CONSUMER PERCEPTIONS TOWARDS THE MARKETING OF FUNCTIONAL FOODS IN THE UMHLATHUZE REGION

By

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ABSTRACT

A healthy lifestyle has been embraced by the populace as a result consumption of healthy food is given prevalence. Consumers nowadays prioritized purchasing healthy foods such as functional foods. To address this issue, greater varieties of healthy foods have been introduced by the food industry to reduce debilitating diseases such as cancer diabetes mellitus, obesity amongst others. In this present study consumer's perceptions regarding the marketing of functional foods in the uMhlathuze municipality were investigated. A quantitative research method was adopted for this study. Questionnaires were administered to a total number of 384 consumers at Richards bay shopping malls (230) and Empangeni shopping malls (154) respectively. The findings of the study showed that consumers' behaviour towards purchasing functional foods is influenced by the following: advertisements on social media accounts, health benefits of functional foods, health professional's recommendations, food quality, food price, and family obligation or concerns. Thus, the study recommends that for the food industry to boost their sales and consumers' acceptability of functional foods, they need to improve the awareness of functional food. This can be done through advertisements, especially on social media accounts such as Google, YouTube, and Facebook as well as providing detailed health benefits of the food by providing this information on the food packages. Also, the food quality should not be compromised and the prices of food should not be unnecessarily hiked up.

Keywords: Consumers Behaviour, Consumers Perceptions, Functional Foods, Marketing Mix, Marketing Communication.

ETHICAL STATEMENT BY THE RESEARCHER

I, ADESHOLA SEKINAT OSUNSANMI, declare that the work presented in this research is based on my work except where references have been made. The dissertation has not been submitted for any degree in any university. I declare that necessary authorization was obtained to conduct the research.

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Adeshola S. Osunsanmi **Date**

DEDICATION

This work is dedicated to Almighty God for the gift of life and to my late mom, Mrs. Alice Omolola Famojuro.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 Introduction

'Let your food be your medicine' said Hippocrates (400 BC) (Touwaide & Appetiti 2015, Cardenas, 2013). In recent times, foods are not meant to satisfy human hunger only, they are intended to improve mental and physical wellbeing. Also, they prevent nutrition-related diseases such as diabetes, cancer, obesity, hypertension, among others by providing adequate nutrients for body system functionalities (Shandilya & Sharma. 2017). These kinds of foods are term Functional Foods. Functional foods are defined as "food which contains ingredients that provide added health benefits beyond their nutritional value and have been actively fortified/enhanced during production" (Maharaj 2019: p,1), Functional foods are available across all food categories such as cereals, bakery, spreads, milk, yogurt, chewing gum, ice cream and soft drinks (Kaur, 2017). Therefore, Functional food has become a hope for people with the desire for healthy and diseases free lifestyle (Rattanachaikunsopon & Phumkhachorn 2018).

Despite the numerous benefits of functional foods, it is still under demand by the populace (Shandilya & Sharma 2017). This has crushed the desire to synchronize the health benefit of the consumer at one side and profit margin of food industries in other to boost the functional food market (Shandilya & Sharma 2017). The major drawback for the growth of the functional food market is little or no information on consumer behaviours toward functional food and its marketing (Gajdos Kljusuric et al. 2015). Consumer behaviour influences the decisions of consumers towards goods and services, in which functional food is not an exception. Consumer behaviour is driven by some factors including physiological, social, cultural, and personal (Kotler & Keller 2016). The poor acceptability and familiarity of functional food further pose more marketing challenges. Furthermore, a global survey in 38 markets across Europe, Latin American, Asia, Northern America, and South Africa found consumer awareness toward functional food is relatively poor (Nielsen 2015). The insight into the understanding of consumer behaviour toward functional food will equip and also

prepare marketing managers in food industries to effectively communicate and adopt exact advertising methods for their food products.

Hence, this study aims to check consumer's behavior towards functional foods and their reaction to advertising, branding, and packaging of these foods. This would assist marketers in understanding consumers' behavior and brand reactions to develop good marketing strategies to market their products better. It will also show the attitudes of consumers towards functional foods where there is a lack of information.

1.2 Background

Food choice is what we do in everyday life and this is done with different levels of consciousness. Studies showed that changes in consumer lifestyles, as well as the food they consume, have been the cause of non-communicable diseases (NCDs), such as diabetes, cancer, obesity, hypertension, amongst others (Diepeveen, Ling, Suhrcke, Roland, & Marteau, 2013). An increase in the risk of dietary diseases has made consumers conscious of what they consume which leads to an increase in demand for healthy food, beverages, and lifestyle (Adefegha 2018).

Many consumers who care about their health now lookout for food products that are safe and will provide some health benefits to them (Khatkar, Kapoor, Panwar, & Khatkar 2016). Therefore, there is a need for marketers to have foresight on consumers' perception, behavior, and lifestyle. The concept of functional foods emerged in Japan in the late 1980s. These foods are fortified with special constituents to improve the health of the populace, and the use of these foods in many countries is improving rapidly (Siro et al 2008). The functional foods market now worth over 24 billion dollars globally (Kaur, 2017). Though it is estimated that functional food growth will keep rising, and new products will be developed and launched but the functional foods market is experiencing some challenges. Major challenges of the functional foods market are the low degree of familiarity and the consumers' acceptance of functional foods and their marketing channels (Carrillo et al 2013; Schutza et al 2011).

1.3 Problem statement

Consumption of functional food has attracted much interest globally based on its benefit in the prevention of life-threatening diseases such as obesity, stroke, heart attack, diabetes, and cancer. These diseases are among the leading causes of mortality and disability worldwide with a negative impact on the social-economic lifestyle of the populace (Osunsanmi et al, 2015).

Despite the health importance of functional food consumption, functional food marketing remain a huge challenge (Health and wellness in South Africa, 2017). In other to improve the functional food market values the marketers need to have an in-depth understanding of consumer behaviour toward functional foods and also information on marketing activities such as the best advertising channels for functional food among others (Health and wellness in South Africa, 2017). Critically understanding consumer behaviours provide insight into consumer preferences and what exact behaviour influences purchasing of a functional food (Starling, 2014). Therefore, marketers need to have a thorough understanding of consumer behaviour for a better marketing plan and strategizes for functional food products. Besides, consumer behaviour, as well as a marketing plan, differ with geographical location toward goods and services (Carrillo et al 2013, Schnettler et al. 2015). Studies on Information on consumer behaviour and the right marketing campaign such as effective advertising methods toward functional foods in the Umhlathuze region, South Africa are not available. This research finding will assist the food industry to identify the ideal marketing channels to boost sales of functional foods. To the best knowledge of the researcher, there is no study on the marketing of functional in South Africa, hence the study will fill this gap.

1.4 Aim of the study

To evaluate the perceptions of consumers towards the marketing of functional foods in the uMhlathuze municipality.

1.5 Objectives

Major Objective

To investigate consumer perceptions towards the marketing of functional foods in the uMhlathuze municipality?

Specific objectives

To achieve the above-stated objective, the following objectives form the basis of this study:

- To investigate the influence of demographic variables on the purchase of functional foods in the uMhlathuze municipality.
- To determine factors that influence consumers' purchase behavior towards functional foods in the uMhlathuze municipality.
- To investigate the influence of marketing communication strategies on the marketing of functional foods in the uMhlathuze municipality.
- To evaluate consumer perception towards the branding of functional foods in the uMhlathuze municipality.
- To determine consumer attitudes towards the packaging of functional foods in the uMhlathuze municipality.

1.6 Research questions

- How do consumers' demographic variables influence the purchase of functional foods in the uMhlathuze municipality?
- What are the factors that influence consumers' purchase behavior towards functional foods in the uMhlathuze municipality?
- What is the influence of the marketing communication strategies on the marketing of functional foods in the uMhlathuze municipality?
- What are consumers' perceptions towards the branding of functional foods in the uMhlathuze municipality?
- What are consumers' attitudes towards the packaging of functional foods in the uMhlathuze municipality?

1.7 Significance of the study

This study identifies the perceptions and attitudes of consumers towards functional foods. This, in turn, assists functional food producers and marketers to have an idea of the expectations of consumers from them. Thus, the study is of benefit to producers and marketers in addressing the issue of consumers' confusion about the concept of functional foods.

Additionally, there is a paucity of literature on functional food and consumers' perceptions, especially in the area of marketing food products. Lastly, information on appropriate channels including advertising and promotion for effective marketing of functional food in South Africa is still limited. Therefore, this study is of benefit to organisations facing challenges in marketing their functional food products and also to consumers' who have little or no knowledge and awareness of functional foods.

1.8 Limitations and Delimitations of the study

The study is limited in the adopted sampling approach. The convenience sampling approach which is a type of non-probability sampling was adopted for data collection, thus, the generalization of results remains problematic (Etikan et al 2016). However, it is sometimes the only way to conduct research where there are time and cost constraints. Another disadvantage of using a convenience sampling approach is that selection bias and influences cannot be controlled. Notwithstanding, care was taken by the researcher to include participants who understood what functional foods meant after a brief explanation by the researcher. Also, although selections were done on a convenient basis, collection of data took place at different data collection sites which add more rigor and validity to the findings.

Delimitations are the characteristics that narrow the scope and describe the boundaries of the study. According to Suresh (2015), these boundaries may include population traits, geographical size, sample size, the type of design, amongst others. This study was limit to the uMhlatuze region. The major towns in the uMhlathuze region include Empangeni, Richards Bay, and Esikhawini. The delimitation of this study is that the researcher narrowed the study to Empangeni and Richards Bay. The reason being that these two towns have various shopping malls compared to Esikhawini.

1.9 Research approach

The research design in this section is introduced. This is discussed in detail in chapter three. This study used a quantitative research methodology. According to Creswell and Creswell (2017), quantitative research methods involved the collection of data that is structured and which could be represented numerically. Data was collected with the use of questionnaires from 384 respondents. The respondents were conveniently selected in shopping areas around the Umhlathuze region. Data collected was successfully analyzed using Statistical Package for Social Science (SPSS). The research findings were coded, input, and analyzed using version 24 of SPSS, which showed the averages, frequencies, and the relationship between variables. Therefore, descriptive and inferential statistics were used.

1.10 Practical and Ethical consideration

The research was conducted following the University of Zululand Research Ethics policy. The following ethical steps were considered;

- Authorization for administered of questionnaires was obtained from appropriate authorities.
- The respondents' detail such as names, phone numbers, house addresses among others were omitted from the questionnaires, in other to retain anonymity and confidentiality.
- The participation of respondents was solely voluntary. The respondents have the right to withdraw anytime during the administration session.
- The information obtained from this questionnaire was handle in a manner that is not embarrassing, harmful, and discomforting to the participants.
- The objectives of this study were carried out without bias.
- Reviewed works of literature were duly cited and referenced.

1.11 Definition of Terms/key concept

This study contains some key concepts which are discussed in detail in chapter 2.

Functional foods

Functional foods are “food that provides added health benefits beyond their nutritional value. They are also fortified or enhanced during their production” (Maharaj (2019: p.1).

Consumer perception

The process in which people are aware of their environment and use it to determine their decision on a particular product or service (Schiffman, & Wisenblit, 2015).

Consumer behaviour

Consumer behaviour consists of feelings, experiences, ideas, and actions of consumers towards environmental factors such as prices, comments, and advertising (Schiffman, & Wisenblit, 2015).

Marketing mix

The set of marketing tools that firms use to influence the responses of target customers. They are also known as the 4P’s, which are price, product, place, and promotion (Kotler & Armstrong 2016).

Marketing communication

The means which companies use to inform, persuade and remind consumers either directly or indirectly about the products they sell. Marketing communications act as the company voice and a medium of communication and building customer relationships (Kotler & Keller 2016).

1.13 Dissertation Structure

This study is divided into five chapters as shown below:

Chapter 1 Introduction

This is the motivation of the study which focuses on the background, and partial review of existing relevant literature. It gives a clear explanation of functional foods (FF), problem statement as well as the aim and the research questions of the study.

Chapter 2 Literature review

A review and presentation of relevant existing information and literature regarding functional foods. The chapter explains further the definition, history, and benefits of functional foods. It also discusses the factors that influence the consumption of functional foods as well as consumer behaviour analysis.

Chapter 3 Research methodology

In this chapter, the proposed research design is presented. Research objectives are outlined. It also shows how the data gathered are executed and analysed.

Chapter 4 Presentation of results

In this chapter, the findings are presented in a descriptive format, using data gathered through a questionnaire. Primary research findings are compared with the materials presented in the literature review chapter. Findings are presented through figures and tables.

Chapter 5 Discussions Conclusion and Recommendations

The conclusion of the study is presented in this chapter by answering the research questions. A summary of the study is presented. Sequel to the findings of the study, recommendations are highlighted as well as the limitations found in the study. Suggestions for further study are also made in this chapter.

1.14 Conclusion

This chapter introduced the research background and outlined the significance of the study. The objectives and the research questions to be answered are outlined as well as the methodology to be used.

In the following chapter, the next chapter is the presentation of a review of the relevant literature concerning the subject matter. Relevant literature on consumers' perception of the marketing of functional foods, factors influencing consumers' purchase of functional, the marketing mix, marketing communication mix, and consumer behaviour analysis are reviewed.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical framework of the study

Theoretical framework functions as a roadmap for a researcher just the same way roadmap is used by a traveler in navigating their journey (Caselli and Ventura, 2000). Lövdén et al. (2010) avowed that research must be backed and grounded with existing theories to make them valid. Similarly, recommended that the advancement of knowledge in a certain discipline is driven and supported with existing theories.

This literature is divided into two parts, the first part of the theoretical portion starts with the definition of functional foods and their concepts. It then described marketing of functional foods, and consumers' behavior theories proposed in the past. Some of these theories have successfully explained consumer behavior and buying decisions. Therefore, this study adopted theories to support the variables and constructs that determine the purchase and marketing of functional goods. Also, various scholars such as; Annunziata & Vecchio (2010), Ares (2011) and Ali, & Rahut (2019) have called for the application of theories to provide a strong base for understanding marketing and purchasing of functional goods. This study developed a wider and robust theoretical framework to conceptualize the purchasing of functional foods. This was achieved by selecting a theory that can sufficiently predict consumer behaviour.

The adoption of the theories was deemed useful because the theme of the study was centered around two factors: consumer behaviour/perception and marketing of functional foods. Therefore, the theory provides an insight into the theme of the study. For instance, consumer behaviour theory was used in providing insights into the purchasing behaviour of consumers. It was used in understanding the marketing of functional foods. The theory assists in exposing the factors and variables that were used in developing the questionnaire used in this study.

2.2 Functional Foods

The term ‘functional food’ is used worldwide, however, it does not have a definite global official definition. The non-existence of a definite global official definition makes it difficult to differentiate between functional and conventional foods. Functional food has been defined by some national and international authorities and organizations from the simple to the complex (Martirosyan & Singh 2015). According to the National Academy of Sciences Food and Nutrition Board in the US, a "functional food" is: "any modified food or food ingredient that may provide a health benefit beyond the traditional nutrients it contains" (Martirosyan & Singh 2015, p. 209). Whereas Functional Food Centre (FFC) of America defined Functional food as natural or processed foods that consist of bioactive compounds that can prevent as well as ameliorate chronic diseases (Martirosyan & Pisarski, 2017).

The definition of functional food varies, however, they all possess similar characteristics, showing that these foods reduce the risk of certain diseases and provide health benefits (Martirosyan & Singh 2015). For this study, the researcher believes that it is important to identify with a definition that the consumer will understand easily, therefore the researcher has selected Maharaj (2019: p.1), which define functional food “as food which contains ingredients that provide added health benefits beyond their nutritional value and has been actively fortified/enhanced during production”.

Functional food includes omega 3 fortified bread and margarine known as enriched products, probiotic yogurt, calcium in milk, the fiber in some noodles, and whole-grain in some bread and cereal (Wensing & Broring 2018). They are all known as altered products, vitamin c fortified fruit juice, and vitamin D fortified milk known as fortified products, including dietary supplements (Wensing & Broring 2018).

2.3 Background and History and of Functional Foods

Functional foods were firstly introduced in Japan in the 1980s by the Japanese Ministry of Health and Welfare (MHW) and it was defined as foods that provide health benefits to consumers (K¨uster-Boluda & Vidal-Capilla, 2017). The Ministry of Health and Welfare in Japan introduced a system that regulates and approves some foods with written health benefits to improve the health of the general population and to comply with the Nutrition Improvement Law of 1991. These foods are known as 'Foods for Specified Health Use' (FOSHU). This program, which started in 1991, used scientific evidence to approve health claims for functional foods (Ministry of Health and Welfare 2018, American Dietetic Association, 2013, Bigliardi & Galati 2013).

Functional foods are available in nearly all food categories such as baked goods and cereal, dairy foods, baby foods, confectionery, snacks, spreads, meat products, ready meals, and beverages (Ofori & Hsieh 2013). Functional foods, such as cholesterol-lowering products could be used to reduce the risk of having some diseases and also to maintain or cure some illnesses (Jovanovic, 2013). Japan is the birthplace of functional food had over 1700 functional food products between 1988 and 1998, which is estimated to have had a turnover of about 14 billion US$ in 1999 (Sanaullah Khan, Grigor, Wiger & Win 2013). The estimated market in 2003 was 5 billion US$ and the estimated value of 5.73 billion US$ in 2006 (Sanaullah Khan, et al 2013). Japan has influenced many countries with regards to functional foods, especially countries such as United States (US) and other countries across Western Europe. Some of the countries that have successfully expanded their functional food market in Europe are; the United Kingdom, Germany, Netherland, and France (Kaur & Singh, 2017).

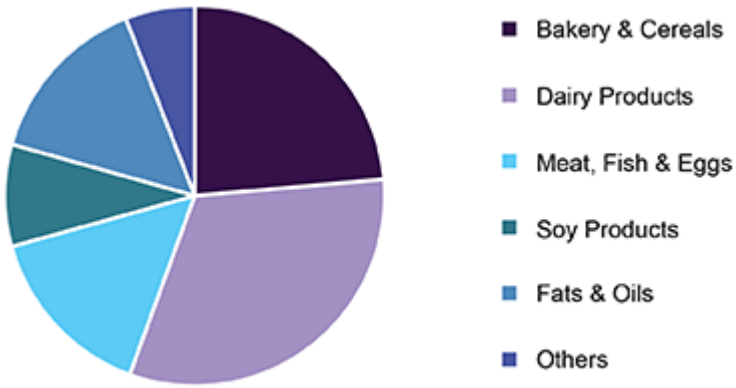
Notwithstanding the above, in South Africa, the functional foods sector companies survey registered on average a 27% growth rate in turnover in the selling of these food products (ADSA, 2015). According to the 2010 report of Euromonitor International, functional drinks such as Coca-cola and Lucozade are doing great in the market, both in Ireland and United Kingdom (UK) but not that popular in other countries.

2.3.1 Current Developments of Functional Foods

Food and beverage manufacturers are now bringing in the fortification of nutritional additives such as fiber, vitamins, omega-3 fatty acids, minerals, and others in their

product offering. The major reason for this is to increase nutritional content in food items (Market Research Report, 2019). A positive attitude is expected from the food and beverage industry, especially in Brazil, Russia, India, China, and South Africa (BRICS) to continue driving the market over the forecast period. New product development, population growth, increase in consumption of food and beverages, and expansion of the retail network are expected to promote the growth of functional foods in BRICS (Market Research Report, 2019). According to a market research report by Grandview, the dairy products segment led the overall market in terms of revenue in 2018, followed by the bakery and the cereals segment. New development in the bakery and cereals segment is expected to do well in the market. Demand for functional snacks and cereal bars is also anticipated to rise in the forecast year. Demand for fortified cereals is expected to increase with companies such as Kellogg launching new product ranges to capture market share (Market Research Report, 2019). From the reviewed studies, it was identified that most studies conducted were carried out in American, European countries and few in African nations. Hence, this study will evaluate the South African consumers' perception of the marketing of functional foods.

Figure 2.1: Global functional foods market share, by-products, 2018



Source: www.grandviewresearch.com

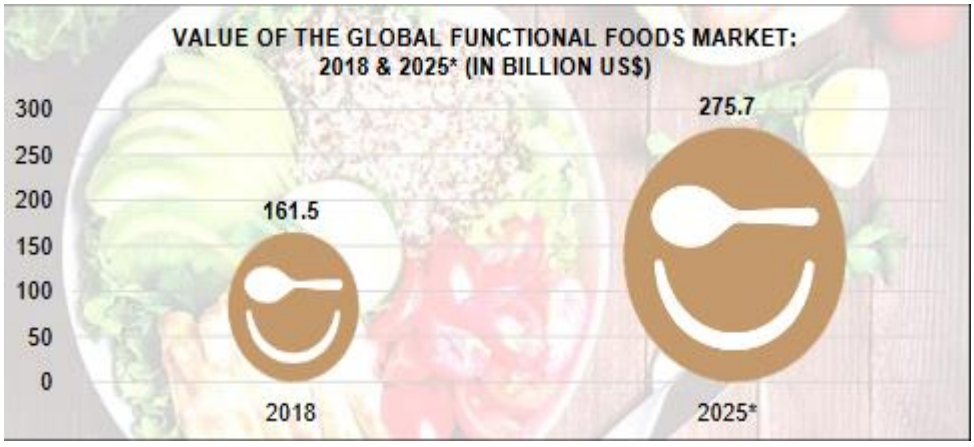
2.4 The Marketing of Functional Foods

In recent times, consumers are becoming more health-conscious and are increasingly taking the sentiment of 'you are what you eat' to heart. This has a serious impact on the functional foods industries, which has been witnessing speedy growth in the past few years in both global and South African markets, as a result of the increasing awareness of healthy eating and lifestyles (SA Functional Foods Industry Landscape Report, 2019).

