

**THE IMPACT OF NUTRITION EDUCATION ON IMPROVING DIETARY HABITS
AMONG HIGH SCHOOL STUDENTS**

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UNIVERSITY OF BENIN

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF VOCATIONAL AND
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CERTIFICATION

This is to certify that this project work was carried out by OKORO EBRUVWIYO BERNICE with matriculation number EDU1804498 in the Department of Vocational and Technical Education, Faculty of Education, University of Benin, Edo State

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DEDICATION

This work is dedicated to God almighty for giving me the enablement to pull through and also my parents Mr and Mrs Okoro for their immense support throughout the time.

ACKNOWLEDGEMENT

I wish to express my profound gratitude to God for his provision and direction in the course of doing this research work and also my deepest gratitude goes to my parents Mr and Mrs Okoro for their financial and moral support throughout my stay in the university up until the completion of this project. My profound gratitude goes to my friend Dare Tijani for his support and assistance to the success of this work and my roommates Afoke Owisi and Stephen Jemimah. Also want to appreciate uncle Sam for coming through sometimes. I want to say thank you to everyone who have contributed one way or another, may the good Lord bless and keep you. Amen.

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ABSTRACT

This study focuses on how high school students' eating habits and nutritional awareness are affected by nutrition education provided in the classroom. To determine the efficacy of nutrition education programmes and the contribution of parental engagement in reinforcing healthy eating habits, data from a sample group of high school students were gathered and analysed. The results show that students' knowledge, food preferences, and nutritional awareness are significantly improved by nutrition education. Additionally, it has been demonstrated that parental participation is essential for maintaining and enhancing eating behaviours.

The study identifies areas for development, such as the need for more engaging teaching techniques, better access to learning resources, and a comprehensive curriculum, even as it emphasises the beneficial effects of school-based nutrition education. These results highlight the value of ongoing initiatives to improve nutrition education's efficiency in encouraging healthy eating habits among high school students. The report ends with suggestions for parents, policymakers, and educational institutions to work together to enhance nutrition education programmes and promote healthy eating practises in high schools.

CHAPTER ONE

INTRODUCTION

- Background of Study
- Statement of the Problem
- Purpose of the Study
- Research Questions
- Scope and Delimitation of the Study
- Significance of the Study

Background Of Study

Proper nutrition is essential for the physical and mental well-being of individuals, particularly during adolescence when growth and development are rapid. High school students are at a critical stage of their lives, and their dietary habits can have long-lasting effects on their health in the future. Unfortunately, many adolescents have poor dietary habits, consuming excessive amounts of unhealthy foods and insufficient nutrients. Nutrition education is an intervention strategy that aims to promote healthy dietary practices and foster positive eating behaviors among high school students. This background study explores the significance of nutrition education in improving the dietary habits of adolescents and its potential impact on their overall health.

Students in secondary school are basically teenagers between the ages of 10 and 19. Habits start forming during this time that may last a lifetime, so it is reasonable for them to spend

time in a healthy atmosphere and adjust to an active and healthy life. The eating habits they develop will be crucial in preventing the development of excess weight that will last a lifetime and the onset of cardiovascular and other chronic illnesses that these weights will cause, especially during this period of rapid growth and development. During adolescence, there is a heightened need for essential nutrients to support growth, physical activity, and cognitive development. However, many high school students face nutritional challenges such as increased fast-food consumption, excessive intake of sugary beverages, and insufficient consumption of fruits and vegetables. Additionally, irregular eating patterns, skipping meals, and engaging in fad diets are common practices among this age group. These dietary habits can lead to various health issues, including obesity, nutrient deficiencies, and increased risk of chronic diseases in adulthood.

Nutrition Education programs have a role to play in correcting nutritional deficiencies in students, notwithstanding nutrition education is a structured and evidence-based approach to imparting knowledge and skills related to healthy eating habits. It aims to empower students with the necessary information to make informed food choices and develop lifelong healthy eating behaviors. Nutrition education programs may be delivered through various means, including classroom-based sessions, interactive workshops, cooking demonstrations, and digital platforms. By teaching students about nutrition, food labeling, portion sizes, and meal planning, these interventions seek to positively influence their dietary choices.

Before the students, parents needs to be actively involved in this programs as sometimes, the parents are the first and major proprietors of some unhealthy food choices. Although numerous studies have evaluated the impact of nutrition education programs on high school students' dietary habits. While findings may vary depending on the program's design and

duration, overall, there is evidence supporting the effectiveness of nutrition education in improving dietary behaviors. To ensure the long-term impact of nutrition education, it is crucial to create a supportive environment that reinforces healthy eating behaviors. This includes collaborating with school cafeterias to offer nutritious meals, implementing policies that restrict the availability of unhealthy foods on school premises, and involving the wider community in promoting healthy living.

The impact of nutrition education on improving dietary habits among high school students should be done by equipping adolescents with the knowledge and skills to make healthier food choices, nutrition education programs can contribute to reducing the prevalence of diet-related health issues in this age group. To maximize the effectiveness and sustainability of these interventions, collaboration among educators, parents, health professionals, and policymakers is essential. By investing in nutrition education, we can empower the younger generation to adopt healthier eating behaviors that will benefit their long-term health and well-being.

Statement Of Problem

Adolescents face various nutritional challenges, such as a high consumption of fast food, sugary beverages, and unhealthy snacks, along with irregular eating patterns and inadequate knowledge of balanced nutrition. There is a lack of proper nutrition education in high schools which has contributed to a limited understanding of the importance of healthy eating habits, resulting in an increased risk of obesity, nutritional deficiencies, and other diet-related health problems. The sustainability of positive dietary changes achieved through nutrition education

programs is uncertain, and there is a need to explore strategies to reinforce and maintain healthy eating habits among high school students in the long term.

Additionally, to see how Parental and community involvement in understanding nutrition education can promote dietary habits of students and the need to lay emphasis on measuring the effectiveness of nutrition education programme, as knowledge of nutrition could play a vital role in improving dietary habits of young people.

