

UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

**ASSESSMENT OF STUDENT-TEACHERS' ATTITUDE TOWARDS
BREAKFAST MEALS: A CASE OF AL-FARUQ COLLEGE OF EDUCATION**



OCTOBER, 2021

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**A Thesis in the Department of HOSPITALITY AND TOURISM EDUCATION,
Faculty of VOCATIONAL EDUCATION, submitted to the school of Graduate
Studies, University of Education, Winneba in partial fulfilment of the
requirements for the award of the Master of Philosophy (CATERING AND
HOSPITALITY) degree**

OCTOBER, 2021

DECLARATION

STUDENT'S DECLARATION

I, BENEDICTA GALYUONI, declare that this dissertation, with the exception of quotations and references contained in published works which have all to the best of my knowledge , been identified and acknowledged, is entirely my own original work, and that it has not been submitted , either in part or whole to any institution anywhere for the award of another degree.

SIGNATURE

DATE:



SUPERVISORS' DECLARATION

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

NAME: DR. MRS. ELLEN OLU

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DATE:

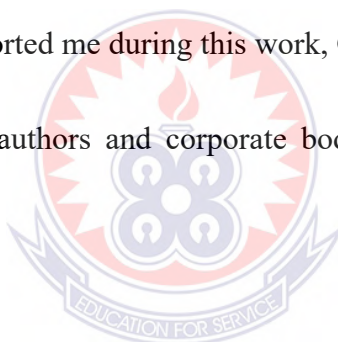
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Finally, I appreciate all authors and corporate bodies whose works I have quoted directly or indirectly in this work.



DEDICATION

I dedicate this piece of work to my daughter Justina M. Kpierrele and my sister Janet Galyuoni.



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ABBREVIATIONS AND ACRONYMS

TPB	-	Theory of Planned Behaviour
DASH	-	Dietary Approaches to Stop Hypertension
CDC	-	Centres for Disease Control and Protection
USDA	-	United State Department of Agriculture
USDHHS	-	United State Department of Health and Human Services
TRA	-	Theory of Reasoned Action
PBC	-	Perceived Behavioural Control
DBE	-	Diploma in Business Education
ICTs	-	Information and Communication Technologies
CoE	-	Colleges of Education
TACT	-	Target, Action, Context and Time
MOE	-	Ministry of Education



ABSTRACT

The skipping of breakfast among the adult youth, especially students in senior high schools colleges of education is a global issue that requires full attention of stakeholders in education to address it. In this study the Theory of Planned Behaviour was explored as an acclaimed model to analyze student-teachers' attitude towards breakfast consumption in the Al-Faruq College of Education in Wenchi, the Bono region of Ghana to ascertain the causes of this phenomenon and propose suitable interventions to address this problem. The mixed approach method was employed describe student-teacher's general disposition about the patronage of breakfast meals served in the College's dining hall and the causes of non-consumption of the aforementioned meals among the study target group. The researcher used 715 student-teachers at the various academic levels as the population. To give credence to the study, the researcher used the randomized stratification sampling method to select a sample size of 359 respondents, which represented 50.2% of the population. A survey questionnaire was and two interview guides were used to elicit responses from the respondents. The study established that skipping of breakfast is a common place in the Al-Faruq College of Education and as a result has led to 20% to 30% student-teachers developing negative attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education. The study found that late serving of breakfast, low quantity and poor quality of the breakfast served among others were the causes of non-patronage of breakfast meals because they were not of high quality. The study, therefore, recommended that dining hall and meals orientation of student-teachers should be organized, strict enforcement of dining hall rules and regulation, and the keeping of the dining hall clean to attract student-teachers.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

According to Maslow's hierarchy of human needs (1943) as cited in McLeod (2020), food is one of the basic needs of humans and has a great impact on the body. Food consumption, plays a significant role in human life. Food may be taken in the morning (breakfast), afternoon (lunch), or evening (supper) (Yates, & Warde, 2017). This means that there is time line for taking food or meal in the life of an individual. Among the time line for taking meal, breakfast has been considered as very significant because it is considered as the first meal of the day (Stote, Baer, Spears, Paul, Harris, Rumpler, & Mattson, 2007).

It is important to note that studies done on breakfast, especially on students' academic performance have emphasis the significant and the need for students to take breakfast. For example Kawafha, (2013) argues that the consumption of breakfast, which is an important meal of the day has a positive and direct impact on various educational and overall academic achievements of students. This is because breakfast helps to kickstart the morning by boosting the metabolism and providing energy for the activities of the day. The significant of breakfast has also been noted by (Olst, 2013) that the time between a person's last meal of the day and the first meal in the next day is about 11 hours which is long enough to drain the energy in the food consumed. In view of this Olsta contends that the body, especially the brain needs energy to function. Therefore, there is the need to consume breakfast at the right time so to start the day's work.

Intiful, & Lartey, (2014) opine that breakfast is the first meal of the day and is typically taken no later than mid-morning. It is frequently branded as the most important meal of the day, owing to a number of benefits including prevention of overweight, obesity and reduction in risk of cardiovascular diseases. Breakfast is important in meeting the day's nutritional needs. Children who consume breakfast are likely to meet their energy and overall nutrient requirement compared to those who do not have breakfast (Nicklas, Bao, Webber, & Berenson, 1993). In India, children between 10 and 15 years who consumed breakfast met about one quarter to one third of their daily energy and protein intakes from the breakfast meal (Chitra, & Reddy, 2007). Breakfast consumption also contributes to increase intakes of other nutrients. In a longitudinal study among girls 9-19 years, in which energy intake was adjusted for, breakfast cereal consumption was related to increased consumption of fibre, calcium, iron, folic acid, vitamin C, and zinc, and a decrease in fat and cholesterol intake (Barton, Eldridge, Thompson, Affenito, Striegel-Moore, Franko, & Crockett, 2005).

The amount of time between the consumption of the last meal of the day and breakfast the next morning is generally longer compared to the time interval between other meals such as breakfast and lunch or lunch and dinner.¹¹ The long-time interval results in metabolic changes that interfere with cognitive function and school performance.¹⁰ Among American children, 9-11 years old, those who took breakfast had higher mental arithmetic task performance, showed better creative thinking and improvement on performance of tasks involving processing of complex visual display.^{11,12,13} Other studies report improvements in tasks regarding memory function with the intake of breakfast.

Student's breakfast is very important because their brain needs energy to work for effective learning (Dorio & Amparado, 2020). A confirmation of this statement has also been provided by Woolf (2007) who argues that the consumption of breakfast at the right time has a positive impact on the cognitive domain of an individual. It must therefore be stressed that eating of breakfast by students must be taken serious. Therefore, the school authorities must make every frantic effort to monitor the consumption of breakfast by the students at all levels of education in Ghana.

Flowing from this, it is important to note that the government of Ghana and for that matter the ministry of education has provide residential facilities for all colleges of education in a form of boarding with dining halls, which provide students with meals (breakfast, lunch and supper) (Doku, Koivusilta, Raisamo, & Rimpelä, 2013).

In spite of this available catering facility of which its cost is borne by the government, students often refuse to consume breakfast meals prepared for them (Mberia, Imungi & Mbugua, 2017). Besides, a study by Kleinman, Hall & Green (2002) found that, students who were at nutritional risk had significantly poorer attendance, punctuality, and grades at school, more behavior problems, and were less likely to eat breakfast at school than children who were not at nutritional risk. Also, McSweeney, Bradley, Adamson & Spence (2019) opine that, the reason for poor attitude has to do with perceived notion of poor quality of breakfast meals in boarding school leading to the development of poor attitudes among students towards the consumption of these meals. The development of students' attitude towards breakfast meals is current trend in research with respect to attitude and other behavioural related issues, due to some concerns raised on poor quality of these meals being served in the dining halls of boarding schools (Acham, Kikafunda, Malde, Oldewage-Theron, & Egal, 2012). Base on this, then it is possible that breakfast prepared for the schools is serve at the right

time, has low quality in food nutrients. Another problem must also be attributed to the hygienic nature of the pantry, kitchen, the dining hall and the quantity of the food that is served on the dining hall table.

It is significant to note that Ochola & Masibo (2014) in their study on dietary intake of students in developing countries revealed that the breakfast (light meals) consumed by students in the developing countries are insufficient in terms of nutrients. The problem is further worsened by the growing perception and developing attitude among students in the residential school system, especially in boarding schools where malnutrition breakfast meals are served in the various school dining halls in developing economies such as Ghana (Intiful, & Lartey, 2014). If this is the case, then one may say that students would actually reject the breakfast which is served for them even though the breakfast is meant to enhance the nutritional health of the students as well as saturating their minds for effective and efficient learning.

Surprisingly, this observation has been confirmed by Galal & Hulett (2003) who have argued that issues of nutritional health is considered to be an indispensable element for the quality of student-teacher's education, because skipping of breakfast affects young students' ability to concentrate and attend lectures. Skipping breakfast is a common practice by people around the world. The 1999-2006 National Health and Nutrition Survey of the United States reported that between 20% and 30% of children and adolescents skipped breakfast frequently.² In India, the proportion of children skipping breakfast regularly was even higher (over 50%).

Accordingly, Intiful, & Lartey, (2014) have expressed that breakfast is considered the most important meal of the day, yet many people skip breakfast. Studies indicate that school student who regularly skip breakfast are not likely to concentrate in class, thus affecting school performance. Breakfast skippers in most cases are unable to

compensate for the nutrients lost during the rest of the day (Nicklas, Bao, Webber, & Berenson, 1993). In view of this, the goal of the current study was to assess the student-teacher's attitude towards breakfast meals in Al-farug College of Education in Wenchi Municipality of Bono Region of Ghana.

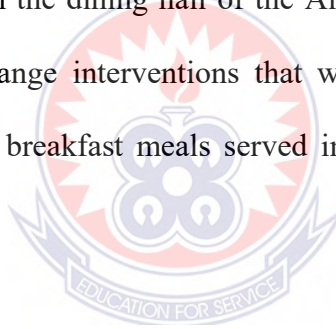
1.1 Statement of the Problem

A lot of studies have been done on the attitude of students towards breakfast in school (Galal & Hulett 2003; Doku, Koivusilta, Raisamo, & Rimpelä, 2013; Intiful, & Lartey, 2014). Many of these studies have argued that students who consume breakfast are likely to meet their energy and overall nutrient requirement compared to those who do not have breakfast (Nicklas, Bao, Webber, & Berenson, 1993). These studies have also proven that breakfast consumption also contributes to intellectual or cognitive development of students. It must be stressed that breakfast meal has numerous health benefits including prevention of overweight, obesity and reduction in risk of cardiovascular diseases.

Despite the fact that the literature has found the consumption of breakfast to be very significant to the cognitive development of students, (Chitra, & Reddy, 2007) there have been extensive research regarding the negative impact of skipping breakfast by students over the past few decades. Skipping breakfast is commonly practice by people globally. The 1999-2006 National Health and Nutrition Survey of the United States reported that between 20% and 30% of children and adolescents skipped breakfast frequently. In view if this, Nicklas (2007) argues that hunger in the morning can affect performance at school mainly due to lack of concentration. This is very surprising because student-teacehrs' attitude towards breakfast in Al-faruq College of Education is a problem that needs to be assessed.

The concerns which rise up include: breakfast which is prepared for the students is not served at the right time, or the breakfast has low quality in food nutrients, due to unhygienic nature of the pantry, the kitchen, the dining hall, the quantity of the food that is served on the dining hall table. These are the concerns which have created the gap in this study which need to be studied.

It has been observed that student-teachers patronize the lunch and supper meals then the breakfast meal. Therefore this study sought to assess student-teachers' developed attitudes toward breakfast meals served in the dining hall of the College of Education; to examine the causes of low-patronage of breakfast meals by student-teachers at the Al-Faruq College of Education; to assess the nutritional content of breakfast meals served student-teachers in the dining hall of the Al-Faruq College of Education; and to propose behaviour change interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education.



1.2 Main Objectives of the Study

The main objective of this study was to examine student-teachers' attitude towards breakfast served in the dining hall of the Al-Faruq College of Education.

1.2.1 Specific Objectives

1. To conduct an assessment on student-teachers' attitude towards breakfast meals served in the dining hall of the College of Education.
2. To identify the causes of low-patronage of breakfast meals by student-teachers at the Al-Faruq College of Education.

3. To examine the nutritional content of breakfast meals and propose behaviour change interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education.

1.3 Research Questions

1. What are the developed attitudes of student-teachers toward breakfast meals served in the dining hall of the Al-Faruq College of Education?
2. What are the causes of low-patronage of breakfast meals by student-teachers at the Al-Faruq College of Education?
3. What is the nutritional content of breakfast meals and behaviour change intervention that will help student-teachers develop positive attitude towards breakfast meals served in the dining hall of the Al-Faruq College of Education?

1.4 Research Hypothesis

1. H_01 = Nutritional deficiency and wrong time of serving food prevent students from eating breakfast
2. H_02 = Low nutritional level and low quality of meal may prevent students from eating breakfast at the dining hall
3. H_03 = The unhygienic nature of the pantry, the kitchen, the dining hall may prevent students from eating breakfast at the dining hall
4. H_04 = The quantity of the food that is served on the dining hall table may prevent students from eating the breakfast at the dining hall.

1.5 Delimitation

The scope of this study is to assess Students' attitudes toward breakfast meals served in the dining hall of Al-Faruq College of Education, Wenchi, in the Bono region of Ghana. The study will be conducted at all the academic levels of the college because in order to appreciate an in-depth knowledge of the study.

1.6 Limitation

The study was done at the Al-Faruq College of Education within the Wenchi Municipal Assembly in the Bono region of Ghana.

The research is limited to the study of description of student-teachers' attitude toward breakfast meals, factors that cause low-patronage of breakfast meals served in the dining hall of the Al-Faruq College of Education and possible interventions that can help shape attitudes of students positively.

The main constraints were resources (financial) and time, since the researcher had to visit the study area frequently. Another limitation of this study was the Covid-19 pandemic which made it difficult to obtain data from all the student-teachers.

1.7 Importance of the Study

The overall significance of this study is to assist students –teacher change their already developed attitudes toward breakfast meals served at the dining hall, and to also provide information, approaches to the school management for the planning and development of food consumption interventions aimed at promoting general positive attitudes of student-teachers toward school's breakfast meals. To be able to do this, the study will make students of Colleges of Education especially those in the Al-Faruq College of Education become conscious of their negative attitudes that they

have developed toward school's breakfast meals, the need to patronize breakfast meals in order to ensure the promotion of discipline and effective academic work in schools and help provide information approaches for developing robust food consumption interventions for promoting student-teachers' consumption of breakfast in the college. This will be done by provide an opportunity for development of interventions to minimize future upsurge and formation of negative attitudes of students towards the consumption of schools breakfast meals.

1.8 Definition of Terms

Attitude: It is an informed tendency to react in a constantly positive or negative way in respect of a certain condition, idea or a thing.

Dining hall meals: They are various foods served at periodic times in a school's approved eating place.

Food: Anything solid or liquid when taken it into the body, nutrients are being absorbed and used by the body for its function.

Food consumption: It is the art of eating or taking-in meals.

Intervention: Measures that are put in place to address or correct an anomaly.

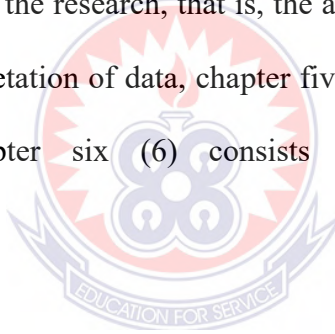
Nutrition: The study of nutrients and how they are been utilized in the body for energy.

Meal: It is food eaten at a certain time or period of the day.

Student-teachers: They are category of students who are primary under-training to teach at the basic school level in the near future.

1.9 Organization

The research was organized in five (5) chapters. The chapter one (1) consists of introduction; statement of problem; objectives of the study, delimitation, limitation and organization of chapters. Chapter two (2) deals with related extant literature that highlighted the conceptual framework, Breakfast Meals, the concept of attitudes, Nutrition, Establishment and Operationalization of the College of Education concept, the Boarding School System (globally and in Ghana), the concept of Food and Diet, Students' Attitude towards Food/Meals, Interventions for Addressing Attitudinal Challenges Towards Breakfast Meals (Interventions for Behavioural Change) . Chapter three (3) comprise the methodology to be employed. Chapter four (4) deals with the key outcomes of the research, that is, the assembling of data, presentation of data, analysis and interpretation of data, chapter five (5) will comprise the discussion of findings, and chapter six (6) consists of summary; conclusion and recommendations.