2.4.1 Global Functional Foods Market

A report estimates that the market for functional foods globally amounted to (approximately) $161.5 billion in 2018, and is expected to grow at a compound annual growth rate (CAGR) of 7.9%, for the forecast period of 2019 – 2025 and it is estimated to reach a projected US$275.7 billion by 2025 (Market Research Report, 2019, South African Functional Foods Industry Landscape Report, 2019).

Figure 2.2: Value of the global functional foods market 2018



Source: Insight survey 2019, p. 7

Sequel to this attractive market growth and high margins, food companies have been investing in the development of new nutrition-modified and functional products (Khan, Grigor, Win, & Boland, 2014). However, research has shown that there is a high risk of product failure as 70 to 90 percent of new health-enhancing products exit the market within the first two years from their launch (Hardy, 2010). This is likely as a result of not considering consumer perception, preference, and acceptance when developing the products (Starling, 2014).

2.4.2 Marketing of Functional foods in South Africa

The South African Fortified/Functional Packaged Food market increased by 8% in current value terms in 2018, this is as a result of the increase in health-consciousness, which is behind the increase in demand for foods and beverages with added nutritional value (SA Functional Foods Industry Landscape Report, 2019). Results from a survey conducted by the Heart and Stroke Foundation of South Africa revealed that South African consumers are now trying to live healthier lifestyles. The findings of the survey showed that 74.3% of respondents showed interest in changing the kind of foods they consume to improve their health. Meanwhile, 47.7% of respondents do not consume alcohol in the week to support their focus on living healthier lifestyles (Maharaj, 2019). Campaigns are being carried out by functional food and beverage producers and marketers in South Africa to inform the consumers to be aware of the risk of obesity, due to the increasing number of South African population affected by non-communicable diseases such as diabetes. This information is to encourage them in consuming food/drink with added health benefits such as energy drinks, fortified juice, and dairy (Mordor Intelligence research report 2019). The South African population is slowly moving away from consuming carbonated drinks to fortified and energy drinks and the consumption of these drinks is high among young and wealthier males (Mordor Intelligence research report 2019).

Nestle is a proudly South African manufacturer company that focuses on using its products to promote quality of life and to assist in building a healthier future. Their slogan “Good Food, Good Life” is what is driving them to develop a product that is designed to address consumers’ constantly changing needs. They distribute and export some of South Africa’s functional food brands including baby foods, breakfast cereals, among others (Market Research Report, 2019).

Figure 2.3: Nestle functional foods brands/products

Source: Insight Survey 2019, p. 9

Tiger consumer brands led the health and wellness market in South Africa in 2016; they were able to achieve this through their wide products in different categories, and their promotional messages. For instance, Albany bread is being promoted as being healthy with the statement “it is fortified with minerals and vitamins and its cholesterol-free”. This helps consumers to make healthier choices. They also have an efficient distribution network such as the supermarket chains, which is one of the company's strengths (Health and wellness in South Africa, 2017). Tiger brands are also the producer of Jungle oats which have been promoting health benefits for some years now, such as protection against high cholesterol, high blood pressure, diabetes, weight loss, and heart diseases (Health 24, 2011). Coca-Cola is another company that is considered successful in the health and wellness beverages market (Health and wellness in South Africa, 2017). This feat has been achieved through the introduction and popularity of its Coca-Cola Zero and Diet Coke brands.

Supermarket chains, such as Woolworths, Pick n Pay, Spar and Checkers are also involved in selling health food such as functional packaged food to the consumers. They experienced a little growth in the internet retailing of health and wellness products in 2016 (Health and wellness in South Africa, 2017). According to Euromonitor, (2019), Danone Southern African remained the largest player in functional packaged foods in 2018. The company’s strength is found in functional

probiotic yogurt through the Nutriday brand which offers Activia and Danino in this category. Clover SA (Pty), was also one of the leading players among the top 20 companies in functional packaged foods in South Africa in 2019.

2.5 Marketing

American Marketing Association defines marketing as “the activity, set of institutions and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (AMA, 2017, p. 1).

According to Kotler and Keller, marketing is defined as, “satisfying needs and wants through an exchange process” (Kotler & Keller 2015, P. 6). The Chartered Institute of Marketing defines marketing as “the management process responsible for identifying, anticipating, and satisfying customers’ requirements profitably” (CIM, 2015, p.1).

The purpose of marketing is to know and understand what customers need and provide it accordingly. The key important aspect of marketing is that consumer’s needs must be met and satisfied (Kotler & Keller 2015). To gain market leadership and recognition, customers’ satisfaction must be met through product quality, product innovation, and customer service. In the absence of these, no amount of sales promotion or advertising can counteract it (Kotler & Keller 2015). The marketing mix otherwise known as the 4ps is used to execute marketing planning into practice (Nuseir & Madanat 2015). Hence, the next section of the literature elaborates more on the marketing mix.

2..5.1 Marketing Mix – The 4P’s

The marketing mix is a set of marketing tools that firms use to influence the target customers’ response. They are also known as the 4P’s which are: product, price, place, and promotion (Kotler & Armstrong 2016).

2.5.1.1 Product- Acceptability

Product implies the goods or services an organization offers to consumers to satisfy their want(s) or need(s) (Kotler & Armstrong 2016). In the product, the quantity, as well as the quality, can influence how much of the product consumers will consume (Lefebvre, 2013). Acceptability means that the product must meet the expectations of

the consumers'. It can be functional or psychological acceptability (Sheth & Sisodia, 2012). The level of acceptability determines how consumers feel towards buying or using a product.

Some consumers prefer healthy food such as functional foods because they perceive them as healthier and nutritious (Khatkar, Kapoor, Panwar, & Khatkar, 2016). If consumers' expectation of healthy food is positive, then the consumer expectation of healthy food purchase is likely to be more positive (Khatkar, et al 2016). Consumer acceptance of functional foods cannot be taken for granted, therefore marketers must know what their target market needs and give to them. Nielsen (2015) highlights that foods fortified with fiber and protein, and weight loss and management are food products in demand, therefore manufacturers are to consider making new products that incorporate such nutrients.

2.5.1.2 Price-Affordability

According to Kotler and Armstrong (2016), price is the value of money that customers exchange in enjoying the benefits of a product or service. It considers the economic sacrifice a buyer usually makes to get something. Affordability is defined as the ability (economic affordability) and willingness (psychological) of the consumer to pay the offered product's price (Sheth & Sisodia 2012). Research has shown that price is a major variable for the purchase of most products (Peter & Donnelly, 2013).

Consumers with high incomes tend to buy healthy foods such as functional foods more compared to consumers with low income (Dolgopolova & Teuber, 2016). Nielsen (2015), disagrees that high-income earners buy functional foods more, by suggesting that functional foods are fairly priced and that consumers do not need to earn higher income to be able to purchase them.

Economic affordability influences consumer behaviour and intention of buying healthy products while psychological affordability is about perceived benefit and value. If the consumer perceives that healthy food product consumption has a value such as health and benefits, they may be willing to pay a premium price (Khatkar, et al 2016).). The type of pricing such as a discount, bonus, or cut-price can determine and influence how much people purchase and consume the healthy product (Lefebvre, 2013).

According to Tuohy, *et al.* (2009), private-labels with regards to functional foods brands tend to gain market share during the recession as they will be appealing to price-sensitive customers looking forward to paying less for similar products. Ares et al. (2010), also highlighted that a higher price may lead to lower purchase intention of functional foods, and the belief and trust in the product quality may also lead to a higher purchase decision

2.5.1.3 Promotion- Awareness

Awareness is how much consumers know about certain products. The information aims to convince consumers to buy a healthy product and a trial will make them repurchase the products, and this can only be achieved through advertising and promotion (Sheth & Sisodia 2012). Advertising comprises traditional and non-traditional marketing strategies. Traditional marketing communication media are radio, television, print such as newspapers and magazines, public relation campaigns (PR), face to face, billboards, and banners (Arens, Schafer, & Weigold, 2015). Non-traditional marketing communication media include online marketing, social media, blogs, and email (Kotler & Armstrong 2016).

According to K¨uster-Boluda & Vidal-Capilla, (2017), consumers' acceptance of functional foods was low because of a lack of awareness and knowledge on the concept of functional food. A global survey by Nieslen on over 21,100 respondents across Europe, Asia Pacific, North America, Latin America, and South Africa, found that consumer's knowledge and awareness of different healthy foods such as functional foods was remarkably low (Nieslen 2015). Therefore, there should be awareness campaigns on the benefits and functions of functional foods. Packaging labels are a key source of information to the consumers. Manufacturers and retailers are to ensure as much as possible to provide easy-to-understand nutritional information to assist consumers to take control of their health (Nielsen, 2015).

2.5.1.4 Place-Accessibility

The place is the location and the channels of distributing the goods to the final consumers. According to Kotler & Armstrong (2016), the distribution channel is a set of means that help to transfer a product or service from the producer to the final consumer. A distribution channel is usually made up of producers, consumers, or any

intermediaries that involve transferring a product to final consumers (Kotler & Armstrong 2016). Accessibility means how convenient it is for consumers to easily purchase and use certain products (Sheth & Sisodia, 2012). For a product to be accessible, the distribution channel is important to reach the consumers and meet their demands. Functional food products in the market are limited and may lead to a negative attitude towards the purchase and consumption of functional food among consumers (Shikha, Sharma, & Khadke 2014). According to Thogersen & Zhou (2012), low availability is one of the challenges faced by consumers purchasing functional foods. Moreover, when people are motivated to purchase such products, low accessibility may change the purchase intention

2.5.2 Marketing communication

Marketing communication is the means through which companies inform, persuade and remind consumers either directly or indirectly about the products they sell. Marketing communications act as the company voice and a medium of communication and building customer relationships (Kotler & Keller 2016). Marketing communication can also be used to increase sales as well as contributing to brand equity. It is also used to create awareness to consumers concerning a product, to know how and why a product is used, where, when and by whom (Arens, Schafer, & Weigold, 2015).

Consumers' sources of information on functional foods are from family and friends, online sources, professional/doctors, media, regulatory bodies, and other reputable authorities (Bruschi et al. 2015, Sandmann et al. 2015, Salleh et al. 2015).

2.5.3 Marketing communication mix

The marketing communication mix otherwise known as the promotion mix is a set of tools that organisations used to communicate with their customers. Using an effective communication mix can boost the revenue of an organisation. The major means of communication mix are; Advertising, sales promotion, public relations and publicity, direct marketing, word-of-mouth marketing, personal selling, and interactive marketing (Kotler, & Keller 2016).

2.5.3.1 Advertising

This can be described as any paid form of promotions of goods and services or ideas by an identified sponsor. This can be done through print media such as magazines and newspapers, network media such as cable, telephone, wireless, and satellite, broadcast media such as television and radio, electronic media such as videotape, videodisc, audiotape, webpage and CD-ROM, and display media such as posters, billboards, and signs (Kotler & Keller 2016).

A study by Sandmann, Brown, Mau, Saur, Amling, & Barvencik, (2015), conducted in Germany reported that consumers have more confidence and trust in health-related information and marketing communication coming from nutritional advisers such as doctors, retailers, food manufacturers, and newspapers. Meanwhile, another study by Kapoor & Munjal (2017), conducted in India among 150 women highlighted that consumers' most important source of information on functional foods is from Gym instructors and nutritionists.

2.5.3.2 Word of mouth marketing

This is a means whereby people relate with their friends, family, neighbors, and colleague through oral, written, or electronic communication about the experiences or benefits derived by purchasing or using a particular product or service (Kotler & Keller 2016). Some consumers get information on functional foods through friends and family experiences (Schnettler et al 2015).

2.5.3.3 Personal selling

This is when a company sales representative goes out to have face-to-face interaction with prospective purchasers to present and answer questions concerning the company's products and securing orders (Kotler & Keller 2016). One of the disadvantages of personal selling is that it is expensive and difficult to reach a large number of customers (Kotler & Armstrong 2016).

2.5.3.4 Interactive marketing

These are online activities designed to engage customers either directly or indirectly to increase sales, raise awareness or improve the image of a product (Kotler & Keller

2016). According to Taylor (2015), online marketing is useful in targeting audiences in a very direct way. However, this works mostly for the younger generation.

2.6 Types of Marketing Channels

Companies can choose to distribute their products or services to consumers through different channels. The two major channels are direct and indirect marketing channels (Kotler & Armstrong 2016).

A direct marketing channel is a process where producers sell their products or services to the consumer without the use of an intermediary. This channel gives the producer the power to control the products effectively and customer satisfaction is guaranteed (Kotler & Armstrong 2016). Examples of direct marketing channels are internet selling, door-to-door sales, manufacturer-owned stores, mail order, and telemarketing (Kotler & Keller 2016).

An indirect marketing channel involves the use of one or more intermediaries in delivering the products to the final consumers. Products such as clothing, groceries, and automobiles require an intermediary such as wholesalers or retailers to get the product across to the final consumer (Arens, Schafer, & Weigold, 2015).

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2.6.1 Distribution channel

There is a need for companies to make use of intermediaries in delivering their goods to the consumer. The most commonly used intermediaries are wholesalers and retailers. Before a company designs its channel of distribution, such a company should find out if necessary intermediaries such as retailers and wholesalers are available and are ready to sell the product (Arens, Schafer, & Weigold, 2015).

Distribution channel of functional foods in North America, Europe, Asia Pacific, South America, and the Middle East and Africa which include, UAE, South Africa and the rest of the Middle East and Africa are Supermarkets/Hypermarkets, Pharmacies/Health stores, Convenience stores, and Online Retailing (Mordor Intelligence 2019).

2.6.1.1 Wholesalers

A wholesaler is a person or organization that buys in large quantities with the hope to sell to retailers, commercial, industrial, or to other wholesalers. Examples of wholesalers are manufacturers sales offices, agent, merchant wholesalers are a broker (Kotler & Armstrong 2016).

2.6.1.2 Retailers

A retailer is a business fellow who is involved in the selling of goods and services to the final consumers for their personal use and benefit. Examples of retaining businesses are retailer stores, departmental stores, convenience stores, and supermarkets (Arens, Schafer, & Weigold, 2015). In South Africa, Woolworths is a major retailer, that has established a strong position in functional probiotic yogurt (Euromonitor, 2019).

2.7 Consumer perception and Behavior Analysis

Consumer perception can be defined as the process in which people are aware of their environment and use it to determine their decision on a particular product or service. Consumers react to a product or service based on their perception (Schiffman, & Wisenblit, 2015). According to Vecchio, Van Loo, & Annunziata, (2016), some of the vital reasons for buying and consuming functional foods from consumers' perception are to maintain their health and prevent diseases. Consumer behaviour consists of feelings, experiences, ideas, and actions of the consumer with other environmental factors such as prices, comments, and advertising. Consumer behaviour is a complex process that includes continuous changes in activities, ideas, and perceptions of consumers as a group or individual (Schiffman, & Wisenblit, 2015). Studying consumer behaviour assists marketers to understand why consumers behave the way they do and helps in the prediction of consumers' reactions to promotional messages (Kazmi, 2010). The more marketers know about consumer behaviour, the better suitable marketing strategies and promotional campaigns that influence consumers to purchase the products or services (Kazmi, 2010). Consumer response to different types of marketing strategies is the main question to answer.

2.7.1 Factors Influencing Consumers' Behavior

Since consumers vary in age, taste, income, education, and other characteristics, the way they purchase the product differs. Various factors influence the purchase decision of consumers; these factors are classified into internal and external. They are also known as determinants of consumer behaviour (Kotler & Keller 2016). Internal influences include personal factors such as age, gender, income, level of education, personality, and lifestyle. Psychological factors such as perception, learning, motivation, belief, and attitude are also considered internal factors. Conversely, external influences include cultural factors such as culture, sub-culture, and social class and social factors like reference group, family, role, and status (Kotler & Keller 2016). According to Vecchio et al (2016), Brecic, Gorton, & Barjolle, (2014), price, education, income level, taste, familiarity with brand, trustworthiness, and consumer awareness and knowledge are some of the factors that influence consumers to purchase functional foods.

Consumer behaviour Theory

Consumer behaviour theory assists in explaining the spending behaviour of an individual relative to their individual choice and budget limitations (Almeida, 2015). Caselli & Ventura (2000), submitted that consumer behaviour theory is a branch of microeconomics theory focused on showing the choices make by an individual based on their income and spending power. Askegaard & Linnet (2011), perceive consumer theory as a tool for understanding the opportunity cost between an individual's taste and income. Thus, it can be deduced that consumer behaviour theory provides the opportunity for understanding the consumer's behaviour regarding the purchase of a certain product. This study adopted consumer behaviour theory in understanding their decision of purchasing functional foods.

This study believed that consumer behaviour theory assists in exposing the freedom of consumers in choosing between purchasing functional foods and non-functional foods. This theory performs this function as it provides a proper understanding of a consumer's taste and income. Caselli & Ventura (2000), provided another advantage of consumer behaviour theory and asserted that the theory assists in understanding consumer choice which has the capacity for influencing government policy, corporate advertising, and marketing. Askegaard & Linnet (2011) reported that consumer

behaviour theory performs these functions and expose the purchasing power of a consumer based on the following basic assumptions of human behaviour:

- Maximization of utility: this is an important pillar of consumer theory because individuals or consumers make some calculated decisions during their shopping. The major decision involves the choice in buying the products that ensure the greatest benefit also known as a maximum utility. Regarding this study, the decision involves the factors that motivate them to purchase functional or non-functional foods.
- Non-satiation: This situation occurs when there are goods or products in which a consumer would benefit from having more from it. This situation leads to a process in which the consumer is not satisfied with one trip to the malls and therefore wants to consume more. The functional foods were classified as Non-satiation in this study.
- Decreasing marginal utility: the theory postulated that consumers will lose satisfaction in a product after consumption for a long period. Patterson & Schroeder (2010) related this phenomenon to the economic term known as a diminishing return. The consumer theory recommends that when decreasing marginal utility is experienced the manufacturing should adopt marketing strategies or sales promotions that present the product in another dimension.

Almeida (2015), submitted that for consumer behaviour theory to perform its functions making the assumptions that information is perfect and evenly distributed. It also assumes that prices are linear, goods are divisible and there are a full set of purchase options for the consumers. Therefore, the theory assists the researcher in setting the objectives of this study related to the purchase of functional goods. The assumptions of the consumer behaviour theory were used as a guideline in explaining the factors that determine the purchase of functional foods.

Table 2.1: Theoretical framework for the study

Theory	Definition	Variables extracted in shaping the questionnaire	Source

Consumer theory	Consumer theory assists in explaining the spending behaviour of an individual relative to their individual choice and budget limitations. It is a branch of microeconomics theory focused on showing the choices made by an individual based on their income and spending power. It assists in understanding the opportunity cost between an individual's taste and income.	• Marketing strategies and communication • Factors influencing purchase behaviour • Sales promotions	Caselli & Ventura (2000), Patterson & Schroeder (2010) and Almeida (2015)

Figure 2.4: Model of Consumer Behavior

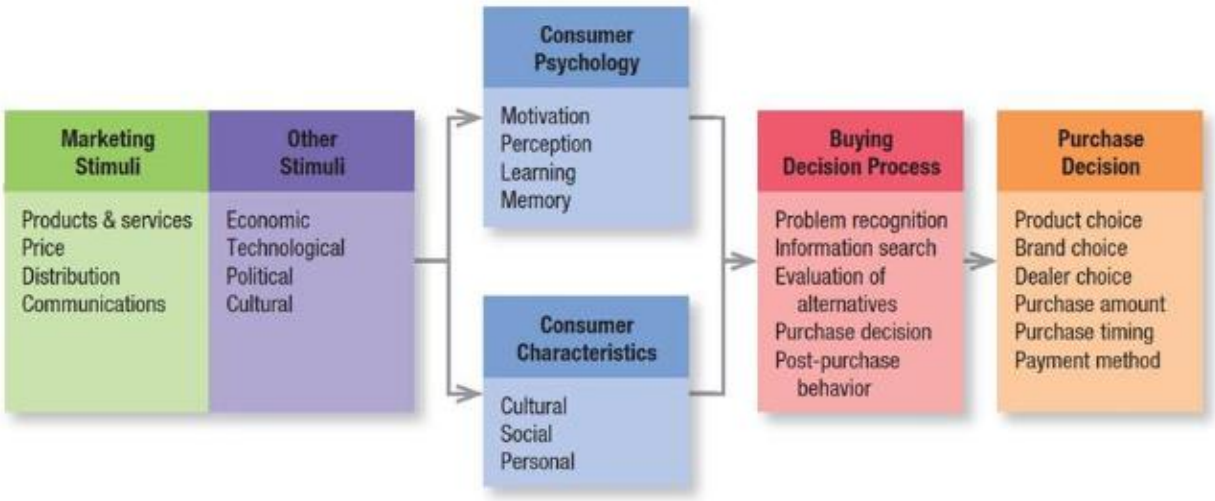

Figure 4: Consumer Behaviour Model, Kotler & Keller 2016, p. 187

2.7.1.1 Personal factors

Personal characteristics that influence a consumer's decision include age and stage in the life cycle, income, level of education and economic circumstances, personality, and lifestyle. Marketers need to monitor these factors closely because many of these have a direct impact on consumer behaviour (Kotler & Keller 2016). Despite many studies that have investigated and analyzed demographic factors such as age, gender, income, and education as factors that influence consumer behaviour towards functional foods, there is no homogenous result (Kaur & Singh, 2017).

Age

The taste of people in terms of food, clothing recreation, and furniture is related to changes in age and stage of life. Consumption of a product can also be influenced by the family life cycle, age, number, and gender of people in the household at a particular point in time. Typically, a family life cycle consists of young singles and married couples with children but nowadays marketers are shifting attention to non-traditional stages such as unmarried couples, same-sex couples, childless couples, singles marrying later in life, and single parents by creating and developing necessary products for each stage. For example, as consumers progress in age, they may change from eating unhealthy foods to a healthy diet. As they grow older, they may change to a low-cholesterol diet to guide against health problems at old age (Kotler & Armstrong 2016).