Purpose Of The Study

The purpose of the study is to investigate the impact of nutrition education on improving the dietary habits of high school students, therefore the purpose of this research is;

1. To see how the lack of proper nutrition education contribute to the prevalence of unhealthy dietary habits among high school students
2. To find out the key nutritional challenges faced by adolescents, and how do these challenges impact their overall health and well-being
3. To examine the specific components and approaches of effective nutrition education programs for high school students
4. To examine the factors that influence the success and sustainability of nutrition education programs in high schools
5. To see how parental involvement and community support impact the effectiveness of nutrition education initiatives

6. To investigate the barriers and facilitators that affect the implementation of nutrition education programs in high schools

Research Questions

1. What are the most effective methods or strategies for delivering nutrition education in high school settings to promote healthier dietary choices among students?
2. Will the incorporation of a comprehensive nutrition education program in high schools lead to significant improvements in the dietary habits of students?
3. Does the involvement of parents or caregivers in nutrition education initiatives in high schools enhance the sustainability of improved dietary habits among students?
4. What are the barriers and challenges faced by high schools in implementing and sustaining nutrition education initiatives, and how can these be addressed?

Significance Of Study

Poor nutritional choices and practices have been shown to increase during adolescence; the need for nutrition education becomes clear. It is important that health educators look into nutrition education and its impact on the dietary habits of adolescent females. Several studies have been conducted that show how nutrition education impacts the dietary habits of adolescents. These studies have reviewed the effect of nutrition education on adolescent and have analyzed how nutrition education impacts snack patterns. The main nutritional problems affecting adolescent populations in particular include under-nutrition in terms of stunting and wasting. Others are deficiencies of micro-nutrients such as iron and vitamin A, obesity and other specific nutrient deficiencies

The increasing global rate of malnutrition and diet-related chronic diseases that are of grave concern necessitated the UN Food Systems Summit 2022 to reiterate the urgent need for an effective food system and diet transformation to promote better and equitable access to nutrition (Development Initiatives, 2022). The research on the effect of nutrition education on enhancing dietary practices among high school students is significant to students and families at large since it has the ability to assist many people by offering insightful information about the importance of healthy eating habits. Also, nutrition education can improve academic performance as good nutrition is essential for cognitive health and academic success. In order to improve learning and overall academic accomplishment, educators and policymakers must understand how nutrition education affects the eating habits of high school students.

The long-term health and well-being of the adolescence is important which is why it is a crucial time for them to start forming nutritional habits that will last a lifetime. Positive dietary adjustments made when a kid is in high school may have long-term effects on their health and happiness as adults. A better understanding of the effectiveness of nutrition education programs can help schools improve their curriculum and develop evidence-based approaches to address the nutritional needs of their students. Nutrition education programme can involve parental and community contribution as they are key factors in reinforcing healthy dietary habits among high school students. It can encourage parents, caregivers, and community members to actively participate in promoting nutrition education initiatives. Improved dietary habits among high school students can potentially alleviate the economic burden associated with diet-related health issues. A reduction in diet related health diseases can reduce the possibility of the health care costs related to such problems, this could be positive implications for society as a whole. Overall, the significance of this research lies in its potential to improve the overall health and well-being

of high school students, influence public health policies, and create a positive impact on society by fostering healthy dietary habits from a young age.

Scope And Delimitation

The scope of the study refers to the boundaries and limitations that define the extent of the research. On the other hand, the delimitation of the study refer to the specific aspects or variables that the research will not cover.

Scope of the Study

1. The study will concentrate on how eating habits of high school pupils are affected by interventions in nutrition education. The impact of nutrition education initiatives in encouraging teenagers to adopt healthy eating habits will be examined.
2. Secondary school students from JS1 to SS3 level in ekosodin will be included in the study.
3. The study will look at several classroom-based, workshop-style, and online nutrition education initiatives that are used in high schools. Both short-term and long-term actions will fall under the scope.
4. The study will assess various aspects of dietary habits, such as the consumption of fruits, vegetables, fast food, sugary beverages, and other nutritional components. It may also explore eating patterns, meal frequency, and nutrient intake.
5. The research will consider how the school environment, including the availability of healthy food options in the cafeteria may influence students' dietary behaviors.

Delimitation of the Study

1. The study will have a specific time frame for data collection and analysis, which may limit the examination of long-term effects of nutrition education on dietary habits.
2. Findings from the study may not be entirely generalized to all high school students across different regions or cultural backgrounds due to the specific sample and geographic scope.
3. While the research may acknowledge the influence of external factors such as media and advertising on dietary habits, it may not extensively delve into the broader societal and cultural influences.
4. Although the research may recognize the importance of parental involvement and community support, it may not extensively investigate the role of these factors in depth.
5. Health Outcomes: The study may assess dietary habits as an outcome, but it may not extensively examine specific health outcomes related to improved dietary behaviors due to time and resource constraints.

CHAPTER 2

REVIEW OF RELATED LITERATURE

This chapter encompasses a thorough review of related literature on the Impact of nutrition education on improving dietary habits among high school students. This review was done under the following:

- Concept of Nutrition and Nutrition Education
- The Role of Secondary School in Improving Nutrition Education
- Health Education and Health Behaviour Theories and How They Influence Dietary Habit Improvement
- Factors That Influences the Dietary Choices of High School Students
- Challenges In Implementing Nutrition Education Programs In Secondary Schools
- The Importance Of Nutrition Education In Improving Dietary Habit Of Secondary School Students
- Summary And Conclusion Of Literature Review

Concept of Nutrition

Nutrition is the concept that focuses on the essential substances found in food, known as nutrients, which include carbohydrates, proteins, fats, vitamins, minerals, and water. These nutrients are necessary for various bodily functions and processes. According to the WHO Healthy Diets Fact sheet, a healthy diet contains an adequate intake of fruit, vegetables, and

foods high in fiber, such as wholegrain, and limits the intake of fats, free sugars and sodium (WHO, 2015).

Nutrition also called nourishment is the provision of the materials necessary in the form of food to support life. Many common health problems can be prevented or alleviated with a healthy diet. The diet of an organism is what it eats, and is largely determined by the perceived palatability of foods. A poor diet can have an injured impact on health, causing deficiency diseases such as scurvy, beriberi, kwashiorkor and health-threatening conditions like obesity and metabolic syndrome, and such common chronic systemic diseases as cardiovascular disease, diabetes, and osteoporosis (Mbah, Patricia Etuna, 2018). It is the process by which organisms take in food and utilizes it in the body in order to promote overall wellness and improved health and growth. Himanshu Rajak in 2023, defined nutrition as the science that studies the relationship between food and health. It encompasses the process of consuming, digesting, and utilizing food substances for growth, maintenance, and repair of the body. A balanced diet that provides all the essential nutrients is critical for maintaining good health.

