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AWARENESS OF FOOD LABELLING INFORMATION AND ITS USE IN PURCHASING OF PRE-PACKAGED FOOD PRODUCTS AMONG CONSUMERS: A CASE STUDY OF THE ATWIMA NWABIAGYA DISTRICT

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SEPTEMBER, 2018

DECLARATION

STUDENT'S DECLARATION

I, DIANA OWUSU AMPONSAH, declare that this project report, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:…….....…….

DATE:…….....…….

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of Project report as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: GILBERT OWIAH SAMPSON (Ph.D)

SIGNATURE:…….....…….

DATE:…….....….

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DEDICATION

I dedicate this piece of work to my children, Nana, Adwoa, Papa and K and to my friend, Agnes Nsiah, for her care and support throughout the period of this course.

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ABSTRACT

The practice of reading and using food labelling information in purchasing pre-packaged food is very important. Unfortunately, in most communities in Ghana, people are not used to reading pre-packaged food labels. The study aimed at creating awareness of pre-packaged food labelling among consumers. The objectives of the study were to determine awareness level of consumers of pre-packaged food labelling information; identify the effect of the food labelling information in purchasing pre-packaged foods; and assess the challenges consumers encounter in reading and understanding food labels on pre-packaged foods. The study adopted the mixed-method design. Simple random sampling technique was used to sample 276 consumers. Data was gathered using questionnaire and interviews. The study revealed that most of the consumers were aware of food labelling information on pre-packaged foods by reading the list of ingredients on food packages 94.7%, reading the expiration dates on food packages 95.7%. Reading and looking out for the country of origin on food package 72.8%, reading the food storage and handling instructions on food packages 85.0%, and reading and checking the organic seal/certification on food packages 80.1%. The study further found that price, manufacturing date, and appearance of the pre-packaged food had effect on the purchasing decisions of consumers. It appeared from the study that level of education of consumers, lack of understanding of food labels, uncertainty about accuracy of information and lack of interest in the information on the food labels affected consumers‘ ability to read the food labels. Based on this, conclusions were made that food labelling is very important because it informs consumers on the contents of the food they are purchasing and it was recommended that manufacturers of food items should ensure that the lists of ingredients or contents of the food are written on the food labels. Also, consumers should check the manufacturing date (best before, expiry date) of food items before they buy them.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

As consumers around the world all the time have access to new food products and more information about food, they want to be educated so that they can read, understand and interpret food labelling and use such information in decision making during purchase of pre-packaged foods. Food labelling is an important communication tool between consumers and food manufacturers. When consumers are able to read and understand information on a food label, it helps them to make informed choices. Food label is any tag, brand, mark, pictorial or any descriptive matter written, printed, stencilled, marked, embossed or impressed on, or attached to a container of food. Food labelling includes any written, printed, or graphic matter that is presented on the label accompanying the food, or is displayed near food for the purpose of promoting its sale (*Codex Alimentarius Standards*, 2007).

Food labels provide information from manufacturer to consumer about a particular pre-packaged food. The information may include name of the food, ingredients used in its manufacture, nutritional composition, manufacturing and expiry dates, recommended storage conditions, instructions for use, etc. Food labels are found to be very important public health tools that are used to promote a balanced diet; and hence enhance public health and well-being. According to Al-Tamimi, Sindra, Kip and Kinn (2004), it helps consumers to understand the nutritional values of food products and thus they are able to compare the nutritional values of similar food products. Food labelling information is legally regulated and food regulatory authorities are using the information to protect consumers by ensuring provision of clear, honest and correct

information to consumers. The ability to choose pre-packaged food based on information obtained on its label requires knowledge and ability to read, understand and interpret the information (Sunelle, de Beer & Larney, 2010). The main objective of food labelling is to inform consumers about product characteristics that play an important role in the purchase decision-making process (Caswell & Anders, 2011). In Ghana, regulation of food labelling is done by the Food and Drugs Authority. The authority evaluates and registers pre-packaged foods before approval for distribution and marketing in the country. According to the Food and Drugs Authority (Food Labelling Law), the pre-packaged food labelling should include name of the food, list of ingredients, net content, name and address of the manufacturer and expiry dates, storage conditions, nutrition information (composition) and instructions for use. All this information is essential to help consumers in making choices of food depending on preference, dietary recommendations or restrictions and other reasons. The information also allows consumers to compare food ingredients. Some foods have specific instructions for preparation and use, while some require specific storage conditions, etc. More importantly, pre-packaged foods have specific shelf life which is normally indicated on the label through manufacturing and expiry dates. All these suggest the need for consumers to be well informed about all the aforementioned characteristics of a particular pre-packaged food before purchase and this information is expected to be found on the food label.

1.1 Statement of Problem

The practice of reading and using food labelling information in purchasing pre-packaged food is very important. Unfortunately, in most of our communities in Ghana, people are not used to reading pre-packaged food labels. This often leads to

the purchase of expired pre-packaged foods, purchase of large quantities of foods on sale which have very short shelf life or very near expiry dates as well as purchase of foods with ingredients that one is allergic to or need to avoid due to health problems or religious beliefs. In Ghana, significant number of the people do not read and use food labelling information in purchasing pre-packaged food products which is the case in developed countries. With the rising concerns about the interrelationship between nutrition, health and disease outbreak that can be traced to consuming expired products or allergic food among consumers, this study is undertaken to create the awareness of food labelling information and how it can be used to make consumers purchase using the Atwima Nwabiagya District as a case study.

1.2 The Purpose of the Study

The purpose of this study is to create awareness of pre-packaged food labelling among consumers and assess its impact on consumers‘ decision in purchasing pre-packaged foods.

1.3 Objectives of the Study

The objectives of the study are to:

1. Determine awareness level of consumers of pre-packaged food labelling information.
2. Identify the effect of the food labelling information in purchasing pre-packaged foods.
3. Assess the challenges consumers encounter in reading and understanding food labels on pre-packaged foods.

1.4 Research Questions

The following research questions were formulated to guide the study to achieve the set objectives:

1. What is the awareness level of consumers of food labelling information on pre-packaged foods?
2. How does the food labelling information on pre-packaged foods affect purchasing decision of consumers?
3. What are some the challenges consumers encounter in reading and understanding pre-packaged food labels?

1.5 Significance of the Study

The findings from this study will provide information on the awareness of pre-packaged food labelling information among consumers and the use of the information in purchasing pre-packaged foods. The information will bring to the attention of policy makers on the need to have programs to improve consumers‘ awareness of food labelling information as well as the use of such information in the purchase of food. Furthermore, the findings will also bring to the attention of pre-packaged food manufacturers and regulators on the need to improve food labelling regulations and food label formats. It will be beneficial to consumers since they will pay greater emphasis to read labels found on food products. The stakeholders will use the findings to reflect on their study and use it in their lives. Other researchers researching on a similar topic in the future will use it as a source of reference.

1.6 Limitations of the Study

Because of time factor, this research was conducted on a small sample size. Also, the data collection was confined to a few consumers in the Atwima Nwabiagya district. This made it difficult to generalise the findings of the study that was generated from the study to different districts in the country.

1.7 Delimitations of the Study

The scope of the research was focused on shops in the following towns, Abuakwa, Nkawie, Sepaase, Maakro, and Toase in the Atwima Nwabiagya District.

1.8 Organisation of the Study

This study has five chapters. Chapter one is the introduction. It contains the background to the study, statement of the problem, purpose, objectives, research questions, limitations, delimitations, significance, and organisation of the study. Chapter 2 is a review of the related literature. The theoretical, empirical and conceptual frameworks have been highlighted. Chapter 3 is the research methodology. It contains the research design, source of data, population, sample size and sampling technique, data collection instruments, validity and reliability of research instruments, data collection procedure, ethical considerations, data analysis and study area. Chapter 4 contains the results of the study. It is concerned with data presentation, analysis of results and discussion. Chapter 5 contains a summary of the study, conclusions and related findings, and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is the review of related literature. Literature has been reviewed according to the research questions. The theoretical, empirical and conceptual frameworks have been highlighted in this chapter.

Literature has been reviewed on the following topics:

2.1 Determining the Awareness Level of Consumers on Pre-Packaged Food Labelling Information

2.2 Identifying the Relationship between Food Labelling Information and the Purchasing Decisions of Consumers

2.3 Assessing the Challenges of Consumers in Reading and Understanding Food Labels on Pre-Packaged Foods

2.1 Determining the Awareness Level of Consumers on Pre-Packaged Food Labelling Information

Food labelling is an important communication tool between consumers and food manufacturers. Consumers‘ ability to read and understand information on a food label is vital. The need for food labelling is the consumer‘s _ight to know.‘ This is particularly important for food allergic consumers, because the only way of avoiding allergic reaction is to avoid specific ingredients in food. This is very true because the labels on the food products give major information about the product (Eigenmann, 2001). According to Sunelle et al. (2010), consumers have different motivations in searching for or using information on food labels. These factors, being internal (individual), situational or external (institutional, product attributes) motivate

consumers whether to seek or not to seek information about a particular pre-packaged food prior to its purchase or eating. The information about a particular pre-packaged food is normally expected to be found on its label. Consumer‘s attitude towards reading food labels can be influenced by demographic characteristics such as age, sex, education level, health status and nutrition knowledge. Situational factors such as income, time and being in special diet can also influence a consumer to seek information about a particular pre-packaged food and use the information to make an informed food choice. Generally, consumers use information available on food labels in determining product choice. The label reading is significantly determined by the product‘s life stage and the health consciousness of the people (Donna, Zappelli & Chalmers, 2001).

Food label use can be looked at in different perspectives. From policy perspective, it is an assurance of promoting healthy eating while protecting consumers‘ free will to choose from several options. From consumer‘s point of view, it provides a means of reducing the irregularity in product specific information provided to consumers by producers. From a producer or retailer perspective, it provides a means of showing positive nutritional characteristics of products in a plausible way (Grunert & Wills, 2007). Food labels are generally acknowledged to have an important role in communicating product-related information to consumers and are considered to have the potential to influence food choice and dietary behaviour (Mackison, Wrieden & Anderson, 2009). According to Washi (2012), there is the need to raise the level of awareness of consumers especially on nutrition aspects of food labelling in order to assist them make healthy choices of food. As awareness for dietary preferences by the consumers increase, they want more information to be provided on the labels.