A study by Vella, Stratton, Sheeshka, & Duncan, (2014), indicates that functional food consumption is related to an older age. Other studies have proven that older consumers perceive functional foods as important foods to their health more than younger consumers, in the sense that they see these foods as what they should eat to counteract health issues related to aging (Bornkessel, Bröring, Omta, & van Trijp, 2014). A study by Bonanno (2012) in Italia and another conducted by Chase et al. (2009) among Canadian consumers shows that as consumers grow older, their demand for omega-3 added dairy products and functional yogurt increases. The studies by Dobrenova, Grabner-Krauter, & Terlutter, (2015), Kraus (2015a), Kraus

(2015b), and Marina, Marija, & Ida (2014) contradict this by suggesting that young consumers tend to use functional foods more.

Gender

Many studies on the gender dimension of functional food products have shown that women are more likely to accept and consume functional foods more compared to men. A study by Brečić et al., (2014), suggests that female consumers are more likely to purchase functional foods because they have positive attitudes towards them. A similar study by Annunziata & Vecchio (2013), reports that females have a high preference for functional dairy products such as probiotics yogurt than taking pills. However, some studies found no gender difference in the consumption and acceptance of functional food products such as yogurt with added benefits (Ares et al., 2010b; Cox et al., 2011).

Education

Studies by Bornkessel et al., 2014; Brečić et al., 2014), found that higher education and income have a positive influence on the consumption of functional foods. A study by Kraus (2015b), conducted in various European countries such as Germany, France, Poland, Italy, and Portugal shows that consumers who acquire education above primary school level tend to purchase functional foods more than those with less education qualification, while another study by (Chambers & Lobb 2007) conducted in the UK found no influence of education level on the consumption of functional food products.

Income

People's level of income also affects their buying behaviour and their perception of money. People in the lower-income category tend to buy necessary goods rather than luxury goods or brands. For example, a low-income consumer that wants to eat a healthy diet will only purchase inexpensive products or the products within his income level (Kotler & Armstrong 2016). It was found that higher-income respondents tend to consume functional foods more than low-income respondents since functional foods may have a price premium for their health claim, therefore not everybody can afford them (Brečić et al., 2014). Nielsen (2015) disagrees that high-income earners buy

functional foods more, by suggesting that functional foods are fairly priced and that consumers do not need to earn higher income to be able to purchase them.

Lifestyle

A person's lifestyle is a way of living that is expressed in activities, interests as well as opinions. It shows how an individual interacts with the environment. A consumer who is conscious of his or her health will always purchase and consume healthy foods such as organic, natural, and functional foods and will also try to exercise regularly (Kotler & Keller 2016). The kind of product consumers choose to buy is related to their lifestyle. According to Kotler & Armstrong (2016), lifestyle dimensions are; activities that focus on how people spend their time such as work, vacations, and hobbies. Interests are people's priorities and preferences such as food, home, and family, while opinion is how consumers feel about certain or different issues such as products, politics, or themselves. A healthy lifestyle helps people to prevent non-communicable diseases to an extent and maintain their physical health. The study by Brečić, Gorton, & Barjolle, 2014) suggests that lifestyle is one of the motivations behind consumer consumption of functional foods. This is because most consumers see it as a solution to their poor eating habits while some see it as a means of having control over their health.

Personality

Personality is what differentiates one person from another by different traits. These individual traits include self-confidence, sociability, dominance, aggressiveness, and adaptability (Kotler & Armstong 2016). Personality can be used to analyze consumer brand choices. Consumers often choose brands that suit their personality. According to Jennifer Aaker (1997) cited in Kotler & Armstrong (2016), there are five brand personality traits, which are: “Sincerity (down-to-earth, honest wholesome, and cheerful), Excitement (daring, spirited, imaginative, and up-to-date), Competence (reliable, intelligent, and successful), Sophistication (upper-class and charming), Ruggedness (outdoorsy and touch)”. All the above attributes can be used to determine consumer behaviour towards a particular service or product (Kotler, & Armstrong 2016).

2.7.1.2 Psychological factors

Consumer behaviour is also influenced by four psychological: motivation, perception, learning, belief, and attitudes.

Motivation

An individual has different needs at a particular time or another. These needs can either be biological such as discomfort, thirst, and hunger, or psychological which arises from belonging, recognition, and esteem. When a need arises to an adequate level, it motivates people to react. A motive is a need that triggers an individual to obtain satisfaction (Kotler & Armstrong 2016). Abraham Maslow, a popular psychologist, explained why people are driven by different needs at different times. He shows that human needs are arranged in a ladder form whereby down to top approach is adopted. When one needs to have been satisfied, one moves to the next important need. For a company to encourage consumers to purchase their products and increase sales, they must try to create a need in the consumer's mind that will motivate such consumers to purchase the brand (Kotler & Armstrong 2016). Studies by (Bornkessel et al., 2014; Lu, 2015), show that nutritional knowledge is one of the factors that motivate the consumer to consume functional foods, as people with higher awareness of functional foods ingredients and benefits are more willing to buy them. These findings link with the study by Cox et al (2015) which shows that consumers who are aware of functional food have a positive perception of the product.

Perception

A motivated person acts according to his or her perception of the situation. In marketing, perception is important because perception influences consumer behaviour. People respond to different sensory stimuli such as taste, smell, sound, texture, and colour differently (Hanna, 2013). Perception is the process of selecting, organizing, and interpreting information to generate a meaningful picture of the world (Lantos, 2010). Kotler & Keller (2016), p. 187 defined perception as "the entire process in which an individual becomes aware of the environment and interprets it so that it will fit into his/her frame of reference". In other words, people interpret the environment according to their opinion. The first process is when the consumer receives the message. This is when the consumer comes in contact with the stimuli by seeing,

tasting, smelling, touching. Organizing is when people process the message. If the message is interesting, attention will be on the relevant information (Kotler & Keller 2016). The last stage is the interpretation of the message. After decoding the message, people interpret the message differently according to their experiences, beliefs, and attitudes (Lantos, 2010). People come up with different perceptions concerning the same object due to three perceptual processes which are: selective attention, selective distortion, and selective retention. In selective attention, an individual only focuses on the little number of stimuli that s/he is exposed to. In this process, consumers only respond to the stimuli that affect their current needs while giving little or no attention to other stimuli coming into the environment. For example, somebody that is motivated to buy and consume healthy foods will pay much attention to healthy food ads and pay less attention to makeup ads (Kotler, & Keller 2010). Cranfield et al. (2011, p. 378), state that people "who perceived themselves healthy make greater use of functional foods as a way of protecting their good health state".

Learning

People learn from experience. Learning suggests a change in behaviour as a result of one's experience. People's learning can create their experiences and can as well-bring about behaviour change (Durmaz, 2014). According to Lamb, Hair, and McDaniel (2011), learning is defined as "the process that makes changes in behaviour through experience and practice". Learning can be grouped into two types, which are experiential learning and conceptual learning (Lamb, Hair, & McDaniel, 2011). Experiential experience happens through personal experiences. This is a process influenced by the experiences of people through the continuous use of products and services directly. For example, if after drinking coffee, one falls sick as a result of that, that person had a negative experience with regards to coffee and will not want to buy or drink coffee anymore. On the other hand, if the person has a good experience with the product, s/he will be glad to buy the such again. Conceptual experience occurs when people learn from others' experiences instead of themselves. For example, a consumer may get a recommendation from a family member and friends who have used a particular product before (Lamb, Hair, & McDaniel, 2011). According to a study by (Annunziata & Vecchio, 2013), an individual who has had a direct and indirect

experience with illnesses will be more open to information regarding diet and health-related issues.

Beliefs and attitude

A belief is an opinion or view that a person has on something. This can be through the experience s/he acquires from his/her family and friends or his learning. Attitude is similar to value (Maio & Haddock 2015, Lamb, Hair, & McDaniel, 2011). According to Chang, (2011), attitude is defined as "something about a person's tendency toward an object or an idea and his/her value evaluations and feelings about something". Palani & Sohrabi, (2013), also defined attitude as a settled way of thinking or feeling about something. Attitude is formed on people's faith and knowledge. It may not be established on facts. Attitude leads to people's perception of various services and goods. An individual has his/her perception of every goods and service (Maio & Haddock 2015, Palani & Sohrabi, 2013; Lamb, Hair & McDaniel, 2011; Chang, 2011). There are three types of attitudes, which are; cognition, affection, and conation (Maio & Haddock 2015, Chang, 2011; Palani & Sohrabi 2013). Cognition is a process whereby people form the perception according to their personal experience and knowledge. This is also known as a learning component ((Maio & Haddock 2015, Palani & Sohrabi 2013). Affection is a process where consumers form the perception base on their feeling and emotion, while conation is a process where people desire to act on their behaviour, this is also known as the action component (Maio & Haddock 2015, Palani & Sohrabi 2013). Marketers can change the attitude and beliefs of consumers through good marketing campaigns.

The aforementioned reports indicate that psychological factors contribute to consumer behaviour towards functional food products. Consumers can show a positive attitude to certain products when they believe in their health properties or when they perceive that they are good for them and their loved ones, or when they have adequate knowledge and awareness of functional food.

2.7.1.3 Cultural factors

Cultural factors that influence consumer behaviour include culture, sub-culture, and social class.

Culture

Culture entails things that are learned through family and other key institutions while growing up. The influence of culture on buying behaviour varies from one country to another. Therefore, marketers need to consider the culture and analyze the cultural factors for each society, market, or situation to know what products to produce and the marketing strategy to use to best market their existing and new products. Culture plays a major role in the expectations, behaviour, perception, and habit of the consumers (Kotler & Keller 2016, pp. 179-181). Studies have shown that functional foods are not perceived equally across cultures and countries. According to the study conducted by Annunziata & Vecchio, (2010), it was found that the interest in functional foods is higher among northern and central European countries than in Mediterranean nations. This is as a result of differences in the eating habits of these countries. Schnettler et al. (2015) argue that people from ethnic minorities have less tendency to buy functional foods. A study by Annunziata & Vecchio, (2011) focusing on Italian consumers, shows how the Italians found the concept of functional foods confusing, as they cannot differentiate functional food from conventional food. Another factor defining cultural differences is in the area of trust, the extent of “risk” people consider to be involved when dealing with a functional food. A study by Dolgopolova, Teuber, & Bruschi, (2015) revealed how differently Germans and Russians trust functional foods. Germans showed a higher level of trust in functional foods while Russians displayed to have an extreme irrational dislike for new or unfamiliar items.

Sub-culture

Sub-culture is a group of people that share a similar lifestyle. Each culture contains various sub-culture such as geographic regions, religions, racial groups, nationalities, and others. Marketers can segment their market into various groups to produce products and services targeting each group's needs. For example, an organization can design products targeted towards the youths of a particular region (Schiffman, & Wisenblit, 2015).

Social class

Social classes are defined as a group of people with similar lifestyles, behaviours, and interests. A person with social class has brand preferences in furniture, automobiles, clothing, leisure activities, amongst others. This is important to marketers because people in a particular social class usually have the same buying behaviour. In this regard, marketing activities should be formed according to a different social class. For example, a consumer from the upper class will be attracted to the product with high quality, distinct features, and some other things to show class while consumers from the lower class will focus more on price (Kotler & Keller 2016).

2.7.1.4 Social factors

Social factors such as reference groups, family, role, and status also affect buying behaviour.

Reference groups

A reference group is one to which an individual belongs. It has a direct or indirect influence on the behaviours or attitudes of its members. Any group that has a direct influence on people's behaviour is called a membership group. This membership group can be classified into primary and secondary groups. Example of the primary group includes family, co-workers, neighbours, and friends while secondary groups include trade union groups, religions, and professionals. A reference group can influence its member in the following ways; they expose people to a new lifestyle and behaviour, they influence attitude, and they make an individual have a preference for one brand over another which automatically affects product and brand choices. An individual can also be influenced by a group in which s/he hopes to join. This group is known as the aspiration group. For marketers to penetrate and influence the reference group, they are plan to influence the group’s opinion leaders. An opinion leader is a person that gives information about a particular product, teaching on the usefulness or how to use a product, and giving advice on the best brands to choose from (Kotler & Keller 2016, pp. 181-183). A study by Sandmann et al., (2015), highlights doctors/dieticians as the source of information and reference concerning functional foods.

Family

Family is a strong influencing factor for its members. This is where an individual grows to form personality, acquire value and develop an opinion and attitude on some subjects. Marketers are trying to find out who is the strong influencer among the husband, wife, and children. If the buying decision for a product is influenced by children, then the advertisement will be made to target the children. Also, note that a change in consumer lifestyle also brings changes in buying roles. However, people may respond to marketing messages (Kotler & Keller 2016). A study by (Annunziata & Vecchio, 2013) revealed that in families with children below the age of 12, parents feel more responsible for their health. This motivates them to purchase more nutritious food such as functional food.

Roles and status

A role entails the activities expected from an individual according to his position at work and his profession, his gender, and his position in the family. Roles, in turn, create status. People usually purchase products and brands that speak and reflect their status (Kotler & Keller 2016).

2.8 Brand and Branding

A brand can be defined as “a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors” (Kotler & Keller 2016, p. 1). Branding is a process whereby the company differentiates itself from its competitors, by making unique offers and delivering to the target market with the combination of name and image that is connected with satisfaction and quality (Kapferer, 2012). Branding involves meeting the expectation of the consumer and doing things the same way to fulfill the brand promise while putting effort into representing the brand positively through all marketing communication means (Kotler & Keller 2016). The main reason behind the brand building is to create an effective communication channel that will reflect a positive brand image to the consumers, and make them have a good brand awareness which will automatically lead to brand equity (Geelhoed, Samhoud, & Hamurcu, 2013). Brand positioning is when the consumer can differentiate a brand

from the competition through the brand's special qualities, goal, and value (Geelhoed, Samhoud, & Hamurcu, 2013).

2.8.1 Brand Identity

Brand identity is created by the brand owner. It focuses mainly on what the company wants to create in the minds of the customers. Brand identity represents the aim, value, and brand promise of a company. It is about how a brand presents its uniqueness, which will make the consumer choose it over other brands (Kotler & Keller 2016). A brand promise is a statement from a company to its consumers stating, the consumers' expectation from their products, regarding benefits and experiences. This promise is usually spread through various marketing campaigns and advertisements. For example, Nestle says 'Good Food, Good Life' (Cant, M.C. & Heerden, C.H. 2010). A study by Ares et al. (2010), highlighted brand identity as an important element that influences consumers' acceptance and choice of functional food. Companies are expected to work towards building their brand.

2.8.2 Brand image

Brand image entails consumers' expectations of a given brand. The brand image starts with what consumers have in their mind which can be broken down into attributes, benefits, and attitudes (Kotler & Keller 2016). The attribute is the special quality which consumers believe that a product possesses, while the benefit is the value consumers believe they derived from using a particular product or service, and attitude is the judgment made by the consumer after using the product. This attitude can be positive or negative, depending on how good or bad the product benefits or attributes are (Keller 2003 in Erfan & Kwek 2013). Consumer's feelings and perceptions can be packed towards a product. Consumers' perceptions and beliefs towards a particular product are called brand image. Marketers can make use of advertising, promotions, and packaging to build up brand images (Kotler & Armstrong 2016).

2.8.3 Brand awareness

Brand awareness is about how much awareness consumers have over a product, company, service, or brand. This involves the ability of consumers to recognize and recall a particular brand amongst others (Kotler & Keller 2016). Various companies

desire their products or services to be known by potential customers. Meanwhile, the level of familiarity with a brand influences consumers to have a positive attitude towards the product (Kapferer, 2012). A study by Annunziata & Vecchio, (2013) indicates that the more consumers are familiar with a brand of functional food the more they tend to choose the brand in their purchase decision.

2.8.4 Brand loyalty

Brand loyalty involves a positive attitude towards a brand which results in a situation where the consumer buys the same brand of a product over time with the assurance that the brand can satisfy their needs. It also shows the faithfulness of the consumer to repurchase the brand over time. Loyal customers find it difficult to switch to another brand even when their favorite brand makes some changes either in the area of the product features or price. Such loyal consumers can come up with positive word-of-mouth advertisements about the brand to their friends and family (Kotler & Keller 2016).

2.9 Factor influencing the purchase of functional foods

Different factors contribute to consumers' willingness to consume healthy foods such as functional food **(**Dolgopolova & Teuber 2016). A report by Shandilya and Sharma. (2017), highlighted that the most important reason for consumers buying functional foods is to prevent diseases. Research carried out by Agriculture & Agric Food (2009) showed that 'demographic characteristics of consumers have little influence on the acceptance of functional foods. Meanwhile, the majority of consumers are females between the age of 35-60 and with a high level of education. According to IFIC (2000), cited by Siro et al (2008), people that who functional food are mostly female between the age of 45-74.

Lähteenmäki & Urala (2007) developed a model for measuring consumer willingness to purchase functional food. Also, food areas of consumer wiliness to consume functional foods were considered. These are Necessity, Reward, Safety, and Confidence. Necessity is how a customer perceives the need for functional foods and their attitude towards them. The reward is about the benefit of using these foods which is mainly on health, and the general wellbeing of the user. Safety revolves around customers' beliefs that it is safe to consume functional foods and that it limits their

chances of contracting lifestyle diseases. Confidence in functional foods is about how much assurance the consumer has on the product and how they perceive it as something healthy to eat (Chen 2011). Research conducted in the past by Annunziata et al. (2016), Vecchio et al (2016), and Brecic, et al (2014) revealed that familiarity with the brand as well as price and taste, mothers with young children, older population, trustworthiness, consumer knowledge, presence of an ill family member, income and educational level of the consumer are also contributing factors which influence consumers to purchase functional foods.

2.9.1 Perceived reward from using functional foods

Reward from functional foods is based on the idea that it helps the consumer to live a healthy lifestyle, have control over their health by dwelling on the benefits derived from consuming functional foods (Dobrenova et al 2015). The perceived reward is one of the important reasons behind consumer motivation and wiliness to consume functional foods (Dobrenova et al 2015, Chen 2011). If consumers understand the health benefit and rewards of the product, they are more willing and ready to buy functional foods (Dobrenova et al 2015, Carrillo et al. 2013).

2.9.2 The necessity for using functional foods

The necessity for functional foods entails how consumers see such as a form of medicine (Chen 2011). This is basically to see how consumers perceive functional foods, whether functional food is necessary for society or not (Dobrenova et al 2015).

2.9.3 Confidence in functional foods

Consumers with a high degree of confidence in functional foods are more ready to buy them (Chen 2011). Having confidence in functional foods is when consumers believe that the product delivers the stated/anticipated benefits and all information concerning the product is correct (Hung et al 2016). Confidence in functional foods is based on the belief of consumers that such foods are safe and healthy for consumption and promote their health (Hung et al 2016, Lähteenmäki & Urala 2007).

2.9.4 Perceived safety from functional foods

Consumers who feel that functional foods are safe for consumption and not harmful to their health are more likely to buy such. The safety of functional foods is majorly dependent on consumers' views on the possible risks in consuming them (Hung et al 2016).

2.10 Challenges faced when marketing functional foods internationally and in South Africa

The manufacturers of functional foods are faced with two main challenges when marketing functional foods. Firstly, many consumers are not health conscious, secondly, many consumers lack knowledge about functional foods and the health claim issued by the manufacturer and the marketers which are mostly communicated by the media (Shikha, Sharma, & Khadke, 2014; Walker-Naylor, et al, 2009).

The trustworthiness of information sources also plays an important role in motivating food consumption generally as well as functional food consumption. Even though some consumers believe in the health properties of some foods, they are always reluctant to buy food that they are not familiar with. People are more likely not to buy or consume functional foods when they know nothing about them (Shikha, Sharma, & Khadke, 2014). With this regard, marketers need to be more helpful in educating consumers about functional foods to enhance their growth and acceptance. However, the main source of information through which consumers get to know or hear about functional food is through mass media advertising (Shikha, Sharma, & Khadke, 2014). According to Schmidt (2010), consumers stated medical source and the media as their main source of information concerning functional foods and their benefits and they believe that the information from medical sources such as dieticians, physicians, and nutritionists influence them more than the media such as television news, newspaper, and magazine. Some other barriers to functional food consumption have also been identified in studies. Cost and taste are some of the barriers that have been recognized (Ali & Rahut 2019). This is shown in a study conducted on the perceived barriers to healthy eating and dietary behaviour among European adults, where the majority of participants perceived functional food as expensive (Pinho et al. 2018). Studies conducted in the past have also identified taste as another barrier to functional foods.

This was revealed in a qualitative focus group study conducted among Hawaii college students, where functional foods were perceived to be more artificial, taste worse, and more medicine-like than conventional foods (Amore et al. 2019). Another study conducted on the influences of health information on the acceptance of functional beverages showed that more health-conscious participants were more likely to come to terms with the taste of functional beverages for health benefits and other added nutrition (Imamura et al. 2015). However, a study by Cox et al (2015) shows that participants were not ready to accept tasteless functional foods, even if they contain omega-3 fatty acid or the claimed added health benefits. Moreover, they would not purchase such foods if they do not taste as good as conventional foods.

Consumers' demand towards healthy food such as functional packaged food in South Africa is limited by the low level of income and high taxes, which leads to almost non-existence demand for healthy beverages (Health and wellness in South Africa, 2017). The consumer goods firms are coming up with marketing strategies that create awareness and make healthy products affordable, available, and acceptable to the consumers through their various advertising campaigns (Health and wellness in South Africa, 2017).

It was observed that several studies have been conducted on functional foods and consumers' behaviour from Australia (O'Connor & White, 2010, Nolan-Clark et al., 2011), studies such as (Hur & Jang, 2015, Naylor et al., 2009) in the US, studies by (Urala & Lahteenmaki, 2007) in Finland, and other studies such as (Annunziata & Vecchio, 2013, Tobin et al. 2014, Annunziata et al.2016) in other European countries but very few in developing countries, especially in South Africa. However, this study explores consumers' perception of the marketing of functional foods from the South African perspective. Marketers need to have a better understanding of consumer behaviour to develop products that meet the expectations of consumers and at the same time create good marketing strategies concerning the product, pricing, placement, and promotion of the product (Menezes, Deliza, Chan, & Guinard, 2011).

