, and Learning builds.

Perceptual builds involve affectability to data – how much the purchaser controls the stream of boost data, perceptual predisposition – bending or adjustment of the data got because of the shoppers fitting the new data into his or her current mental set, and look for data – the dynamic looking for of data on utilization decisions. These set up together help to control, channel and process the boosts that are gotten.

The learning build make out of intention – portrayed as either broad or particular objectives inducing activity, evoked set – the shoppers' evaluation of the capacity of the utilization decisions that are under dynamic thought to fulfill his or her objectives, choice middle people – the psychological principles or heuristics of the purchaser for surveying buy choices, inclinations – an inclination toward brands in the evoked set communicated as a state of mind toward them, inhibitors – ecological powers, for example, restricted assets (e.g. time or money related) limiting the utilization decision and fulfillment – speaks to an input component from present buy reflection utilized on educate ensuing choices (Loudon, 1993).

Howard and Sheth (1969), affirm that basic leadership of purchasers changes in connection to quality and mentality toward the brands accessible administered to a great extent by the shopper's nature and information with the item class. The shopper participates in Extended Problem Solving (EPS) when the customer does not have solid learning and disposition in this way looking for data to diminish mark uncertainty. Drawn out considerations are taken by the customer in such circumstances previously he or she chooses the item to buy or whether to make any buy. As the item gather turns out to be more well-known, the procedures will be embraced less scrupulously as the purchaser attempts Limited Problem Solving (LPS) and in the end Routine Problem Solving (RPS) (Foxall, 1990).

Exogenous factors clarify different outer factors affecting choices altogether. In spite of the fact that these factors or factors to some degree rely upon the individual purchaser, they are not accurately characterized by Howard and Sheth (Loudon AND Della Bitta 1993). Howard and Sheth (1969), contend that these exogenous factors have the historical backdrop of the purchaser up to the start of the time of perception.

Yield factors speak to the reactions of the purchaser and experience the dynamic strides to buy: consideration – the extent of the purchaser's data admission, cognizance – the handled and comprehended data that is utilized, states of mind – the purchaser's assessment of a specific brand's capability to fulfill the buy thought processes, goal – the purchaser's figure of which item they will purchase, and buy conduct – the genuine buy conduct, which mirrors the purchaser's inclination to purchase as changed by any inhibitors (Loudon, 1993).

2.3.3 Consumer Decision Model

The Consumer Decision Model was at first created by Engel, et al., in 1995. The model is planned on seven focuses choice process: require acknowledgment taken after by a hunt of data both inside and remotely, the assessment of options, buy, and post buy reflection lastly, divestment. Two elements influence these choices: first, upgrades are gotten and handled by the shopper together with recollections of past encounters, and second, outside factors as either ecological impacts or individual contrasts. The impacts of the natural make out of social class, culture, family, circumstance and individual impact. The individual impacts contain inspiration and inclusion, learning, state of mind, purchaser asset, demeanors, identity, qualities and way of life (Blackwell et al., 2001).

2.4 Empirical Review of Literature

Khan and Dhar, (2006); Sachdeva et al., (2009), place certain impression of individuals about their own wellbeing make out of a fanciful feeling of resistance affected by honing assumed wellbeing improving practices. Once more, solid decision taken by individuals rely upon their expansion liberal practices (Wilcox, Block, Fitzsimons, and Vallen, 2009).

Bjelakovic et al., (2007); Radimer et al., (2004), contend that there exists a nearby deviated connection between the wellbeing status of people and the interest for dietary supplements considering the mental outcomes of the utilization of dietary supplements present.

Khan and Dhar, (2007), theory the impact of taking dietary supplements on the decrease of self-direction of consequent wellbeing related practices. Khan et al., (2007), found that taking dietary supplements advance apparent wellbeing related qualifications, as observed by an ascent in saw resistance.

Gilbert (2010), inspected statistic portions specifics of individuals' mentalities towards useful nourishments, sustenance and wellbeing and inferred that section of sustenance as pharmaceutical customers as the principle purchasers of utilitarian sustenance. Menrad (2003), sets that learning of fixings in dietary supplements influence customers' conduct of buying dietary supplements.