1.10 Summary

Chapter one entailed an overview of the concepts of art exhibitions and art education. This chapter also discussed the statement of the problem, the objectives and the significance of the study. Additionally, the terminologies used throughout this study were defined.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Overview

This chapter discussed existing opinions expressed by various authors on the subject matter. The review centers on the concepts, among others. Literatures derived from websites, books, reports, and other relevant sources duly acknowledged in the review below

2.1 Concept of Food/Diet Consumption

Food consumption can be general explained as the total amount of food available for consumption (Klaver, Burema, van Staveren & Knuijman, 1982). Cited by (Leroy et al., 2015) The food that we eat forms part of who we are because it is an individual characteristic, part of our distinctiveness and can exemplify several feelings. It is public knowledge that because people's decisions to opt for certain types of food decisions are genuinely grounded in ethical, political, religious and personal backgrounds (Kónya & Gergely, 2016). Food consumption trends have the possibility of helping to predict the demand for certain agricultural products, and through such information, excellent opportunities could be created to influence consumption patterns through the development and formation of their attitudes and perceptions on such foods (Piazza, 2019).

Food has become an essential part of our existence because over centuries, wealth of information has been acquired regarding the use of food to promote growth of youngsters and young adults, since food composition brings to bear the nutritional contribution of foods. Food is any edible substance that nourishes the body (Mudambi, 2007). Food is also described as any edible substance that can be

consumed (eaten or drunk) for the purposes of meeting energy needs, edification, regulation and protection of a living body (ibid). It is the natural resource through which bodies of living things are made. It is important to observe that the consumption of the appropriate intake in respect of the right kinds and quantities of food can promote well-balanced nutrition and good health typically evident in people's appearance, efficiency and emotional well-being (FAO, 2018).

Good and balanced meal affects students' ability to perform at school in many ways, and this is because when students experience low food quality are likely to develop negative attitudes and form wrong perceptions about such meals. On the other hand, when students consume quality and well-balanced meals are likely to assist them develop positive attitudes and form right perceptions about them (Maroto, Snelling & Linck, 2014).

2.2 Concept of Attitude

The term *attitude* originated from two Latin words *apto* which means suitable and *acto*, which signifies *postures of the body*, with their original root in the word *apto*, meaning *act* (Ofori, 2017). The word *attitude* was initially introduced in Psychology by Herbert Spencer and Alexander Bain in the 1860s. Attitude is explained as a normal tendency expressed by evaluating a definite object with some level of likeness or dislikeness (Eagly & Chaiken, 1993). It is explained by Hogg and Vaughan (2005) as an equitably persistent demonstration of beliefs, affections, and behavioural tendencies toward socially important things, situations or symbols.

Schiffman (2000) defines attitude as an exhibition of inner feelings that indicate whether an individual is favourably or unfavourably inclined to a product, an idea or an activity, and that attitude cannot be directly detected, since psychographics like

perception, motivation and learning impact them. They can be derived from what people say and do or how they behave.

Crano and Prislin (2006) posit that attitudes are assessed outcomes for espousing cognitive or affective responses, and they are appraised reactions to some objects equally reliant on an individual's beliefs or opinions (Gardner, 1985). It is also a never-ending connection of influential, affective, intuitive (Krech & Crutchfield, 1948, p.152), and logical actions that relate to some parts of a person's world, although Bem (1970, p.14) concisely defines Attitudes as "likes and dislikes".

Chaiken (1998) explicitly presents a succinct design and review of attitude as either good or bad; like or dislike; harmful or useful; pleasant or unpleasant propensities toward a course of action. This situation has the proclivity to make an individual portray respond positively or negatively toward a course of action.

According to Kreitner and Kinicki (2004), Nabi, Moyer-Gusé and Byrne (2007) as cited in Ofori (2017), attitude has three main ingredients, namely "Cognitive (beliefs, knowledge, and expectations), Affective (motivational and emotional) and Behaviour (performance or actions)." These ingredients of attitude are referred to as the "ABC of psychology", hence the terms "affect", "behaviour", and "cognition" (McLeod, 2018).

In this study, attitude could be described as a person's general disposition towards the consumption of breakfast served in a school's dining hall within a school's boarding system in terms of "likeness or dislikeness". Loyd & Gressard (1986) assert that positive attitudes towards a particular course of action such as students' like or dislike concerning the consumption of breakfast served during dining period in a school setting are positively or negatively linked to the consumers' level of experience on breakfast meal consumption. This claim by Loyd & Gressard (1986) are considered as

determinants of consumer's attitude towards breakfast served at the dining hall of a boarding school at the secondary or post-secondary school level since Ajzen & Fishbein (1975) have established the basis the attitude is not inherent, but it is learned and formed through experience.

It is therefore, appropriate for school administrators and managers to appreciate the various factors that occasion the development of students' attitudes in order to fill the gaps created by them. This can be done through orientation, intensive education and research. These interventions, among others have the potential of assisting students develop positive attitudes towards the meals served at the dining hall of the school boarding system.

2.2.1. Affective Component of Attitude

According to Harmon-Jones, Gable & Price (2013) as cited in Ofori (2017), the affective component of attitude involves one's assessment with respect to like or dislike, or an emotional reaction to a situation (often characterized by Psychological ideas).

2.2.2 Behavioural Component of Attitude

The behavioural element in attitude mostly called Conative comprises an individual's apparent conducts that is focused on the object or individual (Zimbardo & Ebbesen, 1969). It involves how an individual act toward an object. It is the only constituent of attitude that is noticeable since the other two components (affective and cognitive) can only be inferred.

2.2.3 Cognitive Component of Attitude

The Cognitive component involves an individual's appreciation about an attitude object. The cognitive element of attitude deals with what one thinks about people, situations or objects. This shows how a one reflects on a particular kind of conduct emanating from their attitude.

2.2.4 Attitude Component Measure

The three components of attitude (affective, behavioural, and cognitive) have some level of consistency with each other (Ofori, 2017), because if one component is influenced, it triggers an action in the rest of the components. Therefore, whenever there is an adjustment in one of the constituents, it will have a direct outcome on the other components. This understanding of the way the various components of attitude works presents an in-depth knowledge on how to measure them. The affective part is measured by responses of *like* and *dislike*, whereas the cognitive component is measured by self-assessment in respect of the depth of knowledge that a person has about a specific course of action. The behavioural component is measured by observing how a person demonstrates a particular conduct.

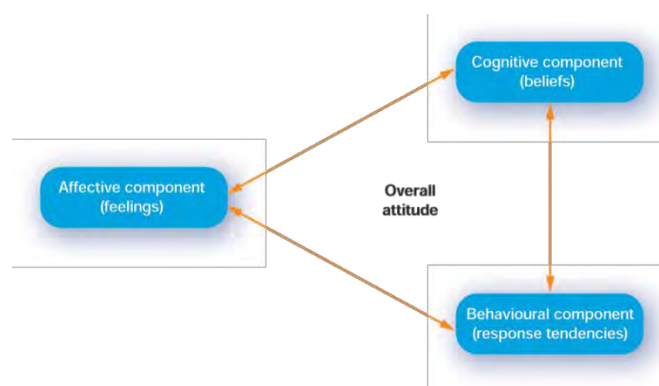


Figure 1: Measurement of Attitude Components

Source: Neal, Quester & Hawkins (2004)

Relative to the above account on concept of attitude and perception, students' attitudes and perceptions toward dining hall breakfast within the school boarding set-up entail their emotional state (affective); their beliefs and realistic knowledge (cognitive); and their behavioural intentions and actions (behavioural) toward dining hall breakfast. Therefore, the operational meaning of *attitudes and perceptions toward breakfast* in this study denotes students' level of knowledge, conviction, likeness and intent toward the patronage of breakfast served in a school's dining hall within the context of school boarding system.

2.2.5 Attitude Formation

According to Pickens (2005, p.44), attitude formation is the result of learning, influencing people, and our personal experiences with persons and situations because attitude has enormous effect on our choices and they regulate our behaviour. Schiffman (2000) explains Attitude formation as the method through which people develop feelings or views towards others, products, ideas and activities in their immediate setting. Attitude presents itself in various forms, and is influenced through experience. Attitudes can be measured, transformed or improved.

The orientation, education and the application of personal experience as tools for developing positive attitude is fundamentally dependent on a learner who has a great positive or negative appraisal of the situation (patronage of breakfast served in boarding school dining halls).

2.3 Breakfast Meals

Breakfast is the most important meal of the day, because it has a positive and direct effect on various educational and overall academic achievements (Kawafha, 2013). Hence, skipping of breakfast is considered as a barrier to optimal learning (ibid).

Giovannini, Agustonia, and Shamir (2008) noted in their workshop presentation at the Milano Pediatria meeting that students who eat breakfast show better problem-solving, short-term memory, attention, and unpredictable memory compare to those who did not eat breakfast, as well as better cognitive performance than breakfast skippers (Dye, Luck, & Blundell, 2000) even though the precise grounds for these effects are not fully articulated. With so much research still unknown regarding the specific causes of breakfast skipping by students and development of undesirable attitudes of students towards breakfast, researchers, educators and parents still grapple with why students most often refuse to patronize breakfast meals in school dining halls, but spend their meagre “pocket money” to buy meals from undisclosed sources and vendors.

In defining breakfast, McLaughlin, Bernstein, Crepinsek, Daft & Murphy (2002) stated that the universally acclaimed definition, which has been agreed upon by the United States Department of Agriculture (USDA) is one that clarifies breakfast to constitute “at least 10% of recommended dietary allowances (RDA) for energy and food from at least 2 major food groups.” Murphy (2007, p.19) elucidates the USDA definition by stating that outside the United States there are oftentimes “straight-jacket” explanation of breakfast that necessitate the meal to total 20-25% of recommended daily allowance (RDA) for energy and include food from three food groups or “food from 2-3 groups and nutrients totaling => 25% of RDA for total calories, protein, and certain vitamins and minerals.” Timlin and Pereira (2007, p.88) as cited in Giovannini *et al.*, 2010, p. 98) also define breakfast as “the first meal of the day, eaten before or at the start of daily activities within 2 hours of waking, typically no later than 10:00 a.m.” This is reinforced by the Preziosi, Galan, Deheeger, Yacoub, Drewnowski & Hercberg (1999, p.172) who defined breakfast as “the first eating

occasion involving a solid food or a beverage that occurred after waking”; however, the type of breakfast was categorized into clusters with respect to the percentage of the everyday energy allowance consumed. In fact, these observations seem to point to the need for higher-caloric and more-balanced morning meals.

Even though the importance of breakfast has been extensively posited in this study, concerns, however, have been expressed about the nutritional quality of breakfast meals in schools by researchers (Kleinman *et al.*, 2002). Another issue of concern regarding breakfast consumption has to do with the correlation between its consumption and increased nutrient intake by students. Though Kleinman *et al.* (2002) analyse the benefits of breakfast consumption, the scholars were reluctant to support the real essence of traditional school breakfast meals without first discussing literature on the quality of the meal being offered students in boarding schools.

What causes students to skip breakfast and what largely contribute to the development of students’ undesirable attitude toward breakfast consumption are questions that have not yet been answered to the satisfaction of the scholarly community. Therefore, this study attempts to address these research interrogations.

2.3.1 Food Groups

The United States Centers for Disease Control and Prevention (CDC) (2010) categorize food into either five or six major food groups depending on which traditional eating plan is being followed. The USDA’s system, known under the taglines MyPlate and MyPyramid, categorizes all recommended foods into five major food groups, while the Dietary Approaches to Stop Hypertension (DASH) developed by the National Institutes of Health (NIH) categorizes all recommended food into six

major food groups, adding a separate category for “Nuts, Seeds, and Legumes” that the USDA’s recommendation does not contain (CDC, 2010). The DASH (2006) divides foods into six categories such as

- a. Grains;
- b. Vegetables;
- c. Fruits;
- d. Fat-free or low-fat milk and milk products;
- e. Lean meats, poultry, and fish; and
- f. Nuts, seeds, and legumes.

According to the U.S. Department of Health and Human Services (2006), the two food groups that were not stated by the CDC as recommended food groups, contrary to what have been acknowledged by the DASH are (1) fats and oils and (2) sweets and added sugars. The five recommended food groups publicized by the USDA ChooseMyPlate.gov website under the My Plate tagline were (1) fruits, (2) vegetables, (3) grains, (4) protein foods, and (5) dairy (Choose a Food Group). On the website of the USDA, “Oils are NOT a food group, but they provide essential nutrients. Therefore, oils are included in USDA food patterns”.

2.3.2 Micro- and Macronutrients

According to Balch and Balch (2000) substances such as water, carbohydrates, protein, and fats, and the enzymes required to digest them, vitamins and minerals are regarded as nutrients, and are often referred to as micronutrients merely because they are required in relatively small amounts. Very clearly, macronutrients could be

explained as those that encompass all foods that are not considered vitamins and minerals, and the Food and Nutrition Board (2005) include carbohydrates, fibers, fats, fatty acids, cholesterol, proteins, and amino acids.

2.3.3 The Need for Breakfast

Breakfast as the first meal of the day is required to satisfy hunger, improve both the health and the cognitive abilities of students, provided it is composed of high-quality nutrients. For the purpose of this literature review, this study will analyse the nutritional content of breakfast menu items of the Al-Faruq College of Education and identify interventions for promoting its massive consumption.

2.3.4 Overall Health Benefits of Breakfast

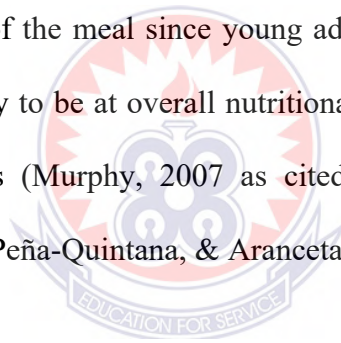
Traditionally, Murphy (2007) notes that breakfast foods constitute eggs, teas, cereals, fruits and other higher fat related food substances necessary for improved health and cognitive abilities of students. Nicklas, O'Neil and Myers (2004, p.35) emphasized that breakfast consumption has a "substantial effect on the overall nutrient adequacy" of students. Nicklas *et al.* (2004) were of the view, people who did not consume breakfast were at an increased nutritional risk because the nutrients that were not consumed during breakfast were not remarkably replaced at later meals (Murphy, 2007).

More importantly, Nicklas *et al.* (2004) as cited by Murphy (2007) report that particular nutrients that breakfast skippers do not consume were almost two-thirds deficient of the RDA, and these specific nutrients included vitamins A, B6, and D, calcium, magnesium, riboflavin, folacin, zinc, phosphorus, and iron. Indeed, breakfast

skippers were more probable to exhibit symptoms of anemia, which is an implication of iron-deficiency (Abalkhail & Shawky, 2002) and the likelihood for a decrease in calcium intake that seem to be linked to the intake of milk frequently consumed at breakfast meals, but not consumed by breakfast skippers (Ortega, Requejo, López-Sobaler, Andrés, Quintas, Navia, & Rivas, 1998).

Giovannini *et al.* (2010, p.98) observed that consistent consumption of breakfast is associated with improved diet quality and better food choices throughout the day” (p. 98), and so generally, the total nutrient adequacy of students seems to be positively impacted throughout the day by the choice to consume breakfast.

In advocating for students’ consumption of breakfast, it is essential to review the quality and caloric size of the meal since young adults who consume a “low-quality breakfast” are more likely to be at overall nutritional risk compared to those who eat higher quality breakfasts (Murphy, 2007 as cited in Serra-Majem, Ribas, Pérez-Rodrigo, García-Closas, Peña-Quintana, & Aranceta, 2002).



2.4 Attitude Change

Racioppo, Petty & Crites Jr. (1994) discuss attitudinal as a transformation of a person’s general evaluative view of a stimulus, and to transform a person’s attitude, it is important to trigger the functions of the cognitive and emotional components and by challenging his or her behaviour through the provision of some new information.