2.11 Conclusion

This chapter reviewed the literature on the definition of functional foods though there is no specific definition of the term as the definition varies across countries. It also explained some factors that influence the consumption of functional foods, the barriers to the marketing of functional foods, and the importance of understanding consumer behaviour. The functional food marketers need to create an effective marketing communication channel that gives more information on these foods and creates more awareness. From the reviewed studies, consumers' acceptance of functional foods depends on certain factors, such as; awareness of the concept of functional foods, health benefits, functional ingredients as well as marketing communication.

The following chapter will discuss the research methodology adopted in addressing the research questions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section presents the primary research method adopted for the data collection on consumers' perceptions towards the marketing of functional foods. It also presents information on how the collected data was analyzed. Data was collected with the aid of survey questionnaires from 384 respondents from three different retails stores in uMhlathuze municipality, South Africa after filling the consent forms. The convenience non-probability sampling method was adopted in the Data collection. The data collected were analysed using Statistical Package for Social Science (SPSS) version 24. The details for the research methodology used in this study are described in the sub-sections.

3.2 Research Design

Research design is defined as a blueprint in conducting research, this involves the description of research approach, study setting, sampling size, sampling technique, and methods of data collection and analysis, in other to answer specific research questions or for testing research hypothesis (Creswell & Creswell (2017). The research design also reflects the framework for the study, the design must always align with the research objectives. In this study, a survey design method was adopted. In which questionnaires are designed to gather information and answered the research questions.

Research Approach

The research approach that was used for this study is a quantitative approach According to Sekaran & Bougie (2016), a research approach can either be a quantitative, qualitative, or a mixed method. Qualitative data is obtained from people's opinions, behaviour, pictures, and objects that involve detailed descriptions of a phenomenon, while quantitative involves collecting numerical data that are to be

statistically analyzed (Sekaran & Bougie 2016). A mixed methods research approach involves the combination of both qualitative and quantitative research design in collecting data (Sekaran & Bougie 2016).

3.2.1 Choice of research approach for this study

The research approach that was used for this study is quantitative. According to Creswell & Creswell (2017), this is an approach that makes use of numbers to explain findings and it aims at generalizing the findings to the population. The study utilized a quantitative research method due to its capacity for analyzing data in number format through mathematical methods and generalizing the findings across a large group of specific peoples (Muijs, 2010). The quantitative research method used involved the completion of survey questionnaires by consumers at shopping areas, to ascertain their perception towards the marketing of functional foods.

The reason behind the choice of quantitative approach for this study is because the use of numerical data is the best way to represent and support the identified research questions of this study. It is also the best way of collecting reliable data from a large sample pool (Creswell 2014). This study required to collect data from 384 consumers from the shopping mall, which is quite a large sample in which interview is not appropriate due to time and cost constraints and the busy nature of shopping malls. As identified by Brace (2018), since questionnaires can be filled within a little period, a large number of consumers can be surveyed through the use of questionnaires in a shorter time compared to qualitative tools for collecting data such as an interview. A large sample is more representative of the population; therefore, this can increase the accuracy of the research findings. Another reason for choosing questionnaires is that respondents can fill the questionnaires anonymously and the costs incurred are much less (Nardi, 2018).

3.3 Research Method and Techniques

According to Walliman (2011), research methods are the tools or instruments adopted by researchers to carry-out their inquiry or investigation. Almaki, (2018) highlighted the types of research methods namely, survey questionnaire, experiments, interviews, case studies, participants, and non-participants' observation.

The research instrument that was used in this study was survey questionnaires for consumers. A survey design provides a quantitative description of attitudes, opinions, or trends of a population by studying a sample of that population (Creswell, 2014). The most effective method of targeting consumers was to fill the questionnaire outside shopping malls. The questionnaires were administered to consumers at Richards Bay and Empangeni in the uMhlatuze municipality in KZN. Data was collected between August to October 2019.

3.4 Target Population

The target population is the entire group of people that the researcher wishes to investigate (Kumar, 2019). According to the Statistic South Africa census 2011 figure, the population for this region is 334,459 (Stats SA, 2011). The target population for this study is consumers from 18 years and above in the uMhlathuze region.

3.5 Sampling

The sample used in this study was 384 consumers from the uMhlathuze region. This is based on the Krejie and Morgan sampling table which states that any population above 75,000 should use a sample size of 384 (Krejie & Morgan, 1970 in Sekaran & Bougie, 2016). Sampling can be defined as a process of selecting a smaller class of individuals to represent the population (Sekaran & Bougie, 2016). It is used because the researcher cannot study the whole population. After all, it is time-consuming and expensive.

3.5.1 Sampling Design

There are two types of sampling which are probability and non-probability sampling. A probability sample is a sampling method in which individuals have an equal opportunity to be chosen in a population, while in the non-probability sample, the entire individual population does not have an equal chance of being selected (Kumar, 2019). Kumar (2019) stated the types of random probability sampling, namely, simple random sampling, systematic sampling, stratified sampling, and cluster sampling. Additionally, types of non-probability sampling methods include convenience sampling, purposive sampling, quota sampling, and snowball sampling.

Due to practicality, time, and cost constraints, the researcher chose convenience sampling which is a non-probability sampling technique. This technique though may

not allow generalization of results to the general population, gives valuable insights into the perceptions of consumers (Etikan et al., 2016).

3.5.2 Sampling Method

Convenience sampling was chosen for this study. This is a situation where respondents have to be at the place of sampling when the selection occurs (Speak et al., 2018). The rationale behind the choice of convenience sampling approach which is a type of non-probability sampling is due to the nature of the area where data was collected, that is, shopping areas. The sample of respondents does not have an equal chance to be chosen as part of a sample.

According to Speak et al (2018), the advantage of convenience sampling is that it is the most convenient, less costly, and least time-consuming sampling method. The major disadvantage of using the convenience sampling approach is that selection bias and influences cannot be controlled and results cannot be generalised to the entire population. However, it is sometimes the only way to conduct research where there are time and cost constraints.

The researcher was present outside the shopping areas and the questionnaires were given to consumers to complete after a brief explanation from the researcher regarding the concept of functional foods. Only the consumers who knew about functional foods were allowed to complete the questionnaire. The questionnaires were handed out personally by the researcher so that clarity could be given to respondents. The administration of the questionnaires lasted for three months. This is a non-probability method, as consumers who were not available at the malls during this period were excluded from the sample. Consumers were also selected at the convenience of the researcher. The researcher only approached another consumer after finalizing with the previous consumer. However, for validity, the researcher collected data at different data collection points as stated below.

Below is the table showing the proportion of the questionnaires distributed in Richards Bay and Empangeni respectively. The researcher decided to share the respondents into a ratio of 60:40, according to the average number of consumers that visited the

shopping malls. Richards Bay participants were 60%, while Empangeni participants were 40% of the sample size.

Table 3.1: Distribution of respondents

Grocery stores	**Spar**	**Pick n Pay**	**Checkers**	
Richards Bay	77	77	77	
Empangeni	51	51	51	
Total	128	128	128	**384**

3.6 Data collection instrument

There are two different sources where data can originate, namely primary and secondary data. Primary data was collected basically for this study. This is done through survey questionnaires (Sekaran & Bougie 2016). This was used in this study because it allowed the researcher to have a face-to-face interaction with the consumers and clarify questions. Also, less cost was incurred. The researcher provided simple verbal information about functional foods to make sure the respondents understood and answered the questions accordingly. One of the disadvantages of the questionnaire is the low response rate. To avoid this, the researcher personally distributed the questionnaires and waited for the consumers to complete and return immediately. Therefore, the questionnaire was self-administered. The questionnaire is discussed below.

3.6.1 Questionnaire design

Brace (2018) advise that researchers that plan to use questionnaires write the kind of questionnaire for their study themselves. In line with this, the questionnaire used was designed by the researcher based on the review of literature relating to functional foods. The questionnaire was designed by modifying Cant, Gerber-Nel, Nel & Kotzé's (2008) seven-step process, as discussed below.

Consumers questionnaires

Step 1: Precise information

This questionnaire determined the perception of consumers towards the marketing of functional foods. The questionnaire focused on consumer behaviour and attitude and marketing communication.

Step 2: Identification of questions content

A demographic section was included in the questionnaire to achieve the first objective. Asking consumers for their demographic data helps to show that the questionnaire was used by different respondents with different demographic data. This has also been used by other researchers such as Somehagan, Holmes, & Saleh, (2013), in a study of consumer attitude towards functional foods in Sweden.

Step 3: Questions' structure

The questions consist of closed-ended questions. This was chosen to make it quicker and easier for the consumers to complete the questionnaire. The questionnaire was divided into five sections, covering demographic, factors that influence the purchase behaviour of functional foods, marketing communication, consumer attitudes towards the branding of functional foods, and consumer attitudes towards the packaging of functional foods. The ordering is discussed in step 5.

Step 4: Questions simplicity

The statement and responses were made specific and simple. The reason behind this was for the consumers not to misinterpret the questions. A short explanation of what functional foods entails was included as the subject of functional food may be confusing to a first-time reader or consumer. Lastly, consumers were asked to tick their chosen responses rather than to circle the response as this according to Krosnick (2018) minimizes mistakes and confusion.

Step 5: Questions sequence

The researcher decided to start with the demographic details of the respondents to encourage the respondents in completing the questionnaire. Asking a question on personal information first may make the respondent feel at ease instead of questions that entail deeply thinking. According to various authors, there is disagreement on

where a demographic question should be asked in a questionnaire. Brace (2018) highlights that demographic details should be asked at the beginning of a questionnaire while Cant et al (2008) states that personal questions should be asked at the end of the questionnaire. The second section was on factors that influence the purchase behavior of functional foods, including cultural, social, personal, and psychological factors. The third section was on marketing communication which includes the medium of communication of advertising functional foods to the consumers. The fourth section relates to the statement on consumer attitude towards the branding of functional foods and the fifth section was on consumer attitude towards the packaging of functional foods.

Step 6: Questionnaire layout

At the beginning of the questionnaire, simple instructions were explaining the purpose of the study, and the respondents were assured of their confidentiality and anonymity. The researcher's contact number was included in case the respondents had further questions concerning the research. The first section was on demographic variables and the consumers' level of awareness of the concept of functional foods which is related to objective one.

The second section was related to objective two which is factors that influence the consumer buying behavior of functional foods, question one was designed to determine the factors that influence the consumer to purchase functional foods, using the four factors determinants namely personal, psychological, cultural, and social by using five-point Likert scale. Question two was on factors that are important in the consumer purchase decision.

The third section was on marketing communication strategies which are relevant to objective three. Question one asked the consumer to rate the effect of some medium of communication on the marketing of functional foods, using a Likert scale of 1 = not effective to 5 = very effective. Question two was designed to ask consumers about their attitude towards the advertising of functional foods. Question three was on how attractive they are by promotion offers such as buy one, get one free or give away and sample by using a Likert scale of 1 to 5. Question four asked the consumer to rate the information they get from social media as a form of advertising functional foods, a

Likert scale of 1= not useful to 5= extremely useful was used to determine it. The last question in this section was used to ask the consumers how influential social media is in convincing them to purchase functional foods using a Likert scale of 1=not at all influential to 5= extremely influential.

The fourth section was on consumer perceptions toward branding of functional foods which is related to objective four. The question was designed for the consumer to determine their perception towards branding of functional foods using brand loyalty, brand awareness, and brand perception. A five-point Likert scale from 1= strongly disagree to 5= strongly agree was used to determine this.

The last section of the questionnaire was relevant to objective five, which is on consumer perception towards the packaging of functional foods. Consumers were asked to rate their perception towards the packaging of functional foods using a five-point Likert scale from 1= strongly disagree to 5= strongly agree was used to determine this. At the end of the questionnaire was a note of thanks to the respondents for participating in the research.

Step 7: Pilot testing of the questionnaire

Bryman (2012) and Kumar (2019), asserted that pilot testing is necessary for preparation for data collection. This enabled the researcher to trace if the content of the questionnaires were valid to give answers to the research objectives or any problem that might arise while collecting the data such as difficulties of the respondents in understanding the questions.

The questionnaire designed was pilot tested on 20 grocery consumers aged 18 years and above. Consumers that agreed to partake in the pilot study were given a consent form to fill and a brief explanation of the project was highlighted by the researcher before the questionnaires were handed to them to complete. The respondents were assured that their feedback was going to be anonymous and confidential. All the respondents agreed that the questions were well understood while some complained of the length of the questionnaire. After the pilot study, the feedback helped the researcher to make some adjustments in the questionnaire by removing some open-

ended questions. The average completion time for each questionnaire was 15 minutes.

3.7 Validity

Validity is used to check whether the research can answer the questions intended to answer and to find the accuracy of a specific study's findings
(Diedenhofen & Musch, 2016)). In this study, content validity was used to measure the validity of the questionnaire, where marketing experts and an academic expert from other universities evaluated the questionnaire to ascertain that it answers the research questions and assesses all fundamental aspects of the topic. The marketing expert was sourced from the researcher's contact and colleagues, the same as the academic expert. The feedback helped to improve the content validity of the research and the quality of the questionnaire.

3.8 Reliability

Reliability is used to examine the consistency of a consented measure (Diedenhofen & Musch, 2016). In this study, Cronbach's alpha was applied to check reliability. The number ranging between 0.5 and 0.7 were considered to be an acceptable level of internal consistency and a number above 0.8 to be good (Yusoff 2012). Cronbach's alpha for this study is 0.8 which indicates good reliability. This implies that the questionnaire was highly reliable for the required analysis. Also. It can be deduced that the research measured what it was intended to measure.

3.9 Data Analysis

The 384 data collected was successfully analyzed using Statistical Package for Social Science (SPSS) version 24. The research findings were coded, input, and analyzed using SPSS. This shows descriptive statistics such as frequency, percentages, mean item score, and standard deviation.

Frequency

According to Kumar (2019), frequencies is the number of time various categories of a certain phenomenon occur which the percentage of the occurrence can be calculated easily. In this study, the frequency was used for demographics, level of awareness of

functional foods, and categories of functional foods purchased. The mean, median, and mode were computed as well as Standard deviation.

Descriptive statistics

These are the graphical, tabular, and numerical techniques for analyzing and presenting data (Grant et al., 2016). The researcher used descriptive statistics in the form of tables, graphs, and numerical measures in presenting the research findings in this study. This made the data easy to read and understand. The scoring of individual items was computed, after which the mean score was computed to give a clear picture of the data. The standard deviation was also used.

ANOVA and Correlation

A one-way analysis of variance (ANOVA) was performed to determine if there was a relationship between three or more independent groups. Spearman's correlation was used to measure the degree of correlation between variables. The p-value was observed at the Alpha level of 5%.

T-test

A T-test is used to determine the relationship between two sample groups such as gender.

3.10 Ethical consideration

Obtaining ethical considerations is crucial for protecting the integrity of the researcher. The following ethical steps were considered;

- Permission to administer the questionnaires was requested from the appropriate authorities.
- Names of the respondents were not required for completing the questionnaires to maintain anonymity and ensure the confidentiality of provided data.
- Participation in this exercise was entirely voluntary and the participants were aware of their rights to withdraw partially or completely from the research work.

- All data collected was utilized, analyzed, and reported in a way that would not cause harm, embarrassment, stress, discomfort, or pain to any of the participants.
- This research was conducted objectively without any form of bias.
- The reviewed literature was properly cited.

3.11 Conclusion

This chapter presented the research methodology showing the instruments used for data collection, the sample size, population and the method to be adopted for data analysis. This chapter prepared the background for the next chapter which is the presentation of results. An overview of the chapter is presented in the table below.

Table 3.2: Overview of the chapter

Research Methodology	**Tool/Method**
Research Approach	Quantitative
Data collection	Survey
Data collection instrument	Questionnaire
Sampling	Non-Probability sampling, convenience sampling
Data analysis instrument	Statistical Programme for Social Science, (SPSS)

CHAPTER FOUR

PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the data obtained from the survey research as well as their analysis and the findings resulting from them. The analysis covers the demographic data of the respondents and evaluates their awareness with regards to functional foods. The chapter appraises the factors that influence the behaviour of consumers towards functional foods. The other part worthy of note in this chapter is assessing the attitudes towards the advertising of functional foods and sales promotion that attracted the respondents towards the purchase of functional foods. Finally, it examines consumer attitudes towards the branding of functional foods. In conclusion, the study examines the consumers' perception towards the marketing of functional foods, all in a bid to achieving the objectives of this research.

The samples were drawn from individuals who visited the shopping malls in Empangeni, and Richards Bay. Descriptive statistics such as frequency, percentages, mean item score, ANOVA, and correlation supported with pie and bar charts were used for descriptive purposes. The findings were analysed through the statistical package for the Social Science (SPSS) version 24.

4.2 Demographic profile of consumers

Before the interpretation of the collected data, it is important to consider the general characteristics of the respondents to ensure that they are capable to produce accurate answers to the question posed by the research instrument. Demographic data gives

us a feel for the characteristics of the sample. Descriptive statistics about the respondents are presented below.

Figure 4.1: Gender Distribution

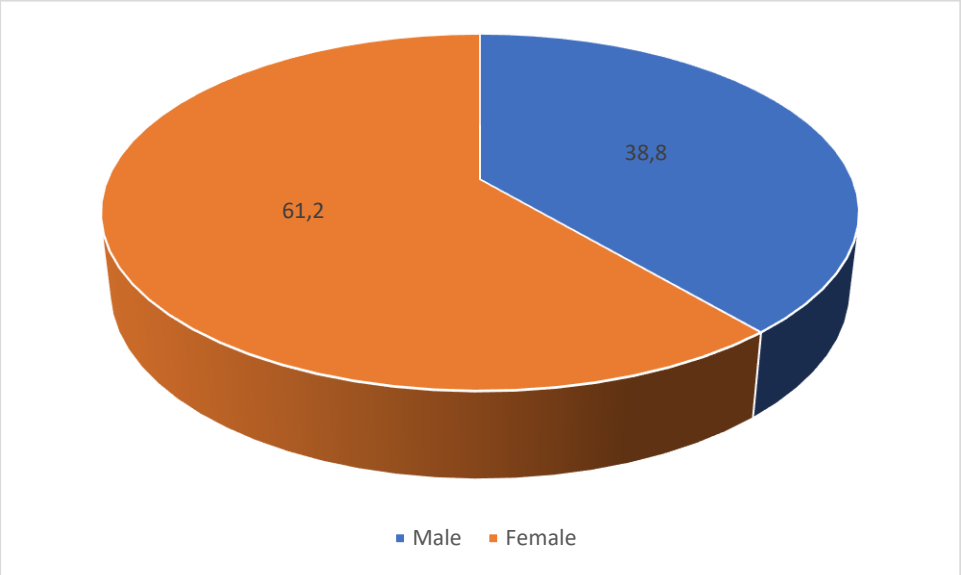

Figure 4.1 above presents the gender distribution of the respondents. The chart shows that 61.2% (235) of the respondents were females. This suggests that most of the shoppers in the mall are women while 38.8% (149) were males.

Table 4.2: Demographics of the respondents

Personal Characteristics	**Frequency**	**Percentage**	**Cumulative percent**
Age distribution			
18-25 years	159	41.4	41.4
26-35 years	86	22.4	63.8
36-44 years	91	23.7	87.5
45-59 years	48	12.5	100.0
Total	**384**	**100**	
Employment status			
Employed	102	26.6	26.6

Unemployed	164	42.6	69.2
Partly employed	64	16.7	85.9
Other	54	14.1	100.0
Total	**384**	**100**	
Educational qualification			
Primary school	40	10.4	10.4
High school	132	34.4	44.8
Degree	170	44.3	89.1
Post graduate	42	10.9	100.0
Total	**384**	**100**	

Table 4.1 above presents other characteristics of the respondents such as their age distribution, employment status, and educational qualification. The table shows that 41.4% (159) of the respondents were within the age bracket of 18-25 years. A look at the table also reveals that a cumulative of 87.5% (336) of the respondents were within the age bracket of 18-44 years. This suggests that the younger consumer population was more responsive to the study. This means that the sample consists mainly of younger to middle-aged members of society.

Table 4.1 also presents the employment status of the respondents. The table shows that 42.6% (164) of the respondents were unemployed, as they were predominantly younger generation. The table also revealed that the cumulative of 43.3% were employed and partly employed, while 14.1% (54) have other forms of occupation apart from those listed as an option in the survey. This is representative of the Quarterly Labour Force Survey (QLFS) conducted by Statistics South Africa (Stats SA), among individuals aged 15 to 64 which recorded an unemployment rate of 29.1% and an employment rate of 42.4% between July – September 2019. Notwithstanding, the majority of respondents were employed in some form (Stats SA 2019).

In terms of educational background, (table 4.1), revealed that 44.3% (170) of the respondents were graduates with degrees. A percentage of 34.4% (132) were high school graduates, while 10.9% (42) had post-graduate degrees. This implies that the

majority of the respondents were educated enough to understand the question posed by the research.