The national nutrition and health survey (NNHS) in 2018, did a survey on the nutrition situation in Nigeria and found out that the nutrition situation is characterized by a double burden of malnutrition with about one third of the children under five years stunted (more than half in the northwest) and a similar proportion of women overweight or obese. Nearly half of the women of reproductive age (48.5 percent) are also anaemic. Although acute malnutrition levels are below the critical levels with global acute malnutrition (GAM) rate of 7.2%⁷, the case loads are high given the population of the country. Nigeria faces the challenges of food deficit, and is the largest importer of rice – one of the staple foods. Each year about million Nigerian children die before their 5th birthday and malnutrition contributes to nearly half of these deaths.

Nutrition has a significant impact on overall health and well-being. Proper nutrition can reduce the risk of chronic diseases such as heart disease, diabetes, and obesity, and it plays a crucial role in growth and development, especially in children and adolescents. There are several diet related diseases which we can put in consideration, Diet is often considered as a lifestyle factor, contributes to the development of many chronic conditions including obesity, cardiovascular disease, hypertension, stroke, type 2 diabetes, metabolic syndrome, some cancers, and perhaps some neurological diseases. Moreover, one medical condition, when present, often contributes to the development of other medical conditions, such as the impact of obesity or excess body weight/fat as a risk factor for conditions including type 2 diabetes, hypertension, metabolic syndrome, and some cancers, among others.

Concept of Nutrition Education

Isobel R Contento in 2007, defined nutrition education as “any combination of educational strategies, accompanied by environmental supports, designed to facilitate voluntary adoption of food choices and other food and nutrition- related behaviors conducive to health and well-being. Nutrition education is important because it can nurture students’ healthy eating habits, thereby improving their health outcomes. Quality nutrition education can contribute to students maintaining a healthy weight and lowering their chances of developing weight-related chronic diseases. Well-designed nutrition education can help youth select and consume healthy foods through enhanced awareness, skills, and motivation (United States Department of Agriculture, 2010)

Nutrition education imparts essential knowledge about nutrients, food groups, portion sizes, and the importance of maintaining a balanced diet. It helps individuals understand the

nutritional value of different foods. It encourages the development of healthy eating habits, such as consuming a variety of fruits and vegetables, choosing whole grains, limiting added sugars and salt, and reducing the intake of processed and high-fat foods. It often aligns with dietary guidelines provided by health organizations and governments. These guidelines serve as a foundation for teaching individuals how to meet their nutritional needs. Effective nutrition education acknowledges cultural differences and dietary preferences, it encourages culturally appropriate dietary choices while promoting overall health. It plays a crucial role in preventing diet-related chronic diseases such as obesity, diabetes, heart disease, and certain types of cancer. It educates individuals about risk factors and prevention strategies. It emphasizes the integration of good nutrition into one's lifestyle, including meal planning, cooking skills, and strategies for eating healthily when dining out or in various settings. It often involves parents and the broader community to create a supportive environment for healthier eating. This can include workshops, school programs, and community outreach.

Nutrition education is not a one-time event; it is an ongoing process. It encourages lifelong learning and adaptation to evolving nutritional knowledge and dietary recommendations. This programs include mechanisms for evaluating their impact on knowledge, attitudes, and behavior. Regular assessments help refine and improve the educational approach.

The Role of Secondary School in Improving Nutrition Education

A number of reasons contribute to unhealthy dietary habits of secondary school students. It is reported that children in this category often engage in some unhealthy practices like meal skipping, particularly breakfast, less consumption of fruit and vegetables and therefore the secondary school has a very vital role to play in this context as it is observed that habits learned

in school is most likely to be adopted throughout the child's life (Alphonsus N. Onyiriuka, 2013). Thompson-McCormick, Thomas, Bainivualiku, Nishakhan and Becker (2010) reported that some eating patterns displayed by young people include snacking usually on energy dense foods, meal skipping particularly breakfast or during the day to resort to late night eating, irregular and wide use of fast foods and consumption of junks.

Children and adolescents spent much of their time at school, presenting an important opportunity to deliver specific food and nutrition programme (e.g., school meals, micronutrient supplementation, deworming). It also presents an opportunity to develop children's health and food literacy, embed life-long healthy eating habits and foster understanding of sustainable food systems to address all forms of nutrition. Whole-school approaches to food and nutrition increase knowledge about nutrition and promote healthy lifestyles, including increasing intake of water and nutritious foods, such as fruits, vegetables and healthy snacks. Schools and school communities have an important role to play in promoting sustainable diets, including by encouraging the consumption of locally grown traditional foods, with the added benefit of boosting local economies. A well-nourished, healthy, educated population is the basic prerequisite for growth and economic development. Thus, investment in a whole-school approach to nutrition serves to improve education, health and well-being for learners and also improves the economic outlook of individuals, communities and countries.(WHO 2023)

The improvement of nutrition education and the promotion of healthy eating practices among students have to be among the the primary objectives of secondary schools.Secondary schools can develop a welcoming and instructive atmosphere that encourages students to make wiser and healthier eating decisions, laying the groundwork for long-term wellness. High school can incorporate nutrition education into their curricula to make sure students receive formal

training on nutrition principles, dietary recommendations, and the significance of making good food choices. They can create health and wellness programs that include nutrition education as a key component, and this education can be a part of science, health, or physical education classes. Topics including balanced diets, portion control, and the advantages of whole foods can be covered by these programs.

Health Education and Health Behaviour Theories and How They Influence Dietary Habit Improvement

The World Health Organization (WHO) in 2015, has defined health education as “any combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge or influencing their attitudes. In addition to preventing illness, disability, and premature death, it is used to promote good health. Positive influences and voluntary behavioral changes are encouraged through health education. It makes an effort to address the attitudes, actions, and abilities that can enhance wellness.

In 2016, an article was published on “health behavioral theories used to explain dietary behaviors in adolescents. In the article it was reported that, health behavioral theories (e.g., social cognitive theory, planned behavioral theory, and self-determination theory) are useful to understand adolescents’ dietary behaviors and to develop and guide intervention strategies. Health behavior theories are conceptual frameworks that aid in the comprehension, elucidation, and prediction of health-related behaviors in people or communities. These ideas offer assistance for creating efficient health interventions and shed light on why people participate in particular behaviors. Health education and health behavior theories play a significant role in influencing dietary habit improvement.