The main aim of this study was to influence the gradual attitudinal change of learners towards the consumption of breakfast meals served in the dining hall of the Al-Faruq College of Education at Wenchi in Ghana. Attitudinal change happens when the appropriate interventions are deployed to provide solution to the challenges faced by

students. Another way of promoting attitudinal is through intensive orientation and education; and institution of punitive measures to instil sense of discipline. Hall & Hord (1987) claim that beliefs and concerns about “*personality, assignment and impact*” have been identified as ways of shaping attitudes toward reform.

2.5 Attitude Measurement

Earlier studies revealed that it is very difficult to quantify attitude. This assertion was supported by Mitra (1998) who claimed that measurements of attitudes present some procedural challenges. It is imperative to note that Thurstone & Chave (1929) have likewise indicated the case of information distortion and there make the following proposals:

- a. Attitude scale is to measure the attitude expressed with the view that the individual involved may be deliberately secreting his or her precise attitude or that the public influence of the situations made him or her essentially believe what he or she exhibits.
- b. Limit the situations that hinder our participants from divulging the truth, rather than altering our interpretation subsequently.

However, Thurstone (1928a, p.530) established that “attitudes can be measured” as supported by Fishbein (1967). Likert (1932) observed Likert scale self-reports can be used measure attitudes; therefore, it was used to measure attitudes toward students’ consumption of breakfast meals served in the dining hall of the Al-Faruq College of Education. Mitra (1998) reinforces the claim that Likert scale is an appropriate tool for assessing user’s attitudes toward an issue. The questionnaire form used for this study was the TPB Questionnaire model, which measured the demography of the

participants, and students' general attitude toward breakfast meals served in the dining hall of the Al-Faruq College of Education and those sold along roadside around the study area.

2.6 Conceptual Framework of the Study

A focus on assisting student-teachers to develop positive attitudes towards the consumption of breakfast served in the dining hall in boarding schools will encourage learners to massively patronize dining hall breakfast. In respect of this, learners' attitudes toward breakfast meals served at the dining of the Al-Faruq College of Education, Wenchi in the Bono region of Ghana were explored as factors for ensuring the consumption of breakfast meals within the school environment consistent with the *Theory of Planned Behaviour* – TPB (Ajzen, 1991). The use of several behavioural change models such as TRA to assess people's attitudes and perceptions, and further address issues that surround them have proven ineffective because they there is an absence of some components. According to Godin and Kok (1996), the development of the Theory of Reasoned Action was deficient and had more shortfalls within the field of the Social Science discipline. One of the huge gaps of the TRA had to do with people's inclination that they have minimal influence and can barely regulate their attitudes and behaviours.

The new theory (TPB), proposed by Ajzen (1991), adapts the TRA by adding perceived behavioural control (PBC) to allow the model to more accurately explain variations in behaviour that is not entirely voluntary. The fusion of this constituent triggered the creation of an advanced model called the *Theory of Planned Behaviour*. The key motivation of the theory was to predict and understand the motivational impacts on conduct, which is not below a person's choice, to establish method and areas to obtain systems for changing behaviour, and to bring clarity to any human

activities. This theory helps to comprehend the way and manner in behaviour change in people happen. It is also a model that predicts intention and behaviour.

The *Theory Planned Behaviour* also offers very suitable theoretical and conceptual framework for dealing with complex human social behaviour. The TPB was developed from the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975; Ajzen, 1991) to explain, predict and change certain conducts. The two theories provide suitable models that are anchored on the roles of beliefs, attitudes, customs, observed behavioural control and intents as fundamental indicators of people's behaviour. The application of the theory of planned behaviour toward the consumption of meals served at the dining hall in a boarding school setting would help to ensure an experiential social burden and perceptions of control against the action to patronize such meals. The essential elements of the Theory of Planned Behaviour as designed by Fishbein & Ajzen (1980) are shown in figure 2.3.

CONCEPTUAL FRAMEWORK

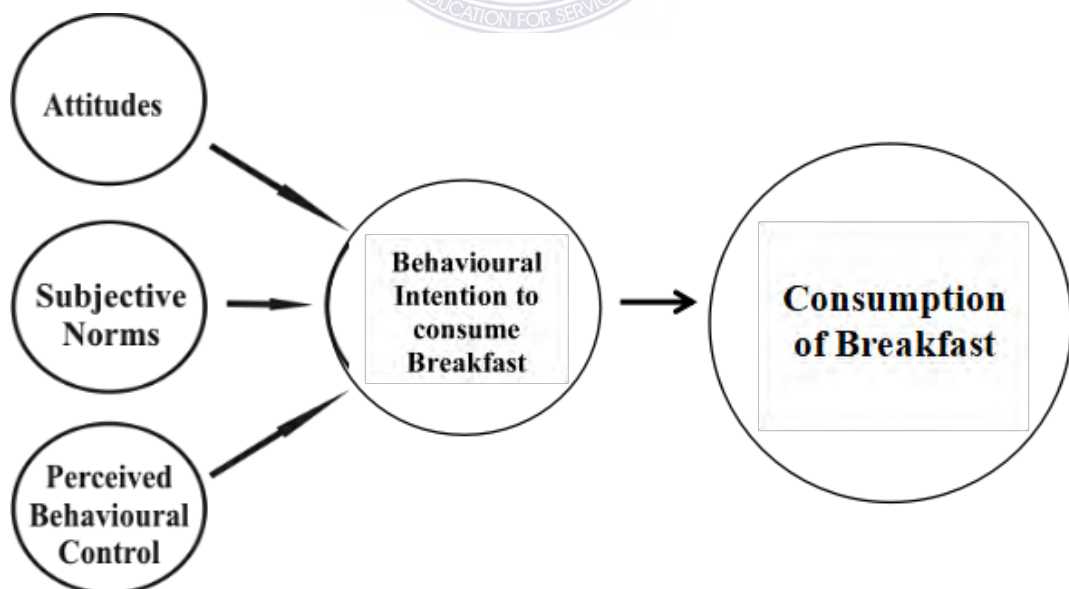


Figure 2 The Theory of Planned Behaviour in a Meal Consumption context

Source: Adapted and modified from Ajzen (1991) and Sanne & Wiese (2018)

The Theory of Planned Behaviour (TPB) proposes that behaviour can best be predicted from a person's intention, which is an indicator of how hard people are willing to try and how much effort people plan to exert toward performance of a behaviour (Ajzen, 1991). The theory also proposes that intention is a function of three variables: attitudes (positive or negative evaluation of performing the behaviour), subjective norms (perceived influences that significant others may exert on the execution of behaviour), and perceived behavioural control (the extent to which people believe they can control performance of social behaviour). For Ajzen (1991), the relative importance that each variable has on intentions can vary from individual to individual and from behaviour to behaviour. Any effort to change behavioural intentions should consider whether attitudes, subjective norms, and/ or perceived behavioural control carry the most weight in determining intentions and behaviour. The Theory of Planned Behaviour also deals with antecedents of attitudes, subjective norms, and perceived behavioural control using an expectancy value model (Hagger & Chatzisarantis, 2005). The theory proposes that attitudes arise from a combination (multiplicative function) of beliefs that behaviour will lead to certain consequences (behavioural beliefs) and the evaluation of these consequences (Ajzen, 1991). Subjective norms and perceived behavioural control are also proposed to have similar origins. Subjective norms are determined by a combination of normative expectations of specific referent groups (normative beliefs) and the motivation to comply with those groups (Ajzen, 1991). Perceived behavioural control is determined by beliefs about the presence of factors that may facilitate or impede performance of behaviour (control beliefs) and the perceived power of these facilitative and/or constraining factors (Ajzen, 1991). Overall, according to the Theory of Planned Behaviour,

physical activity behaviour and intentions can change through attitudes, subjective norms, or perceptions of control and/or a combination of these three variables.

2.6.1.1 *Attitude*

Attitude is a precursor of behavioural intent in the TPB (Ajzen, 1991). It is defined as the extent to which a person evaluates the behaviour as positive or negative (Ajzen, 1991; Mahmoud, 2013). Attitude is formed out of behavioural beliefs and subjective outcome evaluations. Behavioural beliefs are the beliefs that performing the behaviour will provide a certain outcome. Subjective outcome evaluations consider the value the individual assigns to the expected outcome (Ajzen, 1991). Attitude can be based on instrumental beliefs and experiential or affective beliefs of performing the behaviour (Ajzen & Driver, 1992). Instrumental beliefs about the behaviour consider the use or cost benefits of performing the behaviour. Experiential or affective beliefs about the behaviour consider the emotional benefits of performing the behaviour (Ajzen & Driver, 1991). That is to say, behaviours can be considered important because of their perceived usefulness or because of their perceived enjoyment value (Ho *et al.*, 2015). For the purposes of this study, attitude will be defined as the student-teachers' evaluation (positive or negative) towards the consumption of schools' breakfast meals.

Previous studies in various online contexts have found a strong relationship between attitude and intent. It has been proven that the better the attitude towards a certain behaviour is, the more likely the individual is to form a BI to perform the behaviour (Al-Debei *et al.*, 2013; Baker & White, 2010; Crespo & Del Bosque, 2008, p.2841; Heirman & Walrave, 2012; Leng *et al.*, 2011; Wang *et al.*, 2007). It can thus be assumed that a positive attitude towards the breakfast meals will lead to a greater

probability of the formation of a behavioural intent to patronize or consume meals served at the school's dining hall.

2.6.1.2 Subjective Norms

Subjective norms are another precursor of intent in the TPB (Ajzen, 1991), and they are explained as the social pressures a person perceives to perform a certain behaviour (Ajzen, 1991). These social pressures are frequently dependent on how often the person believes the behaviour happens among others, and the perception of the individual of the approval or disapproval of the performing of the behaviour by other people (Ajzen, 1991; Ho *et al.*, 2015). Subjective norms progress out of normative beliefs and the drive to comply with these expectations. According to Ajzen (1991) as cited in Sanne and Wiese (2018), normative beliefs are what the individual perceives significant referent individuals to expect in terms of performing the behaviour, and the motivation to comply with these expectations is based on the perceived social pressure and the individual's willingness to comply.

Subjective norms are influenced by both personal referents for example friends and family, and societal referents (such as mass media) (Ho *et al.*, 2015). Personal referents are generally considered to have a stronger influence on subjective norm than societal referents (Yanovitzky, Stewart & Lederman, 2006). For the purposes of this study, subjective norms will be defined as the social expectations (both on a personal and on a societal level) that the Facebook user perceives regarding engagement with advertising on Facebook.

Previous studies using the TPB have found a positive relationship between subjective norms and BI (Al-Debei *et al.*, 2013; Crespo & Del Bosque, 2008; Heirman & Walrave, 2012; Truong, 2009). It has been proven that the more the individual

perceives the subjective norms to encourage the performing of the behaviour, the more likely the individual is to form an intent to perform the behaviour (Al-Debei *et al.*, 2013; Crespo & Del Bosque, 2008; Heirman & Walrave, 2012; Potgieter & Naidoo, 2017; Truong, 2009). It can thus be assumed that positive subjective norms of consuming breakfast meals advertising will lead to a greater probability of the formation of an intent to consume meals served at the school's dining hall.

2.6.1.3 Perceived Behavioural Control (PBC)

Perceived behavioural control is the final precursor of behavioural intent in the TPB (Ajzen, 1991). It is described as a person's perceived ability to perform the behaviour, which varies across situations based on influences that either assist with or obstruct the performing of the behaviour (Ajzen 1991; 2006). Perceived behavioural control is formed based on control beliefs and the perceived power of the influencing factors. Control beliefs are the concepts the individual has about the extent of control they have over choosing to perform the behaviour, with regard to resources, abilities and barriers (Ajzen, 1991). The perceived power of the influencing factor is the individual's perception of how strongly the factor can influence the performing of the behaviour, by either assisting it or obstructing it (Ajzen, 1991). For the purposes of this study, PBC is defined as the student-teachers' perceived ability to consume meals served at the school's dining hall. Perceived behavioural control not only influences behavioural intent but also directly influences behaviour, as the intention to perform the behaviour may be strong, but a factor outside of the individual's control may obstruct the actual performing of the behaviour (Ajzen, 1991).

Previous studies have proven that the greater the PBC towards a certain behaviour is, the more likely the individual is to form a BI to perform the behaviour (Al-Debei *et*

al., 2013; Baker & White, 2010; Heirman & Walrave, 2012; Leng *et al.*, 2011; Truong, 2009; Wang *et al.*, 2007). It can thus be assumed that better PBC of consuming breakfast meals will lead to a greater probability of the formation of a behavioural intention to consume.

2.6.1.4 Behavioural Intention and Behaviour

Behavioural intention is regarded as a direct precursor to behaviour and is used in the TPB to predict actual behaviour (Ajzen, 1991; Ho *et al.*, 2015), and it is described as the over-all effort a person is prepared to exert in order to perform the behaviour in question (Ajzen 1991). In the context of this study, the behaviour to be measured is student-teachers' consumption of meals served in the school's dining hall. Previous studies support the relationship between BI and behaviour in consumer behaviour context (Al-Debei *et al.*, 2013; Baker & White, 2010; Leng *et al.*, 2011). The BI to be measured will thus be student-teachers' intention to consume meals served at the Al-Faruq College of Education's dining hall as shown figure 2.3.

2.6.2 Characteristics of Theory of Planned Behaviour

The Theory of Planned Behaviour has been one of the most influential and widely cited models of intentional behaviour in social psychology (Armitage & Connor, 2001). The TPB model was adopted in this study as the main conceptual framework to specifically help in the development of positive attitude towards the good nutritional level of meals served at the study area which will in turn enhance the consumption of dining meals and further promote food sustainability in boarding schools, especially that of Al-Faruq College of Education. This model assesses

students' strong beliefs regarding a developed perception of meals served in boarding schools. This study therefore applies the use of TPB as theoretical perspectives to study the underlying attitudinal and perceptual traits of students to determine whether their developed attitudes and formed perceptions of refusing to patronize breakfast meals could be changed or altered.

2.7 Students' Attitude towards Meals/Breakfast consumption

Many studies have identified dietary intake and food choice of adolescents, but only a few have discussed adolescents' attitude toward breakfast or meals they eat (Wesslén, Abrahamsson & Fjellström, 1999). The present study focuses on college of education student-teachers' attitude towards breakfast meals served in the dining hall in the study area and describe interventions for addressing behaviour patterns that are related to breakfast consumption in everyday life.

2.7.1 Development of Students' Attitude towards Breakfast/Meal

Students' satisfaction with meals play an important part in the overall quality of life of a student on a campus, therefore school caterers need to be knowledgeable on the provision of nutritious diets, tasty meals, food preparation dynamics and students' meals experience (Kim, Ng & Kim, 2009, p.10). It is important to note that college kitchen staff are responsible for the providing meals to student-teachers in the various colleges of education in Ghana. The provision of meals by these staff in colleges of education in Ghana is meant to improve the emotional and mental well-being of students (Williams, 2009, p.52). This is supported by Locher, Yoels, Maurer & Van Ells (2005, p.5) who discovered in a study conducted at a south-eastern university in

the United States of America that students consume meals for comfort whenever they feel depressed or face difficult situations.

Mostly, certain challenges including constant consumption of one type of meal, menu fatigue, and unsatisfied taste of meals among others faced by students when consuming campus breakfast meals deter them from its constant patronage, and as Hong *et al.* (2003) points out, students are moderately content with school meals when there are variations in the dining hall menu. This is reinforced by Hirschm, Kramer & Meiselman (2005, p.39) that people who are fed a monotonous-diet-rare-food develop negative attitude than those who are fed with a more varied diet, as observed by Cousins *et al.* (2002, p.64) that too often repetition of menu makes students become bored with meals offered. Similarly, Yoon & Kim (2012) observed that students develop negative attitude toward food because they believe the foods served them are not tasty and, in most cases, they are served large portions sizes of foods they do not like, coupled with improper scheduling of lunch time were found to lower students' consumption of school meals in schools' dining hall.

More importantly, as a result of changing demographic profile of tertiary students since 1996 (Van der Watt, 2008, p.192), there have been increased negative media reports and advertisement regarding food services offered off-campus (Ellis, 2009; Kruger, 2011).

Wesslén *et al.* (1999) is of contrary opinion that food attitudes are generally influenced by the family, particularly the mother, but not by friends. The scholars state that boys regarded meals simply as a way to satisfy their hunger, whereas girls discovered situations that included eating to be important also as social forums and

worried about too much food ruining their body appearance, as keeping a slim, healthy look was coupled to success.