Figure 4.2: Monthly Income

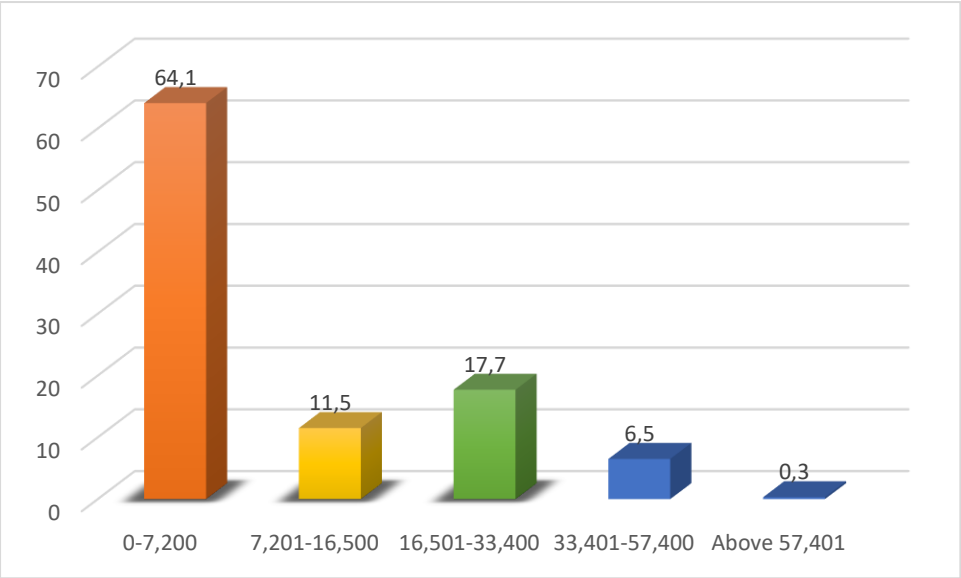

Figure 4.2 shows the monthly income of the respondents. The chart shows that more than half 64.1% (246) of the respondents earned between 0-7,200 Rands per month. This implies that most of the respondents are earning a minimum wage. This could be attributed to numerous factors such as the time of collection of data as most of them are collected during the week. Another factor may be because the shopping malls are closer to the universities, and this is where the majority of the students do their shopping. The chart shows that 17.7% were earning between 16,501-33,400 rands per month, while only a few of 0.3 percent reported monthly income of R57,401.00 and above. These findings revealed that the majority of the respondents were earning minimum wages, which is supported by the National minimum wage Act signed by Cyril Ramaphosa. The Act indicated a minimum wage at R900 a week (900 x 4 = 3,600) per month (Dickens 2015).

4.3 Level of awareness of functional foods of the respondents

This section examines the awareness level of the respondents with functional food, purchase of functional food, and category of functional food frequently purchased by the respondents. This is presented in Table 4.2.

Table 4.3: Awareness and purchase of functional food

Understanding of functional food	Frequency	Percentage	Cumulative Percent
Awareness regarding functional food			
Not at all aware	14	3.6	3.6
Slightly aware	19	4.9	8.5
Somewhat aware	145	37.8	46.3
Moderately aware	160	41.7	88.0
Extremely aware	46	12.0	100.0
Total	**384**	**100**	
Purchase functional food			
Never	2	0.5	0.5
Daily	52	13.5	14.0
Once a week	141	36.7	50.7
Monthly	188	49.0	99.7
Once a year	1	0.3	100.0
Total	**384**	**100**	

Table 4.2 above reveals that the cumulative of 79.5% (305) were aware of functional foods, while 3.6% (14) were not at all aware of functional foods. The outcome of the findings shows that the respondents were aware of functional foods after a brief explanation by the researcher, thereby making their response crucial for this study.

Table 4.2 also revealed that the commutative 85.7% (329) of the respondents purchased functional food monthly and weekly, while a few of 13.5%(52) purchased functional food daily.

Table 4.4: Cross-tabulation regarding awareness and purchase of functional foods

		Awareness level with functional food					
		Not at all aware	Slightly aware	Somewhat aware	Moderately aware	Extremely aware	**Total**
Frequency of purchasing functional food	Never	1	0	1	0	0	**2**
	Daily	4	2	28	16	2	**52**
	Once a week	4	10	56	58	13	**141**
	Monthly	5	7	60	85	31	**188**
	Once a year	0	0	0	1	0	**1**
Total		**14**	**19**	**145**	**160**	**46**	**384**

Table 4.3 presents the cross-tabulation between the awareness level of functional food and the frequency of purchasing functional food. The cross-tabulation was carried to show the relationship between the awareness level of functional food and their purchase. Towards calculating the cross-tabulation awareness with functional food was used as the row (X-axis), while the frequency of purchasing functional food serves as a column (Y-axis).

The table reveals that those that are moderately and extremely aware of functional food frequently purchased functional foods, whereas those who were unaware of functional foods rarely bought functional foods. It can be deduced from these findings that the purchase of functional food is determined by the awareness of such functional food.

Table 4.5: Category of functional foods purchase

	Mean	Median	Mode	Std. Deviation	Rank
Bread	4.29	4.00	5	.800	1
Yoghurt and dairy	3.78	4.00	4	1.032	2
Cereals	3.69	4.00	4	1.088	3
Beverages	3.38	3.00	4	1.246	4
Margarine	3.12	3.00	3	1.151	5

The respondents were asked to rate the functional foods they frequently purchased using a five-point Likert scale from 1 representing Never to 5 denoted with Always and the outcome is presented in Table 4.4. A look at the table depicts that bread ranks 1st as the most bought functional food with a mean score of 4.29 followed by yogurt, cereals, beverages, and margarine.

Objective 1: To investigate the influence of demographic variables on the purchase of functional foods.

4.4 The influence of consumer demographic variables on the purchase of functional foods

In this section, the effect of consumers' demographic variables on the purchase of functional foods is presented. The following figures present the percentages. Figure 4.3 shows the purchase of functional food by Gender.

Figure 4.3: Purchase of Functional foods by Gender

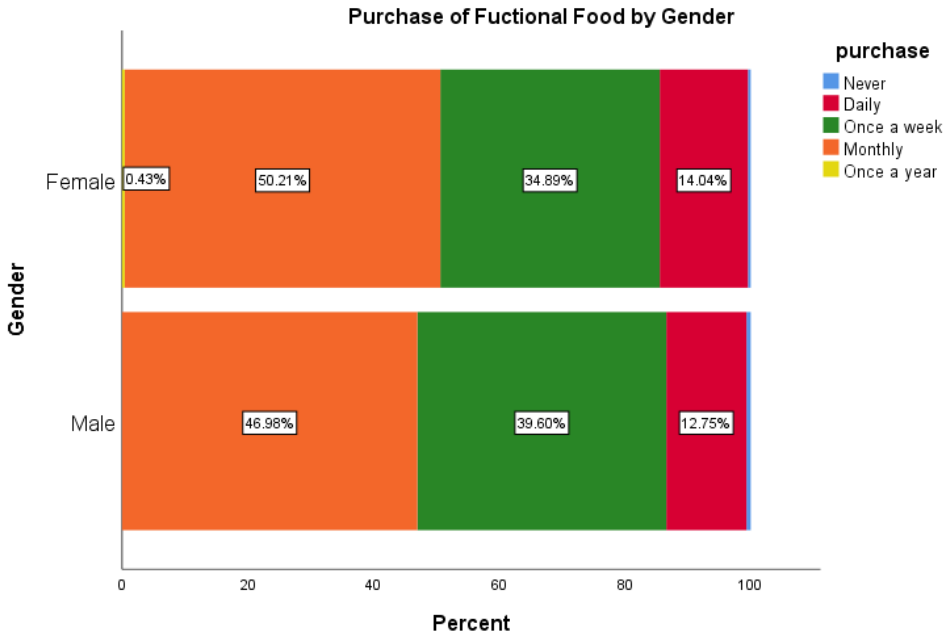

Figure 4.3 above revealed that 50.21% of females purchased functional foods monthly, and only a few 0.4% purchased functional foods once a year, while 46.98% of males purchased functional foods monthly, and 12.75% purchased functional foods daily. This implies that female consumers purchased functional foods more.

Figure 4.4: Purchase of Functional foods by age group

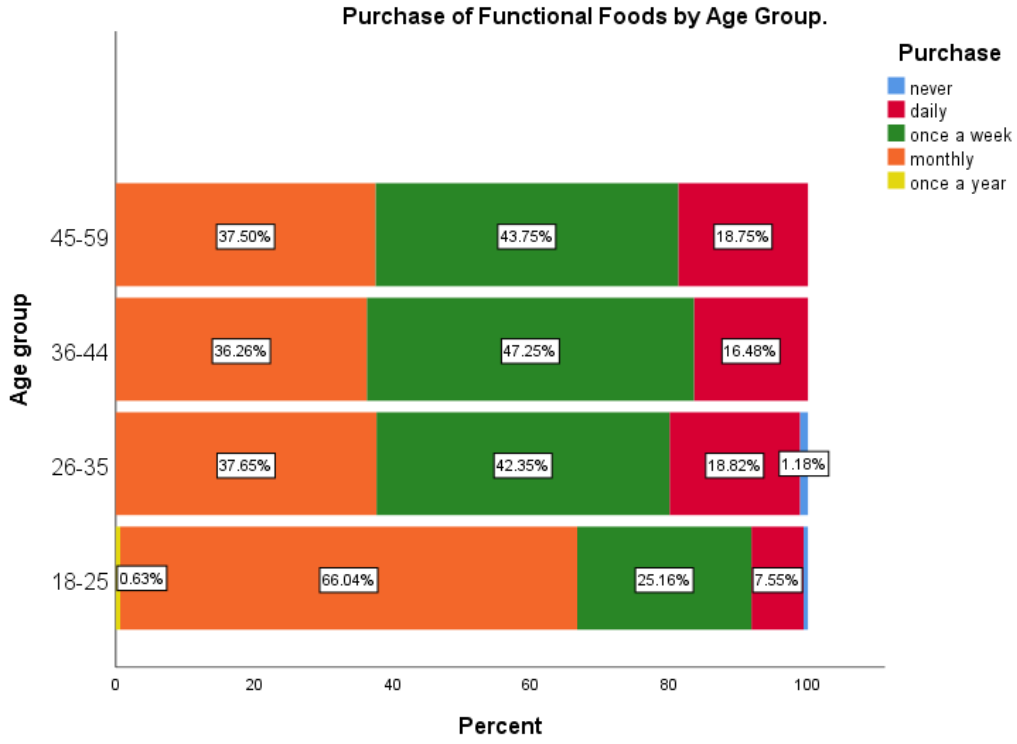

Figure 4.4 revealed that 66.04% of consumers within the ages of 18-25 purchased functional foods monthly, 42.35% of the consumer between the ages of 26-35 purchased functional foods once a week. 47.25% of consumers within the ages of 36-44 purchased functional foods once a week. Lastly, 43.75% of consumers within the ages of 45-59 purchased functional foods once a week. This shows that young and middle-aged consumers purchased functional foods more.

Figure 4.5: Purchase of Functional foods by employment status

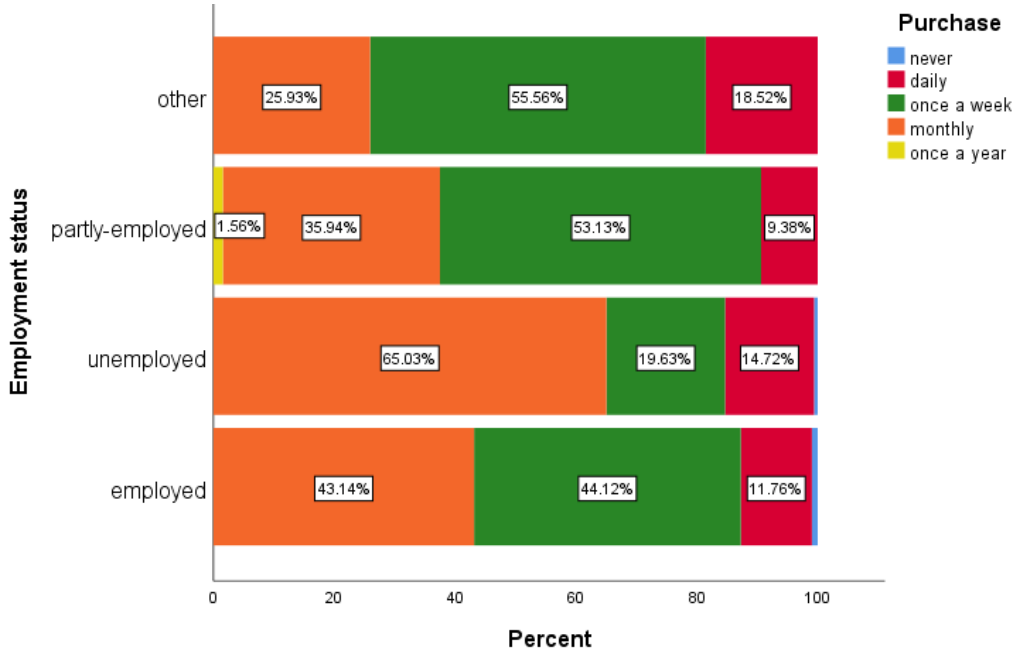

Figure 4.5 revealed that 87.26% of consumers that were employed purchased functional foods monthly and once a week, while 84.66% of unemployed consumers bought functional foods monthly, and once a week. Also, 89.07% of partly-employed consumers purchased functional foods monthly and once a week. Lastly, 81.49% of other consumers purchased functional foods monthly and once a week. This shows that consumers that are gainfully employed bought functional foods more.

Figure 4.6: Purchase of Functional foods by consumers monthly income

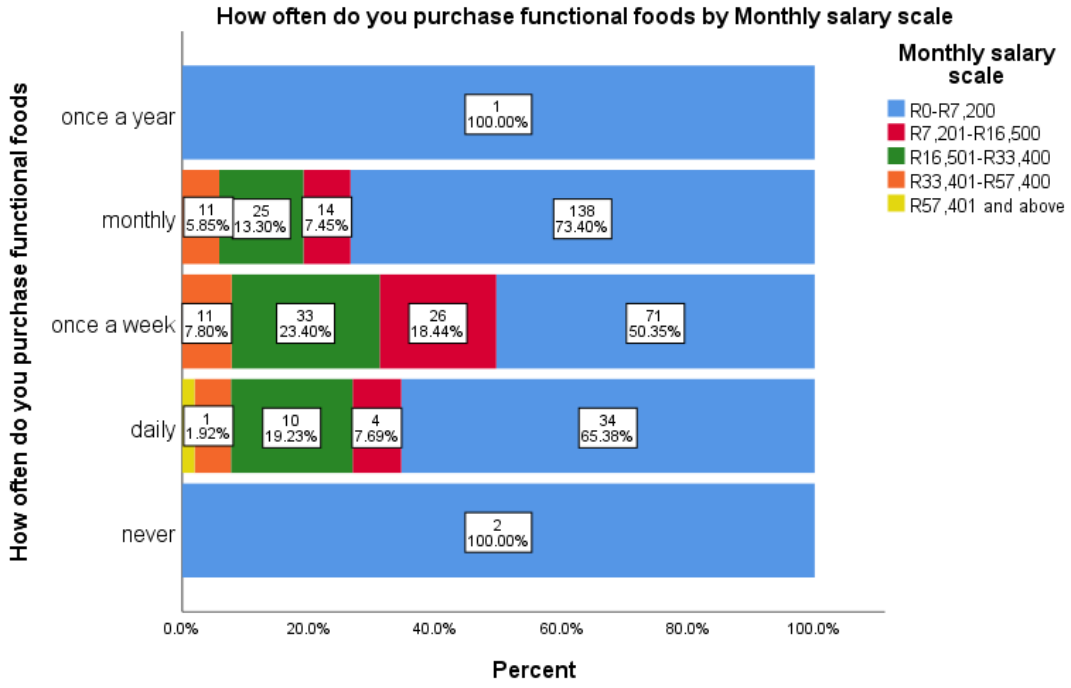

Figure 4.6 shows that 73.40% (138) of consumers that earned between R0.00 – R7,200 purchased functional foods monthly, 65.38% (34) purchased functional foods daily and 50.35% (n=71) once a week. The table also revealed that 18.44% (26) of consumers that earned between R7,201 – R16,500 purchased functional foods once a week, 7.45% (14) monthly, and 7.69% (4) daily. 23.40% (33) of consumers that earned between R16,501 – R33,400 purchased these foods once a week, while 13.30% (25) monthly. 7.80% (11) of the consumers who earned between the monthly income of R33,410-R57,400 purchased functional once a week, while 5.85% (11) monthly. Lastly, 100% (1) of consumers that earned between R57,401 and above bought functional foods daily. This shows that salary scale does not determine the purchase of functional foods as can be seen from the figure that consumers that earned less purchased functional foods more. This may be due to the levels of awareness of these food products. On that, some basic food items such as bread were fortified with vitamins and iron which makes them functional food products.

Objective 2: To determine factors that influence the consumer purchase behavior of functional foods.

4.5 Factors that influence the purchase behaviour of functional foods

In this section, factors that influence the purchase behaviour of functional foods were examined.

The review from the literature shows that the factors that influence the behavior of functional food can be broken down into personal, social, psychological, and cultural factors. Thus, the respondents were asked to rate their level of agreement with the most significant factor using a Likert scale of 1 representing strongly disagree to 5 denoted as strongly agreed with the outcome presented in Table 4.5 to 4.8.

Grading	**Mean**	**Median**
Agree	3.6 and above	4 and 5
Neutral	2.6 – 3.5	3
Disagree	1 – 2.5	1 and 2

The above is a grading table from the Likert scale, where 1 and 2 with the mean score of (1 – 2.5) indicate that the respondent disagreed with the statement, 3 with the mean score of (2.6 - 3.5) means neutral, 4 and 5 with the mean score of (3.6 and above) indicate that the respondents agreed with the statement. This is illustrated in Tables 4.5 to 4.8.

Table 4.6: Cultural factors that influence the purchase of functional foods

Item	Statement	Disagree (%)	Neutral (%)	Agree (%)	Mean	Std. Deviation	Rank
16	I buy functional foods because that is now part of my values that I share with my family,	11	23	66	3.74	0.997	1

	friends, and social groups						
15	People in my family, church/mosque/temple cannot influence what I buy at all	49	16	35	2.79	1.277	2
14	The religion I belong to often sends out information to live healthy which makes me purchase functional foods	48	23	29	2.66	1.233	3
13	I buy functional foods because the cultural group I belong to encourages me to purchase these foods	59	26	15	2.35	1.057	4

N = 384

Table 4.5 shows that the most rated cultural factor that influences the respondents to purchase functional food is shared value with their family with a mean score of 3.74, which is agreed and rank 1st according to the respondent's perspective. It is also visible from the table that 66% of the consumers agreed with the statement '**I buy functional foods because that is now part of my values that I share with my family, friends and social groups'** while a few of 11% disagreed. The 2nd rank factor is a religious factor with a mean score of 2.66 which is neutral according to the grading. It is seen that 35% of the respondents agreed with the statement **'People in my family, church/mosque/temple cannot influence what I buy at all'** while 46% disagreed, and association with a cultural group was rated least influential with a mean score of 2.35, where 59% disagreed with the statement **'I buy functional foods because of**

the cultural group I belong to encourages me to purchase these foods'. These findings indicate that respondents value functional foods and see it as an obligation to share with their friends and family for all to be healthy. These findings reveal that the cultural factors that influence the purchase of functional foods more are family obligation and concern. People believe and trust the information they get from the family and friends more.

Table 4.7: Social factors that influence the purchase of functional foods

Item	Statement	Disagree (%)	Neutral (%)	Agree (%)	Mean	Std. Deviation	Rank
18	I value the health of my children, so I buy functional foods that benefit their well-being	13	17	70	3.88	1.159	1
17	I buy functional foods because people expect a person in my position in the home and the family to make the best choices	33	18	49	3.20	1.324	2
20	I buy functional foods because my friends and family have convinced me to buy them	36	26	38	2.93	1.158	3
19	I buy functional foods because my doctor has advised me to do so	34	38	28	2.91	1.133	4

N = 384

Table 4.6 above reveals that 70% of the respondents agreed with the statement **'I value the health of my children, so I buy functional foods that benefit their well-being'** which is ranked as the most important factor and is rated 1st with a mean score of 3.88 which according to the grading indicates agreed. This is followed by a status symbol of the respondents with a mean score of 3.20, where 49% of the respondents agreed with the statement **'I buy functional foods because people expect a person in my position in the home and the family to make the best choices**' while the conviction from friends and family was rated 3rd with a mean score of 2.93, It can be seen that 38% of the respondent agreed with the statement **'I buy functional foods because my friends and family have convinced me to buy them'.** The findings reveal that the most important social factor that influences the purchase of functional foods is the responsibility of the respondents towards their family and loved ones, followed by the recommendation and conviction from friends and family.

Table 4.8: Personal factors that influence the purchase of functional foods

Item	Statement	Disagree (%)	Neutral (%)	Agree (%)	Mean	Std. Deviation	Rank
22	I only buy functional foods products which I consider to be within my income levels	7	11	82	4.11	0.963	1
23	I buy functional foods because it fits into my healthy lifestyle	7	14	79	3.93	0.893	2
21	I buy functional foods because it is suitable for the	18	20	62	3.64	1.238	3

	older/aged people in the house						
24	I buy functional foods to stay attractive and control my weight	16	30	54	3.53	1.074	4

N = 384

Table 4.7 above shows that the personal factors that determine the purchase of functional foods. The table reveals that income level ranked 1st in determining the purchase of functional food with 82% (mean 4.11) agreeing with the statement **'I only buy functional foods products which I consider to be within my income levels'.** Other significant factors are functional foods fitting into the healthy lifestyle of the respondents with 79% (mean 3.93) agreeing with this statement, followed with its suitability for older people with 62% agree (mean 3.64). These findings reveal that personal factors that influence the purchase of functional foods according to the respondent's responses include, the income they earn, to maintain their healthy lifestyle, and its suitability for the older members in the family.