In the context of this research, these theories will be useful in understanding the causes of poor dietary practices among high school students, giving us an opportunity to comprehend and offer intervention programs to assist in improving dietary practices. This is because adopting healthy eating habits prevents one from developing major issues in the future although diet-related ailments may last a lifetime.

- Social Cognitive theory
- Health Belief Model

Social Cognitive theory (SCT)

Albert Bandura created the Social Cognitive Theory, a comprehensive psychological framework that highlights the significance of social and cognitive factors in analyzing and predicting human behavior. According to Social Cognitive Theory, individual traits, specific influences, and cognitive processes interact in a dynamic way to help people learn and develop behaviors, including those that are connected to their health and dietary habits.

There are some key points in SCT which are explained below;

1. Observational Learning (Modeling).

This states that people have the ability to witness and observe another person's behavior, then imitate it. This is frequently demonstrated by "modeling" behaviors. People are more likely to carry out an activity successfully if they observe another person doing it well. In this context SCT suggests that individuals can learn health eating habits by observing others engaging in these habits. For example, When someone close successfully changes their diet, it may inspire a person to do the same.

2. Reciprocal Determinism

The dynamic and reciprocal interactions of people (individual with a collection of learned experiences), environment (external social context), and behavior (responses to stimuli) is addressed and in order to generate a positive feedback loop that reinforces healthy dietary habits, health interventions based on SCT frequently aim to improve environmental factors (such as availability to healthy food options), and the behavior (such as engaging in regular exercise). This is the core idea behind SCT.

3. Self-Efficacy

This has to do with how much a person believes they can carry out a pattern of behavior successfully. A high sense of one's own competence is linked to increased drive and tenacity in behavior modification. Health promotion programs often aim to increase self-efficacy by providing individuals with the knowledge and skills needed to perform healthy dietary habits and by offering positive reinforcement and support.

4. Outcome Expectations

This refers to the expected results of someone's actions. Before engaging in a behavior, people consider the effects of their choices, and these imagined effects can affect how successfully the behavior is carried out. Expectations are mainly influenced by past experiences, but they are more individualized and concentrate on the value assigned to the result, and expecting good results can make it more likely that a behavior will be adopted. To encourage people to adopt healthy behaviors towards food, health education and information frequently highlight the benefits of doing so. For example, good dietary choices increases the quality of life.

5. Reinforcement

This is a term used to describe the internal or external reactions to a person's behavior that influence the likelihood that the activity will continue or stop. Reinforcements can be positive or negative and can be self-initiated or environmental. This is the SCT concept that has the strongest ties to how behavior and environment interact reciprocally. Health behavior interventions based on SCT may involve helping individuals set realistic diet-related goals, track their progress, and provide strategies for overcoming obstacles.

In general, the Social Cognitive Theory provides a useful framework for comprehending how people learn, grow, and alter their behaviors, including those involving food. It highlights how social influences, personal beliefs, and environmental factors all play a role in determining how people behave, making it suitable to a variety of healthy diet promotion.

Health Belief Model (HBM)

The Health Belief Model is a psychological framework developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels. It is used to determine and describe personal changes in health-related behaviors. Individual attitudes about health issues, which predict individual health-related actions, are a key focus of the Health Belief Model. According to the model, an individual's perceived susceptibility to illness or disease (perceived susceptibility) may drive them to make healthier choices in order to prevent these illness, The main variables that affect health behaviors are belief in the seriousness of consequences (perceived severity), possible advantages of action (perceived benefits), perceived barriers to action, exposure to stimuli that trigger action (cues to action), and self-efficacy. It seeks to explain and predict diet-related behaviors by examining individuals' perceptions and beliefs about their diet and the

factors influencing their decisions. The HBM is based on the idea that people will take diet-related actions if they believe they are susceptible to a health problem and that taking a specific action will have desirable outcomes. Some key components of the Health Belief Model are listed below;

1. Perceived Susceptibility

A person's perception of their vulnerability to developing a particular ailment is referred to as perceived susceptibility. A person must feel they are at risk for disease, illness, or unfavorable health consequences in order to take action. People are more inclined to take action to avoid contracting an illness when they believe they are at risk for it. The inverse is also true: people tend to act in less healthful ways when they think their risk is low or nonexistent. Often, perception of vulnerability is insufficient to alter behavior. In the context of this research, HBM is used to observe how individuals are more likely to take action to prevent or address a health issue if they perceive themselves as susceptible to it as a result of their food choices.

2. Perceived Severity

A person's perception of a disease's significance or severity is referred to as perceived severity. Medical outcomes, such as death or disability, or individual perceptions about how the illness might effect their life can also be used to determine severity. For instance, some people choose not to obtain the flu shot in spite of public health guidelines. They are probably aware that they are susceptible to the flu, but they might think that it won't be serious. For instance, teaching students about the detrimental effects on their long-term health of consuming large amounts of sugar and fat can help them appreciate the severity of their dietary decisions.

3. Perceived Benefits

A person's perception of the value or utility of a new activity in reducing the risk of disease is referred to as the perceived benefit. For instance, those who have diabetes take medication in the hope that it would help them manage their blood sugar. People decide to stop smoking because they think it will be better for their health. A person is more inclined to take action if they believe it will have positive outcomes. Even when someone thinks they are susceptible, there are situations when the advantages of altering behavior are not substantial enough to prompt a change. Programs for nutrition education might emphasize the benefits of eating healthful meals, such as increased energy, better focus, and a lower risk of developing chronic diseases.

4. Perceived Barriers

The most important component in determining behavior change is perceived barriers. A person's perception of the hurdles to behavior change is known as perceived barriers. Barriers might be physical or abstract. Financial hardship, lack of access to transportation, childcare demands, etc. are examples of tangible impediments. Psychological obstacles like a dread of discomfort, embarrassment, or agony might be considered intangible obstacles. Students may encounter a variety of obstacles to establishing healthier eating habits, such as restricted access to nutrient-dense meals or the belief that wholesome foods are bland. By offering doable fixes, including inexpensive and practical healthy meal options, nutrition education can remove these obstacles.

5. Cues to Action

Events, people, or things that cause people to modify their conduct are known as cues to action. Social media, peer advice, and family members' illnesses can all serve as indicators. Restaurants that offer nutrition facts on their menus give patrons a reminder to take the calorie content of the foods they choose into consideration. Hand washing guidelines are posted on posters in public restrooms. Action cues include "buckle up" signage on the highway. Action can also be prompted by alarms on mobile devices and calendar reminders. By providing wholesome school lunches, fostering a positive cafeteria atmosphere, and enacting nutrition regulations that promote healthy food choices, schools can function as catalysts for change. Programs that teach students about nutrition can also provide them the skills and knowledge they need to spot and act on dietary cues.