Childs (2002), contend that training and status impact conduct in purchasing dietary supplements. He directed his examination in America on utilitarian nourishments and affirmed that individuals who are taught are very much educated.

Wansink et al (2005), affirm the Menrad (2003) on learning where buyers have no information and circumstances where they have information. Chain of importance of dietary learning on onsumer conduct of useful nourishment incorporate sustenance particular trait information utilization outcomes of learning and utilization.

Szakaly et al (2012), showed the linkage between utilization of useful nourishment and way of life, wellbeing conduct based on Grunert's sustenance related way of life demonstrate. The creators sketched out classes of way of life sections: the balanced, uninvolved, preservationist, reckless and daring purchaser fragments. Among these,

customers with a sound methodology give the essential target gathering to the utilitarian nourishment showcase.

2.5 Conceptual Framework

To answer the questions posed, the study aims to investigate consumer expectation for and evaluation of food supplements product performance using the food supplement and consumer decision model theories. Whilst food supplement – reasoned action theory and planned behavior theory concentrate on the volitional power of the individual to choose interested action, consumer decision model theories look at the intrinsic and extrinsic factors that influence the individual to make interested choice. Informed by insights from these preliminary studies, the study’s proposed conceptual framework identifies two factors – environmental influences and individual differences that inform the consumer to purchase food supplement.

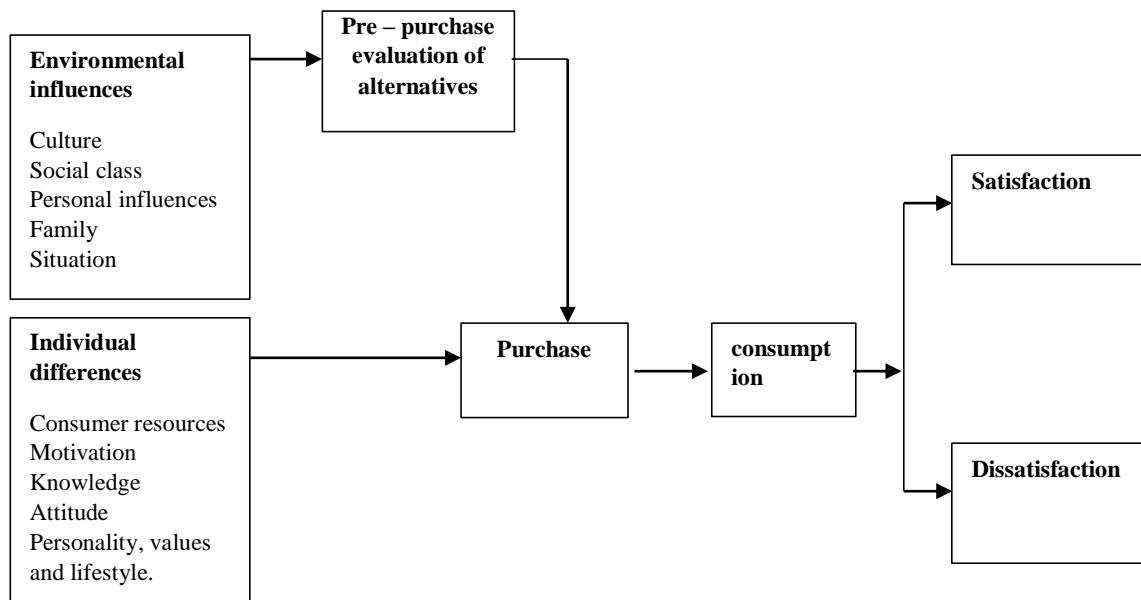


Figure 2: Conceptual Framework (*Authors construct, 2018*)

2.6 Research Gap

The market of sustenance supplements has expanded as of late. General pattern can be spotted on wellbeing market. Around the world, Western Europe and the United States are believed to be the greatest areas of sustenance supplements showcase - speaking to around 43% of the deals in the division. Unexpectedly, the genuine pushers of the progressions are Latin America, South-East Asia, and the developing economies of Central-Eastern Europe, particularly the V4 nations. Concerning the difference in the use, the most imperative advancement is taken by Russia and Poland (Tisman, 2010).

The prior contentions show that various examinations have been done on the advantages of nourishment supplements in the industrialized economies and that there is a deficiency of writing on the estimation of sustenance supplements in creating nations like Ghana.