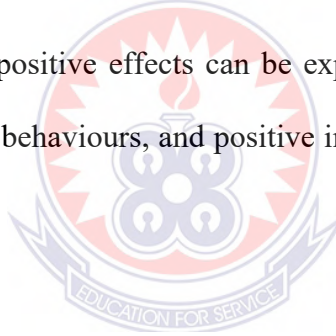
Hall (2014) however, is of the opinion that wealthy students with no limitations on their budget often develop the attitude of low consumption of breakfast meals in colleges, whereas those with budget constraints are compelled to consume meals in the campus dining hall (Coertze, 2012). These factors have led to the development of food or meal attitude of students' towards campus breakfast meals.

Hall (2014, p.18) and Williams (2009, p.51) recommend the provision of familiar and comfort meals in boarding schools in order to prevent the development of students' negative attitude toward meals, and to improve the morale and general well-being of students.

2.8 Nutrition Education among Students

Breakfast meals served in a school dining hall provide students with nutritionally balanced meals to maintain their nutrition and health, to optimize physical and cognitive growth, and to develop good eating habits that may be carried through to adulthood (Lee, 2019). Hayes, Contento & Weekly (2018) contend that nutrition education has been identified to successfully change students' negative attitude toward meals, and not only that, it has also been posited by Hong & Chang (2003) that students consume breakfast meals in school more when they are satisfied and have developed positive attitudes about those meals. The students who consume more show significantly higher satisfaction scores in class. Kim, Ko, Kim & Kim (2000) reported that the more students acquaint themselves with education on nutrition, the more breakfast meals they consume.

A study by Oti (2020) discovered that, nutritional literacy relates to the collection of inter-related context, which is dependent upon knowledge, skills and behaviours. This researcher regards nutrition education as the shared strength that equips an individual with the knowledge to identify, plan and decide what to eat over a period of time with the behaviour change that could be at individual, household or at community level through a developed attitude and formed perception. Vidgen (2014) is of the firm belief that nutrition education has a role in nutritional status, and on people's perception and attitude toward food consumption in all facets of life. Understandably, effective and adequate knowledge on nutrition education is dependent on deliberate practice of food consumption, healthy dietary activities and lifestyles of an individual (Oti, 2020). When several factors that influence students' consumption of meals are identified and managed, positive effects can be expected such as lower cost, higher satisfaction, good dietary behaviours, and positive image and trust in school breakfast meals (ibid).



2.9 Nutrition Assessment

The assessment of nutrient intake of meals is one of the most extensively used secondary methods of establishing nutritional status in food. Assessing the true nutritional component of food is extremely difficult. The main limitations of the common methods of assessing nutritional component of meals focus on the accuracy of the data obtained by such methods in estimating an individual's usual food intake (Dodd, Guenther, Freedman, Subar, Kipnis, Midthune & Krebs-Smith, 2006). This study engaged the services of a nutritionist to conduct an assessment of the various breakfast meal items on the Alfaruq College of Education's dining hall menu in order to ascertain their nutritional compositions. The challenges associated with nutritional

assessment on a food menu encompass methods of assessment, availability of appropriate food composition tables and nutritional reference standards that have been used to estimate adequacy of nutrient intake (Ochola *et al.*, 2014). An argument on nutritional diversity, meal patterns, adequacy of nutrient intake and their implications for health, growth and development of young adult is included. Emphasis is placed on the nutritional values found in all the breakfast meal items on the college's menu and their effects on the consumer to reflect the current nutrition transition being experienced in various boarding schools in the developing countries such as Ghana. A study and assessment of nutritional compositions of breakfast meals consumed provides a suitable data that are available for the formulation of food consumption-based models and frameworks to serve as guidelines the development of positive attitudes of breakfast meals served in boarding schools and colleges in Ghana.

2.10 Addressing Attitudinal Challenges toward Breakfast Meals (Behavioural Change)

Attitude issues toward food have received quite a bit of attention in research interventions regarding meal consumption. Interventions for addressing attitude problems toward breakfast meals relate to the conditions surrounding accessibility and availability of quality breakfast based on where, when and how it is purchased or prepared, and consumed (Larson, Perry, Story & Neumark-Sztainer, 2006).

It must be pointed out that various interventions proposed for addressing attitudinal and perceptual issues of students regarding their massive patronage and consumption of breakfast meals served in the dining halls of schools and colleges have not been effective in promoting such changes. Quite interestingly, researchers within the behaviour change arena in Ghana have not done many studies on the subject either

probably due to the complex nature of attitude assessment or do not have interest in conducting such studies.

In considering where, when and how food is purchased or prepared, and consumed, it is important to analyse people's behavioural beliefs and perceived subjective norms based on their normative beliefs. The assessment of the aforementioned constructs within the Theory of Planned Behaviour (TPB) model will provide information approaches for dealing with complex attitude issues and problems.

According to Chatzisarantis & Hagger (2005), the TPB proposes persuasive communication as one of the effective strategies for dealing with attitude and perceptions challenges and for driving behaviour change. Persuasive communication can be explained as a strategy for promoting behaviour change (Chatzisarantis & Hagger, 2005), which is preferred by proponents of the Theory of Planned Behaviour (Ajzen, 2003). Bright, Manfredo, Fishbein and Bath (1993) elucidate that for a persuasive communication to successfully alter (change) intentions and physical activity behaviour, it must provide belief-targeted messages that target behavioural, normative, and/or control beliefs. The development of belief-targeted messages includes the collection of statements that eventually affect the beliefs that serve as the basis for attitudes, subjective norms, and perceived behavioural control held by the group targeted to receive the communication (Ajzen & Fishbein, 1980).

However, according to the Theory of Planned Behaviour, only the 5 to 8 of the wide range of modal salient beliefs that people hold are considered to influence attitudes, subjective norms, and perceived behavioural control (Ajzen & Fishbein, 1980). Therefore, the over-all foundation for changing attitudes, subjective norms, and/or perceived behavioural control is to change the modal salient behavioural, normative, and control beliefs underlying these constructs.

Ajzen and Fishbein (1980) likewise suggested that the actual structure of belief-targeted messages should comprise two parts. Firstly, it should comprise a series of argumentations in support of the target behaviour such as physical activity. Secondly, the message should aim at enhancing the credibility of the arguments and/or consist of accurate evidence designed to support the arguments (Ajzen & Fishbein, 1980). The rationale behind enhancing credibility of arguments is that credibility leads to acceptance of the message, and acceptance of the message in turns leads to belief change (Ajzen & Fishbein, 1980). Pickens (2005) suggested that theory-based interventions such as the TPB are suitable models for developing successful behaviour change interventions.

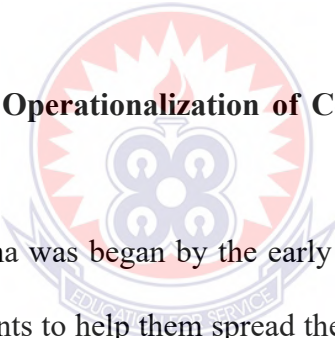
This study applies the tenets of the Theory of Planned Behaviour to develop and evaluate the effectiveness of a behaviour change intervention.

2.11 Brief History of Ghana

According to Arowolo (2010), Ghana was previously known as the Gold Coast, and adopted its current name from an old empire in West Africa during its independence in 1957. The country was the first Sub-Sahara African state to have gained independence from Britain (Buah, 1980). Ghana lies along the Gulf of Guinea and shares borders with three French speaking countries such as Togo to the East, Ivory Coast to the West and Burkina Faso to the North. The official language of Ghana is English and has a variety of local languages (Ansah, 2014). According to Foster (1967) as cited in Edusei (2004), the formal system of education in Ghana introduced by the Europeans in the late fifteenth century (1471) involved the acquisition of theoretical knowledge, disregarding acquisition of artisanal education through apprenticeship.

The introduction of Western education in Ghana was through the castle schools established by European traders for their own children and the children of prominent people in society (McWilliam & Kwamena-Poh, 1975). With the stepping up of British rule, coupled with the training of catechists and teachers by different missionary groups, the expansion of education provided opportunities for many young people to attend school. Although education is desirable because of its benefit to society, the intention of European colonial education appears to be about bringing Western civilisation to the colonised (Steiner-Khamsi, 2004). Post-independent governments and policy makers advocated for such system of education since it is believed to remain relevant till present-day.

2.12 Establishment and Operationalization of College of Education Concept in Ghana



Formal education in Ghana was began by the early missionaries who wanted literate Ghanaians as local assistants to help them spread the gospel, and because of this, they built educational institutions to train teachers who could play the roles of professionally-trained teachers and catechists. The developments lead to establishment of the first teacher training college (Accra Training College) in Ghana somewhere around 1909. This gesture began the establishment of post-secondary teacher training institutions in Ghana, which provided numerous opportunities to individuals to be trained as professional teachers.

The post-independence era of teacher education has undergone several reforms and structural changes. Some of these major reforms and policy changes have been the shift towards free and compulsory basic education to enable access to education by all young people of school-going age with the sole aim of getting rid of elitism to achieve

Millennium Development Goals; the shake-up of the curriculum to meet the changing needs of modern society; the structural reforms of the educational system to minimize the number of years spent in pre-university education; and the provision and expansion of educational facilities to promote accessibility to all students regardless of sex or social status and to enhance the quality of teaching and learning for effective outcomes (Education in Ghana, 2011; MOE, 2007). Needless to say, the quest and demand for the development of the basic education level required the need to train teachers professionally.

Teacher Education is rolled out on different paths in Ghana and these paths form the vehicle for ensuring teacher education preparation and development. Before the setting-up of the Anamuah-Mensah committee in 2006, there were 38 teacher training colleges in Ghana, two universities involved in teacher education programs, and various in-service training measures (Anamuah-Mensah & Benneh, 2006). Different modes were adopted for rolling out teacher training programs, and these included the traditional residential mode, distance education, sandwich (similar to summer sessions where teachers receive training during vacation periods), and school attachment modes.

For the purpose of this study, the traditional residential model of teacher training will be our main focus. According to the Institute of Education (2013), initial teacher education preparation (Diploma in Basic Education [DBE]) is offered in 38 public and 3 private colleges of education (CoE) in Ghana. Although the colleges run the DBE program, examinations are conducted by the University of Cape Coast's Institute of Education. Apart from the CoE, the University of Cape Coast and the University of Education, Winneba, through their various departments under the Faculty of

Education, offer bachelor's degree programs to teachers to teach at both basic schools (Grades K-9) and high schools (Grades 10-12) (Asare & Nti, 2014).

In spite of the numerous benefits that have been derived from the creation of the college of education concept, there is scant research available on the promotion of behaviour change within the context of developing interventional models for helping develop outlooks and form right perceptions on college breakfast meals, this is because over the years students' complains which bother on challenges associated with breakfast meals have not be appropriately addressed, and have therefore, led to some level of abandonment of such meals. This study delves into the factors that culminates into the development of such undesirable behaviour traits of students and provide insights into how these behaviours could be mitigated.

2.13 Summary

The chapter two (2) of the study reviewed the related literature on the Concepts of food and Diet, Breakfast Meals, Students' Attitude towards Food/Meals consumption, Nutrition Education among students, Nutrition Assessment, Brief History of Ghana, Establishment and operationalization of College of Education Concept, Conceptual Framework of the study, Concept of Attitude, Attitude Change, Attitude Measurement, and Interventions for Addressing Attitudinal Challenges Towards Breakfast Meals.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter is the methodology of the study. It discusses the various means the researcher used in collecting the data in conducting the research. It includes the research design, the study area, the population of the study, the sample technique, the sample size, the research instrument, data processing and analysis, validity and reliability of instruments, and ethical consideration.

3.1 Research Design

A mixed-method approach was used for the study. According to Johnson and Onwuegbuzie (2004), mixed methods is "the class of research where the researcher mixed techniques, methods, approaches, ideas or language of quantitative and qualitative research in a single report" (Terrell 2012, 255). The importance of using the mixed method is "to broaden understanding by incorporating both qualitative and quantitative research, or to use one approach to better understand, explain, or build on the results from other approaches" (Creswell, 2009, p.205). Using a mixed-method, researchers may find data that would somehow or another have been overlooked or gone unnoticed (Viadero, 2005). It is premised on the idea that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (Creswell & Clark, 2006).

Because the goal of sequential strategies is to use one phase of the research to inform the next, sequential strategies take a long time to conduct. At the point when time is of concern, researchers frequently utilize the concurrent triangulation strategy wherein

the qualitative and quantitative eliminates are conveyed simultaneously. In a perfect world, the equivalent weight is doled out to each stage, with the consequences of both translated at the same time to decide whether the data gathered during each approach is steady. When announcing the result of this study, the researchers by and large present the factual outcomes beginning with references of the qualitative stage used to grow the measurable data. Even though this is the most widely acceptable way to deal with mixed methods research, it tends to be hard for researchers to design two similarly solid research stages, and incorporating the outcomes can be difficult, to some extent particularly when data inconsistencies emerge. In such cases, the collection of extra data can help explain the outcomes.

The above depictions describe the periods of enormous scale investigations of mixed methods, yet the researcher frequently utilizes mixed methods that additionally direct the researcher very own research. Once more, the objective is to expand on one kind quality of each way to deal with progressively comprehension of what might be conceivable with one approach. A typical report design includes incorporating the results of the analysis of an enormous scale data set with the consequences of top to bottom interviews. A mixed-method study that genuinely coordinates everybody's qualities will be done at each stage, from research questions to data collection and analysis.

3.2 The study area

Al- Faruq College of Education is located at Lowcost near Droboso a suburb of Wenchi, 2km away from the town center. The home town of Dr Kofi Abrefa Busia, average of 1hr drive from Sunyani. Brong Ahafo region- Ghana. The College was established in 1991 by Saudi NGO- Iqra Foundation for Education and Development-based in Kumasi. As English and Arabic Basic School. The total land size is about

20 acres of land which was acquired from the Wenchi Traditional Council. The School was closed down in 2006 and the facilities were reconverted into a Private College of Education in 2011. The Government of Ghana absorbed the College as a Public College of Education in June 2015 and admits students from all religious affiliations. Subsequently, first Admission was done in 2016. The College has accreditation from the National Accreditation Board (NAB) Institutional and Two (2) Programme Accreditations Diploma in Early Childhood Education Diploma in Basic Education Request for Diploma in Arabic Education.

3.3 Population for the Study

Sekaran and Bougie (2013) define the target population as a well-characterized accumulation of people or objects with comparative attributes. A population is a gathering of individuals or objects very much characterized for measurable purposes (Sekaran & Bougie, 2013). The population is the whole group of people being studied. The population of the study comprises 359 students, 3 tutors and 1 nutritionist in Al-faruq College of Education in Wenchi Municipality, in the Bono East Region of Ghana.

3.4 Sampling technique

The researcher used a total population sampling as a purposive sampling technique. The respondents were selected using a purposive sampling technique. Total population sampling, according to Saunders, Lewis & Thornhill (2012) is a type of purposive sampling technique where you choose to examine the entire population (i.e., the total population) that have a particular set of characteristics. In sampling, units are the things that make up the population. Units can be people, cases (e.g.,

organisations, institutions, countries, etc.), pieces of data, and so forth. When using total population sampling, it is most likely that these units will be people.

In the case of total population sampling, the units of interest tend to have some characteristics that are not very common. It is important to note that only some characteristics are not very common, but since it is these characteristics that we are interested in, they influence our choice of total population sampling. In this study, we assume breakfast is compulsory so every student is supposed to take part. This is the reason why the total population was used as sample size. We also used 3 tutors who teach food and nutrition to make sure that the food which is served is quality and quantity. Also, a nutritionist was used to assist in the nutritional content of the food which is served as breakfast.

3.5 Sample Size

The sample size is the number of people who the researcher examines. In the study, the researcher examined 363, so the sample size is 363 respondents.