5. Self-Efficacy

Self-efficacy is the assurance that a person has in their capacity to act or carry out a specific conduct. People typically do not attempt to acquire new behaviors unless they have confidence in their ability to do so. A person who believes changing their behavior would be beneficial (perceived benefit), but is dubious of their abilities to make a change, is not likely to try to change their way of life. In other words, even if a person thinks changing to healthy behaviors will have a big impact, they are unlikely to change their existing habits if they have doubts about their ability to overcome the obstacles to change. With support, training, and other forms of encouragement, self-efficacy can be raised. Students' food habits must be improved, and this requires developing their self-efficacy. To empower students to choose healthier foods, nutrition education should emphasize teaching them practical skills like meal planning, cooking, and grocery shopping.

School students' perceptions and beliefs about nutrition and health must be addressed in order to include the Health Belief Model into nutrition education programs. In addition to imparting knowledge, these programs must engage pupils on an emotional and practical level. The following tactics can be used to implement the HBM and improve pupils' eating habits:

- Make persuasive arguments: Students' perceptions of the value of a healthy diet and the seriousness of poor eating habits should be influenced by materials and messages used in nutrition instruction.
- Showcase role models: Tell success tales of friends or famous people who have changed their eating habits and improved their health.
- Address alleged obstacles, offer workable answers to frequent obstacles, such as financial restrictions or time restrictions, and offer advice for overcoming them.
- Provide practical experiences to increase students' self-efficacy in creating healthy meals and knowing the origins of their food, implement practical cooking workshops or gardening initiatives.
- Parental and caregiver involvement; Engage parents and other caretakers in nutrition education programs to establish a home environment that supports healthy eating objectives.
- Assess and make changes; Utilize surveys or other evaluations conducted before and after programs to continuously examine the efficacy of nutrition education initiatives. To increase the effect of future projects, make changes depending on feedback and results.

Schools can develop thorough nutrition education programs that address students' beliefs, motives, and challenges by utilizing the Health Belief Model and these techniques, thereby encouraging healthy eating habits among school children.

Factors That Influences the Dietary Choices of High School Students

Lauren D. Devine, Alyson J. Hill and Alison M. Gallagher 2023, the four degrees of influence can be categorized under are individual (intrapersonal), social environmental (interpersonal), physical environmental, and macro environmental. However, factors such as the human, social, physical, and macro-environmental levels, including taste preferences, aesthetic appeal, familiarity, food quality, price, portion size, value for money, time, and convenience, could influence food choices.

Hunger and food cravings, food appeal, time constraints on both the part of parents and children, food availability, parental influence on eating habits (including the family's culture or religion), and the benefits of foods (including health) have been perceived to have an impact on food choices. Lack of urgency regarding one's own health in contrast to other problems and preferences for other foods are two major obstacles to consuming more fruits, vegetables, dairy products, and low-fat diets. And so making healthy food taste and look better, reducing the availability of unhealthy options, increasing accessibility and convenience of healthy food, instilling healthy eating habits in children at a young age, and altering social norms to make eating healthfully "cool" are some suggestions for encouraging adolescents to consume a more nutritious diet. (Neumark-Sztainer D, Story M, Perry C, Casey MA. 2011)

Challenges In Implementing Nutrition Education Programs In Secondary Schools

Due to a number of variables, implementing nutrition education programs in secondary schools might be difficult. These difficulties may compromise the viability and efficacy of such programs. Here are some typical difficulties:

1. **Limited Curriculum Time;** The curriculum at secondary schools is frequently jam-packed with subjects that are prioritized more academically. It can be difficult to fit nutrition instruction into a schedule that is already very busy.
2. **Lack of Trained Educators;** Educators that are informed about nutrition are needed because they can give accurate and interesting curriculum. Teachers with dietary knowledge may be in short supply in schools.
3. **Resource Constraints;** Resources for materials, visitors, or field trips linked to nutrition instruction may be scarce in schools. The range and caliber of instructional activities may be constrained as a result.
4. **Competing Priorities;** Other classes or extracurricular activities may take precedence over nutrition education in schools. Establishing and maintaining nutrition programs can be challenging due to competing demands for scarce resources and attention.
5. **Teacher Workload;** As a result of their frequently excessive workloads, teachers may perceive the addition of nutrition education duties as an additional hardship. This could cause opposition to or reluctance to take part in nutrition education initiatives.

6. Resistance from Students; If nutrition education programs are perceived by certain pupils as uninteresting or irrelevant, they may reject them. It might be difficult to get teens interested in topics like healthy eating.
7. Cultural and Dietary Diversity; Schools frequently cater to varied student groups with various dietary requirements and ethnic origins. It can be difficult to create nutrition education programs that are both inclusive and sensitive to cultural differences.
8. Parental and Community Involvement; It can be difficult to get parents' and the community's support and participation. Some parents might not place a high priority on nutrition instruction or they might have different ideas about what makes a healthy diet.
9. Limited Access to Nutritious Foods; Students might not always have easy access to wholesome foods at home or in their communities. This could make efforts at nutrition education less effective.
10. Evaluation and Accountability; It can be difficult to gauge the effectiveness of nutrition education programs. Assessing changes in students' nutrition-related knowledge, attitudes, and behaviors may be challenging.
11. Sustainability; Long-term program maintenance can be challenging, particularly if it depends on outside funds or specific supporters within the institution.
12. Changing Dietary Trends; It might be difficult to consistently keep nutrition education materials and content relevant to reflect changing dietary trends and new health issues.

13. Resistance from Food Industry; In some instances, the interests of the food business may oppose or make an effort to sway nutrition education initiatives that promote consuming less products like sugary drinks and snacks.

It's crucial to involve stakeholders in the development and execution of nutrition education programs, including teachers, parents, students, and members of the community, in order to address these issues. These projects can also be supported by looking for outside financing and working with regional health agencies or groups. Addressing new difficulties in nutrition education requires flexibility and agility in program design and evaluation.