Table 4.9: Psychological factors that influence the purchase of functional foods

Item	Statement	Disagree (%)	Neutral (%)	Agree (%)	Mean	Std. Deviation	Rank
27	I know the added benefits in functional foods	7	17	76	3.95	0.910	1
28	I am an energetic and motivated person, therefore, I use functional foods	6	24	70	3.85	0.879	2

	to maintain my wellbeing						
25	I can reduce taking medication if I eat functional foods	34	20	46	3.20	1.341	3
26	I feel that functional foods are for sick people	16	30	54	1.79	1.071	4

N = 384

Table 4.8 shows the psychological factors that influence the respondents in the purchase of functional food. Knowledge about the foods is rated 1st with 76% (mean score of 3.95) agreeing with the statement **'I know the added benefits in functional foods'** Other psychological factors are using functional food to maintain wellbeing, with 70% (mean 3.85), followed by the ability of functional foods to reduce taking of medication with 46% agreeing to this statement, **'I can reduce taking medication if I eat functional foods'** while 34% disagreed with this statement with a mean score of 3.20. These findings suggest that the most important psychological factors that influence the purchase of functional foods include the knowledge and awareness of the added benefits in the foods, to maintain wellbeing, and to reduce taking medication.

4.6 Influence of socio-demographic on the factors that influence respondents' purchase behavior

Influence of Gender

Table 4.10: Factors that influence consumer purchase behavior by Gender

	Male		Female		Test	Correlation	
	Mean	Std. deviation	Mean	Std. deviation	Sig.	rho	p-value
Cultural factors	2.49	0.802	2.39	0.862	0.243	-0.021	0.676
Social factors	2.58	0.773	2.54	0.791	0.692	-0.021	0.676

Personal factors	2.89	0.428	2.89	0.425	0.863	0.018	0.721
Psychological factors	2.70	0.675	2.75	0.619	0.411	0.043	0.402

The output table (table 4.9) suggested that when subdivided on the basis of gender, male and female, using the t-test for significance the two group were found not to be statistically different ($p > 0.05$), with cultural factors ($p = 0.676$), social factors ($p = 0.676$), personal factors ($p = 0.721$), and psychological factors ($p = 0.402$). Mean and the standard deviation was computed on each of the purchase behaviour items for gender. This suggested that men and women behave similarly about factors that influence their purchase behaviour. While the cultural factors mean score for male was (2.49), that for female was a bit lower (2.39). The social factors mean score for male was (2.58) and that of female was (2.54), personal factors mean score for male was (2.89), same with the female. Psychological factors mean score for male was (2.70), while that for female was higher (2.75). This implies that gender is not a strong motivating factor in the purchase of functional foods. The level of significance was assigned at a 0.05% confidence level.

4.7 ANOVA and Correlation analysis between factors that influence respondents purchase behavior and their demographic characteristics

Influence of age

Table 4.11: Results of one-way ANOVA F-test and Correlation performed for variables on factors that influence consumer purchase behavior on different age groups

							Correlation	
	Age group	Mean	Median	Mode	S.D	(F) Sig	Rho	Sig.
Cultural factors	18 - 25	2.19	3.00	3.00	0.910	**0.001**	0.26	**0.001***
	26 - 35	2.38	3.00	3.00	0.897			
	36 - 44	2.74	3.00	3.00	0.574			

	45 - 59	2.69	3.00	3.00	0.657			
Social factors	18 - 25	2.27	3.00	3.00	0.898	**0.001**	0.35	**0.001***
	26 - 35	2.57	3.00	3.00	0.775			
	36 - 44	2.86	3.00	3.00	0.507			
	45 - 59	2.92	3.00	3.00	0.347			
Personal factors	18 - 25	2.81	3.00	3.00	0.557	**0.005**	0.156	**0.002***
	26 - 35	2.94	3.00	3.00	0.320			
	36 - 44	2.97	3.00	3.00	0.233			
	45 - 59	2.94	3.00	3.00	0.320			
Psychological factors	18 - 25	2.50	3.00	3.00	0.818	0.982	-0.001	0.987
	26 - 35	2.92	3.00	3.00	0.350			
	36 - 44	2.88	3.00	3.00	0.443			
	45 - 59	2.90	3.00	3.00	0.425			

Table 4.10 is a comparison of consumers' purchase behaviour and age groups. The table contains the mean, median and standard deviation, ANOVA (depicted by F) and Spearman correlation (rho) per age group and factors that influence the respondent's purchase behaviour. The level of significance was at a 0.05% confidence. The table reveals that there is a strong significant relationship between cultural factors as indicated by the F score of (p = 0.001) and age groups. It can also be observed that there is a weak positive (rho 0.26) significant correlation of (p = 0.001) between age group and cultural factors. These findings show that the older a person gets; the greater impact cultural factors will have on their purchase decisions.

Based on the table, there is a strong significant relationship between social factors as indicated with F score (p = 0.001) and age group. It can also be observed that there is a moderate positive (rho 0.35) significant correlation (p = 0.001) between social factors and age. These findings suggest that as people increase in age, the more impact social factors will have on their purchase decisions of functional foods.

It can also be seen from the table that there is a significant relationship between personal factors with F score of (p = 0.005) and age group, and there is a weak positive (rho 0.156) significant correlation (0.002) between age group and personal factors.

This means that the older a person gets; the greater impact personal factors will be on their purchasing decision.

Lastly, the table revealed that there is no significant relationship between age group and psychological factors with a p-value that is greater than 0.05 (p = 0.987), and an F score of (p = 0.982), and there is no correlation (rho -0.001) between age group and psychological factors.

Table 4.12: Results of one-way ANOVA F-test and Correlation performed on variables on factors that influence purchase behavior on level of education

						Correlation		
	Level of education	Mean	Median	Mode	S.D	(F) Sig	rho	Sig.
Cultural factors	Primary school	2.05	3.00	3.00	0.677	0.215	-0.013	0.79
	High school	1.83	3.00	3.00	0.582			
	Degree	1.86	3.00	3.00	0.596			
	Post graduate	1.95	3.00	3.00	0.800			
Social factors	Primary school	3.00	3.00	3.00	0.001	**0.000***	0.208	**0.000***
	High school	2.76	3.00	3.00	0.625			
	Graduate	2.49	3.00	3.00	0.809			
	Post graduate	2.59	3.00	3.00	0.763			
Personal factors	Primary school	2.75	3.00	3.00	0.500	**0.000***	0.224	**0.000***
	High school	2.71	3.00	3.00	0.717			
	Graduate	2.87	3.00	3.00	0.477			
	Post graduate	2.91	3.00	3.00	0.401			
Psychological factors	Primary school	3.00	3.00	3.00	0.001	**0.006***	0.140	**0.006***
	High school	2.71	3.00	3.00	0.717			
	Graduate	2.59	3.00	3.00	0.799			
	Post graduate	2.86	3.00	3.00	0.476			

Level of Education

Table 4.11 displays the ANOVA statistics and correlation on the factors that influence consumer purchase behaviour by the level of education. The table shows that there is a strong significant relationship between social factor, personal factor and psychological factors as indicated by the F scores of (p = 0.000), (p = 0.000) and (p = 0.005) respectively. It can also be seen from the table that there is a weak significant

positive (rho 0.208, 0.224, 0.140) correlation (p = 0.000, 0.000, 0.006) between social factors, personal factors, psychological factors respectively and level of education.

The table also shows that there is no significant relationship indicated by the F score of (p = 0.215) between cultural factors and level of education, however, there is no correlation (rho -0.013) between cultural factors and level of education (p = 0.79). The scores above indicate that the more educated customers become, the greater their purchasing decisions will be influenced by social, personal, and psychological factors.

Table 4.13: Results of one-way ANOVA F-test and Correlation performed on factors that influence consumer purchase behavior by monthly income

							Correlation	
	Monthly salary scale	Mean	Median	Mode	S.D	Sig (F)	rho	Sig.
Cultural factors	R0 - R7200	2.30	3.00	3.00	0.894	**0.001**	0.19	**0.0001***
	R7201 - R16500	2.61	3.00	3.00	0.722			
	R16501 - R33400	2.72	3.00	3.00	0.595			
	R33401 - R57400	2.60	3.00	3.00	0.764			
	R57400 and above	1.00	1.00	1.00	0.000			
Social factors	R0 - R7200	2.37	3.00	3.00	0.865	**0.000**	0.32	**0.0001***
	R7201 - R16500	2.91	3.00	3.00	0.421			
	R16501 - R33400	2.93	3.00	3.00	0.359			
	R33401 - R57400	2.84	3.00	3.00	0.554			
	R57400 and above	1.00	1.00	1.00	0.001			
Personal factors	R0 - R7200	2.84	3.00	3.00	0.509	**0.002**	0.18	**0.0001***
	R7201 - R16500	2.95	3.00	3.00	0.302			
	R16501 - R33400	3.00	3.00	3.00	0.001			
	R33401 - R57400	3.00	3.00	3.00	0.001			
	R57400 and above	3.00	3.00	3.00	0.001			
Psychological factors	R0 - R7200	2.64	3.00	3.00	0.724	**0.003**	0.17	**0.001***
	R7201 - R16500	2.91	3.00	3.00	0.362			
	R16501 - R33400	2.93	3.00	3.00	0.121			

	R33401 - R57400	2.76	3.00	3.00	0.663			
	R57400 and above	3.00	3.00	3.00	0.001			

Monthly income

Table 4.12 shows that there is a significant relationship indicated by F score (p = 0.001) between monthly income and cultural factors and there is a weak significant positive (rho 0.19) correlation (p = 0.0001) between cultural factors and monthly income.

The table also revealed that there is a significant relationship between social, personal, and psychological factors as indicated with the F scores (p = 0.000, 0.002, 0.003) respectively and monthly income, and there is a weak significant positive (rho 0.19 0.32, 0.18, 0.17) correlation between social, personal, psychological respectively and monthly income. These findings reveal that the more income customers earned, the greater their purchasing decisions will be influenced by social, personal, and psychological factors.

Table 4.14: Results of one-way ANOVA F-test and Correlation performed on factors that influence consumer purchase behaviour by Employment status

							Correlation	
	Employment status	Mean	Median	Mode	S.D	(F) Sig	Rho	Sig.
Cultural factors	Employed	2.60	3.00	3.00	0.735	0.8580	-0.016	0.756
	Unemployed	2.23	3.00	3.00	0.904			
	Partly - employed	2.66	3.00	3.00	0.695			
	Other	2.43	3.00	3.00	0.860			
Social factors	Employed	2.74	3.00	3.00	0.674	0.0840	0.047	0.357
	Unemployed	2.25	3.00	3.00	0.902			
	Partly - employed	2.88	3.00	3.00	0.418			
	Other	2.78	3.00	3.00	0.572			
Personal factors	Employed	2.96	3.00	3.00	0.279	0.5140	-0.049	0.342
	Unemployed	2.82	3.00	3.00	0.530			
	Partly - employed	2.98	3.00	3.00	0.125			
	Other	2.85	3.00	3.00	0.492			
Psychological factors	Employed	2.79	3.00	3.00	0.603	0.3000	0.033	0.519
	Unemployed	2.59	3.00	3.00	0.750			

	Partly - employed	2.95	3.00	3.00	0.213			
	Other	2.78	3.00	3.00	0.604			

Employment status

Table 4.13 shows the inferential statistics on the factors that influence consumer purchase behaviour by employment status. The table presents the mean, median, mode and standard deviation, correlation test, and ANOVA p-value. The table shows that there is no significant difference in the four groups of employment status indicated by F score of (p =0.8580, 0.0840, 0.5140, 0.3000) and no correlation (rho -0.016, 0.047, -0.049, 0.033) between the factors that influence consumer behaviour of functional foods and employment status. This means that employment status does not affect customers' purchase decisions.

Table 4.15: Important factors in purchase decisions

	Mean	**Median**	**Mode**	**Std. Deviation**	**Rank**
Quality	4.37	5.00	5	.869	1
Price	3.90	4.00	4	1.090	2
Availability	3.46	4.00	4	1.153	3
Packaging	3.34	3.00	4	1.279	4
Promotion/advertising	3.01	3.00	4	1.302	5

Table 4.14 presents the important factors that drive the respondents in purchasing functional foods. Their response was sought by asking them to rate the factors using a five-point Likert scale. Table 4.14 shows that quality is ranked 1st as the most important factor in purchasing functional food with a mean score of 4.37, which revealed that the majority of the respondent agreed with this. The 2nd in rank is the price with a mean score of 3.90, followed by availability with a mean score of 3.46. This implies that functional foods are bought because of their quality. Other factors in order of hierarchy are price, availability, packaging, and promotion/advertising.

Objective 3: To identify the influence of marketing communication strategies on the marketing of functional foods

4.8 Marketing medium of communication for functional foods

This section examines the marketing medium that is more effective in persuading the respondents in purchasing functional foods. The marketing mediums were identified from the review of the literature and given to the respondents to rate them using a five-point Likert scale. The scale consists of 1 representing not effective, 2 represents less effective up to 5 denoted as very effective.

Table 4.16: Marketing medium for functional foods

Item	Statement	Not effective (%)	Neutral (%)	Effective (%)	Mean	Std. Deviation	Rank
37	Information from medical sources	9	14	77	4.01	0.997	1
36	Internet/social media	13	9	78	3.97	1.078	2
35	Television and radio advertisements	11	8	81	3.95	0.988	3
38	The product description on the packaging	16	30	54	3.73	1.055	4
39	Newspaper and magazine	22	19	59	3.45	1.008	5

N = 384

Table 4.15 shows that the consumers' perceptive information from medical sources is the most effective marketing medium attracting the respondents to purchase functional foods with 77% effective and 9% not effective (mean score of 4.01). Another effective marketing medium in significant order is internet/social media with 78% effective and 13% not effective (mean 3.97). The 3rd rank is television, and radio with a mean score

of 3.95 and with 81% effective and 11% not effective. The product description on packaging and newspaper are listed as the least effective medium of communication. This means that the most important medium of information with regards to functional foods is information from medical sources, followed by internet and social media, television, and radio advertisements.

Table 4.17:Method of sales promotion that generates sales for functional foods

Item	Statement	Not effective (%)	Neutral (%)	Effective (%)	Mean	Std. Deviation	Rank
48	Buy one get one free	8	8	84	4.18	0.960	1
47	Free gifts	8	9	83	4.07	1.024	2
45	Discount	9	6	85	4.03	0.919	3
46	Free samples	11	15	74	3.90	1.059	4
49	Reward points	16	20	64	3.65	1.061	5

N= 384

From table 4.16 above the method of sales promotion that convinces or would convince the respondents in purchasing functional food is presented. The table reveals that the ability to buy one get one free is rated 1st, followed by gifts, and the discount is rated 3rd with the mean score of 4.0 above as the major sales promotion method that convinces the respondents in purchasing functional foods. The table also revealed that 84% of the consumers believe that buy one gets one free is effective in attracting them to purchase functional foods, while 8% believe that they are not effective. Other sales promotions attracting the respondents include a mean score below 4.0 are free samples and reward points. It can be deduced from this outcome that monetary sales promotions are the most crucial promotion motivating the respondents in buying functional foods.

4.8.1 Social media information regarding functional food

This section appraises the role performed by social media in spreading information regarding functional foods to the respondents. Thus, the form of social media with the

most frequent advert related to functional food was appraised and social media with the greatest influence on buying functional food was also examined. The outcomes are presented in **figure 4.7. and 4.8 respectively.**

Figure 4.7: Information from social media

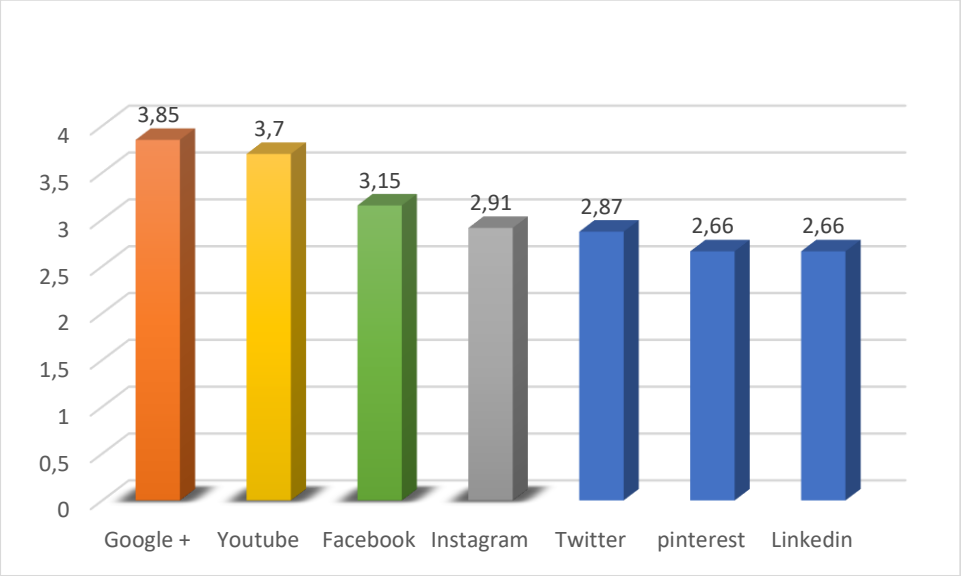

Figure 4.7 above depicts that social media has the most significant information regarding functional foods. The chart shows that Google has the most significant information regarding functional food with a mean score of 3.85. Other social media with a vital detail for functional foods include YouTube, Facebook, Instagram, Twitter, Pinterest, and LinkedIn.

Figure 4 8: Influential social media platforms

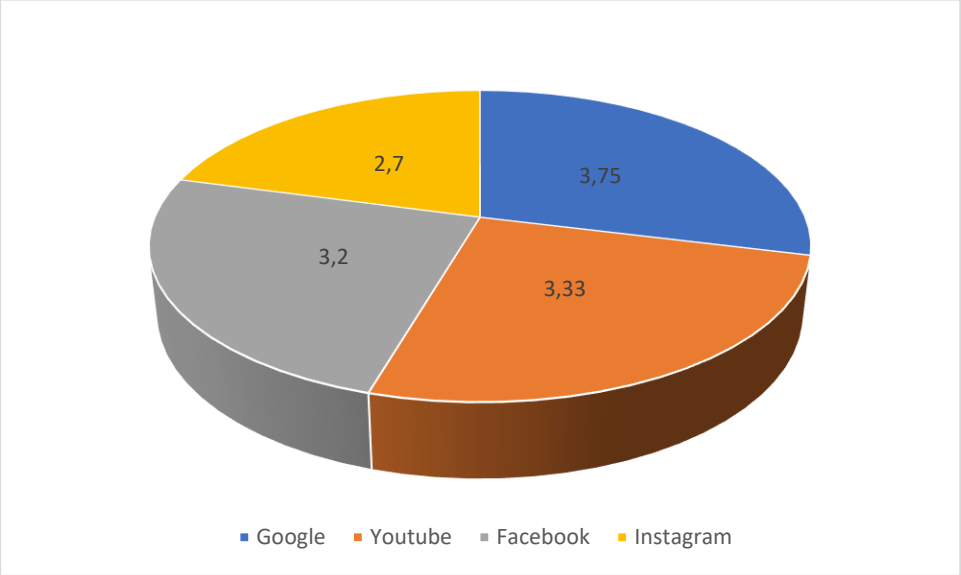

Figure 4.8 above presents social media with the highest influence on the respondents regarding the purchase of functional foods. The pie chart shows that Google has the largest section on the pie chart with a mean score of 3.75 thereby inferring that adverts on google have the highest influence on purchasing functional foods. YouTube has the second biggest section with a mean score of 3.33 followed by Facebook and Instagram. However, this works more for the millennials as can be seen that the respondents of this study are mostly the younger generations.

4.8.2 Attitudes towards the advertising of functional foods (FF)

This section appraises the attitude of the respondents towards the advert of functional foods advert. The outcomes were presented in table 4.17 and 4.18 respectively.

Table 4.18: Attitudes towards the advertising of functional foods

Item	Statement	Negative (%)	Neutral (%)	Positive (%)	Mean	Std. Deviation	Rank
41	Functional foods adverts provide useful information about functional foods	6	19	75	3.83	0.788	1

43	Functional foods adverts assist us in making good healthy choices	9	18	73	3.83	0.884	2
42	Advertisers of functional foods are also concerned about our health	15	24	61	3.66	1.822	3
40	Advertising of functional foods are not true	17	32	50	2.44	1.082	4
44	Functional foods ads are to increase sales only	38	32	30	2.16	1.091	5

N= 384

Table 4.17 shows that according to consumer's perceptions, the most significant advertising factor that influences them to purchase functional foods is the useful information about these foods. This is because of a mean score of 3.83. 75% of the consumers show a positive attitude by agreeing with the statement **'Functional foods adverts provide useful information about functional foods'** while only a few of 6% disagree. Followed by the statement **'Functional foods adverts assist us in making good healthy choices'** where 73% agreed, and 9% disagreed with a mean score of 3.83. The third rank is the statement '**Advertisers of functional foods are also concerned about our health'** where 61% agreed, and 15% disagreed with a mean score of 3.66. This means that information in form of advertising has a major influence on consumers with regards to the purchase of functional foods.