3.6 Research Instrumentation

This study involves the use of both questionnaires and interviews. Questionnaires involve the use of written down items to which the respondent individually respond in writing. The items are in the form of statements or questions. Its merits include the possibility of using distant respondents. Questions are well planned and can always be modified and adapted (Enon, 1998). Questionnaires may appear in two forms such as closed ended questionnaire and open form questionnaire. Closed ended questionnaire is the type of questionnaire in which questions call for short answers. Here you mark a yes and no, write a short response, or check an item, or use a list of suggested

responses (Cohen and Manion, 1994). The open form questionnaire calls for a free response in the respondents' own words. A well designed questionnaire with open and close ended questions was formulated and distributed to respondents to be filled and after a time, the questionnaires were collected for recording and analysis as a way of obtaining primary data. The study applied both closed and open ended questions. This method helped the researcher to get detailed information from different sources as the respondents had a wider chance of giving detailed explanations.

An interview is generally a qualitative research technique which involves asking open-ended questions to converse with respondents and collect elicited data about a subject. Interviews are conducted with a sample from a population and the key characteristic they exhibit is their conversational tone. The researcher conducted an open ended interview after the questionnaires have been collected.

3.7 Data collection strategy

The questionnaires were given to all the 363 students on the same day. The students were asked to sit in the assembly hall of Al-faruq College of Education. The researcher provided the students with the necessary information and guidelines. After that, the students were given about three hours to answer the questions. This allowed the researcher to retrieve all the questionnaire from the 359 students within three hours. With regards to the tutors and the nutritionist, the questions were given to them at their offices. The researcher subsequently interviewed the quality assurance person and the home economics and the dining hall tutors.

3.8 Data Processing and Analysis

The researcher adopted the description type of data analysis which involved description of data collected. However quantitative method of the data analysis such

as tables, percentages and frequencies were used. This was to make the study free from personal values and biases. The tables used for analyzing the data have numbering of the tables. Frequency refers to the number of responds who responded to specific questions and percentage refers to the percentage of respondents who responded to particular questions over the total number of respondents.

Data from the questionnaires was analysed using IBM Statistical Package for Social Sciences (SPSS) version 25. The quantitative data collected was organised, numbered coded and then entered using SPSS. The researcher used a combination of descriptive and inferential statistics to analyse data. Frequency tables and percentages were used to analyse the demographic characteristics of the respondents. Frequency tables and percentages were used to analyse the data extracted from the kinds of incentives teachers enjoy. Correlation and regression analysis were used to examine the significant relationship between the incentive (financial and non-financial) on the commitment levels and the performance of the teachers respectively.

The questionnaire generated quantitative data which was analyzed. Quantitative means quantity, which means something that can be counted. Quantitative is used for statistical analysis because it produces lend numbers. It ask questions like how, when, where and how often.

3.9 Validity and Reliability of Instruments

Validation of instruments enables the researcher to find out whether the instrument generated the expected data or information and whether is understandable, relevant and meaningful. In this study, there were a try-out stage ambiguous items identified and detected was modified before being administered to the required sample. Try-out

was also allowed the researcher to establish or estimate the reliability and the validity of the research instrument chosen.

3.10 Ethical Consideration

Ethics as used in research refers to the appropriateness of a researcher's behavior in relation to the rights of those who become the subject of his or her work, or are affected by it (Saunders et al, 2004 and Adam & Kamuzora, 2008). It aims at ensuring the researcher does not encourage or cause any physical or emotional pain, harm, discomfort. Embarrassment or loss of privacy to his or her respondents.

Hence, the following ethical issues were taken into consideration to ensure that no violation of basic ethical principles during data collection. Firstly, research clearance was sought from the Al-faruq College of Education. Secondly, the head of departments and tutors were informed of the purpose and value of the study and their willingness to participate was established. Thirdly, participants were encouraged to get involved fully and answer all the questionnaire and interview questions freely. Fourthly, the participants were informed that their information would kept confidentially that their identity will not be revealed in any way in the resulting report and only the researcher had to keep such information. The code of conduct for research ethics warns researchers not to harm anybody physically, psychologically or otherwise.

CHAPTER FOUR

RESULTS AND DISCUSSION OF FINDINGS

4.0 Overview

This chapter presents a detailed analysis to explore student-teachers' attitude towards breakfast meals served in the dining hall of Al-Faruq College of Education. The chapter discusses the causes of low patronage of breakfast meals by student-teachers. It also assesses the nutritional content of breakfast meals in the college and establishes the type of intervention that will help students develop positive attitude on breakfast meals served at the dining hall. Generally, it presents the details of the findings from questionnaire and interviews conducted on the 3 tutors and 1 nutritionist administered to student-teacher participants in the study area.

4.1 Demographic Characteristic of Respondents

This section deals with the demographic information which the researcher collected from the participants in this study. Table 4.1 below demographically demonstrates the details of the respondents.

Table 4. 1: Demographic Characteristic of Student Respondents

Gender	Respondents	Percentage
Male	130	36.2
Female	229	63.8
Age		
Below 19	14	3.9
20-25 years	231	64.3
26-30 years	114	31.8
Above 30 years	0	0
Education		
	%	
First year student-teachers	90	25.1
Second year student-teachers	102	28.4
Third year student-teachers	167	46.5

Table 4.1 shows the distribution of respondents according to gender and age of the sampled students. The study's respondents constituted both male and female students. Out of 359 students who took part in the study, majority were females while few were males. This shows that female students outnumbered male students pursuing various programmes in Al-Faruq college of Education. The distribution therefore indicates gender inequality in favour of female students in the college. The implication is that, among the students in Al-Faruq College of Education, large number of females are pursuing programmes to become teachers. This implied that more females tend to enrol in Colleges of Education than their male counterparts who prefer universities. The above result is supported by the fact that in 2012/13, the percentage of women in public universities were 33.6%, in polytechnics 33.1%, and in colleges of education 43.3% (Ministry of Gender, Children and Social Protection, 2014, p. 10).

With regards to the age distribution of respondents, majority of the students 231 respondents aged between 20-25years as against 14 respondents aged below 19years. This implies that student-teachers offering various programmes in the Al-Faruq College of education are young adults and have autonomy over their choices of food as well as when and how they want to eat it. At this stage if they are not mentored well about breakfast as an important meal of the day and as such develop positive attitude towards its consumption, it may lead to many health complications such as obesity, ulcer, diabetic etc. Nicklas, O’Neil and Myers (2004, p.35) emphasized that breakfast consumption has a “substantial effect on the overall nutrient adequacy” of students. Nicklas *et al.* (2004) were of the view, people who did not consume breakfast were at an increased nutritional risk because the nutrients that were not consumed during breakfast were not remarkably replaced at later meals (Murphy, 2007).

Religious Affiliation of Student-teacher Respondents

The study sought to determine the religious affiliation of the study participants as reported in table 4.2.

Table 4. 2 Religious Affiliation of Student-teacher Respondents

Marital Status	Frequency	Percentage
Christian	203	56.5
Islam	141	39.3
Traditional Religion	15	4.2
Other	0	0
Total	359	100

Data shown in Table 4.2 showed that majority (56.5%) of the sampled respondents were Christians, while 39.3% and 4.2% belonged to Islam and Traditional religion respectively.

4.1 Objective One: Assessment on student-teachers' developed attitude towards breakfast meals served in the dining hall of the College of Education.

4.1.1 Interview Responses by Tutors (Qualitative Data)

The objective one of the study sought to conduct an assessment on student-teachers' developed attitude (general disposition) towards breakfast meals served in the dining hall of the Al-Faruq College of Education. The section also sought to quantify the number of student-teachers who patronize breakfast meals served at the College's Dining Hall and again establish whether student-teachers normally exempt themselves from breakfast meals consumption to provide some tutors' responses to the question: "What are the developed attitudes of student-teachers toward breakfast meals served in the dining hall of the Al-Faruq College of Education?"

Responses from interview guide administered on Tutor "A" - (Dining Hall

Master of the College)

- i. Response gathered from a respondent through interview indicates that, the general disposition of student-teachers towards breakfast meals in the study area is *not bad*, because *there are few of them who do not patronize breakfast meals since they have alternative*.
- ii. On whether the number of student-teachers who go to the dining for breakfast can be quantified or not, the participant stated that he cannot quantify since the numbers that come for breakfast meals fluctuate daily.

Responses from interview guide administered on Tutor “B” (Hall Mistress)

From the interview, participant indicated that the attitudes of student-teachers toward breakfast served in the dining hall of the Al-Faruq College of Education vary because *sometimes they are quick for the meals, sometimes they feel reluctant to go.*

- i. On whether the number of student-teachers who go to the dining for breakfast can be quantified or not, the participant indicated through the interview that, though the number of student-teachers who attend dining hall for breakfast cannot be quantified *majority of them really patronize breakfast on campus since it is the first meal served during the day and is also served hot, at times some tutors even patronizes due to its quality nature.*

Responses from interview guide administered on Tutor “C” (Quality Assurance Officer)

1. When the interview guide was administered on the respondent, the participant was of the view that the general disposition or attitude of student-teachers toward breakfast meals
 - i. *Varies according to certain periods within the semester.* That is to say that *some do not feel like patronizing breakfast meals because they have just arrived from home and as a result have enough money to go for alternative.* However, when it is getting closer to the end of the semester or mid-way through the semester they do go for breakfast in the dining hall because it is believed that they pocket money is draining or their provisions are getting finished.

- ii. Some complain that specific meals served in the dining hall are not good for them so they skip such meals. They actually patronize some breakfast meals when they like them.
2. The participant indicated that during the peak season (periods such as mid-way through the semester or the latter part of the semester when students massively go for breakfast in the dining hall) the percentage of patronage is around 70% to 75%. Generally, a percentage 50% or 55% of student-teachers patronize breakfast meals served in the College's dining hall.

Nutritionist

- i. According to the participant, *student-teachers see the breakfast to be boring, some may not see value for money in the meal that is being served. Because it is the first meal of the day some may want to eat a meal that will generally make them feel good to begin the day's work than to have the same taste all the time. Packaging (use of worn out utensils etc.) of the meal and the friendly nature of the person serving the food makes it attractive for one to eat.*

Assessment on student-teachers attitude towards breakfast meals served in the dining hall of the Al-Faruq College of Education.

The findings of this study indicate that the general disposition (attitude) of student-teachers towards breakfast per the views of lecturer respondents are that of *not bad*, (because *there are few of them who do not patronize breakfast meals since they have alternative*), variation (*sometimes they are quick for the meals, sometimes they feel reluctant to go; according to certain periods within the semester* and some actually

patronize some breakfast meals when they like them) and some of the *student-teachers see the breakfast to be boring, while others may not see the value for money in the meal that is being served*. This finding is closely related to a developed attitude because it is formed out of behavioural beliefs and subjective outcome evaluations of the student-teachers general disposition about breakfast meals (Ajzen, 1991).

More importantly, another disposition of student-teachers toward breakfast meals is that of goodness, since *as the first meal of the day, some may want to eat a meal that will generally make them feel good to begin the day's work than to have the same taste all the time*. This phenomenon is supported by Taylor (2017) that people, especially the young adult who consume breakfast meals regularly are more likely to have the ability to learn normally in school and perform academically than those who do not.

Regarding student-teachers own attitude (general disposition) toward breakfast meals, the study revealed that there is moderate satisfaction (49.6% positive), with a considerable number of them remaining indifferent (24.5%) on whether their attitude is that of negative or positive as also posited by Ajzen (1991) and Mahmoud (2013). Close to 29.5% of the expressed gross dissatisfaction (negative) towards such meals. The moderate satisfaction being student-teachers' own disposition or attitude toward breakfast meals is reflected on kind of influence emanating from the *Subjective Norm* because they influence the student-teacher personally through other social factors (such as friends) and societal referents (such as mass media) (Ho *et al.*, 2015).

The study also revealed that a good number of student-teachers (52.9%) feel that breakfast meals served in the College dining hall were of good quality, with only 22% of them claiming that the meals are of poor quality. Others (25.1%) could not express any opinion on whether they are good or poor quality. The situation could be very

worrying since almost half the student body could not vouch for the good quality of the meals.

Other findings of the study revealed that some (52.1%) of the sampled respondents had developed attitudes of rating breakfast meals served in their College dining hall as lacking the right amount of nutrients with 19.5% thinking otherwise. This implies that most of the student-teachers at the Al-Faruq College of Education have a developed disposition that breakfast meals are not generally nutritious. Therefore, they may resort to other meals to satisfy their hunger. For example, 52% of them have the feel that the time breakfast is served is highly inconvenient for them. Also, 20.6% think the breakfast is served on time. This implies that breakfast meals are not served late in the morning by which time they might have already found an alternative meals of “quenching” their hunger. Again, 35.9% expressed their low consumption of breakfast meals because of their religious inclination or orientation while a number of them (39.5%) expressed their disagreement for the breakfast which is served at the dining hall. This implies that some students do not go for breakfast because it goes against their religious beliefs and therefore, **they prefer eating their religiously accepted meals.** Close to 37.3% of the respondents expressed a developed attitude toward breakfast meals to their ethnic or cultural orientation with 37.5% expressing contrary opinion. This implies that certain ethnic groups or cultures forbid their folks for consuming certain food items. It is their belief that low compliance to these belief systems may result in undesirable consequences on their indigenes who flout them. This actually makes them refrain from specific meals served in the College’s dining hall. Again, 42.2% expressed their developed attitudes towards breakfast meals to their social status in the school while 37.6% **sharply expressed contrary opinion.** This implies that some of the student-teachers feel shy to patronize breakfast meals as

a result of their status as either prefects, females or males in their school. In fact, respondent “C” reported that some student-teachers especially the females most often attempt “sneaking” their meals to their dormitories, which is highly forbidden in the College. This is because they feel shy to eat together with their male counterparts in the dining hall, and when they are unsuccessful in conveying the meals to their dormitories, they subsequently stay away, which is a clear reflection of the issue of *Subjective Norm* at play. This is because the *Subjective Norm* construct of the *TPB* (Ajzen, 1991) becomes a clear manifestation of some female student-teachers being socially bullied by sheer shyness from their male counterparts in the dining hall. Another motivation of their shyness is triggered by the Theory of Planned Behaviour in a Meal Consumption context (Adapted and modified from Ajzen, 1991; Sanne & Wiese, 2018) where the *Attitude* construct helps in the formation of behavioural beliefs out of social pressure (subjective norm) leading to the development of behavioural intentions to exhibit the actual behaviour (*shyness*) relative to the Perceived behavioural control in the *TPB* (Ajzen, 1991) because it actually describes as one’s perceived ability to perform the behaviour, which varies across situations based on influences that either assist with or impede the performance of the behaviour (Ajzen 1991; 2006).

Some respondents (59.3%) also expressed their developed attitudes toward breakfast meals to their family status/background with 20.6% expressing a contrary view, implying that family background does not encourage them to go for breakfast meals served in the College’s dining hall since they compare the quality of breakfast they eat at home to what are being served in the College; 52.9% expressed their developed attitudes towards breakfast meals to its poor quality with 19% of them expressing opposing views. This implied that student-teachers generally stay away from

breakfast served in the College's dining hall due to their perceived low quality. Some complain of lack of milk, eggs and other food accompaniments in the College's breakfast and so decide not to consume them. A good number of them (42%) also expressed their developed attitude toward breakfast meals to its poor taste with 32.8% expressing a contrary opinion. This implied that some student-teachers regard the College's breakfast as tasteless and so have decided not to eat them.

Another fallout of this study was that some student-teachers (43.1%) expressed their developed attitude towards low consumption of breakfast to having the means of buying alternative meals with a considerable number of them (25.9%) expressing opposing view. The implication of this is that most students do not patronize breakfast meals during the early days of the semester mainly because they have just returned to school from home and that they have enough money to spend on other meals instead of the breakfast served in the College's dining hall. Interestingly, one lecturer respondent recounts the many times students refuse to patronize dining hall meals just because they had returned to not long ago. Majority (53.5%) of the student-teacher respondents expressed their developed attitude on low consumption of breakfast to the fact that it is light, and that they always prefer heavy meals in the morning. The implication is that a good number of them prefer heavy meals to be served as breakfast in the College's dining hall. Most (52.6%) of the respondents also revealed that their developed attitude on low consumption of breakfast meals could be attributed to the issue of mostly serving only one-way diets, implying that there should be variations in the type of meals served during breakfast periods in the College. Again, some (54.3%) respondents expressed their developed attitude toward breakfast to the feeling of allergy to most of the meals served in the College dining hall with 22.6% expressing contrary opinion, and this presupposes that people do not

patronize breakfast in the College because of health heir health reasons. Also, 55.7% expressed their developed attitude on low consumption of breakfast meals to too much sugar/salt/pepper in it and as a result require to be recognized within the category of student-teachers on special diets.