The Importance Of Nutrition Education In Improving Dietary Habit Of Secondary School Students

The improvement of secondary school student food habits is greatly aided by nutrition education. Rebecca Toutant, 2021, stated that nutrition education is about helping students establish a healthy relationship with food that supports them for the rest of their life and understand the chemical properties of food. Nutrition education provides people with correct information on the nutritional value of foods, food quality and safety, methods of preservation, processing and handling, food preparation and eating to help them make the best choice of foods for an adequate diet. Education on food and nutrition is more important than ever. We can choose what we put in our mouths with knowledge about the foods we eat, where they come from, and how they affect our bodies. We may develop the ability to select foods that are good for both our physical and mental health, and we can make significant adjustments that will transform our lives for the better. (NSHM, 2023). Students receive the knowledge and skills necessary to make educated decisions about their food through nutrition education. By

highlighting the significance of a balanced diet in preventing chronic diseases, keeping a healthy weight, and boosting general well being, it aids in their understanding of the relationship between nutrition and overall health.

Academic achievement and cognitive function are both influenced by proper diet. Students who receive nutrition education will be better able to grasp how their dietary choices affect their capacity for focus, learning, and academic success. Nutritional decisions taken at this crucial time for growth and development, adolescence, can have a long-term effect on health. By directing students toward healthier food options, nutrition education can help students avoid diet-related health issues including obesity, diabetes, and heart disease. Students who take nutrition classes get useful abilities that they can utilize throughout their lives. Meal planning, reading nutrition labels, comprehending portion proportions, and preparing healthful meals are some of these skills. Early instruction in these abilities will better equip pupils to make good decisions as adults. Students gain knowledge of how to evaluate food's nutritional value, take marketing and promotion into account when making decisions, and dispel common dietary myths. These analytical abilities are crucial for making wise selections.

Some students can experience food insecurity at home, which could result in insufficient or sporadic access to nourishing meals. These pupils can make the most of their resources by learning about inexpensive and nutrient-dense food options through nutrition education. Adolescence is a time when eating disorders like bulimia and anorexia nervosa are especially susceptible to forming. Programs for nutrition education can raise awareness of these issues and offer guidance on how to get support and assistance.

Summary And Conclusion Of Literature Review

The literature review examined a range of studies and interventions focused on the impact of nutrition education on the dietary habits of high school students, the literature review highlights the significant potential of nutrition education in positively impacting the dietary habits of high school students. Effective programs not only increased students' knowledge but also translated that knowledge into improved dietary behaviors. The school environment, support from teachers and parents, and the use of behavioral change theories were key factors contributing to success. However, long-term sustainability remains a challenge, emphasizing the need for ongoing efforts to promote healthy eating habits among high school students.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter comprises of

- Research design
- Population of study
- Sample and sampling techniques
- Research Instrument
- Validity of instrument
- Reliability of instrument
- Method of data collection
- Method of data analysis

Research Design

This research was carried out to assess nutrition education impact in improving the dietary habits of secondary school students generally. It is descriptive because it collected data from a given population and this data was analyzed in a systematic manner there by pointing out facts that would be used for evaluation and assessment. This design provided necessary accurate data needed for the sake of authenticity.

Population of Study

This population will be comprised of the secondary school students around ugbowo, benin city.

Sample and Sampling Techniques

The sample size comprised of 100 respondents selected from 8 secondary schools around ugbowo. With the aid of simple random sampling, 10 respondents from 10 different secondary schools in ugbowo making a total of 50.

Research Instrument

The instrument used is a Likert questionnaire, which was titled “the Impact of Nutrition Education on The Dietary Habits of Secondary School Students”. The questionnaire is divided into two sections, A and B. section A focuses on the demographic of the respondent while section B focuses on the research topic.

Validity of the Instrument

The constructed questionnaire was presented to the project supervisor to confirm for content validity. Necessary corrections were made and after which it was appropriately done before administration.

Reliability of the Instrument

The reliability of the instrument was established by using the test-retest method. This is to satisfy how reliable the test instrument when administered to the respondedt on two different occassions. The questionnaire was administered to 10 respondents. After an interval of two weeks,

the same set of instrument was administered to the same group of respondent and the result were correlated using pearson correlation coefficient

$$r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

Method of Data Collection

The questionnaire was administered to the respondents and information regarding how the respondent was to fill out the questionnaire was indicated, the questionnaire was retrieved after answers were provided.

Method of Data Analysis

In analyzing the data, frequency count and simple percentage was used to compute information from the research.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter focuses on the analysis of data derived from the research. The findings derived from this analysis are interpreted and deliberated upon. The study posed four research questions, which provided insightful conclusions regarding the influence of nutrition education in enhancing the dietary behaviors of high school students.

Table 4.1: Distribution of Respondent by Sex

Sex	Frequency	Percentages
Male	34	34%
Female	66	66%
Total	100	100%

Table 4.1, shows the distribution according to sex. As represented, male respondent are 34 which contributes to 34% of the sample size, while the female respondent are 66 contributing to 66 % of the sample size, indicating the majority to be the female

RESULTS

The results of the research is presented as:

Research Question 1: What are the most effective methods or strategies for delivering nutrition education in high school settings to promote healthier dietary choices among students?

Table 4.2: Distribution of responses on School-Based Nutrition Education.

S/N	Items	Agree	%	Disagree	%	Total No of Respondents
1	I received nutrition education as part of my school curriculum.	90	90	10	10	100
2	The nutrition education in my school was engaging and informative.	86	86	14	14	100
3	I had access to relevant learning materials (e.g., textbooks, online resources) for nutrition education.	64	64	36	36	100
4	Teachers effectively communicated the importance of healthy eating.	90	90	10	10	100
5	Nutrition education at my school provided practical tips for making healthier food choices.	95	95	5	5	100

The analysis of the data in Table 4.2 indicated that in item 1, 90% of the sampled population, agreed that they receive nutrition education as part of their school's curriculum agreed, while 10% . This indicates that the overwhelming majority of respondents have access to nutrition education as part of their school program. In item 2, 86% of the population agreed that they have had engaging and informative nutrition education, while 16% disagreed. This suggests that a significant majority of respondents have a positive perception of the quality and engagement of their nutrition education. In item 3, 64% of the sample population, agreed that they had access to relevant learning materials (e.g., textbooks, online resources) for nutrition education. However, 34% of the population disagreed, indicating that a significant proportion felt that they lacked access to such materials. In item 4, 90% of the population agreed that teachers effectively communicated the importance of healthy eating to the students. Only 10%

had a contrary opinion. This demonstrates that the majority of respondents feel that teachers are effective in conveying the importance of healthy eating. In item 5:** Finally, it was found that 95% of the population agreed that nutrition education at school provided practical tips for making healthier food choices, while 5% had a contrary view. This indicates that a vast majority of respondents perceive their school's nutrition education as providing practical and valuable guidance on making healthier food choices.