2.7 Chapter Summary

The chapter discussed food supplements and consumer behavior. Concentration on consumer behaviour was on the environmental and individual differences. The chapter also looked at the theories of consumer behaviour and the empirical dynamics of the triple constraints as well as the theory of constraints and the triple constraints. Ultimately, the chapter developed a framework to guide the study. The chapter outlined the gap in the literature where consumption of food supplements are spotted in the advanced economies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The chapter focuses on the research technique, approach and methodology. It furnishes information on the study area, research approach, methods and strategies. Again, the chapter throws light on the target population, sample size and sampling technique, sources of data, data collection instrument, validity and reliability of research instrument.

3.2 AREA OF STUDY

The Oforikrom Municipality is carved out of the Kumasi Metropolis as one of the 38 newly created and upgraded Districts in 2018. Created with LI 2291, the oforikrom Municipality has its capital as Oforikrom. It was inaugurated on March 15, 2018 alongside other 37 newly created districts. The Oforikrom District was chosen for this study because the Municipality has diverse consumers with different behavioural traits, knowledge and beliefs about food supplements.

3.3 RESEARCH APPROACH

There are two main research approaches, these are the inductive and deductive approaches. As per Trochim (2006), deductive thinking moves from the general to the particular in that contentions depend on standards, laws and are broadly acknowledged standards, while the inductive deals with the development of theories. The study investigates into consumers' behavior towards food supplements taking Forever Living Products in Ghana. Hence, this study adopted the deductive approach in order to establish the behavior of consumers' towards food supplements.

3.2 RESEARCH METHODS

This research is based on deductive approach as it involves the use of already existing theories, thus, quantitative methods, specifically descriptive statistics was adopted to make inference from how consumers' behave towards food supplements.

3.4 RESEARCH STRATEGY

This research study used a questionnaire-based survey to facilitate the achievement of the main research objective. Two main characteristics describe the purposes of a survey. Firstly, surveys aim to produce some descriptions about the distribution of phenomena in a population (Ling et al., 2008). Therefore, a survey analysis may be concerned with comparing the relationship between variables, or with demonstrating the finding, descriptively (Zikmund et al., 2009). Secondly, surveys are used to collect information from research population through use of structured questions. Additionally, a survey provides a means for collection of a large amount of data from a substantial population in a highly economical way and it also operates on a foundation of statistical sampling to protect a particular representative dataset (Liu, 2008).

3.5 TARGET POPULATION

Literally, this refers to the aggregate number of people found within a particular area. In other words, Saunders (2007), consider a population as the complete set of cases whether human beings or not from which a sample is selected or drawn. Likewise, population is also considered as a collection of items or individuals with one or more common characteristics from which data can be elicited and analyzed (Kumar, 1999). In addition, Oxford Advanced Learners' Dictionary also defines population as all the people living in a particular country, city or area. Also, Ruben and Babbie (1989), define study population as the sum of all elements from which the sample is actually

selected. In this regard, all consumers of food supplements in the Oforikrom District remain the population for this research.

3.5.1 Sample Size and Sampling Technique

The study utilized purposive sampling technique to select the consumers' in the light of two reasons: first, simple choice and distinguishing proof of people or gatherings of people that are capable and all around versed in data with a wonder of intrigue (Cresswell et al., 2011). Second, the significance of readiness and accessibility to take an interest, and the capacity to convey encounters and feelings in an expressive, intelligent way, and understandable (Bernard, 2002; Spradley, 1979). However, according to Israel (1992) of a population is less 200, the total population should consider for the sample size. Hence, in this study the sample size is equal to the population. In addition, Israel (1992) advice that in such cases census sampling technique should be adopted. Thus, this study again adopted the census sampling technique in the data collection.

3.6 SOURCES OF DATA

The research study made use of two sources of data; primary and secondary sources of data. The primary data were gathered from the respondents selected for the research work. This source of data formed comprised the first-hand information and solely meant for this research work and was retrieved through questionnaires issued to respondents and analysed. This agreed with Brown (2005), who asserted that a primary source provides direct or first-hand evidence about an event or information. However, secondary source of data was gathered through various documented ongoing projects in the beverage industry. Secondary data was the type of data, which already existed, and not purposefully for this research work. These data helped in reviewing literature. These data were not analysed.