According to Caswell and Padberg (1992), food labels play important roles in the food marketing via their impact on product design, advertising, consumer confidence in food quality, and consumer education on diet and health. Consumers are concerned about the production and expiry dates because of the risk of consuming expired foods. Most of the big supermarkets and many food manufacturers also display nutritional information on the front of pre-packaged food. This is very useful when the consumer want to compare different food products at a glance. In the United Kingdom (UK), food labels are read and used by approximately half of the population. According to most consumers, establishment of safety, hygiene and quality of food products account for the reasons for reading labels (Philip, McPherson & Fround, 2010).

Many shoppers now look at food labels for information about content and preparation, reflecting the growing interest in healthy eating as well as concern about what ingredients are in the foods they eat. According to Teisl, Bockstael and Levy (2001), the labelling of food products, with emphasis on the nutritional characteristics and a crusade to conscientise consumers help to change the orientation of consumers. In the United Kingdom (UK), most women especially mothers with high education levels read food labels due to their interest in nutrition and health, food allergy and religious beliefs (EdComs, 2007). The size of labels and the printing fonts used as well as the style of language in which they are written influence consumers to read and use pre-packaged food labelling (Philip et al., 2010).

According to Kumar and Ali (2011), consumers in India are fairly aware of the information provided on food labels. They attach much importance to information about food ingredients and nutritional contents of food. Similarly, Basarir and Sherif

(2012) asserted that most consumers read the information provided on food labels. They check the expiry date of the products, list of ingredients and the country of origin. According to Mahdavi, Abdolahi and Mahdavi (2012), food labels have effect on nutritional awareness and that food labels are useful in the lives of consumers. They go on to say that the expiry dates and storage conditions information are the most important informational cues that appear on food labels. Aryee (2013) claimed that most consumers were aware that some pre-packaged foods carried food labels with nutrition information. They read the expiration date and nutrition label information.

To Srivastava and Ali (2013), manufacturers of milk based malted health drinks disclose the nutritional information on their food labels to facilitate the consumers in making informed choices as per their marketing/corporate strategy. In exploring further, Darkwa (2014) stated that most consumers read the food labels and examined every detail of the label and the product before placing it in the shopping basket. According to Priyadarshini (2014), most consumers indicated satisfactory level of awareness about different types of information on the food labels displayed on packaged food products. Bazhan, Mostafa and Zohreh (2015) acknowledge that most consumers looked at the date mark on food package to check whether the product is fresh. Latiff, Rezai, Mohamed and Ayob (2015) averred that most of the consumers understand the importance of food labels. To Kaur, Kaou and Qumar (2016), most consumers pay much importance to information on the expiry dates and manufacturing date of the products, perceived relevance of health characteristics and attitudes towards food health properties or functional foods are important drivers of consumer perception (Andrews, Netemeyer & Burton, 1998; Dean, Lampila,

Shepherd, Arvola, Saba, Vassallo, Claupein, Winkelmann & Lähteenmäki, 2012; Stefan, van Herpen, Tudoran & Lähteenmäki, 2013), as well as consumer product involvement (Aschemann-Witzel & Hamm, 2010; Hansen, Thomsen & Beckmann, 2013) while socio-demographic conditions have a minor impact (Stefan, van Herpen, Tudoran & Lähteenmäki, 2013).

2.2 Identifying the Relationship between Food Labelling Information and the Purchasing Decisions of Consumers

Food labels are found to be very important public health tools that are used to promote a balanced diet; and hence enhance public health and wellbeing. Food label information assists consumers to better understand the nutritional value of food and enables them to compare the nutritional values of similar food products and to make healthy informed food choices based on the relevant nutrition information. The understanding and usage of food label at the time of purchase leads consumer towards healthy and informed food choices (Hoefkens, Pieniak, Van Camp & Verbeke, 2012).

Food label is beneficial for fulfilling immediate and future food related needs, guide consumer in changing food shopping behaviour from unhealthy to healthy and nutritional information assist in informed choice decision (Liu, Hoefkens & Verbeke, 2015b). Food packaging inspires consumer during shopping in big stores as well as assists them in making comparison with other food items (Butkevičienė, Stravinskienė & Rūtelionė, 2008). Food label directs consumer in pre-purchase and post-purchase decision making (van der Merwe, Bosman & Ellis, 2014). Efficient food label play multidimensional roles like, providing nutritional information (Grunert & Wills, 2007), control food related allergies (Voordouw, Cornelisse-

Vermaat, Yiakoumaki, Theodoridis, Chryssochoidis & Frewer, 2009) and expiry date provides food safety (Sanlier & Karakus, 2010).

Consumers use label information occasionally on initial purchase. This is likely because consumers assume they know the product to have reached minimum standard (MORI, 2010) or the search cost is expensive (Gianfranco, Thorsten & Vincent-Wayne, 2007). Factors like advertisement and price are keys among the factors that influence consumer decision (Manisha, 2008). Consumer awareness and understanding of food label information is an important safety and health issue. Accordingly, Douaud, Mahgoub, Lesoli and Gobotwang (2007) state that most consumers do not understand the labelling information put on most food products they buy. As shopping aids, food labels add to consumers' information base and help guide buying decisions. They may make markets work more efficiently as competition among firms, in an improved information environment, awards success to products with the best (most preferred) attributes. The label becomes an instrument of consumer sovereignty. According to Prathiraja and Ariyawardana (2003) most consumers use food labelling particularly nutrition labelling, when making a purchasing decision and that it is especially because of health consciousness. According to Douaud, et al. (2007), there is a direct relationship between age, level of education and family income, level of knowledge and use of food labelling information in purchasing foods among consumers in Lesotho.

Most consumers are influenced in their buying decisions by the attractiveness of the packing of the product and the appearance of the product generally (Koutroulou & Tsourgiannis, 2011). Oghojafor, Ladipo and Nwagwu (2012) state that information on

labels influence the purchase decisions of consumers. This is given further credence by Osei, Lawer and Aidoo (2012) that a lot of consumers access food label information before purchase and they read the information occasionally during initial purchase. To Madhvapaty and Gupta (2015), packaging and labelling have greater influence on purchase intent. Purchasing behaviour of consumers depends on labelling credibility (i.e. amount of credible information and trustworthiness of the one who put out the information) (Zadek, Lingayah & Forstater, 1998; Loureiro, Lingayah & Forstater, 2002; Lee & Lee, 2004). Consumers make decision to buy a product after searching and evaluating the meaning of information on nutritional labels (Senauer, Asp & Kinsey, 1991). The general consumer would depend to a large extent on food labels in their purchasing decision because of the immense range of pre-packed foods available, consumer awareness of the risks associated with food and of the practices used in food production (Turner, 1995). Packaging elements act as a tool for differentiation and helps consumers to choose the product from a wide range of similar products and stimulates customers buying behaviour (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004).

In general, it has been found that nutritional label use affects purchasing behaviour mainly because consumers want to avoid the negative nutrients in food products. The effects can be even greater if labelling is combined with an information campaign to educate consumers. It appears that nutritional information affects purchasing behaviour because it influences valuations and perceptions of the product. However, according to Darkwa (2014), the nutritional knowledge of the consumers and the understanding of food labelling may not influence the choice of purchases made by consumers as such. According to Darkwa, awareness and knowledge of food labelling

may not always adequately impact on food choices. According to Manisha (2008), food label information is not the key informant to consumer buying behaviour. The most important motivating factors that influence their patronage of pre-packed food products are the price, nutritional information and taste (Douaud, et al., 2007; Schmidt & Loving, 2011; William & Caliendo, 1994). Moreover, Prathiraja and Ariyawardana (2003) claim that other factors such as age, level of education, family and others affect the purchasing decisions of consumers.

2.3 Assessing the Challenges of Consumers in Reading and Understanding Food Labels on Pre-Packaged Foods

According to the Food and Drugs Law, PNDC Law 305B, it is an offence to offer for sale food that is not of nature, substance and or quality (Food and Drugs Law, 1992). Amidst these laws and the benefits of labels, the shelves of both small and big stores and supermarkets are packed with unwholesome products (expired, unlabeled, badly labeled, non-certified and products labeled in different languages other than English, the official language of Ghana), which are being confiscated by Ghana Standards Board, now Ghana Standards Authority and burnt/destroyed almost every week in the clear view of the public (Ghana Standards Board, 1992). While reading and understanding of products labels is important for preventing health hazards issues, it is a common perceived knowledge in Ghana that most consumers do not read and even those who read do not understand the labelling information put on products mainly for several reasons. The lack of understanding of food label divert consumer toward wrong direction and ultimately result in unhealthy food selection (Besler, Buyuktuncer & Uyar, 2012; Chen & Niu, 2009; EUFIC, 2005; Gorton, Mhurchu, Chen & Dixon, 2009). Language sometime becomes a big hurdle in interpreting food

label at the point of purchase. Thus, an international language like English and the local language both should be accompanied on food label for better and informed choice decision (Schmidt & Loving, 2011). Older aged women tend to face difficulties in interpreting nutrition information on food labelling compared to younger women (Byrd-Bredbenner & Kiefer, 2000).

According to Cowburn and Stockley (2005), the following factors affect consumers' ability to read food labels. They are habit or brand loyalty, lack of time, price, uncertainty about accuracy of information, technical terms, or the use of technical/scientific language and the presentation of too much information. In a similar way, most consumers find it challenging to read food labels because they do not know where to find the information they want or need. They complained that most of the terms - like natural or healthy - are too vague and also the ingredient lists are hard to read. Another interesting reason is that most consumers are not interested in the information. The few who read claim that they do not understand what is written and also do not believe the data printed there. Furthermore, most consumers have difficulties in interpreting the food products contained on food labels. Similarly, Tessier, Edwards and Morris (2000) emphasised that unfortunately, even though consumers read the labelling, it appears that they do not understand the major content fully. Also, they face difficulties interpreting the nutritional information currently provided on food labels. Thus, most consumers could not relate the numerical amount of the main nutrients to a verbal or written description.