Table 4.19: Result of one-way ANOVA and Correlation performed on attitudes towards the advertising of functional foods by demographic factors

Attitude towards Advertising							correlation	
Demographic	Categories	Mean	Median	Mode	S.D	(F) Sig.	rho	Sig.
Gender	Male	2.81	3.00	3.00	0.470	0.085	0.112	**0.029***
	Female	2.89	3.00	3.00	0.398			
Age group	18 – 25	2.76	3.00	3.00	0.521	**0.0001***	0.232	**0.0001***
	26 – 35	2.87	3.00	3.00	0.455			

	36 – 44	2.96	3.00	3.00	2.540			
	45 – 59	2.98	3.00	3.00	0.144			
Level of education	Primary school	3.00	3.00	3.00	0.001	**0.006***	0.163	**0.001***
	High school	2.71	3.00	3.00	0.644			
	Degree	2.80	3.00	3.00	0.468			
	Post-graduate	2.91	3.00	3.00	0.330			
Employment status	Employed	2.92	3.00	3.00	0.336	0.823	-0.004	0.933
	Unemployed	2.77	3.00	3.00	0.538			
	Partly employed	3.00	3.00	3.00	0.001			
	Other	2.85	3.00	3.00	0.408			
Salary scale	R0 - R7200	2.80	3.00	3.00	0.500	**0.002***	0.193	**0.0001***
	R7201 - R16500	2.93	3.00	3.00	0.255			
	R16501 - R33400	3.00	3.00	3.00	0.001			
	R33401 - R57400	3.00	3.00	3.00	0.001			
	R57400 and above	1.00	1.00	1.00	0.001			

N = 384

Table 4.18 presents ANOVA and correlation statistics on consumers' perception towards the advertising of functional foods by demographic factors. The findings depicted that there is a significant relationship between age group, level of education, salary scale as indicated with F scores of (p = 0.0001, 0.006, 0.002) and consumer's perception towards advert of functional foods, and there is a weak significant positive (rho 0.112, 0.232, 0.163, 0.193) correlation (p = 0.029, 0.0001, 0.001, 0.0001) respectively between gender, age group, level of education and monthly income. These results revealed that as customers advance in ages, the more educated they were and increased in monthly income the more positive attitude they may have towards the advertising of functional foods, while employment status has no significant relationship with the attitude towards the advertising of functional foods.

Objective 4: To investigate consumer perception towards the branding of functional foods.

4.9 Consumer perception towards branding of functional foods

This section measures consumer perception towards the branding of functional foods. Their perception was measured in terms of the functional foods brand loyalty, perception, and awareness.

Table 4.20:Consumers perception towards brand loyalty

Item	Statement	Low (%)	Neutral (%)	High (%)	Mean	Std. Deviation	Rank
63	I would be motivated to switch to another competitive brand of functional foods if they are priced right	9	13	78	3.97	0.925	1
64	I go to another store if my brand is not available	11	9	80	3.93	0.928	2
61	I buy the same functional foods brands because it has continuously satisfied my needs	6	20	74	3.92	0.857	3
65	Price and not the brand is the most important factor when I buy functional foods	27	18	55	3.57	2.446	4
62	I will stick to the same functional food brand even if the price is increased	46	17	37	3.94	1.293	5

N= 384

Table 4.19 presents the respondent's response to their level of agreement with the brand of functional foods as it affects their attitude toward purchasing functional food. The first rank of loyalty is in the statement '**I would be motivated to switch to another**

competitive brand of functional foods if they are priced right' where 78% agreed with the statement and 9% disagreed, with a mean score of 3.97, which is agreed. This is followed by 80% who agreed with the statement **'I go to another store if my brand is not available'** and 11% disagreed with a mean score of 3.93 which is also agreed. The third on the rank is the statement **'I buy the same functional foods brands because it has continuously satisfied my needs'** with 74% agreed and 6% disagreed, and a mean score of 3.92. A critical look at the table shows that price is the major function determining the loyalty of the consumers to a particular functional food brand. This assertion was made after discovering that 46% of the respondents have a low agreement to the statement "**I will stick to the same functional food brand even if the price is increased".** These results reveal that customers are price conscious and may only be loyal to a brand when the price is affordable.

Table 4.21: Consumer perceptions towards brand awareness

Item	Statement	Disagree (%)	Neutral (%)	Agree (%)	Mean	Std. Deviation	Rank
67	It is easy for me to recall my regular brand among others when searching for foods items	2	11	87	4.17	0.696	1
66	I buy functional food brands that I have adequate knowledge about	4	14	82	4.08	0.820	2
69	I know most of the brands for each functional foods category	25	32	43	3.22	1.031	3
68	I would be motivated to buy the most advertised brands of functional foods	36	24	40	3.13	1.210	4
70	I am aware of new brands that are introduced into each product category of functional foods	37	35	28	2.92	1.008	5

Table 4.20 presents the consumers' perception of brand awareness. It can be deduced from the table that awareness regarding functional food performs a key role in the purchase of functional food in comparison to the most advertised brands. This assertion was made after the statement like **"I would be motivated to buy the most advertised brands of functional foods"** scored a low mean score of 3.13 (with 40% agreement) in comparison to statement like **"I buy functional foods brands that I have adequate knowledge about" with a mean score** of 4.08 (with 82% agreement). These findings revealed that awareness plays an important role in consumers' purchase behaviour of functional foods.

Table 4.22: Consumers responses to brand perception

Item	Statement	Disagree (%)	Neutral (%)	Agree (%)	Mean	Std. Deviation	Rank
73	I prefer the functional foods brand that has a good image in the market	10	18	71	3.95	1.100	1
72	I trust any brand of functional foods that are recommended by my friends and family	17	23	60	3.53	1.037	2
74	I don't mind buying private label brands/no-name brands of functional foods	23	20	57	3.39	1.191	3
71	The higher the price of a functional foods brand the better the quality	34	11	55	3.34	1.268	4
75	Branding does not add any value to any functional foods product	35	15	50	3.20	1.292	5

N=384

Table 4.21 presents the consumer response regarding perception being the major determinant in the purchase of functional foods. The table confirms that perception is crucial in the purchase of functional foods as 71% of the respondents agreed that they prefer to purchase brands that have a good image in the market with a mean score of 3.95, which is agreed. This is followed by a trusting brand of functional foods that are recommended by friends where 60% agreed with the statement, with a mean score of 3.53. The third rank is 57% agreeing with buying private label brands with a mean score of 3.39, whereas '**branding not adding value to functional foods'** was rated lowest by the respondents, with 50% agreeing with this statement. These results reveal that customers purchased functional foods that they perceive are not harmful to their health and also trust the brand that is recommended by friends.

4.10 ANOVA and Correlation analysis between consumer's perception towards the branding of functional foods and their demographic characteristics

Level of Education

Table 4.23: Consumer perceptions towards the branding of functional foods with different education level

						Correlation		
	Level of education	Mean	Median	Mode	S.D	(F) Sig.	rho	Sig.
Brand loyalty	Primary school	3.00	3.00	3.00	0.001	0.059	0.067	0.192
	High school	2.86	3.00	3.00	0.478			
	Degree	2.96	3.00	3.00	0.221			
	Honours	2.99	3.00	3.00	0.113			
Brand awareness	Primary school	3.00	3.00	3.00	0.001	0.453	0.063	0.219
	High school	2.86	3.00	3.00	0.478			
	Degree	2.88	3.00	3.00	0.425			
	Post-graduate	2.96	3.00	3.00	0.194			
Brand perception	Primary school	3.00	3.00	3.00	0.001	**0.002***	0.154	**0.003***
	High school	2.76	3.00	3.00	0.625			
	Degree	2.79	3.00	3.00	0.527			
	Post-graduate	2.90	3.00	3.00	0.381			

For a group differing in their educational background, there is a significant relationship indicated by the F score (p = 0.002) between brand perception and level of education, and there is a weak positive (rho 0.154) significant correlation (p = 0.003) between brand perception and level of education. This means that the more educated customers get, the more positive perception they may have towards the branding of functional foods.

Table (4.22) also revealed that there is no significant difference observed between brand loyalty, brand awareness, and level of education. However, it can be concluded from the findings that the educational level of respondents has a significant influence on how they perceive functional food brands.

Influence of income

Table 4.24: Consumer perceptions towards the branding of functional foods with different income groups

							Correlation	
	Salary scale	Mean	Median	Mode	S.D	(F) Sig	rho	Sig.
Brand loyalty	R0 - R7200	2.95	3.00	3.00	0.251	0.435	0.083	0.102
	R7201 - R16500	3.00	3.00	3.00	0.001			
	R16501 - R33400	3.00	3.00	3.00	0.001			
	R33401 - R57400	2.92	3.00	3.00	0.400			
	R57400 and above	3.00	3.00	3.00	0.001			
Brand awareness	R0 - R7200	2.87	3.00	3.00	0.429	0.056	0.096	0.06
	R7201 - R16500	2.93	3.00	3.00	0.334			
	R16501 - R33400	2.99	3.00	3.00	0.121			

	R33401 - R57400	2.92	3.00	3.00	0.277			
	R57400 and above	3.00	3.00	3.00	0.001			
Brand perception	R0 - R7200	2.78	3.00	3.00	0.527	**0.001***	0.215	**0.001***
	R7201 - R16500	2.95	3.00	3.00	0.302			
	R16501 - R33400	2.97	3.00	3.00	0.170			
	R33401 - R57400	3.00	3.00	3.00	0.001			
	R57400 and above	3.00	3.00	3.00	0.001			

N = 384

Table 4.23 shows that there is a significant relationship indicated by the F score (0.001) between brand perception and income groups, and there is a weak positive (rho 0.215) a significant correlation between brand perception and income groups.

The table also revealed that there is no significant relationship between brand loyalty, and brand awareness with F scores (p = 0.435, 0.056) concerning different income groups, and there is no significant correlation. These findings reveal that income does not determine brand loyalty and brand awareness. However, the more income customers earn the more positive their perception they will towards brands of functional foods and will positively influence their purchase decision.

Influence of Employment status

Table 4.25: Consumer perceptions toward the branding of functional foods with different employment status

							Correlation	
	Employment status	Mean	Median	Mode	S.D	Sig	rho	Sig.

Brand loyalty	Employed	2.97	3.00	3.00	0.221	0.2000	0.053	0.301
	Unemployed	2.93	3.00	3.00	0.296			
	Partly - employed	3.00	3.00	3.00	0.001			
	Other	2.73	3.00	3.00	0.173			
Brand awareness	Employed	2.93	3.00	3.00	0.323	0.3120	-0.054	0.296
	Unemployed	2.89	3.00	3.00	0.400			
	Partly - employed	2.95	3.00	3.00	0.278			
	Other	2.92	2.00	2.00	0.312			
Brand perception	Employed	2.89	3.00	3.00	0.396	**0.0420**	0.096	0.06
	Unemployed	2.27	3.00	3.00	0.568			
	Partly - employed	3.00	3.00	3.00	0.001			
	Other	2.81	3.00	3.00	0.532			

N = 384

Table 4.24 shows that there is a significant relationship indicated by the F score (p = 0.0420) between employment status and brand perception. However, there is no significant correlation (rho 0.096) between brand perception and employment status (p = 0.06).

A look at the table also revealed that there is no significant relationship between employment status and consumers brand loyalty, and awareness of functional foods, and no significant correlation (rho 0.053, -0.054), with employment status with (p = 0.301, 0.296). These findings also reveal that there is no significant correlation between employment status and these factors.

Influence of Age

Table 4.26: Consumer perception towards the branding of functional foods with different age groups

							Correlation	
	Age group	Mean	Median	Mode	S.D	(F) Sig	rho	Sig.
Brand loyalty	18 - 25	2.94	3.00	3.00	0.281	0.395	0.064	0.213
	26 - 35	2.98	3.00	3.00	0.152			
	36 - 44	3.00	3.00	3.00	0.001			
	45 - 59	2.94	3.00	3.00	0.320			
Brand awareness	18 - 25	2.84	3.00	3.00	0.471	**0.033**	0.121	**0.018**
	26 - 35	2.97	3.00	3.00	0.240			
	36 - 44	2.92	3.00	3.00	0.307			
	45 - 59	2.96	3.00	3.00	0.289			
Brand perception	18 - 25	2.76	3.00	3.00	0.556	**0.004**	0.16	**0.002**
	26 - 35	2.90	3.00	3.00	0.377			
	36 - 44	2.92	3.00	3.00	0.268			
	45 - 59	2.92	3.00	3.00	0.404			

N = 384

Table 4.25 shows that when categorized based on age, there is a significant relationship indicated by F score (p = 0.033) between brand awareness and age group and there is a positive correlation (rho 0.121) between brand awareness and age with (p = 0.018).

The table also shows that there is a significant relationship between brand perception with F score (p = 0.004) and different age groups, and there is a positive significant (rho 0.16) correlation between brand perception and age (p = 0.002).

However, there was no significant difference observed for brand loyalty indicated by F score (p = 0.395) and no significant correlation (rho 0.064) between different age groups and brand loyalty (p = 0.213). The results for this dimension reveals that the older the customers get, the more impact it has on their brand awareness and brand perception which will automatically affect their purchase decision positively.

Influence of Gender

Table 4.27: Consumer perceptions towards the branding of functional foods by gender

	Mean	Std. deviation	Mean	Std. deviation	(F) Sig.	rho	p-value
Brand loyalty	2.96	0.229	2.97	0.224	0.792	0.023	0.652
Brand awareness	2.91	0.366	2.90	0.379	0.704	-0.03	0.56
Brand perception	2.88	0.434	2.83	0.458	0.293	-0.081	0.114

N = 384

Table 4.26 shows that both male and female respondents behave similarly. The mean and the standard deviation were computed on each of the perceptions towards the branding of functional foods for gender. This suggested that men and women behave similarly concerning perceptions towards the branding of these foods. While brand loyalty means score for male was (2.96), that of female was (2.97). The brand awareness mean score for male was (2.91) and that of female was (2.90), brand perception mean score for male was (2.88), that of female was (2.83). This implies that gender is not a strong motivating factor in the purchase of functional foods. Therefore, gender does not have a significant influence on the branding of functional foods.

Objective 5: To determine consumer attitudes towards the packaging of functional foods.

4.11 Consumer attitude towards packaging of functional food

The attitude of the consumers towards the packaging of functional foods was examined in this section. It was examined by asking the respondents to rank their level of agreement with some statements related to the packaging of functional food. The statement used a five-point Likert scale where 1 is denoted with strongly disagree and 5 represents strongly agree with the outcome presented in table 4.27

Table 4.28: Consumers attitude towards the packaging of functional foods

Item	Statement	Disagree (%)	Neutral (%)	Agree (%)	Mean	Std. Deviation	Rank
76	Information on functional foods packaging convinces me of the benefits of the products	10	14	76	3.78	0.903	1
77	The information on the packaging of functional foods makes me feel better about my purchase decision	9	18	73	3.78	0.897	2
80	The packaging of functional foods convinces me that it is a superior product to other options	33	25	42	3.16	1.119	3
79	The packaging of functional foods makes no difference to my purchase decision	38	17	45	3.13	1.179	4
78	The colors and design of the packaging of	51	21	28	2.70	1.197	5

	functional foods attracts me to the product despite a higher price						

N=38

Table 4.27 reveals that 76% of the consumers agreed or had a positive perception of the information displayed on the packaging of functional foods, while a few 10% disagreed. The tables also revealed that the 2nd rank attitude is where 73% of the respondent agreed with the statement "**The information on the packaging of functional foods makes me feel better about my purchase decision",** while 9% disagreed. The third rank is where 42% of the respondent agreed with the statement **"The packaging of functional foods convinces me that it is a superior product to other options"** This implies that information provided on the package of functional foods is the most significant factor in the purchase of functional foods, while the design and color of functional food packages were rated as least significant in determining functional food sales with a mean score of 2. 70.

Table 4.29: ANOVA and Correlation analysis between consumer attitudes towards the packaging of functional foods and their demographic characteristics

							correlation	
Demographics	categories	Mean	Median	Mode	S.D	(F) Sig.	rho	Sig.
Gender	Male	2.82	3.00	3.00	0.521	0.832	-0.006	0.902
	Female	2.83	3.00	3.00	0.477			
Age group	18 - 25	2.72	3.00	3.00	0.605	**0.001***	0.171	**0.001***
	26 - 35	2.86	3.00	3.00	4.640			
	36 - 44	2.92	3.00	3.00	0.341			
	45 - 59	2.92	3.00	3.00	0.279			
Level of education	Primary school	3.00	3.00	3.00	0.001	0.058	0.088	0.085

	High school	2.71	3.00	3.00	0.644			
	Bachelor degree	2.77	3.00	3.00	0.574			
	Post graduate	2.88	3.00	3.00	0.394			
Employment status	Employed	2.88	3.00	3.00	0.380	0.69	0.01	0.843
	Unemployed	2.76	3.00	3.00	0.566			
	Partly employed	2.97	3.00	3.00	0.250			
	Other	2.76	3.00	3.00	0.612			
Salary scale	R0 - R7200	2.76	3.00	3.00	0.574	**0.002***	0.166	**0.001***
	R7201 - R16500	2.98	3.00	3.00	0.151			
	R16501 - R33400	2.90	3.00	3.00	0.352			
	R33401 - R57400	3	3.00	3.00	0.001			
	R57400 and above	3.00	3.00	3.00	0.001			

Table 4.28 shows that age and monthly income are the major factors that determine the respondent's attitudes towards the packaging of functional foods. Age and salary scale has a significant relationship the respondent's attitudes in the packaging of functional foods with (p-value of 0.001) respectively. Whereas gender, educational levels, and employment status do not have a significant influence on consumer attitudes towards the packaging of functional foods with a p-value of 0.902, 0.085, and 0.843 which are greater than ($p > 0.05$).

The table also revealed that there is a significant positive correlation (rho 0.171, 0.166) between attitude towards packaging of functional foods and age group, salary scale ($p = 0.001, 0.001$) respectively. These findings reveal that as customers grow older, and the more income earn, the more they are likely to have a positive attitude towards the packaging of functional foods.

4.12 Conclusion

This chapter presented the survey instrument analyzed and interpreted separately. The data collected through consumer surveys have been presented graphically. Statistical analysis has revealed that some of the important factors that motivate respondents in purchasing functional foods include quality, price, availability, packaging, and promotion/advertising.

The following chapter will focus on the discussion of the results in line with the findings from other scholars. This will help to understand consumer perception towards functional foods and the best way of marketing them.

CHAPTER FIVE

DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The result presented in the previous chapter will be discussed in this chapter, as well as conclusions and recommendations.

5.2 Research objective 1: To investigate the influence of demographic factors on the purchase of functional foods.

The findings from this study (figure 4.3) showed that female consumers purchased functional foods more, this corroborates with the findings of Annunziata, and Vecchio (2013), on a sample of Italians consumers. These authors found that female consumers show a strong preference for functional foods/drinks. Another study by Büyükkaragöz, Bas, Saglam, & Cengiz (2014), also showed that female consumers make up the targeted population for functional foods because there is the tendency of females to have more interest in healthy food consumption compared to male consumers. However, some studies found no gender differences in the consumption and acceptance of functional food products (Urala & Lahteenmaki 2007: Ares et al., 2010b; Cox et al., 2011).

The study findings (figure 4.4) also showed that young consumers between the ages of 18-25 purchased functional foods more, this supports the earlier studies by Dobrenova, Grabner-Krauter, & Terlutter, (2015), and Marina, Marija, & Ida (2014) who opine that young consumers tend to use functional foods to a greater extent. These findings also contradict the earlier studies by Bornkessel, Bröring, Omta, & van Trijp, (2014), Urala & Lahteenmaki (2007) which highlighted that older respondents were more willing to consume functional foods on the bases that it helps in reducing the risk of contracting diseases and to counteract health issues related to ageing. This shows that there are no homogeneous results to back up demographic factors such as age as a factor that influences consumer behaviour towards functional foods.

The findings of this current study contradict previous study by Dolgopolova & Teuber, (2016), indicating that consumers with high income tend to buy healthy foods such as

functional foods more compared to consumers with low income. The findings support an earlier study by Nielsen (2015), which suggested that functional foods are fairly priced and that consumers do not need to earn higher income to be able to purchase them. Figure 4.6 of this study showed that the salary scale does not determine the purchase of functional foods as can be seen from the figure that consumers who earned less purchased functional foods more. This may be due to their level of awareness of these food products. Hence, the next section explores the awareness level of the consumers.

5.2.1 Functional foods consumers and awareness level

It was found in this study (Table 4.2) that almost half (41.7%) of the respondents are aware of functional food, while 37.9% of the respondents are moderately aware of functional food, as was explained by the questionnaire. The findings show that the respondents are fully aware of the concept of functional foods with the help of explanations and examples given by the researcher. This Implies that consumer awareness of functional foods is increasing. This contradicts the previous study by Nielsen (2015) which revealed that the awareness of functional foods generally is low and Shikha, Sharma, & Khadke, (2014) highlighted that consumers' acceptance of functional foods was low because of a lack of awareness of the concept of functional foods. This implies that, as the year goes by, more awareness is being created and people are getting to have more knowledge and awareness of functional foods. The study findings (Table 4.3) also revealed that the consumer purchase of functional foods is determined by the awareness of such functional foods. It shows that those that are moderately and extremely aware of the concept of functional foods frequently purchased functional foods, while those that have no awareness regarding the concept of functional foods rarely buy functional foods. This supports the previous study by Shikha, Sharma, & Khadke, (2014) which revealed that people are reluctant to purchase functional foods that they know nothing about. It can be deduced from these findings that the purchase of functional food is determined by the awareness of such food.

The respondents were also asked to rate the functional foods they frequently purchased. The findings (Table 4.4) revealed that bread is the most bought functional foods by the respondents followed by yogurt, cereals, beverages, and margarine. This

supports the previous study that the bakery and the cereals products segment led the overall market in terms of revenue in 2018, followed by the dairy segment (Market Research Report, 2019).

5.3. Objective 2: To determine factors that influence the consumer purchase behavior of functional foods.

The study shows that the factors that influence the consumers' purchase behavior towards functional food can be broken down into personal, social, psychological, and cultural factors. The study findings (table 4.5) revealed that the cultural factors that influence the purchase of functional foods more are family obligation and family influence. Respondents believe that they have to take care of their family and dependents health-wise. These findings support earlier studies such as Annunziata & Vecchio, (2013), Barrios, Bayarri, Carbonell, Izquierdo, & Costell, (2008) which revealed that a family that has children under 12 years of age, parents feel responsible for their health and this may encourage them to purchase more nutritional products such as functional foods. The study also showed that respondents did not agree that their cultural groups encourage them to consume functional foods which contradicts the study by Hassan Hassan (2011a) which suggested that functional foods consumption is influenced by cultural value and belief.

The study findings (table 4.6) revealed that the most important social factors that influence the purchase of functional foods include, the responsibility of the respondents towards their family and loved ones, conviction from friends and family, and the recommendation from doctors. These findings support the study by Sandmann et al (2015) which highlighted doctors/dieticians as the main source of information regarding functional foods.