The analysis demonstrates that the majority of the sampled population has access to school-based nutrition education as part of their curriculum. Additionally, respondents generally have positive perceptions of the quality, engagement, and effectiveness of their nutrition education and teacher communication. However, there are concerns regarding the availability of relevant learning materials for nutrition education. Overall, the data suggests that school-based nutrition education is positively received by the sampled population, but improvements in resource access may be needed.

Research Question 2: Will the incorporation of a comprehensive nutrition education program in high schools lead to significant improvements in the dietary habits of students?

Table 4.3: Distribution of Responses on Impact on dietary Habits

S/N	Items	Agree	%	Disagree	%	Total No of Respondents
1	School-based nutrition education improved my understanding of the importance of balanced meals.	88	88	12	12	100
2	School-based nutrition education has positively influenced my food choices.	86	86	14	14	100

3	I am now more aware of the nutritional content of the foods I consume due to school-based nutrition education.	88	88	12	12	100
4	Nutrition education at school encouraged me to eat a greater variety of fruits and vegetables.	80	80	20	20	100
5	School-based nutrition education has led to a reduction in my consumption of fast food or unhealthy snacks.	65	65	35	35	100

The analysis of the data in Table 4.3 provides insights into how the sampled population perceives the impact of school-based nutrition education on their knowledge and dietary habits. In item 1, it was found that 88% of the sample population, agreed that school-based nutrition education improved their understanding of the importance of balanced meals, while 12% disagreed. This indicates that a significant majority of the respondents believe that school-based nutrition education has enhanced their comprehension of balanced nutrition. In item 2, 86% of the population agreed that school-based nutrition education has positively influenced their food choices, while 14% disagreed. This suggests that the majority of respondents feel that nutrition education in school has a positive impact on the choices they make when it comes to food. In item 3, 88% of the sample population agreed that they are now more aware due to school-based nutrition education, while 12% had a contrary opinion. This indicates that a significant portion of the respondents believes that their awareness of nutritional content has increased. In item 4, 80% of the population agreed that school-based nutrition education has encouraged them, while 20% disagreed. This suggests that a majority of the respondents believe that nutrition education in school has had a positive impact on diversifying their fruit and vegetable consumption. In item 5, 65% of the population agreed that school-based nutrition education has led to a reduction in their

consumption of fast food or unhealthy snacks, while 35% disagreed. This indicates that a substantial proportion of respondents believes that school-based nutrition education has contributed to reducing their intake of fast food and unhealthy snacks.

The analysis demonstrates that a significant majority of the sampled population perceives the positive impact of school-based nutrition education on their understanding of balanced meals, food choices, nutritional awareness, encouragement to eat fruits and vegetables, and a reduction in fast food or unhealthy snack consumption. This data highlights the effectiveness of school-based nutrition education in improving dietary habits and nutritional knowledge among the sampled population.

Research Question 3: Does the involvement of parents or caregivers in nutrition education initiatives in high schools enhance the sustainability of improved dietary habits among students?

Table 4.4: Distribution of Responses on parental involvement.

S/N	Items	Agree	%	Disagree	%	Total No of Respondents
1	My parents actively encourages and participate in nutrition based programs in my school	78	78	22	22	100
2	Nutrition education in school influenced my family's eating habits?	67	67	33	33	100
3	My parents involvement helped sustain and improve my dietary habit	70	70	30	30	100
4	My family now eat more vegetables and fruits	68	68	22	22	100
5	My parents now provide healthy meals for me in my school lunch pack	79	79	21	21	100

The analysis of the data in Table 4.4 indicates that in item 1, 78% of the sample population, agreed that their parents actively encourage and participate in nutrition-based programs in school, while 32% disagreed, indicating strong parental involvement in promoting nutrition education. In item 2 however, 67% of the population agreed that nutrition education in school influenced their family's eating habits, while 33% disagreed. This suggests that a majority of respondents believe that school-based nutrition education has a positive influence on their family's eating habits. In item 3, 70% of the sample population agreed that their parents' involvement helped, while 30% had a contrary opinion. This indicates that a significant portion of the respondents felt that parental involvement is beneficial in sustaining and improving dietary habits. In item 4, 68% of the population agreed that their family now eats more vegetables and fruit, while 32% disagreed. This suggests that a majority of the respondents believe that their family's dietary habits have become healthier in terms of fruit and vegetable consumption. Lastly item 5 indicated that 79% of the population agreed that their parents now provide healthy meals for them in their school lunch pack, while 21% disagreed. This indicates that the majority of respondents feel that their parents are making an effort to provide healthier meals in their school lunches.

The analysis demonstrates that a significant proportion of the sampled population perceives positive parental involvement and the impact of school-based nutrition education on their dietary habits and family's eating habits.

Research Question 4: What are the barriers and challenges faced by high schools in implementing and sustaining nutrition education initiatives, and how can these be addressed?

Table 4.5: Challenges encountered in delivering nutrition education

S/N	Items	Agree	%	Disagree	%	Total No of Respondents
1	I do not like nutrition education	12	12	88	88	100
2	My teacher does not communicate the subject properly	60	60	40	40	100
3	We do not have good learning materials for nutrition education	68	68	22	22	100
4	There is no time to properly teach nutrition education	84	84	16	16	100
5	I think nutrition education program is a waste of time and resources	10	10	90	90	100

The analysis of the data in Table 4.5 indicates that in item 1, It was found that 12 respondents (12%) agreed that they do not like nutrition education, while the majority of the sampled population (88%) held a contrary view, indicating that they have a positive attitude toward nutrition education. In item 2, 60% of the population agreed that their teachers do not communicate the subject properly, while 40% of the sample population disagreed. This suggests that a significant portion of the sample feels that there is room for improvement in how nutrition education is delivered by teachers. Item 3, 68% of the sample population agreed that they do not have good learning materials for nutrition education, while 32% of the population disagreed. This indicates that a majority of the respondents felt that there is a lack of adequate learning resources for nutrition education. In item 4, 84% of the population agreed that there is not

enough time to properly teach nutrition education, while 16% had a contrary opinion. This suggests that a significant proportion of the respondents feel that more time should be allocated for this subject. Lastly, in item 5, it was found that only 10% of the population agreed that nutrition education at school is a waste of time and resources, while 90% had a contrary view, indicating strong disagreement with the idea that nutrition education is a waste of time and resources.