For most consumers, especially the older people, the main reason for low propensity to read and use food labels is the small print on food labels. For others, they show no

interest, do not believe, or do not understand the food labels respectively (Shine, O'Reilly, & O'Sullivan, 1997). Similarly, for most American consumers, they do not read food labels because they have no interest, or enough time to read labels or have a prior knowledge about the food items (Schupp, Gillespie & Reed, 1998). Factors such as time, familiarly, lack of understanding and lack of favourable point-of-purchase are some of the impediments that affect consumers‘ ability to observe food labels before purchase and consumption (Sarkodie & Boakye-Kessie, 2017). According to Themba and Tanjo (2013), lack of nutrition knowledge, lack of interest and small print on labels are some reasons why consumers do not read food labels. Moreover, some consumers do not believe nutrition information on food products, while others read the nutrition information only when purchasing food items for the first time. Annunziata and Vecchio (2012) have also reported that consumers do not use nutrition information made in foods packages, and in particular, on food labels, because it is not easy to understand. Consumer knowledge on nutrition information and its use in food choices seems to be largely influenced by subjective features and personal conditions such as age, interest in healthy habits and social status (Grunert & Wills, 2007). Specific knowledge of correct food group placement and appropriate serving size is very poor among most consumers (Britten, Haven & Davis, 2006; Tuttle, 2001). In addition, Keenan, AbuSabha and Robinson (2002) found that consumers have difficulty interpreting dietary guidelines, and in particular, fat.

Though consumers tend to perceive nutrition labelling and front-of-packs (FOPs) as a reliable source of nutrition information, and the self-reported used of these labels is high (Campos, Doxey & Hammond, 2011; Cowburn & Stockley, 2005; Guthrie, Fox, Cleveland & Welsh, 1995), more objective analyses show that consumers rarely use

nutrition labels in their food choices (Cowburn & Stockley, 2005; Guthrie, Fox, Cleveland & Welsh, 1995; Liu, Hoefkens & Verbeke, 2015b; Mhurchu & Gorton, 2007; Tessier, Edwards & Morris. 2000). Some of the prominent barriers to using nutrition labels are the lack of knowledge and confidence with nutrition information terms, symbols, and values (Besler, Buyuktuncer & Uyar, 2012; Sunelle et al., 2011; Liu, Hoefkens & Verbeke, 2015b) and secondly, the format of presentation (Baltas, 2001; Besler, Buyuktuncer & Uyar, 2012) because consumers complain about the font size being too small (Sunelle et al, 2011; Tessier, Edwards & Morris, 2000).

In Australia and New Zealand, research shows that most consumers regularly read food labels for a number of reasons including allergy or intolerance to a food or food additive, a need to reduce fat intake or to avoid certain types of foods such as genetically modified foods (Donna, Zappelli & Chalmers, 2001). Low awareness of food labelling, low level of education, low health consciousness, products attributes, food labelling format, influence of media, perceived role of regulatory authorities and non-availability of consumer guidelines on the use of food labelling have been reported by studies from various countries as factors related to consumers not reading and using food labelling information in purchasing food (Coveney, 2007; Sunelle et al., 2010; Philip et al., 2010; Vemula, Subbarao, Vishnu, Mathur & Avula, 2013). A further study by Cole and Balasubramanian (1993) increasing age is associated with the decreasing probability of using labels.

Most of the consumers do not read and use food labelling information because of the low awareness of food labelling, low level of education, low health consciousness, product attributes, food labelling format, influence of media, perceived role of

regulatory authorities and non-availability of consumer guidelines. Excessive amount of information can lead to information overload which can confuse customers or make them lost interest and trust in the information provided. This is the main reason why food labels are being criticised. Most people believe that the excessive information is a reason for their inability to read food labels (Browning, 1993; Carter and Gruere, 2003). The other problem related to the information content is limited size of the label. Data given on food labels are often very condensed and not always fully read and understood. The chance that consumer will respond to the label depends if the label can convince consumer that it contains valuable information.

2.4 Theoretical Framework

The Theory of Planned Behaviour (TPB) deals with the complexities of human social behaviour. The Theory of Planned Behaviour (TPB) predicts an individual‘s intention to engage in a kind of behaviour at a specific time and place. It posits that individual behaviour is driven by behaviour intentions, where behaviour intentions are a function of three determinants: an individual‘s attitude toward behaviour, subjective norms, and perceived behavioural control (Ajzen, 1991). This study used the TPB model as a theoretical framework to explain consumers‘ purchase behaviour being influenced by labelling. The individual intention and the central factor in the Theory of Planned Behaviour is the given behaviour. In a nutshell, the TPB states that behaviour is determined by the intention to engage in such behaviour, which in turn, is determined by the attitude toward the behaviour, the subjective norm, and the perceived behavioural control (Ajzen, 1991). This study focused on the influence of food labelling on consumers‘ purchase behaviour.

2.5 Empirical Framework

In a study by Vijayabaskar and Sundaram (2012) on consumers‘ purchasing attitude towards ready-to-eat food products, it was shown that the health benefit and content of ingredients impacted significantly on the decision making of consumers to adopt healthy ready-to eat products. Most of the consumers feel these products had different key ingredients which normally help them reduce their weight and keep them fit. In another study by Sandberg and Chysochou (2013) on consumer response to food labels in Denmark, it was revealed that majority of the consumers most of the time read food labels. A few of them rarely read food labels or never paid attention to labels. The Food Standards Agency‘s (FSA) Consumers Attitude Survey found that over half of respondents always or often looked at food labels before purchasing items. Women are much more likely to read labels than men; this is especially true of women with children, who look at labels to see whether a food contains sugar or _E‘ numbers. However, some people who check food labels do so simply to check the _best before date (Food Standards Agency, 2007). For Anjum, Sonkar and Masih (2014), in a survey of 100 consumers of biscuits in the Indian market, it was seen that the packaging material had effect on the buying behaviour of the consumers. Moreover, a study by Shekhar and Raveendran (2014) on a total of 220 students who were selected from various schools and colleges from the Kannur district of Kerala state, India on their perception towards nutritional labelling, it was disclosed that nutritional labelling of packed food products did not significantly vary across age and sex of the respondents.

According to Silva and Sandika (2011), from their study on the link between labelling information on meat packs and the purchasing motives of consumers, it was made

known that income and the knowledge level of the consumers significantly motivated the people to purchase meat products based on its nutritional value. It was also reported that gender, individual‘s education, family member‘s education, interpersonal and mass media also affected consumers‘ total awareness and adoption toward food certificate logo on meat packs. It was also seen that women, especially mothers, with higher levels of education read food certificate logos. It was shown that men paid less attention to food safety while purchasing food items. Jain, Jain, Gupta and Sharma (2013) in a study of 70 female consumers aged more than 18 years on the understanding and use of nutrition information on food labels; it was shown that nutritional labels had a fair amount of influence on the buying decision of consumers.

It was seen that nutritional labelling formats helped the consumers to make healthier choices. Moreso, Singh, Iyer and Chandorkar (2013) stated that most of the consumers understood the food labels when it comes to the use and understanding of nutrition labels. A few of them did not understand the food labels. The most difficult to comprehend information on food labels were nutrients in international units. In a cross-sectional study among supermarket shoppers by Vemula et al. (2013) on the use of food label information by urban consumers in India, it was shown that a higher proportion of men shopped for pre-packaged foods than women. The study also revealed that some of the consumers especially the adolescent girls and women read the ingredients list because they were concerned about high-fat and high-sugar foods. The consumers selected for this study also checked the brand names and the date of expiry/best before date. It was observed that a significantly higher number of respondents with higher education checked the quality symbols and nutrition information in on the pre-packaged foods. A cross-sectional study by Talagala and

Arambepola (2016) on the use of food labels by adolescents to make healthier choices on snacks, it was revealed that more females frequently read food labels. It was seen that most consumers paid attention to the brand name, price and nutrition panel and they were able to interpret food labels.

2.6 Conceptual Framework

This conceptual model was put forward by the researcher. This model is based on the premise that when consumers are made aware of the food labelling information, and they can read and understand them, they are likely to purchase the food items. However, the intervening variable likely to cause a change in the decisions of the consumer is the monthly income of a household.

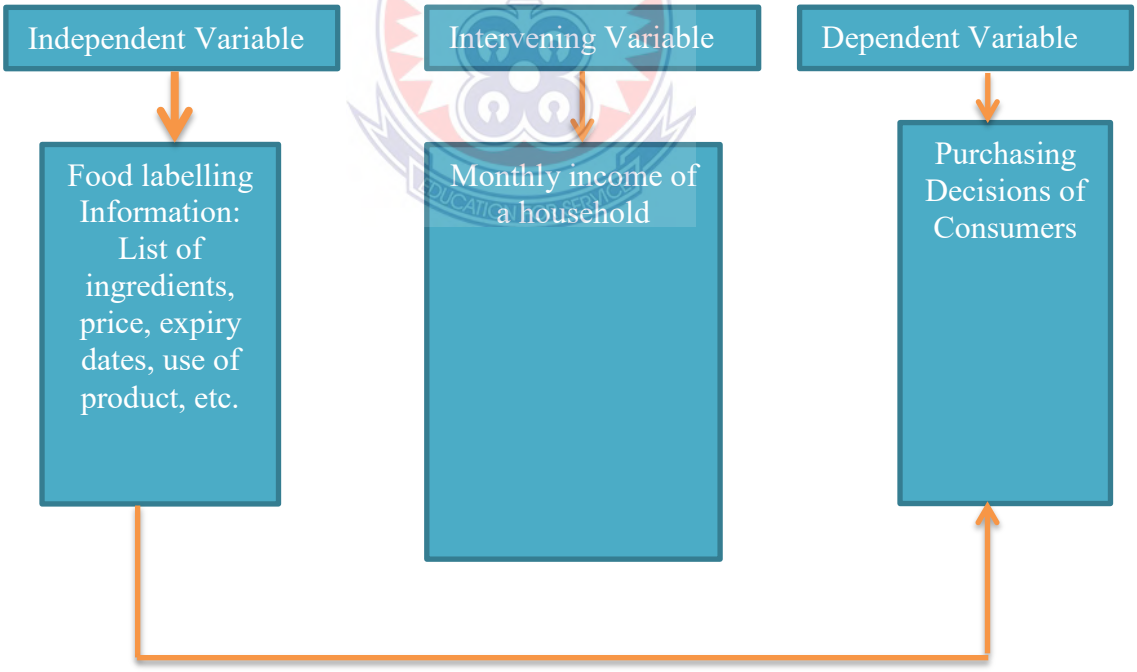

Figure 2. 1 Conceptual framework

(Source: Researcher's Own Construct, June 2018)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter is the research methodology. It contains the research design, source of data, population, sample size and sampling technique, data collection instruments, data collection procedures, validity and reliability of research instruments, ethical considerations and data analysis procedures.