3.7 INSTRUMENT FOR DATA GATHERING

Questionnaires were the fundamental instruments used to gather data for the research work. A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents (Gujarati, 2002). The use of questionnaire in this study had several advantages, which include the ability to reach all respondents and was economical to use in terms of money and time. A 4-point Likert scale that ranged from strongly disagree (=1) to strongly agree (=4) was used to measure all items. To correctly analyse the extent to which the constructs (indicator variables) measure the characteristics, the following range were categorized: Strongly Disagree (1.00 – 1.75), Disagree (1.76 – 2.50), Agree (2.51 -3.25) and Strongly Agree (3.25 – 4.00). To design and setup the survey questionnaire, enquiry questions were grouped from the general to the more specific. The first section of the questionnaire was developed to collect information about the demographic characteristics of consumers' while the second section deals with assessing consumers' behavior towards food supplements.

3.7.1 Validity and Reliability of Research Instrument

Three (3) to five (5) respondents were utilized as pre-test to guarantee increment legitimacy, understanding, troublesome inquiries and respondents' readiness to react to questions (Ghauri et al., 2005; Orodho, 2012). Pre-testing made dialect clearer and tried exactness and manageability of instrument. Pre-test respondents were chosen haphazardly from the focused on populace. Survey was given to project specialists and food supplements experts to cross check regardless of whether modified issues were delineated to guarantee content validity. The changes made from these specialists and experts together with those from the pre-test were joined in the last poll.

3.8 ANALYSIS OF DATA

Data analysis process entails the process of packaging the collected data putting in order and structuring its major elements in a way that the results can be easily and efficiently communicated. The data analysis was conducted through the use of the software Statistical Package for Social Scientist (SPSS) version 21. The presentation and analysis were conducted through statistical mean score ranking.

3.9 CHAPTER SUMMARY

This section depicted the techniques by which information required for the examination is gathered. In particular, it secured the exploration strategies, approach, system, populace, test and inspecting methods, and research instruments, information gathering strategy, instrument legitimacy and instrument unwavering quality.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

This chapter presents the study's results and the discussions of the findings. The key sections of the chapter includes: respondent profile, descriptive results, measurement assessment, and discussions, and chapter conclusion.

4.2 RESPONDENTS' PROFILE

The study sought to explore the role of stakeholders in the delivery of project in the financial services sector. The study administered 110 questionnaires and 107 were retrieved. Preliminary checks for incompleteness however revealed that only 100 could be considered usable for the study. As shown in Table 4.1 shows that majority of the respondents had ages between 0 to 29 (34.0%, n=100) and 30 to 39 years (46.0%, n=100). Also, majority of them were male (54.0%, n=100) or female (46.00%, n=100). Moreover, regarding educational background, majority of them were either bachelor degree holders (50.0%, n=100) or masters' degree holders (22.0%, n=100). Further, majority of them were businessman/women (26%, n=100) followed by security officers (25%, n=100), teachers (22%, n=100), nurse (9%, n=100), bankers and network marketers (7%, n=100) and receptionists (4%, n=100).

Table 4.1 Respondent profile

Variable	Category	% of n
Age	0 – 29	46.0
	30 – 39	34.0
	40 – 49	10.0
	50 +	10.0
Gender	Male	54.0
	Female	46.0
Academic Qualification	SSCE/WASSCE/O LEVEL	14.0
	Bachelor's Degree	50.0
	Professional Certificate	10.0
	Master's Degree	22.0
Occupation		4.0
	Teacher	22
	Banker	7
	Businessman/woman	26
	Network marketer	7
	Security officer	25
	Nurse	9
	Receptionist	4

4.3 DESCRIPTIVE RESULTS

This section presents descriptive results on the study's constructs. The constructs are consumers' knowledge on food supplements, environmental influences on purchasing food supplements, individual differences on purchasing food supplements and consumer's evaluation of consuming food supplements. A 4-point scale that ranged from strongly disagree (=1) to strongly agree (=4) was used to measure all items.