The results revealed (Table 4.7) that personal factors that influence the purchase of functional foods according to the respondents' responses include, the income they earn, maintaining healthy lifestyles, and its suitability for the older members of the family. These findings support the study by Vella et al (2014), which revealed that the factors that influence consumer purchase behavior includes, the presence of older people in the house, and the health consciousness of consumers.

In the present study, the findings (table 4.8) suggest that the most psychological factors that influence the purchase of functional foods include the knowledge and awareness of the added benefits in the foods to maintain wellbeing and to reduce taking medication. This coincides with the earlier study by Vecchio, Van Loo, & Annunziata, (2016), which highlighted health benefits as the most determinant factors for consumer willingness of purchasing functional foods, to the extent that consumers are willing to compromise on taste. This shows that consumers mostly purchase functional foods to maintain their wellbeing and as a guard against diseases.

It was also found from this study (figure 4.14), consumers highlighted quality as the most important factor in their purchase decision of functional foods, followed by price, availability, packaging, promotion, and advertising. This shows that consumers purchase and consume functional foods because of the quality and trust in the product, irrespective of the price, quality should not be compromised. These findings also corroborate a study by Annunziata et al (2016), which suggested that trust and familiarity with functional foods will determine how frequently consumers will purchase these foods. This also implies that poor quality, lack of trust, lack of knowledge, and high or premium price/cost can stand as a barrier to consumers' purchase of functional foods. This is following previous studies by (Annunziata, Vecchio, & Kraus, 2016, Schnettler, & Grunert, 2016). Another study by Gajdos Kljusuric et al (2015), highlighted taste, quality, and price as the most important factors in purchasing functional foods, which is still following this present study. The solution to lack of knowledge is by educating consumers through advertising campaigns, especially on social media, which is a form of mass communication at low cost and less effort. This is a platform where consumers go to search for information especially the millennials. This will create more awareness among the consumers and educate them on the benefits of the products.

5.4 Objective 3: To identify the influence of marketing communication strategies on the marketing of functional foods

In a study by Schnettler (2015), consumers have highlighted medical sources and the media as their main source of information regarding functional foods. Another study

by Kapoor & Munjal (2017), conducted in India among 150 women highlighted that consumers' most important source of information on functional foods is from nutritionists and Gym instructors. These findings support this present study.

In this study, (Table 4.15) information from medical sources is found to be the first most important medium of information, and the most effective medium that attracts the respondents in purchasing functional foods, followed by the internet/social media, information from Television, and Radio advertisement, the product description on packaging and lastly, newspaper and magazine. A study by Gajdos Kljusuric et al (2015), also revealed that consumers generally lack trust in the packaging information. This suggests that functional foods marketers should create more awareness through marketing strategies such as advertising and promotion, and give more information that assists consumers in purchasing functional foods.

In this study, (table 4.17) respondents were asked to rate their attitudes towards the advertising of functional foods. It was revealed that the majority of the respondents show a positive attitude towards the information they received in the form of an advertisement concerning functional foods which in return helps them in making good healthy choices. This implies that to achieve more success and growth in the market, advertisers of functional foods should give more information. This should be in form of advertisements on social media and other means of marketing communication, and easy-to-understand nutritional information on the packages that will educate the consumer more on the benefits and usefulness of these products, to take control of their health (Nielsen, 2015).

It was also revealed from this study (table 4.16) that the ability to buy one get one free, gifts and discount are the major sales promotions that convince the respondents in purchasing functional foods, other promotions are free sample and reward points. It can be deduced from this outcome that monetary sales promotions are the most crucial promotion motivating the respondents in buying functional foods.

5.4.1 Social media information regarding functional food

A study by Zhang et al (2017) has shown the importance of social media as a form of marketing communication (Zhang et al 2017). In this current study (figure 4.7), it was found that consumers search for information regarding functional foods from social media and the most frequently used social media sites and search engines are Google, followed by Youtube, Facebook, Instagram, Twitter, Pinterest, and LinkedIn. The result (Figure 4.8), also showed that Google provides well clear pieces of information that influence consumers to purchase functional foods. Youtube is the second-highest influencer, followed by Facebook and Instagram. Studies in the past by Katz (2008) and Kotler et al (2008), suggested traditional means of advertising as the best medium of reaching a whole populace. These findings contradict the findings of this study where the younger participants prefer the non-traditional marketing communication means. A study by Crowther (2014) suggests the use of free platforms such as Youtube, as a means of marketing communication as this serves the marketing purpose for a long period. The findings also highlighted Facebook as an important social platform visited by both consumers and businesses frequently, followed by Twitter, which also corroborates the findings of this study.

5.5 Objective 4: To investigate consumer's perceptions towards the branding of functional foods.

Studies have shown that brands positively influence consumers' attitudes and preferences towards health-enhancing products such as functional foods (Barrena and Sanchez, 2010; Ares & Deliza, 2010). Similar studies by Annunziata and Vecchio, (2013), Barrena & Sanchez, (2010), also revealed that familiarity with a brand is one of the product characteristics that consumers use during their purchase decision process, and that brand signifies quality and serves as a form of guarantee from the manufacturers to the consumers to believe and have trust in their products. Ares & Deliza, (2010) highlighted that brand is one of the most mentioned items after, taste, packages, and colour influencing consumers' purchases. These findings coincide with this present study as shown in (table 4.20) that, consumers show a positive attitude towards brands that they have adequate knowledge about, and they also have a positive attitude towards brands that have a good image in the market. The findings show that brands motivate and increase consumers' choice of functional food/drink

products, therefore functional food manufacturers need to build their brand and create more awareness of their brands to the general public.

5.6 Objective 5: To determine consumer attitudes towards the packaging of functional foods.

A few studies have highlighted the role of packaging in influencing the consumer's attitude towards functional foods. A study by Ares & Deliza (2010) shows that packaging of products attract consumers and affect their purchase decision. The same study explores the effect of packaging in consuming nutrition-modified desserts. The study found that the shape and colour of packaging influence consumers' purchase decisions and that consumers prefer brown packaging for such deserts. The findings contradict the findings of this present study. It was found in this study (table 4.28) that information provided on the packages of functional food is the most important attribute in the purchase of functional foods, while the colour and design of the packages are rated less significant in their purchase decisions.

A study by Ovrum et al (2012) revealed that the presence of nutrition information or health claim on the packaging of functional foods may encourage consumers to make healthier food choices. This finding also supports this present study. However, a study by Williams et al (2008) indicates that consumers prefer health information over nutrition information on functional foods packaging. Therefore, a product needs to have a good package but the most important attribute is in the area of the product description of the packages. A piece of well-clear information would educate consumers on the usefulness, benefits, and effectiveness of the product which will in turn influence/motivate consumers to purchase such products. However, more research is needed in the area of packages as factors that influence the consumer purchase decision of functional foods.

5.7 Summary of findings

The researcher found that people buy and consume functional foods daily, but they have no idea that they are called functional foods due to non-general definition and regulation. After an explanation by the researcher, it was found that many consumers consume these foods to improve and enhance their health. The research showed that

the South African consumer level of awareness of functional foods is increasing as people are getting more health-conscious due to marketing campaigns and health publicity. The study also found that some of the factors that influence consumers to purchase functional foods are social and family influence, health benefits, awareness of functional foods, and recommendations from doctor/health professional.

The research showed quality as the most important factor in the consumers' purchase decisions of functional foods followed by price, availability, packaging, promotion, and advertising, and the main source of information is from the medical sources and the media. It was also found that consumers desire to get more clear and easy-to-understand information regarding functional foods on social media, such as Google, Youtube, Facebook, amongst others are easy avenues where information can be sought.

With regards to brand, consumers show a positive attitude towards brands that they have adequate knowledge about, and they also have a positive attitude towards brands that have a good image in the market. It was also found that brands motivate and increase consumers' choice of functional food/drink.

The research concluded by determining consumer attitudes towards the packaging of functional foods. The findings highlighted that information provided on the packages of functional food is the most important attribute in the purchase of functional foods while the colour and design of the packages are rated less significant in their purchase decisions. This implies that information is important in the packaging, thus, manufacturers of functional foods are to ensure that clear and easy-to-understand information is written on the packages to assist the consumers in making the right choice.

5.8 Conclusions

This study looked at consumer's perceptions towards the marketing of functional foods. It was gathered from the literature that consumer perception regarding a product always determines the way they react to the product. The literature showed that if the consumer has a positive perception towards a brand or product, the

tendency of buying such a product is high. The researcher concludes that the producers of functional foods should research what the consumer is expecting from them which will enable them to understand consumer behaviour and perception to develop a product that will gain their trust. When advertising functional food products, the benefits, and necessary information should be highlighted in the packaging to increase consumer willingness to use the products. Lastly, quality should not be compromised since consumers expect value from the money spent.

It was also found from the literature that lack of trust, lack of awareness, and price are some of the main factors affecting the purchase of functional foods, consumers are not willing to buy functional foods brands that they know nothing about. Thus, the researcher recommends that functional food producers should create more awareness about their products and build their brands to gain consumers' trust and loyalty. According to this study, respondents see social media as an important means of educating consumers than labeling and packaging. Therefore, it is important for marketers to put more information regarding these products on social media, to create more awareness, and to educate millennials, consumers, because they have internet access at their fingertips.

5.9 Recommendations

Based on this study, the following recommendations are guidelines to help the functional industry promote these products;

There should be a uniform regulation definition and term recognized by the food industry and the consumers to minimize confusion and increase positive perceptions towards functional foods. The food industry can re-address its marketing strategy by highlighting the health benefit of its products.

Manufacturers of functional foods should provide some incentives that will influence or persuade consumers to buy functional food products. Lack of awareness can be taken care of by providing vital and clear information and advertising more on social media. The benefits of functional foods rather than the ingredients should be obvious in the package because information boosts consumers’ demands.

5.10 Recommendations for further research

Research needs to be carried out in different cultural settings to understand consumers' perceptions of functional food products in different cultures and around the world. Also, in-depth research with the use of survey and focus groups are required to add more understanding to the consumers' perceptions and attitudes. Likewise, further research should be conducted around the marketing and branding of functional foods by exploring the correlation between specific functional food products against specific brands. Also, a study needs to be conducted to explore the motivation of food manufacturers to develop functional foods, the marketing strategies used to encourage demand and to create awareness.

5.11 Conclusion

This chapter presented the perceptions of consumers toward the marketing of functional foods. Literature confirmed that it is important for functional food manufacturers and marketers to understand consumers' behaviour, perception, and lifestyle, to develop products that will gain consumer acceptance, and create well-to-do marketing campaigns. These are expected to convince consumers to purchase and consume the products.

The chapter also highlights conclusions, recommendations, and suggestions for further research.

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APPENDIX 1: Questionnaire

INFORMED CONSENT DECLARATION
(Participant)

Project Title: Consumer perception towards the marketing of functional foods in the uMhlathuze region.

Adeshola S. Osunsanmi from the Department of Business Management, University of Zululand has requested my permission to participate in the above-mentioned research project.

The nature and the purpose of the research project, and of this informed consent declaration have been explained to me in a language that I understand.

I am aware that:

1. The purpose of the research project is to investigate consumer perception towards the marketing of functional foods in the uMhlathuze region.

2. The University of Zululand has given ethical clearance to this research project and I have seen/ may request to see the clearance certificate.

3. By participating in this research project I will be contributing towards the well-being of my health and the society at large.

4. I will participate in the project by filling in a questionnaire and returning it back to the researcher.

5. My participation is entirely voluntary and should I at any stage wish to withdraw from participating further, I may do so without any negative consequence.

6. I will not be compensated for participating in the research.

7. There is no risk associated with my participation in the project.

8. The researcher intends publishing the research results in the form of dissertation. However, confidentiality and anonymity of records will be maintained and that my name and identity will not be revealed to anyone who has not been involved in the conduct of the research.

9. Any further questions that I might have concerning the research or my participation will be answered by the researcher at adesholami1@gmail.com or 0746701557, or the researcher's supervisor at the University of Zululand via Email HeeralalS@unizulu.ac.za.

10. By signing this informed consent declaration, I am not waiving any legal claims, rights or remedies.

11. A copy of this informed consent declaration will be given to me, and the original will be kept on record.

I, ...have read
the above information /confirm that the above information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all questions that I wished to ask and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurised in any way and I voluntarily agree to participate in the above-mentioned project.

…….. ……..

Participant's signature **Date**

This survey is being conducted to investigate consumer perception towards the marketing of functional foods.

Functional/fortified food is a food that is fortified with vitamins, calcium and other nutrients, claims to improve health or well-being by providing benefits beyond that of the traditional nutrients it contains. It is also known as Health beneficial food or Health food.

Functional food examples

FOOD CATEGORIES	**EXAMPLES**
Bread	**Albany** with added low GI is effective for managing body weight and sugar level. **BB,** Enrich in vitamin D
Margarine	**Flora, Canola**. That is fortified with omega 3 fatty acids and plant sterol to lower cholesterol
Yogurt	**Danone, Clover**. That has added probiotic to help the digestive system

Cereal	**Pronuto, Kellogg, Future life.** They have added vitamins, folic acid and another nutrient good for the health

Do you now understand the meaning of functional foods? **Yes ( ) No ( )**

Please tick with a (X) next to the correct response.

SECTION A: BIOGRAPHICAL INFORMATION

1. **AGE**

18-25	26-35	36-44	45-59	60 and above
1	**2**	**3**	**4**	**5**

2. **GENDER**

MALE	FEMALE	OTHER
1	**2**	**3**

3. **EMPLOYMENT STATUS**

EMPLOYED	UNEMPLOYED	PARTLY-EMPLOYED	OTHER
1	**2**	**3**	**4**

4. **MONTHLY SALARY SCALE**

R0- R7,200	R7,201-R16,500	R16,501-R33,400	R33,401-R57,400	R57,401 and above
1	**2**	**3**	**4**	**5**

5. **EDUCATION LEVEL**

PRIMARY SCHOOL EDUCATION	HIGH SCHOOL	BACHELOR DEGREE	POST GRADUATE
1	**2**	**3**	**4**

6. What is your level of awareness of the concept of functional food/fortified foods?

Not at all aware	Not sure	Slightly aware	Moderately aware	Extremely aware
1	**2**	**3**	**4**	**5**

7. How often do you purchase functional foods? Using 5 points Likert scale

Never	Daily	Once a week	Monthly	Once a year
1	**2**	**3**	**4**	**5**

Which category of functional foods do you buy frequently? Using 5 points Likert scale

	Categories of functional food	**Never 1**	**Rarely 2**	**Sometime 3**	**Often 4**	**Always 5**
8.	Margarine					
9..	Cereals					
10	Bread					
11	Yogurt and dairy					
12	Beverages					

SECTION B FACTORS THAT INFLUENCE PURCHASE BEHAVIOUR OF FUNCTIONAL FOODS

What factors influence you to purchase functional food using the following Likert scale 1 -5

	Statement	**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly Agree 5**
	Cultural Factors					
13	I buy functional foods because the cultural					

	group I belong to encourages me to purchase these foods.					
14	The religion I belong to often sends out information to live healthy, which makes me purchase functional foods.					
15	People in my family, church/ mosque/temple cannot influence what I buy at all.					
16	I buy functional foods because that is now part of my values that I share with my family, friends and social groups.					
	Social factors					
17	I buy functional foods because people expect a person in my position in the home and in the family to make the best choices.					
18	I value the health of my children so I buy functional food that benefits their well being					
19	I buy functional food because my doctor has advised me to do so.					
20	I buy functional foods because my friends and family have convinced me to buy them					
	Personal factors					

21	I buy functional foods because it is suitable for the older/aged people in the house					
22	I only buy functional food products which I consider to be within my income levels					
23	I buy functional foods because it fits into my healthy lifestyle					
24	I buy functional foods to stay attractive and control my weight					
	Psychological Factors					
25	I can reduce taking medication if I eat functional foods					
26	I feel that functional foods are for sick people					
27	I have knowledge about the added benefits in functional foods					
28	I am an energetic and motivated person, therefore, I use functional foods to maintain my well being					

How important are the following things to your purchase decision? Please rate on a scale of 1 to 5, where 1 = not important, 2 = important, 3 = not sure, 4 = very important and 5 = extremely important

		Not important 1	**Important 2**	**Not sure 3**	**Very important 4**	**Extremely important 5**
30	Availability					
31	Promotion/advertising					
32	Price					

33	Quality					
34	Packaging					

SECTION C MARKETING COMMUNICATION

Which of the following medium of communication is more persuasive in purchasing functional foods? using Likert scale 1-5

	Medium of Communication	**Not effective 1**	**Less effective 2**	**Neutral 3**	**Effective 4**	**Very effective 5**
35	Television and Radio advertisements					
36	Internet/social media					
37	Information from medical sources					
38	The product description on the packaging					
39	Newspaper/Magazine					

Attitudes towards the advertising of functional foods.

For the following statement, kindly use the Likert scale **where 1 = strongly disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = strongly agree**

	Statement	**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly Agree 5**
40	Advertising of functional foods are not true					
41	Functional food adverts provide useful information about functional foods					

42	Advertisers of functional foods are also concerned about our health					
43	Functional food ads assist us in making good healthy choices					
44	Functional food ads are to increase sales only					

Which method of sale promotions convinced or would convince you to buy functional foods? Using the Likert scale 1 -5

	Sale Promotion Methods	**Not effective 1**	**Less effective 2**	**Neutral 3**	**Effective 4**	**Very effective 5**
45	Discount					
46	Free samples					
47	Free Gifts					
48	Buy one get one free					
49	Rewards points					

If you have social media, how will you rate the information you get from the following social media as a form of advertising functional foods? Using a Likert scale of 1-5.

	Social Media services	**Not useful 1**	**Slightly useful 2**	**Not sure 3**	**Very useful 4**	**Extremely useful 5**
50	Facebook					
51	Google+					
52	Instagram					
53	LinkedIn					
54	Pinterest					
55	Twitter					
56	Youtube					

How influential are the following social media platforms in convincing you to purchase functional foods?

	Social media platform	**Not at all influential 1**	**Slightly influential 2**	**Neutral 3**	**Influential 4**	**Extremely influential 5**
57	Youtube					
58	Facebook					
59	Google					

60	Instagram					

SECTION D CONSUMER ATTITUDES TOWARDS THE BRANDING OF FUNCTIONAL FOODS

For the following statement, kindly use the Likert scale **where 1 = strongly disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = strongly agree**

	Brand loyalty	**Strongly disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
61	I buy the same functional food brand because it has continuously satisfied my needs					
62	I will stick to the same functional food brand even if the price is increased					
63	I would be motivated to switch to another competitive brand of functional foods if they are priced right					
64	I go to another store if my brand is not available					
65	Price and not the brand is the most important factor when I buy functional foods					
	Brand awareness					
66	I buy functional food brands that I have adequate knowledge about					
67	It is easy for me to recall my regular brand among others when searching for food items					
68	I would be motivated to buy the most advertised brands of functional food					
69	I know most of the brands for each					

	functional food category					
70	I am aware of new brands that are introduced into each product category of functional foods					
	Brand perception					
71	The higher the price of a functional food brand the better the quality					
72	I trust any brand of functional food that is recommended by my friends and family					
73	I prefer the functional food brand that has a good image in the market					
74	I don't mind buying private label brands/no-name brands of functional food					
75	Branding does not add any value to any functional food product					

SECTION E CONSUMER ATTITUDES TOWARDS THE PACKAGING OF FUNCTIONAL FOODS

For the following statement, kindly use the Likert scale **where 1 = strongly disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = strongly agree**

	Statement	**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly Agree 5**
76	Information on functional food packaging convinces me of the benefits of the product					
77	The information on the packaging of functional foods makes me feel					

	better about the purchase decision					
78	The colors and design of the Packaging of functional foods attracts me to the product despite a higher price					
79	The packaging of functional foods makes no difference to my purchase decision					
80	The packaging of functional foods convinces me that it is a superior product to other options					

Thank you for your time

APPENDIX 2: Ethical clearance certificate

UNIVERSITY OF ZULULAND
RESEARCH ETHICS COMMITTEE
(Reg No: UZREC 171110-030)

RESEARCH & INNOVATION
Website: http://www.unizulu.ac.za
Private Bag X1001
KwaDlangezwa 3886
Tel: 035 902 6731
Fax: 035 902 6222
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ETHICAL CLEARANCE CERTIFICATE

Certificate Number	UZREC 171110-030 PGM 2018/571							
Project Title	CONSUMER PERCEPTION TOWARDS THE MARKETING OF FUCTIONAL FOODS IN THE UMHLATHUZE REGION.							
Principal Researcher/ Investigator	AD Osunsanmi							
Supervisor and Co-supervisor	Mr S Heeralal							
Department	Business Management							
Faculty	CAL							
Type of Risk	Low Risk- Data collection from people							
Nature of Project	Honours/4th Year		Master's	x	Doctoral		Departmental	

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project. The Researcher may therefore commence with data collection as from the date of this Certificate, using the certificate number indicated above.

Special conditions:

(1) This certificate is valid for 1 year from the date of issue.
(2) Principal researcher must provide an annual report to the UZREC in the prescribed format [due date- 06 December 2019]
(3) Principal researcher must submit a report at the end of project in respect of ethical compliance.
(4) The UZREC must be informed immediately of any material change in the conditions or undertakings mentioned in the documents that were presented to the meeting.

The UZREC wishes the researcher well in conducting research.

Professor Gideon De Wet
Chairperson: University Research Ethics Committee
Deputy Vice-Chancellor: Research & Innovation
06 December 2018

CHAIRPERSON
UNIVERSITY OF ZULULAND RESEARCH ETHICS COMMITTEE (UZREC)
REG NO: UZREC 171110-30
07-12-2018
RESEARCH & INNOVATION OFFICE