3.1 Research Design

The researcher adopted the mixed-method design. The study used both the quantitative and qualitative methods to collect data. This was done with the sole aim of drawing on the strengths of quantitative and qualitative data gathering techniques. According to Philip (1998), the researcher does not necessarily consider a single particular way of looking at the social world that is the reason for the adoption of a range of methodological strategies. Bryman (2012) said that each method have distinctive characteristics that make the possibility of combining them especially attractive. This helped the researcher to understand the problem at stake better.

3.2 Sources of Data

Data were collected from primary and secondary sources.

3.2.1 Primary data

They are firsthand testimony or direct evidence concerning a topic under consideration. Primary sources are original materials on which research is based (Galvan, 2013). Data were collected from questionnaire and interviews.

3.2.2 Secondary data

A secondary source is a source that provides non-original or secondhand data or information (Galvan, 2013). Secondary sources are written about primary sources. Data were also collected from secondary sources such as journals, books, web-based materials, etc.

3.3 Population

The population refers to the total collection of all elements about which the researcher wishes to make some references (Denscombe, 2003). Balnaves and Caputi (2001) assert that the researcher operationally defines the population. The area of study was confined to the following towns; Abuakwa, Nkawie, Sepaase, Maakro and Toase in the Atwima Nwabiagya District. There were 255 shops and 1150 consumers. They were chosen because they were related to the purpose of the research. Moreover, the researcher wanted to collect information from individuals that had first-hand information about the topic under consideration. The population of the study can be seen in Table 3.1.

Table 3. 1: **Population of the Study**

Towns	**Number of Shops**	**Number of Consumers**
Abuakwa	100	500
Nkawie	100	450
Sepaase	10	35
Maakro	25	55
Toase	20	110
Total	**255**	**1150**

(Source: Researcher's field study, 2018)

3.4 Study Area

Atwima Nwabiagya District was carved out of the former Atwima District in 2004 by the Legislative Instrument 1738. The Atwima Nwabiagya District Assembly was created to facilitate the improvement of the quality of life of the people within the assembly's jurisdiction, through equitable provision of services for the total development of the district, within the context of good governance. The vision of the assembly is to be a leader in effective and efficient local governance and to provide the required development infrastructure and services, for a desirable and interesting district to live and work (Ghana Statistical Service, 2014).

The Atwima Nwabiagya District lies approximately on latitude 6^0 32'N and 6^0 75'N and between longitude 1^0 45' and 2^0 00'W. It is one of the 30 political and administrative districts in Ashanti Region. It is situated in the western part of the region and shares common boundaries with Ahafo Ano South and Atwima Mponua Districts to the West, Offinso Municipal to the North, Amansie-West and Atwima Kwanwoma Districts to the South, and Kumasi Metropolis and Afigya Kwabre Districts to the East. It covers an estimated area of 294.84 sq. km. The district capital is Nkawie (Ghana Statistical Service, 2014).

The economy of Atwima Nwabiagya District can be classified under four broad categories namely agriculture, industry, trading and services. The service industry employs 31.7 percent of the labour force, followed by trade/commerce which employs 25.9 percent, agriculture, (22.8%) and lastly industry employing (19.6%). Although the district is sixty eight percent rural and thirty two percent urban, generally it would be expected that agriculture dominates the economy, however it should be noted that

most of the settlements are closer to the urbanised communities and so are mostly engaged in services and trade activities (Ghana Statistical Service, 2014).

The district's manufacturing sector is dominated by dressmaking, carpentry, metal fabrication, distillation of alcoholic beverages (*Akpeteshie)* leather works, ceramics, quarrying, baking, wood processing (sawmill) and batik/tie and dye making. These businesses are mostly micro and small-scale enterprises with no permanent employees. The owners usually rely on apprentices to undertake their activities. About twenty three percent of the working population in the district is engaged in trading/commercial activities (buying and selling). The types of trading/commercial activities found in the district include trading in foodstuffs, provisions, spare parts, alcoholic and non-alcoholic beverages, building materials, cooked foods, wood/ wood products, plastic products, chemicals, fuel and lubricants. Most of the traders are small scale retailers, and apart from a few who trade in defined market places, most trading activities in the district are still located alongside major roads, water ways and residential neighbourhoods, thus creating some environmental and sanitation problems (Ghana Statistical Service, 2014).

There are 3 main markets in the district. These are located at Barekese, Abuakwa and Nkawie. The Abuakwa market operates daily, whiles the Nkawie and Barekese markets operates both daily and weekly. The district has a number of businesses, which are engaged in the provision of different services to people within and outside the district. Important services available in the district include hairdressing /barbering, traditional catering (chop bar), automobile repairs, radio/TV repairs, refrigerator/air-

condition repairs, mobile phone repairs, transportation, Information and communication among others (Ghana Statistical Service, 2014).

3.5 Sampling Technique

Sampling is the process of selecting units or groups from a population of interest so that by studying the sample, findings may fairly be generalised to the population. Sampling technique on the other hand is the strategy the researcher applies during the statistical sampling process (Saunders, Lewis & Thornhill, 2012). The researcher used two sampling technique in this study; the purposive sampling and the simple random sampling techniques.

The shops were selected through the use of the purposive sampling method. Purposive sampling (also known as judgment, selective or subjective sampling) is a sampling technique in which researcher relies on his or her own judgment when choosing members of population to participate in the study (Black, 2010). The sample was chosen by the judgment of the researcher. Researchers often believe that they can obtain a representative sample by using a sound judgment, which will result in saving time and money (Black, 2010). Thus, the researcher selected five shops from each town to make a total of twenty five shops.

The simple random sampling method was used to select the 276 consumers. The simple random sampling is the basic sampling technique where we select a group of subjects (a sample) for study from a larger group (a population) (Saunders, Lewis & Thornhill, 2012). Each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample. Every possible

sample of a given size has the same chance of selection. The process of simple random sampling involved writing ―yes or no" on pieces of paper that were folded, put in a container and mixed up together. One paper was picked at random. Consumers who picked a ―yes" paper were included in the study. However those picked a ―no" paper were not included. This was done in all the shops. The simple random sampling was used because the study intended to select a representative without bias from the accessible population. This ensured that each member of the population had an equal and independent chance of being included in the sample (Saunders, Lewis & Thornhill, 2012).

3.6 Sample Size

The sample is the part of the population that helps us to draw inferences about the population. It is time consuming and expensive to collect information about the population and therefore an appropriate sample size is needed so that the researcher can make inferences about the population based on that sample (Burmeister & Aitken, 2012).

3.6.1 Sample Size Determination (of Respondents)

A two-step sample selection process was used. In the first step, the researcher identified a number of shops in which data collection was to take place. In order to draw a random sample of the consumers in the shops, the researcher first gathered a number of shoppers (consumers) in the selected shops. The sample size was drawn individually from the selected shops. With a confidence interval of 90 percent, the sample size for each shop in the study was determined using the formula given by Yamane (1967) as:

$$n = \frac{N}{1 + N\,(a)^2}$$

Where:

n= the sample size,

N= the sample frame and

α= the margin of error (10%).

For example, the sample size of 83 for Abuakwa shops is as follows:

$$n = \frac{500}{1 + 500\,(0.1)^2}$$

Thus, in all a total sample of 276 consumers was then drawn using the simple random sampling technique. The formula was used in arriving at the sample size for all the shops.

Table 3. 2: **Sample Size of Respondents for the Study**

Towns	**Number of Consumers**	**Sample Size**
Abuakwa	500	83
Nkawie	450	81
Sepaase	35	25
Maakro	55	35
Toase	110	52
Total	**1120**	**276**

(Source: Researcher's field study, 2018)

3.7 Data Collection Instruments

Data was gathered using questionnaire and interviews constructed by the researcher.

3.7.1 Questionnaire

Questionnaire can be defined as the process of acquiring more knowledge through the medium of asking questions whether personal or general minus the use of personal or intimate interaction (Saunders, Lewis & Thornhill, 2012). The main use of questionnaire is acquiring more information about the intended project and it can be used for various reasons in a research study. This instrument was appropriate for this study because data were collected from a large number of respondents within a very short time.

The structured questionnaire was used as the instrument for the study. The questionnaire was framed in a clear manner such that it enabled the respondents to understand and answer the question easily. The questions in the questionnaire were short and simple and were arranged in a logical manner. The questionnaires were distributed to the respondents who could read and write to fill them and they were collected on the spot. However, for those who could not read, the questions were read and explained to them and their responses were written on the paper for them.

3.7.2 Interview Schedules

The researcher applied in-depth interview method to collect qualitative data. The interview conversations were conducted person to person with the consumers. The interview served as an opportunity to get a vivid description of the topic under consideration. The structured interview schedules were carried out with the

respondents. The consent of the interviewees was sought before the interview was conducted. The interviewees were assured of the confidentiality of the interview and that no personal information about them would be conveyed in the report. The interview was conducted face-to-face with the respondents. The personal interviews were conducted with the interviewees in front of the shops they bought food items. They were asked six questions. The interview often had the highest response rates (typically around 80-95%) but was used with 50 of the respondents as it was an expensive method of collection of data. It helped the researcher to make direct observations and also helped to instil confidence in respondents by showing them official identification. However, some of the interviews were also rescheduled several times because the time was not convenient for some of the respondents.

The interviewees were given the freedom to choose between answering the questionnaire and the interview schedule or only the interview schedule. They were thus taken through the interview to elicit responses on the various themes.

3.8 Data Collection Procedures

The researcher and research assistants visited the shops and administered the questionnaire. The researcher explained the purpose and use of the study and sought the consent of the respondents for the study. The questionnaires were written in English. Respondents were allowed to ask questions that they did not understand. The questionnaire was in three parts, sections A, B, and C. Section A had questions on the demographic characteristics like gender, age, marital status, education, occupation, size of household and monthly income of household. There were seven questions in Section A. Section B was used to gather information regarding the perception of the awareness level of the respondents on food label. Section C was used to ask questions

on the effect of food labelling on pre-packaged foods on the purchasing decisions of consumers. Section D was used to ask questions on the difficulties consumers encounter in reading and understanding pre-packaged food labels. The structured self-completion questionnaires (with pre-coded responses as well closed and open ended questions) were given to the 276 respondents. The researcher was able to retrieve 206 questionnaires and these were used for the analysis. The response rate for the questionnaire received was 75% and this is very inspiring for a study of this nature.

A structured interview was also conducted on the shoppers in the various shops. Before the interview, the researcher explained the purpose of the study to the research subjects as well as assuring their confidentiality and while at the same time soliciting their consent after their agreement. The researcher only proceeded with the interview after their confirmation of willingness to participate. The interview was used in order to probe beyond the answers and thus enter into dialogue with the interviewees (May, 1997). Additionally, the interview allowed the interviewees to throw more light on their answers if they preferred to do. This was done to help them make in-depth analysis of the questions they had been asked. The questionnaire and interview guide were used to allow for triangulation of results. 50 people were interviewed.