4.3.1 Consumers' knowledge on food supplements

Five (5) question were asked to measure consumers' knowledge on food supplements stakeholder identification this items were adopted from (DSHEA, 1994). The descriptive results on the items and their composite (average) score are shown in Table 4.2a. Of the 5 questions, the lowest mean score was 2.71 (standard deviation = .957) and the highest means score was 4.04 (standard deviation = 5.820). The large maximum score (10.4) indicate that the data contains more outliers. The overall mean score was

3.45 (standard deviation = 1.733). Given a scale of 1 to 4, these results, suggest that consumers knowledge on food supplements is high.

Table 4.2a Extent of Consumers' knowledge on food supplements

<i>Item code</i>	<i>Item statement</i>	<i>Mean</i>	<i>Std Dev</i>
HFS	Please, have you heard about food supplements?	3.74	0.564
SC	If yes, what is your source	3.64	0.562
DFS	What are food supplements	2.71	0.957
CFS	Please, do you consume food supplements	4.04	5.820
HFCFS	If yes, how often do you consume food supplements	3.14	0.714
<i>Composite (average) score</i>		3.45	1.723

Source: Field study (2018)

4.3.2 Environmental influences of purchasing food supplements

Nine (9) items were adopted from (Loudon, 1993; Foxall, 1990; and Howard et al., 1969) to measure the environmental influences of purchasing food supplements. To make the results easily interpretable, the scores obtained were recoded to reflect each consumer of food supplements. More importantly, the study categorised the dimensions of environmental influences as culture, social class, and situation. The descriptive statistics of the items and their overall average score are shown in Tables 4.2b. Across the nine dimensions, an average consumer scored 3.75 (standard deviation = 1.853). 3.46 (standard deviation = 2.561), 3.09 (standard deviation = 0.862). The means and the standard deviation scores were obtained on all the nine dimensions respectively. Overall, the composite average score and standard deviation were 3.43 and 1.759

respectively. The large maximum score (10.4) indicate that the data contains more outliers. Given a scale of 1 to 4 used to measure the items, these results suggest that environmental factors greatly influence consumers decision to purchase food supplements.

Table 4.2b Extent of the Environmental influences on purchasing food supplements

<i>Item code</i>	<i>Item statement</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Rank</i>
CT1	Customs and traditions do not allow me to consume food supplements	3.6	0.638	3rd
CT2	Consuming food supplements means violating strong cultural norms	3.48	0.677	2nd
CT3	Consuming food supplements leads to stigmatisation	4.18	4.245	1st
SC1	Friends of the same social status often consume food supplements	2.92	0.986	3rd
SC2	Consumption of food supplements is a result of friends persuasion	4.06	6.028	1st
SC3	High caliber of people consume food supplements	3.4	0.670	2nd
ST1	Consumption of food supplements become important in terms of sickness	3.36	0.749	1st
ST2	Consumption of food supplements become important when recommended by doctor	3.16	0.817	2nd
ST3	Consumption of food supplements become important when it can help me to perform a duty	2.76	1.021	3rd
<i>Composite (average) score</i>		3.43	1.759	

Source: Field study (2018)

4.3.3 Individual Differences of Purchasing Food Supplements

Nine (9) items were adopted from Blackwell *et al.*, 2001 to measure the individual influences of buying food supplements. To make the interpretation easier the scores obtained were recoded to reflect each individual influences of purchasing food supplements. More so, the study outlined the dimensions of the individual influences as consumer resources, level of knowledge, and attitude. Each of the constructs has three questions. The descriptive statistics of the items and their overall average score are shown in Tables 4.3c. Across the 9 dimensions, an average participant scored 4.02 (standard deviation = 3.530). 3.63 (standard deviation = 2.335), 3.39 (standard deviation = 0.666). The means and the standard deviation scores were obtained on all the nine dimensions used to measure individual differences of consuming food supplements. Overall, the composite average score and standard deviation were 3.68 and 2.177 respectively. Given a scale of 1 to 4 used to measure the items, these results suggest that individual influences greatly affect the rate at which individual consumers patronise food supplements.