The above analysis indicates that while a significant portion of the respondents have positive attitudes toward nutrition education, there are also concerns about how it is taught, the availability of learning materials, the time allocated, and the perception of its value.

Discussion of Findings

The results of the analysis of Tables 4.2, 4.3, 4.4, and 4.5 show that school-based nutrition education improves students' understanding and dietary behaviour. It also emphasizes how important parental engagement is in fostering and sustaining these advantageous impacts at home. There are still certain things that could be done better, such as improving the curriculum, expanding access to learning resources, and improving teaching techniques. Overall, the statistics highlight the value of nutrition education in encouraging good eating habits among high school students and the necessity for ongoing efforts to increase its efficacy. This finding is corroborated by research by Gloria O. Anetor, Benjamin O. Ogundele, and Oyediran E. Oyewole (2012), who showed that a small percentage of secondary school students participate in nutrition education activities that have an impact on their eating or dietary habits, primarily resulting in a decrease in meal skipping. Additionally, Pei Lin Lua and Wan Dali Wan Putri Elena (2012) showed in their research that after the implementation of nutrition interventions using a variety

of methodologies, college students' eating behaviours saw significant and advantageous modifications. The most effective strategies for improving students' eating habits and encouraging healthier diets and lifestyles, in particular, proved to be nutrition education and its conjunction with supplement distribution.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter contains the summary of the study, the conclusions drawn and the recommendations offered

Summary

This study looked at how high school pupils' eating habits were affected by nutrition instruction. Data was gathered from 100 pupils from 10 secondary schools between Ugbowo and Ekosodin in Benin city in order to answer four research questions that were posed and investigated. The tool used to collect data was a questionnaire. The study's research design was a descriptive survey. Simple percentages and frequency counts were used to analyse the data.

Findings of the Research

Findings of the study includes:

- The knowledge and eating habits of pupils are positively impacted by nutrition education provided in schools.
- The majority of students felt that nutrition education had enhanced their knowledge of healthy eating, resulted in favourable changes in their food preferences, and increased their awareness of nutritional content.
- Parental engagement is also considered to be a factor in maintaining and enhancing eating behaviours.

- A comprehensive curriculum, better access to learning materials, and more engaging teaching techniques are all needed for improvement.

Conclusion

The results of this study demonstrate the value of school-based nutrition education in influencing high school students' dietary practices and nutritional understanding, to say the least. These programme give students the skills they need to choose healthier foods and have a deeper appreciation for the value of balanced meals. Additionally, by having involved parents, the good influence extends to families. The statistics emphasized the importance of maintaining and enhancing programme for nutrition education in schools. It emphasized the requirement for a curriculum that involves students and gives them access to pertinent learning resources. Additionally, it urges the proper dissemination of nutrition education's significance to all pupils because it is obvious that these programme are not seen as a waste of time or resources.

Recommendations

- In light of these findings, educational institutions, policymakers, and parents ought to collaborate in order to increase nutrition education's effectiveness, target problem regions, and keep promoting a healthy diet among high school kids.
- Continue to emphasize to all students the importance and advantages of nutrition education. This can aid alter attitudes and guarantee that students comprehend the value and significance of these programme.

- Foster a culture of healthy eating in schools by fostering a welcoming atmosphere that inspires and enables children to choose foods that are better for them. This may entail offering wholesome food options in school cafeterias.
- Make sure that enough time is set aside in the school curriculum for nutrition education.
- Provide students with easily accessible and pertinent learning materials, such as textbooks, internet sources, and practical guides, to assist their nutrition education. This enables a more in-depth examination of the subject and improved comprehension on the part of the students.

Suggestion for Further Studies

The researcher focused on the impact of nutrition education in improving the dietary habits of high school students. Similar research can be carried out among a different category of people in a different settings.

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DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

UNIVERSITY OF BENIN

Dear Respondent

I am a student in my final year at the department and organization mentioned above. I am conducting research on the impact Of Nutrition Education On Improving ' Dietary Habits of High School Students. Please be as honest as you can when answering the questions on the form. Your assistance will be much valued, and any suggestions you offer will be handled in complete confidence.

Since the research is solely academic, it is necessary for me to get my degree in home economics education. Any information you provide will be treated in the strictest confidence. Thank you for your assistance. I would appreciate it if you could help by honestly and accurately filling out this form.

Questionnaire On The Impact Of Nutrition Education On Improving The Dietary Habits Of High School Students

Section 1: Demographic Information

1. Age: _____

2. Gender: Male Female Non-binary Prefer not to say

3. Grade/Year in Secondary School: _____

KEY: Strongly Disagree (SD), Disagree, (D), Neutral (N), Agree (A), Strongly Agree (SA)

Section 2:

S/N	School-Based Nutrition Education	SD	D	SA	A
1	I received nutrition education as part of my school curriculum.				
2	The nutrition education in my school was engaging and informative.				
3	I had access to relevant learning materials (e.g., textbooks, online resources) for nutrition education.				
4	Teachers effectively communicated the importance of healthy eating.				
5	Nutrition education at my school provided practical tips for making healthier food choices.				
	Impact on dietary Habits				
6	Nutrition education at school significantly increased my knowledge of healthy eating.				
7	School-based nutrition education has positively influenced my food choices.				
8	I am now more aware of the nutritional content of the foods I consume due to school-based nutrition education.				

9	Nutrition education at school encouraged me to eat a greater variety of fruits and vegetables.				
10	School-based nutrition education has led to a reduction in my consumption of fast food or unhealthy snacks.				
	Parental involvment				
11	My parents actively encourages and participate in nutrition based programs in my school				
12	Nutrition education in school influenced my family's eating habits?				
13	My parents involvement helped sustain and improve my dietary habit				
14	My family now eat more vegetables and fruits				
15	My parents now provide healthy meals for me in my school lunch pack				
	Challenges encountered in delivering nutrition education				
16	I do not nutrition education				
17	My teacher does not communicate the subject properly				
18	We do not have good learning materials for nutrition education				
19	There is no time to properly teach nutrition education				
20	I think nutrition education program is a waste of time and resources				