3.9 Validity and Reliability of Research Instruments

Validity refers to the truthfulness or correctness of the measurement as planned or intended (Seale, 2004). The questionnaire was pre-tested on a group of shoppers on the university campus to find if they were valid. The instrument was validated using face and content validity. The face validity was done by looking at the layout and the structure of the instrument while the content validity was determined by the

supervisor who examined the questions to find out whether they really actually measured what is supposed to measure. Reliability is the consistency with which research procedures deliver their results (Bryman & Bell, 2011; Seale, 2004). It also relates to the repeatability of the findings under similar conditions. The Cronbach alpha method was used to test the internal consistency of the items and the coefficient of 0.72 was obtained. This reliability test value indicated that the instrument was reliable for use in achieving the research objectives.

3.10 Ethical Considerations

The researcher assured the respondents of the non-disclosure of confidential information. The respondents were accorded the highest maximum of respect. The researcher discussed and sought consent from the shoppers to take part in the study as subjects. They were also assured that their identity, and any documents, they provided and any other information will be kept anonymous. The researcher acknowledged the work of other scholars where applicable to avoid the pitiful sin of plagiarism.

3.11 Data Analysis

Data from the questionnaires were analysed using Statistical Package for Social Sciences (SPSS). Frequency tables and percentages were used to analyse the demographic characteristics of the respondents. Frequency tables, percentages and means were used to analyse the data extracted from the major objectives of the study using SPSS. Information collected from the interviews was condensed into key themes that had a bearing on the research question.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

The presentation of results and discussion is found in this chapter. The data were presented and analysed in conjunction with the objectives of the study. Frequency tables and percentages were used to analyse the demographic characteristics of the respondents. Frequency tables, percentages and means were used to analyse the major objectives of the study. Also, the researcher condensed information collected from the interviews into key themes that had a bearing on the research question.

4.1 Demographic Characteristics of the Respondents

The demographic characteristics of the respondents have been presented in Tables 4.1.

Table 4. 1: Demographic Characteristics of Respondents

Variables	Frequency (*f*)	Percentage (%)
Gender		
Male	108	52.4%
Female	98	47.6%
Total	**206**	**100.0%**
Age		
21 – 25 years	23	11.2%
26 – 30 years	37	18.0%
31 – 35 years	46	22.3%
36 – 40 years	28	13.6%
41 – 45 years	38	18.4%
46 years and above	34	16.5%
Total	**206**	**100.0%**
Marital Status		
Single	69	33.5%
Married	103	50.0%
Divorced	16	7.8%
Widowed	18	8.7%
Total	**206**	**100.0%**
Highest Educational Qualification		
BECE	18	8.7%
WASSCE	17	8.3%
Technical/Vocational	15	7.3%
Bachelor‘s degree	98	47.6%
Master‘s degree	57	27.7%
Doctoral degree	1	0.5%
Total	**206**	**100.0%**

(Source: Researcher‘s Fieldwork, September 2018)

Table 4.1 shows the demographic characteristics of respondents. On the gender of respondents, it was seen that 108 respondents representing 52.4% were males while 53 respondents representing 47.6% were females. From this analysis, it was seen that there were more males than females in the study.

On the age distribution of respondents, it can be seen that 23 respondents representing 11.2% were between the ages of 21-25 while 37 respondents representing 18% were between the ages of 26-30. Forty six respondents representing 22.3% were between the ages of 31-35 while 28 respondents representing 13.6% were between the ages of 36-40. Thirty eight respondents representing 18.4% were between the ages of 41-45 while 34 respondents representing 16.5% were 46 years and above. The data showed that those between the ages of 31-35 were in the majority.

With respect to the marital status of respondents, it can be seen that 69 respondents representing 33.5% were single while 103 respondents representing 50% were married. Sixteen respondents representing 7.8% were divorced while 18 respondents representing 8.7% were widowed. This analysis showed that more married people were represented in this study.

Looking at the highest educational qualification of respondents, it can be seen that 18 respondents representing 8.7% held the BECE certificate while 17 respondents representing 8.3% held the WASSCE certificate. Fifteen respondents representing 7.3% held the Technical/Vocational certificate while 98 respondents representing 47.6% held the Bachelor‘s degree. Fifty seven respondents representing 27.7% held the Master‘s degree while 1 respondent representing 0.5% held the Doctoral

certificate. This analysis showed that most of the respondents held the Bachelor's degree.

4.2 Awareness level of consumers of food labelling information on pre-packaged foods

The data on the awareness level of consumers of food labelling information on pre-packaged foods is presented in Table 4.2.

Table 4. 2: Awareness level of consumers of food labelling information on pre-packaged foods

Variables	SA		A		N		D		SD		Mean
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	($\bar{x}$)
Reading the list of ingredients on food packages helps to create awareness	123	59.7%	72	35.0%	0	0%	11	5.3%	0	0%	1.51
Reading the expiration dates on food packages helps to create awareness	133	64.6%	64	31.1%	0	0%	4	1.9%	5	2.4%	1.47
Reading and looking out for the country of origin on food packages helps to create awareness	50	24.3%	100	48.5%	31	15.0%	17	8.3%	8	3.9%	2.19
Reading the food storage and handling instructions on food packages helps to create awareness	62	30.1%	113	54.9%	26	12.6%	5	2.4%	0	0%	1.87
Reading and checking the organic seal/certification on food packages helps to create awareness	65	31.6%	100	48.5%	19	9.2%	22	10.7%	0	0%	1.99

Key: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree.

(Source: Researcher's Fieldwork, September 2018)

From Table 4.2, the respondents were requested to indicate their awareness level of consumers of food labelling information on pre-packaged foods. The Likert scaled responses to the prompt, ~~"r~~eading the list of ingredients on food packages helps to create awareness," revealed that 59.7% of the respondents strongly agreed that they became aware of food labelling information on pre-packaged foods by reading the

lists of ingredients on food packages and 35% agreed. However, 5.3% were in disagreement with the statement. Aggregating the ―agree" results together for the prompt showed that 94.7% were in agreement with the prompt. On average, a mean of 1.51 was obtained indicating that the consumers were aware of the list of ingredients on the pre-packaged foods. This finding is consistent with the findings by Kumar & Ali (2011).

The Likert scaled responses to the prompt, ―reading the expiry dates on food packages helps to create awareness," revealed that 64.6% of the respondents strongly agreed that they became aware of food labelling information on pre-packaged foods by reading the expiry dates on food packages and 31.1% agreed. On the contrary, 4.3% were in disagreement with the statement. Aggregating the ―agree" results together for the prompt showed that 95.7% were in agreement with the prompt. On average, a mean of 1.47 was obtained indicating that the consumers were aware of the expiration dates on the pre-packaged foods. This is consistent with the findings of other researchers, Mahdavi, Abdolahi & Mahdavi (2012); Washi (2012); Bazhan, Mostafa & Zohreh (2015); Kaur, Kaou & Qumar (2016) and Aryee (2013) who asserted that most consumers read the expiry dates and other important information on food labels. According to Mahdavi, Abdolahi and Mahdavi (2012), the expiry dates and storage conditions information are the most important informational cues that appear on food labels. However, this finding is seen in a different way by Basarir and Sherif (2012) who claimed that consumers rarely read information on food storage and others.

The Likert scaled responses to the prompt, ―reading and looking out for the country of origin on food packages helps to create awareness," revealed that 24.3% of the

respondents strongly agreed that they became aware of food labelling information on pre-packaged foods by reading and looking out for the country of origin on food packages and 48.5% agreed. However, 12.2% were in disagreement with the statement. 15% indicated that they were not sure whether they read and looked out for the country of origin on food packages by remaining neutral. Aggregating the ~~a~~gree" results together for the prompt showed that 72.8% were in agreement with the prompt. On average, a mean of 2.19 was obtained indicating that the consumers were aware of the country of origin on the pre-packaged foods. This is validated by Basarir and Sherif (2012) who claimed that consumers check the country of origin among other information. Barrena and Sanchez (2010) make a point when they state consumers consume products they trust and know their origin.

The Likert scaled responses to the prompt, ~~r~~eading the food storage and handling instructions on food packages helps to create awareness," revealed that 30.1% of the respondents strongly agreed that they became aware of food labelling information on pre-packaged foods by reading the food storage and handling instructions on food packages and 54.9% agreed. However, 2.4% were in disagreement with the statement. 12.6% indicated that they were not sure whether they read the food storage and handling instructions on food packages by remaining neutral. Aggregating the ~~a~~gree" results together for the prompt showed that 85% were in agreement with the prompt. On average, a mean of 1.87 was obtained indicating that the consumers were aware of the food storage and handling instructions on the pre-packaged foods. This finding is in agreement with Villalba, Boyer and Bazemore (2015) who opined that the information on the food labels detailing the food storage and handling instructions are included to enable consumers undertake these instructions to maintain the quality and

safety of the food items they purchase. When foods are improperly handled or stored, bacteria can grow, causing the product to spoil quickly or be unsafe to eat — regardless of the expiration date on the package.

The Likert scaled responses to the prompt, ―reading and checking the organic seal/certification on food packages helps to create awareness," revealed that 31.6% of the respondents strongly agreed that they became aware of food labelling information on pre-packaged foods by reading and checking the organic seal/certification on food packages and 48.5% agreed. However, 10.7% were in disagreement with the statement. 9.2% indicated that they were not sure whether read and checked the organic seal/certification on food packages by remaining neutral. Aggregating the ―agree" results together for the prompt showed that 80.1% were in agreement with the prompt. On average, a mean of 1.99 was obtained indicating that the consumers were aware of the organic seal/certification on the pre-packaged foods. This finding is corroborated by Caswell (2000) who states that the organic label gives consumers the assurance that a product is organic. The organic label represents identification that a product is certified against particular organic standards. It carries the name of the certification body and the standards it complies with (Food and Agriculture Organisation of the United Nations, 2013). Consumers are becoming more enlightened and would want to know more about the food they buy and consume.

4.3 The effect of food labelling information on pre-packaged foods on the purchasing decision of consumers

The effect of food labelling information on pre-packaged foods on the purchasing decision of consumers is presented in Table 4.3.