Table 4.2c Extent of Individual Influences of Purchasing Food Supplements

<i>Item code</i>	<i>Item statement</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Rank</i>
CR1	Time does not allow me to consume food supplements	4.38	5.805	1st
CR2	Not enough money to buy food supplements	3.53	0.543	3rd
CR3	Food supplements are expensive	4.16	4.244	2nd
LK1	The idea of food supplements is alien	3.24	0.560	3rd
LK2	No information on implications of consuming food supplements	4.36	5.801	1st
LK3	Sellers of food supplements do not explain in details the content and the benefits of consuming food supplements	3.3	0.646	2nd
AT1	People do not like consuming food supplements	3.36	0.635	2nd
AT2	Consumption of food supplements are low because people do not care about their health	3.34	0.751	3rd
AT3	Consumption of food supplements are low because people are conservative	3.48	0.614	1st
	<i>Composite (average) score</i>	3.68	2.177	

Note: $n = 100$

Source: Field study (2018)

4.3.4 Consumer's evaluation of consuming food supplements.

Two (2) questions were asked on how consumers evaluate food supplements. These questions were based on a model developed by Engel, Kollat, and Blackwell in 1968. The descriptive results on the items and their composite (average) score are shown in Table 4.2d. Of the 2 questions the lowest mean score was 2.82 (standard deviation = .774) and the highest means score was 3.1 (standard deviation = .952). The overall mean score was 2.96 (standard deviation = 0.863). Given a scale of 1 to 4, these results, suggest that consumers strongly evaluate food supplements on the basis that consuming

food supplements solve problems such as improves your health, manage your weight and boost your immune system and monetary value measure.

Table 4.2d Extent of Consumers Evaluation of Food Supplements.

<i>Item code</i>	<i>Item statement</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Rank</i>
CE1	Value for money	3.1	0.952	1st
CE2	Solve problems, that is improves your health, manage your weight and boost your immune system	2.82	0.774	2nd
<i>Composite (average) score</i>		2.96	0.863	

Source: Field study (2018)

4.4 MEASUREMENT ASSESSMENT

To examine the reliability and validity of the study's scales, the study relied on Cronbach alpha test. Cronbach alpha test is a suitable technique for assessing the internal consistency of scales (Hair et al. 2014; Field 2009). The Cronbach alpha test conducted revealed that each scale in the study had strong internal consistency and was reliable given that the alpha values were above .70 (Field 2009). Consumers knowledge on food supplements, environmental influences of consuming food supplements, individual influences of purchasing food supplements and consumers evaluation of food supplements consumption had alpha values of .899, .906, .949, and .954 respectively indicating strong internal consistency of each scale that measured the dimensions.

4.5 DISCUSSIONS

Food supplements consumption is on the increase in almost all industrialized economies. Interest in foods supplements and drinks have been driven by a desire for health, as well as health. Frewer et al. (2003) argue that the development of supplement

foods will grow in industrialized countries. This is driven by increasing higher prevalence of non-communicable diseases, life expectancy, and acceptance of the strong link between diet and health and the increasing healthcare costs. However, consumers remain wary about health-related claims on food supplements products and skeptical of their efficacy. Therefore, success in the food supplements market is increasingly dependent upon establishing a relationship of trust with the consumer. Consolidating the arguments espoused by Frewer et al., (2003) on the growth of food supplements and again reducing the weariness of consumers about their health-related claims on food supplements, the present study relied on a sample of 100 consumers in Ghana, specifically Ashanti Region, Kumasi. The results obtained are discussed below:

4.5.1 Consumers Knowledge on Food Supplements

The descriptive results on the items and their composite (average) score are shown in Table 4.2a. Of the 5 questions, the lowest mean score was 2.71 (standard deviation = .957) and the highest means score was 4.04 (standard deviation = 5.820). The large maximum score (10.4) indicate that the data contains more outliers. The overall mean score was 3.45 (standard deviation = 1.733). Given a scale of 1 to 4, these results, suggest that consumers knowledge on food supplements is high. The study conducted by Wansink et al (2005), which confirmed the Menrad (2003) study, found that consumers have no knowledge on food supplements and that hierarchy of nutritional knowledge on consumer behaviour of functional food included food specific attribute knowledge consumption consequences of knowledge and consumption. The present study disagrees with the findings of Wansink et al., (2005) and concludes that consumers have high knowledge on the food supplements.