Another remarkable observation made by some (56%) student-teachers regarding their developed attitude on low consumption of breakfast meals is the unkempt nature of the dining hall facility. Some lecturer participants also recount the untidy nature of the facility culminating in a section of student-teachers staying away from the facility for fear food contamination and subsequently falling sick.

On whether the number of dining hall absentees during breakfast period can be quantified, respondents generally observed that it will be very difficult to quantify, but somehow believed that a third and sometimes close half of the student body most of the time stay away from the dining hall during breakfast period. One lecturer participant indicated that that during the peak season such as periods mid-way through the semester or the latter part of the semester, student-teachers massively patronize breakfast in the dining hall, with the percentage of patronage around 70% to 75%. She also indicated that generally, between 50% and 55% of student-teachers patronize breakfast meals served in the College's dining hall.

It can be deduced that the emanation of these influences from personal inclination can be attributed to one of the constructs (*Individual Approach*) of the Integrative Model of Absenteeism developed by Løkke Nielsen (2007), which clearly attribute the personal cause of a phenomenon to demographic traits of a person in terms of sex, age, and other personal characteristics.

4.6.1 Questionnaire Responses by Student-teachers (Quantitative Data)

This section presents the quantitative information based on the responses from the student-teachers.

Table 4. 3: Questionnaire Responses by Student-teachers (Quantitative Data)

No.	<i>Questionnaire Items Student-teachers' attitude towards breakfast</i>	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 3	Strongly Agree 5
1	I feel very sleepy when I take corn porridge as breakfast	42 (11.7%)	51 (14.2%)	88 (24.5%)	118 (32.9%)	60 (16.7%)
2	I feel very uncomfortable after taking capital letters (oblayo) for breakfast	31 (8.6%)	48 (13.4%)	90 (25.1%)	94 (26.2%)	96 (26.7%)
3	Millet porridge (Hausa koko) and bread makes me dull and weak	102 (28.4%)	100 (27.9%)	87 (24.2%)	14 (3.9%)	56 (15.6%)
4	Egg, cocoa beverage and bread for breakfast is the best	96 (26.7%)	98 (27.3%)	91 (25.3%)	52 (14.5%)	22 (6.1%)
5	I prefer taking rice porridge (rice water) and bread for breakfast	88 (24.5%)	59 (16.4%)	68 (18.9%)	83 (23.1%)	61 (17%)
6	I do not consume breakfast served in the College dining hall because of my ethnic or cultural orientation.	78 (21.7%)	56 (15.8%)	77 (21.4%)	91 (25.3%)	57 (15.9%)
7	I do not consume breakfast served in the College dining hall because of my social status in the school.	82 (22.8%)	53 (14.8%)	76 (21.2%)	76 (21.2%)	72 (20.1%)

8	I do not consume breakfast served in the College dining hall because of my family status/background.	27 (7.5%)	47 (13.1%)	72 (20.1%)	103 (28.7%)	110 (30.6%)
9	I do not consume breakfast served in the College dining hall because of its poor quality.	20 (5.6%)	48 (13.4%)	80 (22.3%)	101 (28.1%)	110 (30.6%)
10	I do not consume breakfast served in the College dining hall because of its poor taste.	68 (18.9%)	50 (13.9%)	74 (20.6%)	90 (25.1%)	77 (21.4%)
11	I do not consume breakfast served in the College dining hall because I always have the means of buying alternative breakfast.	44 (12.3%)	49 (13.6%)	78 (21.7%)	111 (30.9%)	77 (21.4%)
12	I do not consume breakfast served in the College dining hall because it is light (I always prefer heavy meals in the morning).	35 (9.7%)	58 (16.2%)	74 (20.6%)	114 (31.8%)	78 (21.7%)
13	I do not consume breakfast meals served in the college dining hall because one-way diets are mostly served.	42 (11.7%)	51 (14.2%)	77 (21.4%)	96 (26.7%)	93 (25.9%)
14	I do not consume breakfast meals served in the college dining hall because I am allergic to most of the meals served.	37 (10.3%)	44 (12.3%)	83 (23.1%)	98 (27.3%)	97 (27%)
15	I do not consume	27	46	86	97	103

	breakfast meals served in the college dining hall because of too much sugar/salt/pepper in it.	(7.5%)	(12.8%)	(24%)	(27%)	(28.7%)
16	I do not consume breakfast meals served in the college dining hall because of the unkempt nature of the dining hall facility.	24 (6.7%)	54 (15%)	80 (22.3%)	99 (27.6%)	102 (28.4%)

Source: Field Work (2020)

In table 4.3, some of the sampled respondents had developed the attitude of strongly disagreeing (11.7%), disagreeing (14.2%), agreeing (32.9%) and strongly agreeing (16.7%) with the statement that they feel I feel very sleepy when I take corn porridge as breakfast while 24.5% remained undecided.

On the issue of student-teachers feeling very uncomfortable after taking capital letters (oblayo) for breakfast, 8.6% strongly disagreed, 13.4% disagreed, 26.2% agreed and 26.7% strongly agreed, whereas 25.1% remained undecided.

When respondents were asked if they feel dull and weak after consuming millet porridge (Hausa koko) and bread, 28.4% responded that they strongly disagree with that statement while 15.6% strongly agree and 3.9% agree with that statement. Respondents who said they disagree are 27.9% and undecided are 24.2%. Comparing the responses, it can be concluded that student-teachers at Al-Faruq College of Education prefer millet porridge (Hausa koko) and bread for breakfast to the other breakfast served them.

Majority of the respondents representing 26.7% strongly disagree and 27.3% disagree with the statement egg, cocoa beverage and bread for breakfast is the best. Meanwhile 14.5% and 6.1% agree and strongly agree respectively. Talking about respondents who are indecisive, 25.3% of the respondents said so. Therefore, this responses indicate that, egg, cocoa beverage and bread is not a preferred breakfast meal for student-Teachers at Al-Faruq College of education. The researcher further sampled some of the respondents to enquire about their responses given, they indicated that, they only take the egg and bread leaving the cocoa beverage because the saucepans that are used to serve spicy foods are also used to serve the cocoa beverage so it affect the taste of the beverage that why they don't take it.

Respondents when asked if they prefer taking rice porridge (rice water) and bread for breakfast, 24.5% being the majority strongly disagree and 17% being the minority said they agree. However, 16.4% disagreed, and 23.1% agreed to the statement while 18.9% remained undecided.

On the issue of student-teachers developed attitude of regarding low consumption of breakfast served in the College dining hall because of their ethnic or cultural orientation, the study participants strongly disagreed (21.7%), disagreed (15.8%), agreed (25.3%) and strongly agreed (15.9%), while 21.4% remained undecided.

On student-teachers developed attitude regarding low consumption of breakfast served in the College dining hall because of their social status in the school, 22.8% strongly disagreed, 14.8% disagreed, 21.2% agreed and 20.1% strongly agreed, while 21.2% remained undecided.

With respect to student-teachers developed attitude on low consumption of breakfast served in the College dining hall because of my family status/background, 7.5%

strongly disagreed, 13.1% disagreed 28.7% agreed and 30.6% strongly agreed, while 20.1% remained undecided.

In respect of student-teachers developed attitude regarding low consumption of breakfast served in the College dining hall because of its poor quality, 5.6% strongly disagreed, 13.4% disagreed, 28.1% agreed and 30.6% strongly agreed, while 22.3% remained undecided.

On student-teachers developed attitude regarding low consumption of breakfast served in the College dining hall because of its poor taste, 18.9% strongly disagreed, 13.9% disagreed, 25.1% agreed and 21.4% strongly agreed, while 20.6% remained undecided.

Also on student-teachers developed attitude regarding low consumption of breakfast served in the College dining hall because they always have the means of buying alternative such meals, 12.3% strongly disagreed, 13.6% disagreed, 30.9% agreed and 21.4% strongly agreed, while 21.7% remained undecided.

With respect to student-teachers developed attitude on low consumption of breakfast served in the College dining hall because it is light (and they always prefer heavy meals in the morning), 9.7% strongly disagreed, 16.2% disagreed, 31.8% agreed and 21.7% strongly agreed, while 20.6% remained undecided.

Regarding student-teachers developed attitude on low consumption of breakfast meals served in the college dining hall because one-way diets are mostly served, 11.7% were in strong disagreement, 14.2% were in disagreement, 26.7% were agreement and 25.9% were in strong agreement, with 21.4% remaining undecided.

On the issue of student-teachers developed attitude of regarding the feeling that they are allergic to most of the breakfast meals served in the College dining hall, 10.3%

strongly disagreed, 12.3% disagreed, 27.3% agreed and 27% strongly agreed, whereas 23.1% remained undecided.

With respect to student-teachers developed attitude on low consumption of breakfast meals served in the college dining hall due to too much sugar/salt/pepper in it, 7.5% strongly disagreed, 12.8% disagreed, 27% agreed and 28.7% strongly agreed, while 24% remained undecided.

Regarding student-teachers developed attitude on low consumption of breakfast meals served in the college dining hall because of the unkempt nature of the dining hall facility, 6.7% strongly disagreed, 15% disagreed, 27.6% agreed and 28.4% strongly agreed, while 22.3% remained undecided.

4. To conduct an assessment on student-teachers' attitudes towards breakfast meals served in the dining hall of the College of Education.
5. To examine the nutritional content of breakfast meals and propose behaviour change interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education.

Objective two: Identification of the causes of low-patronage of breakfast meals by student-teachers at the Al-Faruq College of Education.

Interview Responses by Tutors (Qualitative Data)

The objective two of the study sought to examine the causes of low patronage of breakfast meals by student-teachers at the Al-Faruq College of Education by providing the Tutor' responses to the question: "What are the causes of low patronage of breakfast meals by student-teachers at the Al-Faruq College of Education?"

Tutor “A” (Dining Hall Master of the College)

- i. When asked whether student-teachers exempt themselves from breakfast meals, the participant indicated that a good number of them do exempt themselves (Yes).
- ii. When asked why they exempt themselves, he reported the following:
 - a. *Time of taking the breakfast: when I say time of taking the breakfast I mean, the students are coming from different cultural background, as a result, there are some of them who take their breakfast as early as 6 O'clock, 7 O'clock, 8 O'clock am, anything after 8 O'clock, they seem it to be hunger, so if you serve the students with their breakfast at 9 O'clock, which is normally done at the Al-Faruq College of Education, there are some who had already taken their breakfast, so definitely, they will skip the breakfast served in the dining hall.*
 - b. *Another reason why student-teachers usually skip breakfast in the dining hall is the quantity of the breakfast. When I say quantity of the breakfast, there are some them when they are taking their breakfast, they take it in the quantity that satisfy them. So assuming a student-teacher going outside to buy food for breakfast, he or she can buy the quantity that satisfy him or her. But being in an academic environment where he or she may not get that quantity, sometimes it makes them skip the breakfast served in the dining hall.*
 - c. *Another reason why some students skip dining hall is the quality of the breakfast. If the quality of the breakfast is compromised, there is no way you can get the students patronize the breakfast in the dining hall. When I talk of quality, I want to compare it to the kind of breakfast they take in their various homes. Don't underrate the students. Some of them take breakfast that is rich in quality. But when they are in an academic environment where they are not served with the*

kind of quality meal that they want, I don't think they will patronize dining hall. They will be skipping it all the time every morning.

- d. *Preference of the student. When I say preference of the student, I mean, there are some of the students who prefer a particular meal or a particular breakfast to be served. For instance, if breakfast is served on Wednesday (porridge is served on Wednesday) and I don't like porridge, on that Wednesday definitely, I won't go to the dining hall. Preference of the students also matters.*
- e. *The health needs of the student-teachers. There are some of the students who are diabetic patients, there are some of the students who have hypertension, there are some students who have health-related problems. Those student-teachers don't take pepper, sugar, so they want their breakfast to be sugar-free. So now tell me, what breakfast served in the dining hall don't contain pepper, that doesn't have sugar in it? It is as a result of health problems that some of them skip breakfast.*

Tutor "B" (Hall Mistress)

- i. Regarding whether student-teachers exempt themselves from breakfast meals, the participant indicated in affirmation that a good number of them do exempt themselves.
- ii. When asked to explain the reasons why student-teachers skip breakfast meals served in the College's dining hall, the participant stated the following:
- a. Student-teachers skip breakfast meals *especially during examination week* because they are so much *engrossed in their studies and by the time they realize that it is time for breakfast they feel that time has elapsed.*
- b. Out of sickness, some student-teachers skip breakfast because they do not have the appetite to consume such meals.

- c. Peer influence also contribute to skipping of breakfast meals by student-teachers, especially when they realize that some of their friends do not got to the dining hall for breakfast.
- d. Some student-teachers who skip breakfast in the College's dining hall complain of shyness.
- e. Some student-teachers also skip breakfast when they are not in school as a result of either they are on exeat or have left the school unceremoniously.

Tutor "C" (Quality Assurance Officer)

- 1. When asked whether some student-teachers exempt themselves from breakfast meals in the College's dining hall, the participant answered "Yes".
- 2. When asked why student-teachers exempt themselves from breakfast meals in the College's dining hall, the participant stated the following:
 - i. *The quality of the food. When the quality of the food is low, they do not patronize breakfast served in the dining hall.*
 - ii. *The quantity of the food. Since they are not kids, when they realize that the quantity of the breakfast served is less and would not satisfy them, they will rather not go there to waste their time. They will instead go to the food vendors and buy food from them to get satisfied.*
 - iii. *Also, when the breakfast is served late, they patronize those of food vendors in order to attend class on time.*

- iv. *When their preferred meal is not served during breakfast, they will not show up in the dining hall during breakfast time. They will rather stay in their dormitories and eat from the provisions.*
- v. When they have enough provisions in their rooms, they will not waste their time and go there.
- vi. Moreover, they are not allowed to bring food to their dormitories, so they, especially the ladies who feel shy to eat outside will feed on their provisions and will not show up in the dining hall for breakfast.
- vii. Poor timing of breakfast meals served in the College's dining hall. Considering the time, they go to class and when they go for breakfast, it is not favourable to students and as a result find alternative means of satisfying their hunger, thereby skipping breakfast meals served in the College's dining hall.
- viii. The condition of the dining hall is very poor. Currently, the College does not have a dining hall. The College's mosque now doubles as the College's dining hall and auditorium. This multi-purpose use of the facility makes the place crowded and unkempt.

Nutritionist

- i. When asked why some student-teachers skip breakfast meals served in the College's dining hall, the nutritionist had these to say:

“Skipping breakfast usually is an individual choice (Shaw, 1998), some of the reasons include

- a. *“not being hungry in the morning or the lack of time”;*

- b. *Females may skip breakfast because they are dissatisfied with their body shape and want to lose weight;*
- c. *Thirdly, others may claim taking breakfast makes them dull or sleep in the mornings;*
- d. *Others may skip due to the presentation of the meal; and*
- e. *Lastly, getting to use to same taste or lack of variety.*

Responses from student-teachers on the causes of low patronage of breakfast meals served at the Al-Faruq College of Education dining hall.

The study revealed that the following could be attributed to the causes of low patronage of breakfast meals by student-teachers at the Al-Faruq College of Education:

- a. Late serving of breakfast;
- b. The low quantity of the breakfast meals served;
- c. The poor quality of the breakfast served;
- d. Disregard of student-teachers breakfast preference;
- e. Disregard of the health needs and considerations of the student-teachers;
- f. Certain conditions such as examinations periods, early part of semester when they have just arrived from home;
- g. Incidence of sickness;
- h. Peer group influence;
- i. Problem of shyness;
- j. Not present in school;

- k. Having enough provisions;
- l. Unkempt nature of the dining hall;
- m. Not being hungry in the morning;
- n. Maintenance of body shape and loss of weight (in the case of female student-teachers);
- o. Preference for heavy breakfast instead of light ones;
- p. Consumption of breakfast making student-teachers dull or sleep in the mornings;
- q. Tastelessness of meals;
- r. Monotonous nature of breakfast meals; and
- s. Too much of certain ingredients such as sugar/salt/pepper etc. in the meals.