Table 4. 3: Effect of Food Labelling Information on the Purchasing Decisions of Consumers

Variables	SA		A		N		D		SD		Mean
	f	*%*	*f*	*%*	*f*	*%*	*F*	*%*	*f*	*%*	($\bar{x}$)
I purchase a product because of the lists of ingredients or contents of food.	60	29.1%	86	41.7%	26	12.6%	30	14.6%	4	1.9%	2.18
I purchase a product because of the price of packaged food.	32	15.5%	75	36.4%	25	12.1%	70	34.0%	4	1.9%	2.70
I purchase a product because of the manufacturing date (best before, expiry date).	108	52.4%	60	29.1%	15	7.3%	12	5.8%	11	5.3%	1.83
I purchase a product because of the name and address of product manufacturer.	9	4.4%	85	41.3%	33	16.0%	53	25.7%	26	12.6%	3.01
I purchase a product because of the appearance/package design on the food items.	22	10.7%	87	42.2%	31	15.0%	58	28.2%	8	3.9%	2.72
I purchase a product because of the use of the product.	99	48.1%	76	36.9%	18	8.7%	4	1.9%	9	4.4%	1.78
I purchase a product because of the method of preparation of the product	21	10.2%	84	40.8%	45	21.8%	43	20.9%	13	6.3%	2.72
I purchase a product because of the quality certification from agencies.	64	31.1%	88	42.7%	30	14.6	0	0%	24	11.6%	2.07

Key: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree.
(Source: Researcher's Fieldwork, September 2018)

From Table 4.3, the respondents were requested to indicate the effect of food labelling information on pre-packaged foods on the purchasing decision of consumers.

About 29.1% strongly agreed that the lists of ingredients or contents of the food had an effect on their purchasing decisions and 41.7% agreed that the lists of ingredients or contents of the food had an effect on their purchasing decisions. 1.9% strongly disagreed that the lists of ingredients or contents of the food had an effect on their purchasing decisions and 14.6% disagreed. 12.6% did not know whether the lists of ingredients or contents of the food had an effect on their purchasing decisions or not by remaining neutral. When the –agree" results are put together, it yields a 70.3% agreement which shows that the lists of ingredients or contents of the food had an effect on their purchasing decisions. On average, a mean of 2.18 was obtained indicating that the lists of ingredients or contents of the food had an effect on their purchasing decisions. This finding is in agreement with the studies by Eigenmann (2001); Teisl, Bockstael and Levy (2001); EdComs (2007); Oghojafor, Ladipo and Nwagwu (2012) and Grunert and Wills (2007) who opined that the most consumers read the list of ingredients before they purchase a food item.

Almost 15.5% strongly agreed that the price of packaged food had an effect on their purchasing decisions and 36.4% agreed that the price of packaged food had an effect on their purchasing decisions. 1.9% strongly disagreed that the price of packaged food had an effect on their purchasing decisions and 34% disagreed. 12.1% did not know whether the price of packaged food had an effect on their purchasing decisions or not by remaining neutral. When the –agree" results are put together, it yields a 51.9% agreement which shows that the price of packaged food had an effect on their purchasing decisions. On average, a mean of 2.70 was obtained indicating that the price of packaged food had an effect on their purchasing decisions. This finding is supported by Manisha (2008); Douaud, et al. (2007); Schmidt and Loving (2011);

William and Caliendo (1994) and Cowburn and Stockley (2005) who averred that price affects consumers to purchase food products.

Approximately 52.4% strongly agreed that the manufacturing date (best before, expiry date) had an effect on their purchasing decisions and 29.1 % agreed that the manufacturing date (best before, expiry date) had an effect on their purchasing decisions. 5.3% strongly disagreed that the manufacturing date (best before, expiry date) had an effect on their purchasing decisions and 5.8% disagreed. 7.3% did not know whether the manufacturing date (best before, expiry date) had an effect on their purchasing decisions or not by remaining neutral. When the ―agree" results are put together, it yields a 81.5% agreement which shows that the manufacturing date (best before, expiry date) had an effect on their purchasing decisions. On average, a mean of 1.83 was obtained indicating that the manufacturing date (best before, expiry date) had an effect on their purchasing decisions. This finding is corroborated by Basarir and Sherif (2012); Mahdavi, Abdolahi and Mahdavi (2012) and Aryee (2013) who claimed that most consumers read the expiry dates on food labels.

About 4.4% strongly agreed that the name and address of the product manufacturer had an effect on their purchasing decisions and 41.3% agreed that the name and address of the product manufacturer had an effect on their purchasing decisions. 12.6% strongly disagreed that the name and address of the product manufacturer had an effect on their purchasing decisions and 25.7% disagreed. 16% did not know whether the name and address of the product manufacturer had an effect on their purchasing decisions or not by remaining neutral. When the ―agree" results are put together, it yields a 45.7% agreement which is not a strong indication that the name

and address of the product manufacturer had an effect on their purchasing decisions. On average, a mean of 3.01 was obtained indicating that the name and address of the product manufacturer had an effect on their purchasing decisions. This finding is supported by Bickle (2011) who asserted that consumers like consistency in companies, brands, and products. Brands deliver emotional connection to a business' products and services. Most purchase decisions are made with respect to the brands. In the same vein, Alton (2016) claimed that a good company name is very important when launching a brand or product. The way the brand name sounds and the images it evokes both impact the purchase decision.

Around 10.7% strongly agreed that the appearance/package design on the food items had an effect on their purchasing decisions and 42.2% agreed that the appearance/package design on the food items had an effect on their purchasing decisions. 3.9% strongly disagreed that the appearance/package design on the food items had an effect on their purchasing decisions and 28.2% disagreed. 15% did not know whether the appearance/package design on the food items had an effect on their purchasing decisions or not by remaining neutral. When the "agree" results are put together, it yields a 52.9% agreement which shows that the appearance/package design on the food items had an effect on their purchasing decisions. On average, a mean of 2.72 was obtained indicating that the appearance/package design on the food items had an effect on their purchasing decisions. This finding is consistent with the findings by other researchers like Philip et al. (2010); Butkevičienė, Stravinskienė and Rūtelionė (2008); Koutroulou and Tsourgiannis (2011); Madhvapaty and Gupta (2015); Underwood, Klein and Burke (2001) and Silayoi and Speece (2004) who are of the opinion that most consumers are persuaded to buy a product because of the

attractiveness of the packing of the product and the appearance of the product. Packaging of food products displays the visual identity of a given brand and differentiates one brand form the others. Packaging should be one of the core elements of the marketing mix as it is an important marketing tool for influencing buyers (Kotler, Keller, Brady, Goodman & Hansen, 2009) The visual elements of a package play an important role here, because they create higher attention and are processed faster (Dobson & Yadav, 2012).

Approximately 48.1% strongly agreed that the use of the product had an effect on their purchasing decisions and 36.9% agreed that the use of the product had an effect on their purchasing decisions. 4.4% strongly disagreed that the use of the product had an effect on their purchasing decisions and 1.9% disagreed. 8.7% did not know whether the use of the product had an effect on their purchasing decisions or not by remaining neutral. When the ―agree" results are put together, it yields a 85% agreement which shows that the use of the product had an effect on their purchasing decisions. On average, a mean of 1.78 was obtained indicating that use of the product had an effect on their purchasing decisions. A consumer buying a product thinks rationally about the use of the product. A lot of the consumers make sure that everything they buy has a purpose.

Around 10.2% strongly agreed that the method of preparation of the product had an effect on their purchasing decisions and 40.8% agreed that the method of preparation of the product had an effect on their purchasing decisions. 6.3% strongly disagreed that the method of preparation of the product had an effect on their purchasing decisions and 20.9% disagreed. 21.8% did not know whether the method of

preparation of the product had an effect on their purchasing decisions or not by remaining neutral. When the ―agree" results are put together, it yields a 51% agreement which shows that the method of preparation of the product had an effect on their purchasing decisions. On average, a mean of 2.72 was obtained indicating that the method of preparation of the product had an effect on their purchasing decisions. This finding is given weight by Thaler (2012) who state that customers are willing to pay higher prices for a product if they know it is coming from a specific manufacturer.

About 31.1% strongly agreed that the quality certification from agencies had an effect on their purchasing decisions and 42.7% agreed that the quality certification from agencies had an effect on their purchasing decisions. 11.6% strongly disagreed that the quality certification from agencies had an effect on their purchasing decisions. 14.6% did not know whether the quality certification from agencies had an effect on their purchasing decisions or not by remaining neutral. When the ―agree" results are put together, it yields a 73.8% agreement which shows that the quality certification from agencies had an effect on their purchasing decisions. On average, a mean of 2.07 was obtained indicating that the quality certification from agencies had an effect on their purchasing decisions. This finding is further corroborated by Menapace, Colson, Grebitus and Facendola (2008) and Wang, Sun, and Parsons (2010) who claimed that consumers evaluate product quality according to its characteristics or attributes; those are indicators that can help to characterize it (Xu & Wu, 2010) reported that consumers in China were willing to pay for food products certified by private agency but with the intervention of the government. Similarly, Wu and Jang (2014) asserted

that consumers' perceptions of quality, brand image, brand preference, and brand attitude all function as mediator variables for ISO certification on purchase intention.

4.4 The Challenges consumers encounter in reading and understanding pre-packaged food labels

The challenges consumers encounter in reading and understanding pre-packaged food labels is presented in Table 4.4.

Table 4. 4: Challenges consumers encounter in reading and understanding pre-packaged food labels

Variables	SA		A		N		D		SD		Mean
	f	%	*f*	%	*f*	%	*F*	%	*f*	%	($\bar{x}$)
My level of education affects my ability to read the food label	90	43.7%	39	18.9%	4	1.9%	26	12.6%	47	22.8%	2.52
I am not able to make the right food decision because of the lack of understanding of food labels	63	30.6%	61	29.6	8	3.9%	40	19.4%	34	16.5%	3.37
Language is a big hurdle for me in interpreting food label at the point of purchase	61	29.6%	56	27.2%	19	9.2%	31	15.0%	39	18.9%	3.35
Uncertainty about accuracy of information affect my ability to read food labels	37	18.0%	69	33.5%	31	15.0%	39	18.9%	30	14.6%	2.79
Lack of interest in the information on the food label affect my ability to read the food labels	23	11.2%	74	35.9%	44	21.4%	54	26.2%	11	5.3%	3.21
The low health consciousness of the consumers affect their ability to read food labels	56	27.2%	48	23.3%	28	13.6%	54	26.2%	20	9.7%	2.68
The limited size of the label affect my ability to read it	49	23.8%	66	32.0%	14	6.8%	54	26.2%	23	11.2%	2.69

Key: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree.
(Source: Researcher's Fieldwork, September 2018)

From Table 4.4, the respondents were requested to indicate the challenges consumers encounter in reading and understanding pre-packaged food labels.