4.5.2 Environmental Influences on Purchasing Food Supplements

The descriptive statistics of the items and their overall average score are shown in Tables 4.2b. Across the nine dimensions, an average consumer scored 3.75 (standard deviation = 1.853), 3.46 (standard deviation = 2.561), 3.09 (standard deviation = 0.862). The means and the standard deviation scores were obtained on all the nine dimensions respectively. Overall, the composite average score and standard deviation were 3.43 and 1.759 respectively. The large maximum score (10.4) indicate that the data contains more outliers. Given a scale of 1 to 4 used to measure the items, these results suggest that environmental factors greatly influence consumers decision to purchase food supplements. A study by Foxall, 1990; Howard et al., 1969) found that the influence of family, peers, reference groups and others is the social stimuli in that these stimuli are internalised by the consumer before they affect the decision process. In connection to that, the present study also finds that environmental influences greatly affect consumers decision to purchase food supplements.

4.5.3 Individual differences on Purchasing Food Supplements

The descriptive statistics of the items and their overall average score are shown in Tables 4.3c. Across the 9 dimensions, an average participant scored 4.02 (standard deviation = 3.530), 3.63 (standard deviation = 2.335), 3.39 (standard deviation = 0.666). The means and the standard deviation scores were obtained on all the nine dimensions used to measure individual differences of consuming food supplements. Overall, the composite average score and standard deviation were 3.68 and 2.177 respectively. Given a scale of 1 to 4 used to measure the items, these results suggest that individual influences greatly affect the rate at which individual consumers patronise food supplements. A study conducted by (Childs 2002; Szakaly et al 2012; Blackwell *et al.*, 2001), posited that knowledge, attitudes and resources have significantly positive effect

on consumers decision to buy food supplements. They concluded that among these, consumers with a rational approach provide the primary target group for the functional food market. In connection to that, the present study also finds that environmental influences greatly affect consumers decision to purchase food supplements.

4.5.4 Consumers Evaluation of Food Supplements

The descriptive results on the items and their composite (average) score are shown in Table 4.2d. Of the 2 questions the lowest mean score was 2.82 (standard deviation = .774) and the highest means score was 3.1 (standard deviation = .952). The overall mean score was 2.96 (standard deviation = 0.863). Given a scale of 1 to 4, these results, suggest that consumers strongly evaluate food supplements on the basis that consuming food supplements solve problems such as improves your health, manage your weight and boost your immune system and monetary value measure. The result conforms to the Reasoned Action Theory proposed by Ajzen et al., (1980) which states that is positive and negative evaluation of performance of a person about behavior choice.

4.6 CHAPTER CONCLUSION

This chapter presented the study's results and findings. It also discusses the findings in relation to the study's objectives and the pertinent literature. The subsequent chapter presents the summary of the findings, conclusion, and recommendation of the study

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of the study was to the study is to assess consumers' behavior toward food supplements. This chapter of the study provides summary of the study findings in congruence with the slated research objectives. The chapter also presents thorough conclusion and recommendations based on the findings discovered by the study. The recommendations of the study covered two broad areas namely policy or practical recommendations and future research recommendations. Whilst the practical recommendations cover steps to improve the consumption of food supplements, future research recommendations cover information for future researchers on the topic understudy.

5.2 SUMMARY OF FINDINGS

The claim that consuming food supplements play a vital role in human life is plausible to many human beings. However, consumption of food supplements have not been seriously taken by consumer. In the light of this, the purpose of the study was to assess consumers' behavior toward food supplements in Ashanti Region, Kumasi.

The first objective of the study was to examine the environmental influences that affect consumers' purchase of food supplements. The study found that environmental influences greatly affect decision to purchase. Similarly, the study found that each environmental influence – culture, social class, and situation strongly impact consumers decision to buy food supplements. Again, environmental influences play a significant role in consumer's life when it comes to the decision of buying food supplements.

The second objective of the study was to examine the individual influences that affect consumers' purchase of food supplements. The study found that individual influences greatly affect decision to purchase. Similarly, the study found that each individual influence – consumer resources, level of knowledge, and attitude strongly impact consumers decision to buy food supplements. Again, individual influences play a significant role in consumer's life when it comes to the decision of purchasing food supplements

The third objective of the study was to understand consumer's evaluation of food supplements.

The study discovered that consumers strongly evaluate their consumption of food supplements on the basis that consuming food supplements solve problems such as improves your health, manage your weight and boost your immune system and monetary value measure. Overall consumers are satisfied consuming food supplements.