From this finding of this study, it can be inferred that student-teachers' patronage of meals is largely a function of individual and environmental influences (Taylor, 2017). This is because, the individual influences are psychological as well as biological, while environmental influences involve social environments such as family, friends, peer networks and other factors such as the quality of breakfast meals served in the College's dining hall, condition of dining hall environment, the time meals are served and individual preferences, availability of provisions in the "chop box". Social system or macro-system, which is also an influence, includes mass media, marketing and advertising, social and cultural norms of the society (Talyor, 2017) are all multiple influential motivators that have occasioned (caused) the development of student-teachers' attitude toward breakfast consumption in the dining hall of the Al-Faruq College of Education.

Questionnaire Responses by Student-teachers (Quantitative Data)

Table 4. 4: Causes of Student-teachers' Low patronage of breakfast meals

No.	Questionnaire Item on the Causes of low patronage of breakfast meals by student-teachers in Al-Faruq College of Education.	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 3	Strongly Agree 5
1	Going for breakfast is just waste of time.	14 (3.9%)	56 (15.6%)	87 (24.2%)	102 (28.4%)	100 (27.9%)
2	The meals served at breakfast are not well cooked.	22 (6.1%)	52 (14.5%)	91 (25.3%)	98 (27.3%)	96 (26.7%)
3	The meals served at breakfast are tasty and very nutritious.	88 (24.5%)	83 (23.1%)	68 (18.9%)	59 (16.4%)	61 (17%)
4	Breakfast is not served at the specified time on the school timetable.	42 (11.7%)	51 (14.2%)	88 (24.5%)	118 (32.9%)	60 (16.7%)
5	Breakfast served are not prepared from the best of food stuff options (e.g. rice)	31 (8.6%)	48 (13.4%)	90 (25.1%)	94 (26.2%)	96 (26.7%)
6	Student-teachers do not consume breakfast at the college's dining hall because they naturally prefer heavy meals in the morning.	46 (12.8%)	46 (12.8%)	95 (26.5%)	92 (25.6%)	80 (22.3%)
7	Student-teachers do not consume breakfast at the college's dining hall because they do not like what is available to eat.	20 (5.6%)	50 (13.9%)	85 (23.7%)	105 (29.2%)	99 (27.6%)
8	Student-teachers do not consume breakfast at the college's dining hall because they are not hungry at that time of the morning.	60 (16.7%)	47 (13.1%)	77 (21.4%)	91 (25.3%)	84 (23.4%)
9	Student-teachers do not consume breakfast at the college's dining hall because they want to lose weight.	77 (21.4%)	38 (10.6%)	80 (22.3%)	88 (24.5%)	76 (21.2%)

In table 4.4, some of the sampled respondents attributed their low patronage of breakfast meals served in the College's dining to going for breakfast is just waste of time by expressing strongly disagreement (3.9%), disagreement (15.6%), agreement (28.2%) and strongly agreement (27.9%), while 24.2% remained undecided.

On the issue of student-teachers' low patronage of breakfast served in the College dining hall due to the meals served at breakfast are not well cooked, 6.1% strongly disagreed, 14.5% disagreed, 27.3% agreed and 26.7% strongly agreed, whereas 23.4% remained undecided.

In respect of whether meals served at breakfast are tasty and very nutritious, 24.5% of the respondents indicated that, they strongly disagreed, 23.1% disagreed while 17% strongly agreed and 16.4% agreed but 18.9% remained undecided.

With respect to respondents' low patronage of breakfast meals served in their College dining hall due the fact that breakfast is not served at the specified time on the school timetable, the sampled participants expressed strong disagreement (11.7%), disagreement (14.2%), agreement (32.9%) and strong agreement (32.9%), whereas 24.5% remained undecided.

Regarding student-teachers' low patronage of breakfast meals served in the College dining hall due to the fact that the breakfast served are not prepared from the best of food stuff options (e.g. rice), 26.2% and 26.7% indicated that they agreed and strongly agreed as against 13.4% and 8.6% indicating they disagree and strongly disagree. Meanwhile 25.1% remained undecided.

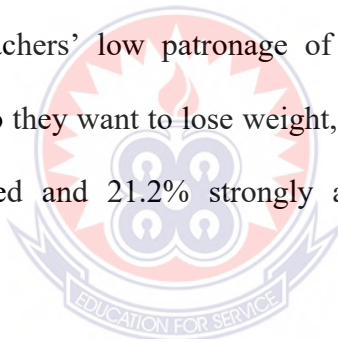
On the issue of student-teachers' low patronage of breakfast meals served in their College dining hall due to their natural preference for heavy meals in the morning, the

study participants strongly disagreed (12.8%), disagreed (12.8%), agreed (25.6%) and strongly agreed (22.3%), while 26.5% remained undecided.

On student-teachers' low patronage of breakfast meals served in their College dining hall due to the fact that they do not like what is available to eat, 5.6% strongly disagreed, 13.9% disagreed, 29.2% agreed and 27.6% strongly agreed, while 23.7% remained undecided.

With respect to student-teachers' low patronage of breakfast meals served in their College dining hall due to the fact that they are not hungry at that time of the morning, 16.7% strongly disagreed, 13.1% disagreed, 25.3% agreed and 23.4% strongly agreed, while 21.4% remained undecided.

In respect of student-teachers' low patronage of breakfast meals served in their College dining hall due to they want to lose weight, 21.4% strongly disagreed, 10.6% disagreed, 24.5% agreed and 21.2% strongly agreed, while 22.3% remained undecided.



Objective 3: Examining the nutritional content of breakfast meals and proposing behaviour change interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education.

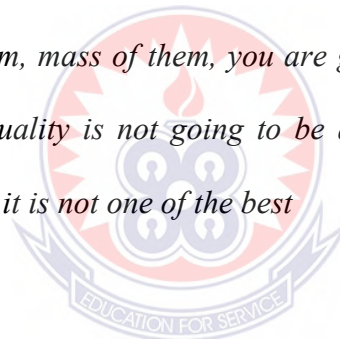
4.3. Interview Responses by Tutors (Qualitative Data)

The objective three of the study sought to assess the nutritional content of breakfast meals served student-teachers in the dining hall of the Al-Faruq College of Education by answering the question: "What is the nutritional content of breakfast meals served student-teachers in the dining hall of the Al-Faruq College of Education?" It also

explains from the standpoint of the lecturer how he or she would describe the general quality of the breakfast meals served in the College's dining hall.

Tutor "A" (Dining Hall Master of the College)

- i. The participant described the general quality of the breakfast meals served in the Colleges dining hall by stating that *the quality of meals served in all Colleges of Education may not be as quality as it is done in our various homes. Why am I saying that? If you have over five hundred students you are going to feed, definitely, the quality will be compromised. If you have few or some kind of fewer mouths to serve, the quality will be a bit rich. But where you have a chunk of students, a lot of them, mass of them, you are going to prepare food for them to eat, definitely, the quality is not going to be all that good. So I think that the quality though good, it is not one of the best*



Tutor "B" (Hall Mistress)

- a. The participant reported that the breakfast served in *the College's dining hall is of good quality and highly nutritious, since the kitchen staff are always monitored by the authority, the quality assurance unit of the College and some nutritionists to ensure that they are on their "toes" because the health of the students is very paramount.*

Tutor "C" (Quality Assurance Officer)

- i. The participant was of the view that the general of the breakfast meals served in the College's dining hall can be described as *50-50 or it is of less quality.* She

indicated that *it would not be more than 50% because some of the meals such as porridge cannot be served without milk, but it currently been served without it. According to her, one tin of milk cannot satisfy more than five to ten people and the school administration cannot also afford cost of milk and other ingredients that will meet all the needs of student-teachers.*

Nutritionist

- i. When asked of the the nutritional components of the breakfast meals served at the college's dining hall per the attached dining menu by reflecting on the various breakfast menu items on the school's dining menu and stating their nutritional values and components, the nutritionist had these to say:

Based on the 3 main food groups that is body building, protective and energy giving foods. These can further be grouped as carbohydrate, protein (plant and animal source), vitamins and minerals and some healthy fat sources. A healthy adult is encouraged to ensure that each meal of the day comprises of food sources from these groups to maintain optimum health. A breakfast can be claimed to be healthy if it contains the following four (4) components usually termed as the four (4) star diet:

- a. *Whole grains which are grains of any cereals that contain the endosperm (the germ's food supply and high in carbohydrates), germ (the seeds nutrient -rich embryo) and bran (nutritious outer layer). This can also be referred to as staple foods. Whole grains are typically high in iron, magnesium, manganese, phosphors selenium, vitamins B and dietary fiber Examples in the Ghanaian*

context include wheat, oatmeal, whole corn meal, millet, guinea corn, sorgum, fonio and brown rice;

- b. lean protein which include eggs, legumes and nut ;*
- c. low fat diary milk (any form of skimmed or filled milk); and*
- d. fruit and vegetables.*

Based on the above the nutritional components of a breakfast, the meals served in the college's dining hall per the attached menu can be described as follows, out of the 7 meals served in a week;

- a. 2 source of the breakfast contains whole grain which is millet porridge.*
- b. There are 4 meals which are refined grained meaning the bran and the germ have been removed during processing (koko, rice porridge, obloyo and bread).*
- c. Diary low fat milk source is served 2 times a week and*
- d. tea and bread served once. On a scale of 1-100, the breakfast served will be estimated to be 70% refined grained with limited sources of fiber, minerals and B vitamins. Whole grain sources will be about 28% with diary sources also been 28%. However, there are no sources of protein and fruits and vegetables provided.*

The 4-star diet is used to help individuals and families ensure that each meal consumed is varied and as such constitute a healthy diet for an optimal function of the body. Analysis of breakfast meal served at Al-Faruq College of education using the Ghana Health Service Nutrition department 4-star diet as a guide is in the table below. (Source: Ghana Health Service/ Ministry of Health maternal and child health record book pg.17).

Table 4. 5: Nutritional content of breakfast meal served at Al-Faruq College of Education

	Monday Koko& bread	Tuesday Oblayo & milk	Wednesday Millet koko &bread	Thursday Rice porridge & bread	Friday Millet koko & bread	Saturday Oblayo & milk	Sunday Tea bread
Staple	Corn & bread	Oblayo	Millet Bread	Rice bread	Millet bread	Obloya bread	Bread
Animal protein	Nil	Milk	Nil	Nil	Nil	Milk	Egg
Legume & seed	Nil	Nil	Nil	Nil	Nil	Nil	Cocoa
Fruit & vegetable	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Star	1 star	2 star	1 star	1 star	1 star	2 star	3 star

From the table above, 4 out of the 7 breakfast meals served are 1 star meal (staple) and 2 out of the 7 meals being 2-star (staple and animal protein) whilst only 1 meal out of the 7 breakfast meal is a 3star. There is no fruit and vegetables provided and tea is not considered a source of nutrient and also contains anti nutritive factor called tannins which inhibit the absorption of iron. Using the 4-star diet guide, it can be concluded that the diet quality of breakfast meal served in the school is largely energy adequate, nutritionally inadequate because it lacks the protective sources of food which are the fruits and vegetables. Similarly, a staple dense meal with decreased dietary fibre intake predisposes students to high blood glucose levels over a long period of time and lead to the development of type2 diabetes mellitus (Ozougwu et al., 2013).

- ii. When asked to describe the general quality of the breakfast meals served at the College's dining hall in her standpoint as a Nutritionist, the participant gave the following remarks:

Evidence has suggested that breakfast is a central component of an individual well-being. It is therefore often referred to as the most important meal of the day and contributes to the total daily energy and nutrients intake by a person (Nicklas, Bao, Webber, & Berenson, 1993). The schools breakfast based on the assessment using the 3 food groups and the 4 components of a healthy breakfast with reference to the Ghana health service 4-star diet plan.

Breakfast, served in the college's dining hall per the attached menu can be described as one that does not meet the requirement of a standard breakfast for a healthy adult. The breakfast provides little or no source of lean protein (from animal and plant), B vitamins and mineral as well as all fiber. It is largely a breakfast containing refined sources of grains (about 70% refined carbohydrates).

- iii. When asked of the benefits student-teachers would gain by consuming breakfast meals served in the College's dining hall, the participant reported that...

Nicklas et al. (1993) indicates that once breakfast is skipped, other meals of the day does not compensate for the lost breakfast benefits. This usually results to rampant snacking on high fat dense diets which increases exposure to increased cholesterol levels compared with persons who consume breakfast (Resnicow, 1991). Furthermore, skipping breakfast interfered with cognitive and learning in persons who are nutritionally at risk albeit its consumption

improves school attendance (Pollitt & Mathews, 1998) This is indicative that skipping breakfast is associated with behaviors that compromises the health of adults with a potential effect on the attendance to lectures with consequences on the cognitive and learning process in the said person. This however points to the fact that students who consume the school breakfast have a greater chance of attending lectures regularly, on time with enhanced learning though other aspects such as concentration may be affected due to nutritionally compromised nature of the meal especially with Iron. Iron is an important component of hemoglobin, the substance in the red blood cell that carries oxygen from our lungs to the body tissues and cells to produce energy for our bodies. For this reason, the first symptom of low body iron stores is tiredness, fatigue and loss of concentration. And these symptoms have negative effects on an individual.

4.4.1 Interview Responses by Tutors (Qualitative Data)

The objective four of the study sought to propose some interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education by answering the question: “What type of intervention will help student-teachers develop positive attitude towards breakfast meals served in the dining hall of the Al-Faruq College of Education?”

Tutor “A” (Dining Hall Master of the College)

The participant identified the following as interventions to for promoting massive patronage or consumption of breakfast served in the College’s dining hall:

- a. *When students come to the school in level 100, they are freshers, they don’t know the dining hall administration, so what I will do to organize an orientation*

workshop for them where the students will be taken through the dining hall administration, what food is served on a particular day and time. When students are briefed or oriented on the dining hall administration, they become familiar with the dining hall and as a result, they will like to be coming to the dining hall most of the time. During the orientation, you inform the students that most of the messages in the school or most information in the school will be delivered in the dining hall. When you condition the mind of the student-teachers in this way that most information is delivered in the dining hall, definitely, even if the person is skipping the dining hall, because of the information that will be delivered there, the person will attend the dining hall. So, if dining hall administrators will organize orientation for the students as far dining hall administration is concerned, I believe there will be mass patronage in the dining hall.

- b. Quite apart from that the dining hall administrators should take it upon themselves as a routine activity to always update the student-teachers on information or changes in the dining hall. For instance, if the food is going to be delayed, definitely, it will affect all other factors, so the dining hall tutor should be informed by the kitchen staff, and the tutor will in turn communicate this information to the dining hall prefect, and the prefect will also in turn relay this information to the entire student body. If this channel of information works effectively things will improve.*
- c. Again, the dining hall environment should always be attractive. If you have an attractive dining hall, you will surely have students patronizing meals served there. But if you have a dining hall that looks like Al-Faruq College of Education dining hall, don't expect students to come to this kind of dining hall to take their meals (breakfast) that will be served there. The Colleges dining hall is a multi-*

purpose dining hall (the same facility serves as a mosque, Examination Centre and eating place), so imagine what will happen in this era of COVID-19. Quite apart from that, spider web is all the place (dining hall), and when students are eating, spider webs will be falling into their meals. Students who are concerned about their health will normally not come to the dining hall. There should massive clean-up in the dining hall to get rid of the dirt and spider webs that have engulf the place in order make the environment attractive. An attractive environment will definitely attract students.

- d. Grievances of the student-teachers who come to the dining hall to eat must always be addressed promptly. Sometimes the students have serious problems with the College administration but because bureaucracy, they will channel their problem through the dining hall, the dining hall will take it to the administration, the problem will not be addressed.*
- e. The concerned of students who have health needs ought to be addressed. If they go to the kitchen staff to complain that they have some problems, it should be solved for them. But if their concerns are not addressed, such students will definitely not patronize meals served in the dining hall.*

Tutor “B” (Hall Mistress)

The participant recommended the following interventions to address the issue of low patronage of breakfast meals by the student-teachers of the Al-Faruq College of Education:

- i. Massive education need to be given to student-teachers on their arrival in the College on the importance of breakfast to the human being as a whole, since it is*

the first meal served during the day, and it awakens all the cells for the person to be able to learn and grasp whatever it is being taught.