About 43.7% strongly agreed that their level of education affected their ability to read food labels and 18.9% agreed that their level of education affected their ability to read food labels. 22.8% strongly disagreed that their level of education affected their ability to read food labels and 12.6% disagreed. 1.9% did not know whether their level of education affected their ability to read food labels or not by remaining neutral. When the ―agree" results are put together, it yields a 62.6% agreement which shows that one's level of education affected one's ability to read food labels. On average, a mean of 2.52 was obtained indicating that one's level of education affected one's ability to read food labels. This finding is corroborated by Nayga (1997) and Nayga, Lipinski and Savur (1998) who opined that more educated consumers read food labels and use the information on them. In this same vein, EdComs (2007) assert that in the UK, most women especially mothers with high education levels read food labels due to their interest in nutrition and health, food allergy and religious beliefs. Kristal, Levy, Patterson, Li and White (1998); Neuhouser, Kristal and Patterson (1999); Smith, Taylor and Stephen (2000) and Lin, Lee and Yen (2004) believe that consumers who are old and less educated do not read food labels often.

Approximately 30.6% strongly agreed that they were not able to make the right food decision because of their lack of understanding of food labels and 29.6% agreed that they were not able to make the right food decision because of their lack of understanding of food labels. 16.5% strongly disagreed that they were not able to make the right food decision because of their lack of understanding of food labels and 19.4% disagreed. 3.9% did not know whether they were not able to make the right food decision because of their lack of understanding of food labels or not by remaining neutral. When the ―agree" results are put together, it yields a 60.2%

agreement which shows that one is not able to make the right food decision because of one‘s lack of understanding of food labels. On average, a mean of 3.37 was obtained indicating that one is not able to make the right food decision because of one‘s lack of understanding of food labels. This finding is agreement with the findings of Iyer and Chandorkar (2013); Besler, Buyuktuncer and Uyar (2012); Sunelle et al. (2011); Liu, Hoefkens and Verbeke (2015b); Hoefkens, Pieniak, Van Camp and Verbeke (2012); Douaud et al. (2007); Chen and Niu (2009); EUFIC (2005); Gorton, Mhurchu, Chen and Dixon, (2009); Byrd-Bredbenner and Kiefer (2000); Sarkodie and Boakye-Kessie (2017) and Kristal, Levy, Patterson, Li and White (1998) who claimed that most consumers do not understand or cannot interpret the nutrition information terms, symbols, and values on food labels. This finding is however challenged by Singh, Iyer and Chandorkar (2013) who have asserted most consumers understood the food labels.

Almost 29.6% strongly agreed that language was a big hurdle for them in interpreting food labels at the point of purchase and 27.2% agreed that language was a big hurdle for them in interpreting food labels at the point of purchase. 18.9% strongly disagreed that language was a big hurdle for them in interpreting food labels at the point of purchase and 15% disagreed. 9.2% did not know whether language was a big hurdle for them in interpreting food labels at the point of purchase or not by remaining neutral. When the ―agree" results are put together, it yields a 56.8% agreement which shows that language was a big hurdle for them in interpreting food labels at the point of purchase. On average, a mean of 3.35 was obtained indicating that language was a big hurdle for them in interpreting food labels at the point of purchase. This finding is corroborated by Philip et al. (2010); Schmidt and Loving (2011) and Cowburn and

Stockley (2005) who claimed that language affects consumers‘ ability to read food labels.

Approximately 18% strongly agreed that their uncertainty about accuracy of information affected their ability to read food labels and 33.5% agreed that their uncertainty about accuracy of information affected their ability to read food labels. 14.6% strongly disagreed that their uncertainty about accuracy of information affected their ability to read food labels and 18.9% disagreed. 15% did not know whether their uncertainty about accuracy of information affected their ability to read food labels or not by remaining neutral. When the ―agree" results are put together, it yields a 51.5% agreement which shows that their uncertainty about accuracy of information affected their ability to read food labels. On average, a mean of 2.79 was obtained indicating that one‘s uncertainty about accuracy of information affected one‘s ability to read food labels. This finding is verified by Cowburn and Stockley (2005) who asserted that uncertainty about accuracy of information affects consumers‘ ability to read food labels.

Almost 11.2% strongly agreed that the lack of interest in the information on the food labels affected their ability to read the food labels and 35.9% agreed that the lack of interest in the information on the food labels affected their ability to read the food labels. 9.7% strongly disagreed that the lack of interest in the information on the food labels affected their ability to read the food labels and 26.2% disagreed. 13.6% did not know whether the lack of interest in the information on the food labels affected their ability to read the food labels or not by remaining neutral. When the ―agree" results are put together, it yields a 50.5% agreement which shows that the lack of interest in

the information on the food labels affected their ability to read the food labels. On average, a mean of 2.68 was obtained indicating that the lack of interest in the information on the food labels affected their ability to read the food labels. This finding is supported by Kristal, Levy, Patterson, Li & White (1998) who have declared that lack of interest is one of the barriers to food label use among consumers

About 23.8% strongly agreed that the limited size of the labels affected their ability to read it and 32% agreed that the limited size of the labels affected their ability to read it. 11.2% strongly disagreed that the limited size of the labels affected their ability to read it and 26.2% disagreed. 6.8% did not know whether the limited size of the labels affected their ability to read it or not by remaining neutral. When the ~~–a~~gree" results are put together, it yields a 55.8% agreement which shows that the limited size of the labels affected their ability to read it. On average, a mean of 2.69 was obtained indicating that the limited size of the labels affected their ability to read it. This finding is corroborated by Affram and Darkwa (2015) and Kristal, Levy, Patterson, Li and White (1998) who opined that small font sizes among other factors did not encourage consumers to read and use food labels.

4.5 Observation from Interviews of Respondents

Fifty people were interviewed. On the question on how well informed, the respondents were on food labelling information; twenty people said they were very much informed about food labelling information. Nineteen people said they were moderately informed about food labelling information. Six people said they were minimally informed about food labelling information. One people said he was not informed about food labelling information. The observation is that most of the

respondents said they were informed about the information on the food labels. About thirty eight respondents said they read the information on the food labels before they purchased a food item. They stated several reasons for reading the food labelling information. Some of the reasons they stated were as follows:

> An interviewee who was a female teacher and several of the interviewees stated that:
> *"They read the expiry date and the list of ingredients on the label."*
> Another person and several others also stated that:
> *"They read the information to know the storage conditions and how to use a product."*

On the question of the terms associated with food labelling information, 26 interviewees said they were familiar with the term _list of ingredients.' Six interviewees said they knew of the term _net content.' Six interviewees said they were familiar with the term _name of the manufacturer.' Eleven interviewees said they were familiar with the term _country of origin.' Four interviewees said they were familiar with the term _batch/lot identification.' Fifteen interviewees said they were familiar with the term _manufacture date.' Thirty six interviewees said they were familiar with the term _expiry date.' Nine interviewees said they were familiar with the term _storage conditions.' Ten interviewees said they were familiar with the term _nutrition information.' Fifteen interviewees said they were familiar with the term _instructions for use.' It can be seen that a lot of the respondents were familiar with some of the terms associated with food labels. The prominent terms they stated they were familiar with were the list of ingredients and expiry date.

On the question of whether they read the food labelling information before purchasing pre-packaged foods, 42 interviewees said they were read the information while 6 said

they did not read the information. A follow question was asked on why they read or did not read the information and they gave varied reasons.

On the question of the importance of food labelling information, 46 interviewees said they were very important. 3 interviewees said they were somewhat important. The observation is that a large number of the interviewees said food labels were very important.

About forty six interviewees remarked that:

"They felt uneasy purchasing a food item that had no labels on them. They were cautious in using such items."

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary, conclusion and recommendations for the study. It also gives suggestions for further research.

5.1 Summary of Findings

The purpose of the study was to create awareness of pre-packaged food labelling among consumers and assess its impact on consumers‘ decision in purchasing pre-packaged foods. The objectives of the study were to determine awareness level of consumers of pre-packaged food labelling information; identify the effect of the food labelling information in purchasing pre-packaged foods and assess the challenges consumers encounter in reading and understanding food labels on pre-packaged foods.

Based on the analysis of data collected and the discussion of the results, the following key findings were made:

5.1.1 Awareness of Food Labelling among Consumers

On the awareness level of consumers of food labelling information on pre-packaged foods, the study revealed the following findings:

The results of the study revealed that most of the consumers were aware of the list of ingredients. They read the lists of ingredients on the food packages to check the contents of the food. Furthermore, the study showed that the consumers were aware of the expiry dates. The study also showed that most of the respondents were aware of the country of origin. Added to these, the study also showed that most of the

consumers were aware of the food storage and handling instructions and the organic seal/certification on the pre-packaged foods.

5.1.2 Effect of food labelling information on pre-packaged foods on the purchasing decision of consumers

On the effect of food labelling information on pre-packaged foods on the purchasing decision of consumers, the study revealed the following findings:

The study found out that the lists of ingredients or contents of the food had an effect on the purchasing decisions of consumers. Likewise, it was revealed that the price of packaged food had an effect on their purchasing decisions. More than half of the respondents stated that the manufacturing date (best before, expiry date) had an effect on their purchasing decisions. It was also found out that the name and address of the product manufacturer had an effect on their purchasing decisions. The study also revealed that the appearance/package design on the food items also had an effect on the purchasing decisions of consumers. The study also discovered that the use of the product had an effect on the purchasing decisions of consumers. The study discovered that the method of preparation of the product had an effect on their purchasing decisions of consumers. The study found out that the quality certification from agencies had an effect on their purchasing decisions of consumers.

5.1.3 Challenges consumers encounter in reading and understanding pre-packaged food labels

On the challenges consumers encounter in reading and understanding pre-packaged food labels, the study revealed the following findings:

The study found out the level of education of consumers affected their ability to read food labels. Also, the study discovered that consumers were not able to make the right food decision because of their lack of understanding of food labels. Furthermore, the study revealed that language was a big hurdle for consumers in interpreting food labels at the point of purchase. The study also showed that consumers‘ uncertainty about accuracy of information affected their ability to read food labels. The study also found out that consumers‘ lack of interest in the information on the food labels affected their ability to read the food labels. Moreover, the study found out that the limited size of the labels affected the ability of consumers to read it.