5.3 CONCLUSION

Consumers' knowledge, environmental influences, individual influences and consumer's evaluation of food supplements are very vital subject matter to all health institutions, network marketing companies and individual consumers. Therefore, deep knowledge on food supplement to health institutions, network marketing companies and individual consumers is a must. The study has proven that consumption of food supplement is very vital in individual's life.

5.4 RECOMMENDATIONS

Based on the findings the following recommendations are provided;

- The study found that consumers' knowledge, environmental influences, individual influences and consumer's evaluation influence decision of purchase. Therefore, it is recommended that health institutions, network marketing companies and individual consumers take cognisance of these factors and attuned their behaviours towards food supplements.
- It is recommended that environmental influences, individual influences critical must be looked at carefully by health institutions, network marketing companies in order to convince consumers to consume food supplements. This can be done through thorough understanding and interpretation of the benefits and negative effects of food supplements by health institutions, network marketing companies.

5.5 FUTURE RESEARCH RECOMMENDATIONS

The following future research recommendations are provided;

- Future researchers can examine specific group of individuals and how consumers' knowledge, environmental influences, individual influences and consumer's evaluation influence their decision of purchasing food supplements.

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QUESTIONNAIRE

SECTION A: CONSUMER'S KNOWLEDGE ON FOOD SUPPLEMENTS

1. Please, have heard about food supplements?

Yes []

No []

2. If yes, where did you hear it?

Friends []

Networking marketing firms []

Hospitals []

3. What are food supplements?

4. Please, do you consume food supplements?

Yes []

No []

5. If yes, how often do you consume food supplements?

Every day []

Once a week []

Once every week []

Not at all []

SECTION B: ENVIRONMENTAL INFLUENCES

On a scale of 1 to 4, how will you rate the following environmental influences on purchasing food supplements?

1	2	3	4
Strongly Disagree	Disagree	Agree Strongly	Agree

<i>Item Code</i>	<i>Item Statement</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Culture				
EI 1	Customs and traditions do not allow me to consume food supplements				
EI 2	Consuming food supplements means violating strong cultural norms				
EI 3	Consuming food supplements leads to stigmatisation				
	Social Class				
EI 4	Friends of the same social status often consume food supplements				
EI 5	Consumption of food supplements is a result of friends persuasion				
EI 6	High caliber of people consume food supplements				
	Situation				
EI 7	Consumption of food supplements become important in times of sickness				
EI 8	Consumption of food supplements become important when recommended by a doctor				
EI 9	Consumption of food supplements become important when it can help me to perform a duty				

SECTION C: INDIVIDUAL DIFFERENCES

On a scale of 1 to 4, how will you rate the following individual differences on purchasing food supplements?

1	2	3	4
Strongly Disagree	Disagree	Agree Strongly	Agree

<i>Item Code</i>	<i>Item Statement</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Consumer Resources				
ID 1	Time does not allow me to consume food supplements				
ID 2	Not enough money to buy food supplements				
ID 3	Food supplements are expensive				
	Level of Knowledge				
ID 4	The idea of food supplements is alien				
ID 5	No information on implications of consuming food supplements				
ID 6	Sellers of food supplements do not explain in details the content and the benefits of consuming food supplements				
	Attitude				
ID 7	People do not like consuming food supplements				
ID 8	Consumption of food supplements are low because people do not care about their health				
ID 9	Consumption of food supplements are low because people are conservative				

SECTION D: CONSUMER'S EVALUATION

On a scale of 1 to 4, how will you rate the following consumer's evaluation of consuming food supplements?

1	2	3	4
Strongly Disagree	Disagree	Agree Strongly	Agree

<i>Item Code</i>	<i>Item Statement</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
CE 1	Value for money				
CE 2	Solves problem ie improves your health, manage your weight and boost your immune system				

SECTION E: DEMOGRAPHY

1. What is your age

18 – 25 []

26 – 33 []

34 – 41 []

42 and above []

2. What is your sex?

Male []

Female []

3. What is your education level

SSCE/WASSCE/O Level Certificate []

Professional Certificate []

HND Certificate []

Bachelor's Degree []

Master's Degree []

4. Please, indicate your occupation