- ii. The kitchen staffs need to be educated to be friendly enough, so that students will not be intimidated when going for their breakfast in the dining hall.*
- iii. The dining hall should be a conducive environment for the students, both spacious and a friendly environment as in the seniors not intimidating the juniors, so that they will be motivated to take in breakfast.*

Tutor “C” (Quality Assurance Officer)

- a. The participant gave the following suggestions as the interventions for addressing the issue of low patronage of school’s breakfast by student-teachers of Al-Faruq College of Education:
 - i. The school management school should sit with the Student’s Representative Council members, get some of the female tutor, the school matron, a nutritionist involved to plan and advise on specific meals to be served as breakfast in the College in order to minimize student complaints and diseases/sicknesses students contract while consuming breakfast meals in the College.
 - ii. Issue of time during which breakfast is served should be addressed in order to fix a convenient time to enable students massively patronize meals.
 - iii. Al-Faruq dining hall should be kept clean and in good shape. Future arrangements should be made concerning the construction of a much bigger dining hall to accommodate the student-teachers.
 - iv. The breakfast meal quality should be enhanced to ensure its massive patronage.

Nutritionist

The participant gave the following as effective interventions for promoting massive patronage/consumption of breakfast served in the College's dining hall:

- i. *It is important that the college pays attention to providing nutritionally adequate meals. Such meals do not have to be expensive. The involvement of a nutritionist will facilitate the development of a menu that is inexpensive and also meeting the 4 components of a healthy breakfast as well as address the iron gap in the menu.*
- ii. *Secondly, the students should be engaged and involved in the menu development process this commits them to ensuring that meals prepared are massively patronized.*
- iii. *Also, variety in meals is essential in meeting nutrient requirement especially Iron.*
- iv. *Lastly, the presentation of the food and making the entire meal time an exciting one will make student want to patronize it. An example is having prefects or male students serving meals in a particular day just to add a touch of humour to the process.*

4.8 Questionnaire Responses by Student-teachers (Quantitative Data)

Table 4. 6: Student-teachers' developed attitudes toward breakfast meals

No.	Questionnaire Item on Interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
		1	2	3	3	5
1	Breakfast consumption in schools can be promoted through effective orientation regarding the nutritional content of the school's dining menu.	6 (1.7%)	24 (6.7%)	81 (22.6%)	118 (32.9%)	130 (36.2%)
2	Breakfast consumption in schools can be promoted by strictly enforcing school (dining hall) disciplinary measures.	46 (12.8%)	23 (6.4%)	77 (21.4%)	106 (29.5%)	107 (29.8%)
3	Breakfast consumption in schools can be promoted by ensuring that it is prepared under hygienic conditions.	4 (1.1%)	16 (4.5%)	66 (18.4%)	125 (34.8%)	148 (41.2%)
4	Breakfast consumption in schools can be promoted by considering the preferences of student-teachers, especially those on special diets.	8 (2.2%)	28 (7.8%)	68 (18.9%)	123 (34.3)	132 (36.8%)
5	Breakfast consumption in schools can be promoted ensuring that food is served at the appropriate time.	3 (0.8%)	25 (7%)	75 (20.9%)	108 (30.1%)	148 (41.2%)
6	Breakfast consumption in schools can be promoted by enhancing its taste.	4 (1.1%)	18 (5%)	67 (18.7%)	117 (32.6%)	153 (42.6%)

In table 4.6, some of the sampled believed that consumption of breakfast meals could be improved through the promotion of effective orientation regarding the nutritional content of the school's dining menu by expressing strongly disagreement (1.7%), disagreement (6.7), agreement (32.9%) and strongly agreement (36.2%), while 22.6% remained undecided.

On the issue of student-teachers' belief that strictly enforcement of school (dining hall) disciplinary measures can help promote their consumption of breakfast meals served in the College dining hall, 12.8% strongly disagreed, 6.4% disagreed, 29.5% agreed and 29.8% strongly agreed, whereas 21.4% remained undecided.

In respect of the sampled respondents' belief that ensuring breakfast is prepared under hygienic conditions can help promote massive consumption of the meals, the participants expressed 1.1% strongly disagreement, 4.5% disagreement, 34.8% agreement and 41.2% strongly disagreement, with 18.4% remaining undecided.

With respect to respondents' belief that breakfast consumption in schools can be promoted by considering the preferences of student-teachers, especially those on special diets, the sampled participants expressed strong disagreement (2.2%), disagreement (7.8%), agreement (34.3%) and strong agreement (36.8%), whereas 18.9% remained undecided.

Regarding student-teachers' belief that breakfast consumption in schools can be promoted by ensuring that food is served at the appropriate time, 0.8% strongly disagreed, 7% disagreed, 30.1% agreed and 41.2% strongly agreed, with 20.9% remaining undecided.

On the issue of student-teachers' belief that breakfast consumption in schools can be promoted by enhancing its taste, the study participants strongly disagreed (1.1%),

disagreed (5%), agreed (32.6%) and strongly agreed (42.6%), while 18.7% remained undecided.

4.9 Summary

The chapter four of this study sought to conduct an assessment on student-teachers' developed attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education, the causes of low patronage of breakfast meals by student-teachers at the Al-Faruq College of Education, nutritional content of breakfast meals served student-teachers in the dining hall of the Al-Faruq College of Education and the inventions will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education.



CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.0 Overview

This section presents the summary, conclusion and relevant recommendations of the entire study based on the objectives set.

5.1 Summary

Skipping of breakfast is a common place in the Al-Faruq College of Education and as a result has led to the development of negative attitudes or dispositions towards such meals, and has further not been addressed by the College Management/Administration. In respect of the data obtained from the analyzed results, the following findings were arrived at:

- a. The study established that that about 20% to 30% student-teachers have of developed negative attitudes towards breakfast meals served in the dining hall of the Al-Faruq College of Education.
- b. The study found that late serving of breakfast, low quantity and poor quality of the breakfast served, disregard of student-teachers breakfast preference, peer group influence, shyness, unkempt nature of the dining hall, do not feel hungry in the morning, maintenance of body shape and loss of weight, preference for heavy breakfast instead of light ones, monotonous nature of breakfast meals and too much of certain ingredients such as sugar/salt/pepper etc. in the meals were the reasons why student-teachers refuse to patronize breakfast meals.
- c. The study also found that the breakfast meals served in all Colleges of Education are not of high quality.
- d. The study also established that dining hall and meals orientation and re-orientation of student-teachers should be organized for both in-coming and

continuing students, effective information dissemination to student-teachers, keeping the dining hall environment clean, addressing of student-teachers' grievances concerning dining issues, education of kitchen staff, provision and maintenance of conducive dining hall environment, serving of breakfast at convenient times, construction of a bigger dining hall to accommodate all student-teachers, enhancement of breakfast meals, provision of varied breakfast meals; and strictly enforcement of school (dining hall) rules and regulation.

5.2 Conclusion

The study revealed that there were three forms of disposition (attitude) of student-teachers toward breakfast meals served in the Al-Faruq College of Education dining hall such as “not bad”, “variation” and “goodness”

The study also revealed that the causes of low patronage of breakfast meals by student-teachers in the dining hall of the Al-Faruq College of Education were late serving of breakfast, low quantity of the breakfast meals served, poor quality of the breakfast served, disregard of student-teachers breakfast preference, disregard of the health needs and considerations of the student-teachers, certain conditions such as examinations periods, early part of semester when they have just arrived from home, incidence of sickness, peer group influence, problem of shyness, absence from school, having enough provisions, unkempt nature of the dining hall, not being hungry in the morning, maintenance of body shape and loss of weight (in the case of female student-teachers), preference for heavy breakfast instead of light ones, consumption of breakfast making student-teachers dull or sleep in the mornings, Tastelessness of meals, monotonous nature of breakfast meals and too much of certain ingredients such as sugar/salt/pepper etc. in the meals.

The study revealed that indeed the study also revealed that the meals on the College's dining menu are actually what they are being served in the school dining hall per some observations conducted, and also that the general quality of the breakfast meals served at the College's dining hall per the Nutritionist standpoint is that of one which does not meet the requirement of a standard breakfast for a healthy adult.

The fallout of this revealed the interventions such as general and comprehensive orientation of student-teachers, effective information dissemination to student-teachers, dining hall environment should always be kept clean, addressing of student-teachers' grievances concerning dining issues, continuous education of kitchen staff, provision and maintenance of conducive dining hall environment, ensuring and maintaining dining hall cleanliness, meeting of the college management with the Student's Representative Council, tutor, the school matron, and a nutritionist to plan and adopt a menu for the dining hall, serving breakfast at a convenient time, construction of a bigger dining hall to accommodate all student-teachers, enhancement of breakfast meals, provision of varied breakfast meals, and strictly enforcement of school (dining hall) rules and regulation as what can help student-teachers develop positive attitudes towards the consumption of breakfast meals served in the College's dining hall.

5.3 Recommendations

The approach to dealing with attitudes of students toward an issue is very complex, and the approach for handling such complexities must be critically analyzed considered in order to formulate and implement interventions to address them. Therefore, in dealing with students' attitudes toward breakfast meals consumption in

the dining hall of the Al-Faruq College of Education, the study makes the following recommendations:

- a. There should be strict enforcement of dining hall rules and regulations at the College and stiffer punishment meted out to culprits who flout such rules, especially those who absent themselves without any tangible reasons will help student-teachers develop positive attitudes towards breakfast meals.
- b. There should be orientation and re-orientation of both in-coming and continuing student-teachers on the need to patronize dining hall meals, especially breakfast, since it is the first meal of the day which will help them increase their daily energy intake and promote good academic performance at school and further help them develop positive attitudes toward such meals.
- c. Provision of new and bigger dining hall, and continuous keeping of the dining hall environment clean will urge student-teachers to patronize dining hall meals, especially breakfast.
- d. Continuous education of kitchen staff on hygiene and preparation of quality breakfast meals will boost student-teachers' confidence to consume such meals.
- e. Construction of new dining hall, provision and maintenance of conducive dining hall environment coupled with the serving of breakfast at convenient times will encourage student-teachers to patronize breakfast meals served in the dining hall of the College.
- f. Finally, provision of different varieties of breakfast meals will motivate students to consume such meals.

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APPENDICES

Appendix A: Questionnaire for Student's Teachers

Topic:

Assessment of Student-Teachers' Attitudes toward Breakfast Meals: A Case of Al-Faruq College of Education

This questionnaire seeks to obtain information on the Student-teachers' Attitudes toward Breakfast Meals at the Al-Faruq College of Education. You are assured of confidentiality as your responses and any other information given out will remain anonymous. We are most grateful for taking the time to answer the questions below, and this questionnaire will take about 15 minutes to complete.

Please tick (✓) where applicable

Section A: Demography of Respondents

1. What is your age range? Below 19 years (); 20 – 25 years (); 26 – 30 years Above 30 years ()
2. What is your Sex: Male () Female ()
3. What is your Nationality? Ghanaian () Non Ghanaian ()
4. What is your Marital status? Married (); Divorced (); Widowed (); Separated (); Single ().
5. What is your academic level? (a) 100 (b) 200 (c) 300
6. What ethnic group do you belong to?
7. What your religious affiliation? (a) Christian (b) Muslim (c) Traditional Religion (d) others
8. What is your programme of study?

Section B: *Student-teachers' developed attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education*

No.	<i>Questionnaire Items Student-teachers' attitude towards breakfast</i>	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 3	Strongly Agree 5
1	I feel sleepy when I take corn porridge as breakfast					
2	I feel very uncomfortable after taking <i>Capital Letters</i> (Oblayo) for breakfast					
3	Millet porridge and bread make me feel dull and weak					
4	Egg, cocoa beverage and bread for breakfast is the best					
5	I prefer taking Rice porridge (rice <i>water</i>) and bread for breakfast					
6	I do not consume breakfast served in the College dining hall because of my ethnic or cultural orientation.					
7	I do not consume breakfast served in the College dining hall because of my social status in the school.					
8	I do not consume breakfast served in the College dining hall because of my family status/background.					
9	I do not consume breakfast served in the College dining hall					

No.	<i>Questionnaire Items Student-teachers' attitude towards breakfast</i>	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 3	Strongly Agree 5
	because of its poor quality.					
10	I do not consume breakfast served in the College dining hall because of its poor taste.					
11	I do not consume breakfast served in the College dining hall because I always have the means of buying alternative breakfast.					
12	I do not consume breakfast served in the College dining hall because it is light (I always prefer heavy meals in the morning).					
13	I do not consume breakfast meals served in the college dining hall because one-way diets are mostly served.					
14	I do not consume breakfast meals served in the college dining hall because I am allergic to most of the meals served.					
15	I do not consume breakfast meals served in the college dining hall because of too much sugar/salt/pepper in it.					
16	I do not consume breakfast meals served in the college dining hall because of the unkempt nature of the dining hall facility.					

**Section C: Causes of low patronage of breakfast meals by student-teachers in
Al-Faruq College of Education.**

No.	<i>Questionnaire Item on the Causes of low patronage of breakfast meals by student-teachers in Al-Faruq College of Education.</i>	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 3	Strongly Agree 5
1	Going for breakfast is just a waste of time					
2	The meals served at breakfast are not well cooked					
3	The meals served at breakfast are tasty and very nutritious					
4	Breakfast is not served on the specified time on the school timetable					
5	Breakfast served are <i>not</i> prepared from best of food stuff options (eg rice)					
6	Student-teachers do not consume breakfast at the college's dining hall because they naturally prefer heavy meals in the morning.					
7	Student-teachers do not consume breakfast at the college's dining hall because they do not like what is available to eat.					
8	Student-teachers do not consume breakfast at the college's dining hall because they are not hungry at that time of the morning.					
9	Student-teachers do not consume breakfast at the college's dining hall because they want to lose weight.					

Section D: Interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education

Indicate which of the following you can confidently do without any assistance

No.	Questionnaire Item on Interventions that will help student-teachers develop positive attitudes toward breakfast meals served in the dining hall of the Al-Faruq College of Education	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 3	Strongly Agree 5
1	Breakfast consumption in schools can be promoted through effective orientation regarding the nutritional content of the school's dining menu.					
2	Breakfast consumption in schools can be promoted by strictly enforcing school (dining hall) disciplinary measures.					
3	Breakfast consumption in schools can be promoted by ensuring that it is prepared under hygienic conditions.					
4	Breakfast consumption in schools can be promoted by considering the preferences of student-teachers, especially those on special diets.					
5	Breakfast consumption in schools can be promoted ensuring that food is served at the appropriate time.					
6	Breakfast consumption in schools can be promoted by enhancing its taste.					

Appendix B: Interview Guide for Tutors

Topic:

ASSESSMENT OF STUDENT-TEACHERS' ATTITUDES TOWARD BREAKFAST MEALS: A CASE OF AL-FARUQ COLLEGE OF EDUCATION

1. What are student-teachers general dispositions (attitudes) toward breakfast consumption in the College?
2. Can you quantify the number of student-teachers who patronize breakfast meals served at the College's Dining Hall?
3. Do students normally exempt themselves from breakfast meals? YES /No
4. If Yes, can you explain the reasons why some student-teachers skip breakfast meals served in the College's dining hall?
5. From the standpoint of an academic lecturer, how would you describe the general quality of the breakfast meals served at the College's dining hall?
6. What interventions can you recommend as effective measures for promoting massive patronage/consumption of breakfast served in the College's dining hall? (Propose at least three and explain your reasons)

Appendix C: Interview Guide for Nutritionist

Topic:

**ASSESSMENT OF STUDENT-TEACHERS' ATTITUDES TOWARD
BREAKFAST MEALS: A CASE OF AL-FARUQ COLLEGE OF EDUCATION**

1. What is student-teachers general disposition (attitudes) toward breakfast consumption in the College?
2. In your own estimation, can you explain the reasons why some student-teachers skip breakfast meals served in the College's dining hall? (give at least 5 reasons to justify your answer)
3. What are the nutritional components of the breakfast meals served at the college's dining hall per the attached dining menu? (*Kindly look at the various breakfast menu items on the school's dining menu and state their nutritional values and components. Also attach a copy of the school's Menu to the feedback.*)
4. Do the assessed nutritional components per the attached dining menu reflect what is actually served in the dining hall of the Al-Faruq College of Education?
5. From the standpoint of a Nutritionist, how would you describe the general quality of the breakfast meals served at the College's dining hall?
6. What benefit will students gain by consuming meals served at the College's dining hall?
7. What interventions can you recommend as effective measures for promoting massive patronage/consumption of breakfast served in the College's dining hall? (Propose at least three)