5.2 Conclusion

Food labelling is very important because it informs consumers on the contents of the food they are purchasing. From the findings of this study, it is concluded that the awareness of pre-packaged food labelling information among consumers is comparatively prominent. There are several key factors that affect consumers purchasing decisions. Some of these are the lists of ingredients or contents of the food, the price of packaged food, the manufacturing date (best before, expiry date), the name and address of the product manufacturer, the appearance/package design on the food items, the use of the product, the method of preparation of the product and quality certification from agencies had an effect on their purchasing decisions of consumers. It is also concluded that consumers encounter several challenges in reading and using food labelling information such as their level of education, their lack of understanding of food labels, language, their uncertainty about accuracy of information, their lack of interest in the information on the food labels and the limited size of the labels.

5.3 Recommendations

Following the findings of the study, the following recommendations are made:

1. The manufacturers of food items should ensure that the lists of ingredients or contents of the food are written on the food labels.
2. Consumers should check the manufacturing date (best before, expiry date) of food items before they buy them. Manufacturers should put in the necessary controls to ensure that their products meet consumer expectations of safety and quality.
3. Manufacturers should ensure that the name and address of the product manufacturer should be printed on the labels. This should be done so that in case of problem with the product or otherwise, the consumers can contact the manufacturer.
4. The manufacturer should consider appearance/package design on the food items in order to enhance the product and increase sales. They should pick a container that enhances their products. The kind of message, slogan, and product description should be well crafted because they can attract or repel customers. They should choose colours that are appropriate to your company‘s identity, market/industry and customer base.
5. Manufacturers should put in several mechanisms that can get consumers to use their product. They should create a marketing campaign where they can solicit the views of customers on the products. This can help them to increase their market size and, as a result, sales.
6. The manufacturers should ensure foods are prepared under hygienic conditions. The Food and Drugs Authority should ensure that food handlers should wear disposable gloves when handling ready-to-eat food. The gloves

should be discarded if damaged, soiled, or when interruptions occur in the operation. Both food handlers and consumers should be educated to guide against food contamination.

7. Consumers should ensure that there are quality certification stickers on food items before they purchase them. Consumers should purchase only good quality foods when they are purchasing food items. In the same vein, manufacturers should ensure that their products are registered with the food regulating agencies and have the quality seal on them.
8. The FDA should organise educational campaigns for the consumers. These consumer education campaigns should focus on key issues, use clear, concise language, and offer practical advice. The manufacturers and the FDA should clearly explain the information on the labels to consumers to enable them to use the labels to select healthier foods.
9. The manufacturers should ensure that food labels are written in other local languages for the consumers who cannot speak English or other foreign languages. The technical/scientific language on some of the food labels should be explained if possible into the local languages for easy understanding.
10. Manufacturers should ensure the food labels should contain the exact information about the contents of the food packages. They should prevent mislabelling or misleading descriptions of foods. Mislabelled food deceives the consumer and creates unfair competition with manufacturers or traders. The consumer agencies in conjunction with the FDA should undertake steps to prevent consumer deception, ensure fair trade practices, ensure food safety and improve public health.

11. Consumers should show interest in the information on the food labels as the information is necessary for them in making purchasing decisions.
12. The font size on the food labels should be legible enough to be read by the consumers. Food labels should be clear in order to assist consumers make better-informed food choices. Food producers in the country should consult the Foods and Drugs Authority on proper food labelling before sending labels to be professionally printed. A successful food label should have an appealing food label design (font, logo, images, and colours), relevant information and appropriate phrasing.

5.4 Suggestions for Further Research

It is recommended that further research on the topic should be conducted among the literate population on a larger scale using quantitative and qualitative techniques.

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APPENDIX A

QUESTIONNAIRE SCHEDULE

UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY EDUCATION

QUESTIONNAIRE FOR CONSUMERS ON THE TOPIC: "AWARENESS OF FOOD LABELING INFORMATION AND ITS USE IN PURCHASING OF PRE-PACKAGED FOOD PRODUCTS AMONG CONSUMERS: A CASE STUDY OF THE ATWIMA NWABIAGYA DISTRICT"

Dear Sir/Madam

I am DIANA OWUSU AMPONSAH and undertaking M.Tech Catering and Hospitality at the College of Technology Education, University of Education, Winneba, Kumasi Campus. This questionnaire is to collect data on topic: –Awareness of Food Labelling Information and its Use in Purchasing of Pre-Packaged Food Products among Consumers: A Case Study of the Atwima Nwabiagya District." Your genuine response is paramount for the success of the study. Please be objective in your responses since the data is strictly for academic purposes only and as such confidentiality of your responses is guaranteed.

Thank you in advance.

Instruction: Please tick (√) where applicable and supply details where required

SECTION A: DEMOGRAPHIC DATA OF RESPONDENTS

1. Gender: Male [ ]1 Female [ ]2
2. Age (in years): Less than 20 [ ] 1 21-25 [ ] 2 26-30 [ ] 3 31-35 [ ] 4
   36-40 [ ] 5 41-45 [ ] 6 46 years and above [ ] 7
3. Marital status: Single: [ ] 1 Married [ ] 2 Divorced [ ] 3
   Widowed [ ] 4 Others (please specify) 5 ……..
4. Highest educational qualification of respondents: Primary [ ] 1
   Secondary [ ] 2 Technical/Vocational [ ] 3 Bachelor's Degree [ ] 4
   Master's Degree [ ] 5 Doctoral Degree [ ] 6
   Others (please specify) 7 ……
5. Occupation: ……...
6. Size of Household:……
7. Monthly Income of Household (if any):……

SECTION B: AWARENESS LEVEL OF CONSUMERS OF FOOD LABELLING INFORMATION ON PRE-PACKAGED FOODS.

This survey is designed to find out your perception of awareness level of food labeling information on pre-packaged foods. Indicate the extent to which you agree or disagree (1=strongly agree, 2= agree, 3 = neutral, 4 = disagree, and 5=strongly disagree) with the following statements. Tick the number to the right of each statement your opinion.

S/NO.	STATEMENT	SA	A	N	D	SD
1.	Reading the list of ingredients on food packages helps to create awareness					
2.	Reading the expiration dates on food packages helps to create awareness					

3.	Reading and looking out for the country of origin on food packages helps to create awareness					
4.	Reading the food storage and handling instruction on food packages helps to create awareness					
5.	Reading and checking the organic seal/certification on food packages helps to create awareness					

SECTION C: THE EFFECT OF FOOD LABELLING INFORMATION ON PRE-PACKAGED FOODS AFFECT PURCHASING DECISION OF CONSUMERS

This survey is designed to assess your perception of the effect food labeling information on pre-packaged foods have on the purchasing decision of consumers. Indicate the extent to which you agree or disagree (1=strongly agree, 2= agree, 3 = neutral, 4 = disagree, and 5=strongly disagree) with the following statements. Tick the number to the right of each statement your opinion on the statement that applies to you.

S/NO.	STATEMENT	SA	A	N	D	SD
1.	I purchase a product because of the lists of ingredients or contents of food.					
2.	I purchase a product because of the price of packaged food.					
3.	I purchase a product because of the manufacturing date (best before, expiry date).					
4.	I purchase a product because of the name and address of product manufacturer.					
5.	I purchase a product because of the appearance/package design on the food items.					
6.	I purchase a product because of the use of the product.					
7.	I purchase a product because of the method of					

	preparation of the product					
8.	I purchase a product because of the quality certification from agencies.					

SECTION D: THE DIFFICULTIES CONSUMERS ENCOUNTER IN READING AND UNDERSTANDING PREPACKAGED FOOD LABELS.

This survey is designed to assess your perception of the difficulties consumes encounter in reading and understanding prepackaged food labels. Indicate the extent to which you agree or disagree (1=strongly agree, 2= agree, 3 = neutral, 4 = disagree, and 5=strongly disagree) with the following statements. Tick the number to the right of each statement that your level of perception.

S/NO.	STATEMENT	SA	A	N	D	SD
1.	My level of education affects my ability to read the food label					
2.	I am not able to make the right food decision because of the lack of understanding of food labels					
3.	Language is a big hurdle for me in interpreting food label at the point of purchase					
4.	Uncertainty about accuracy of information affect my ability to read food labels					
5.	Lack of interest in the information on the food label affect my ability to read the food labels					
6.	The low health consciousness of the consumers affect their ability to read food labels					
7.	The limited size of the label affect my ability to read it					

APPENDIX B

INTERVIEW SCHEDULE FOR CONSUMERS

UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY EDUCATION

INTERVIEW SCHEDULE FOR CONSUMERS ON THE TOPIC: "AWARENESS OF FOOD LABELING INFORMATION AND ITS USE IN PURCHASING OF PRE-PACKAGED FOOD PRODUCTS AMONG CONSUMERS: A CASE STUDY OF THE ATWIMA NWABIAGYA DISTRICT"

Dear Sir/Madam

I am DIANA OWUSU AMPONSAH and undertaking M.Tech Catering and Hospitality at the College of Technology Education, University of Education, Winneba, Kumasi Campus. This interview schedule is to collect data on topic: "Awareness of Food Labeling Information and its Use in Purchasing of Pre-Packaged Food Products among Consumers: A Case Study of the Atwima Nwabiagya District." Your genuine response is paramount for the success of the study. Answer the following as frankly as possible. You are allowed to shed more on your answer if you prefer.

Thank you in advance.

1. How well informed would you say you are about food labelling information?

a) Very much informed [ ]

b) Moderately informed [ ]

c) Minimally informed [ ]

d) Not informed [ ]

2. Which of the following terms are you most familiar with in relation to the basic information found on pre-packaged food labels? (Tick the one you like)

a) List of ingredients [ ]

b) Net content [ ]

c) Name of the manufacturer [ ]

d) Country of origin [ ]

e) Batch /lot identification [ ]

f) Manufacture date [ ]

g) Expiry date [ ]

h) Storage condition [ ]

i) Nutrition information [ ]

j) Instructions for use [ ]

3. Do you read food labelling information before purchasing pre-packaged foods?

a) Yes [ ] b) No [ ]

4. If yes, explain why……...

……..

5. If No, explain why?.....

……..

……..

6. How important do you consider food labelling information to be?

a. Very important [ ]

b. Somewhat important [ ]

c. Minimally important [ ]

d. Not important [ ]