PERCEIVED IMPACT OF NUTRITION ON THE ACADEMIC PERFORMANCE OF PUPILS IN NURSERY SCHOOLS IN BENIN CITY

BY

ERUYOGHO IGHOMO

EDU1803680

A RESEARCH SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL MANAGEMENT, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, IN PARTIAL FULFILMENT OF THE AWARD OF BACHELOR OF EDUCATION DEGREE (B. ED) HONOURS IN EARLY CHILDHOOD EDUCATION.

DECEMBER, 2022.

CERTIFICATION

This research project have been read and approved by the undersigned in partial fulfilment of the requirements for the award of Bachelor of Education Degree (B. Ed) Honours in Early Childhood Education in the Institute of Education, University of Benin, Benin city.

_____ _____

Prof. (Mrs). B.O.J Omatseye **Date**
(Project Supervisor)

_____ _____

Prof K. Aluko **Date**
(Project Coordinator)

_____ _____

Dr. (Mrs) F. I. Iyamu **Date**
(Ag, Institute of Education)

_____ _____

Prof. O. K. Omorogiuwa **Date**
(Dean, Faculty of Education)

DECLARATION

I declare that this project is based on a research undertaken by me, ERUYOGHO IGHOMO of the Department of Educational Management, Faculty of Education, University of Benin under the supervision of PROF. (MRS) B. O. J OMATSEYE. All findings and analysis are subject to my personal research and due acknowledgement was given where the views of others were used and expressed using references

ERUYOGHO IGHOMO
EDU1803680

DEDICATION

This project work is dedicated to God the Father, God the Son and God the Holy Spirit, for His banner of love over me and who has kept me till this moment to be what He wants me to be.

Also, to my amazing parents Mr. and Mrs. Williams Eruyogho for their moral and financial support to achieve a successful education.

ACKNOWLEDGEMENT

I wish to express my profound gratitude to my supervisor, Prof. (Mrs) B. O. J Omatseye who inspite of her numerous commitments took patience in reading through my work and gave me the necessary guidelines as well as invaluable advice. I am sincerely grateful to my lecturer, Mr. Wesley Choice Uwadiae for his enthusiasm, patience, insightful comments, helpful information, practical advice and unceasing ideas that have helped me tremendously at all times in my research and writing of the project. His immense knowledge, profound experience and professional expertise has enabled me to complete this research successfully.

I also appreciate my Director, Dr. (Mrs) F. I. Iyamu and all my lecturers in the institute of Education who painstakingly impacted knowledge into me. Thank you so much, and also to mention all my lecturers at the Faculty of Education, you were wonderful.

My special thanks and gratitude goes to my lovely father and my irreplaceable mom for their spiritual, moral and financial support throughout my stay in this prestigious University.

And to my elder sister, Mrs. Pamela Imobieye Joseph and my elder brother, Pastor Osagiator Eruyogho, and my younger brother Ighodaro Eruyogho. I am indeed grateful thank you for your motivations and support financially you all are the best I could not have asked for better siblings.

My gratitude goes to Mommy Eliana for her immeasurable support and assistance throughout my stay in Uniben, God bless and reward you Ma.

In life there are individuals we meet who leave marks that we cannot help but acknowledge relentlessly, these individuals are Ado Kindness, Eboh Chelsea, Edjesa Anabel, Ijiade Deborah, Owuda Esther, Omiyi Eloghosa, Isreal Ahmadu, Lovely and to ECE17 you all hold special places in my heart. And finally, hearty thanks to the Almighty God the creator of the whole universe who has given me both physical strength and academic ability for the successful completion of this work.

TABLE OF CONTENT

ABSTRACT

This study was carried out to bring to limelight the perceived impact of nutrition on the academic performance of pupils in Benin City. Three research questions were raised to guide the study. A descriptive survey design was used in this study. The population of the study consisted all private nursery school teachers in Benin City. The sample size of the study was One hundred (100) teachers drawn from the population. Structured questionnaires were used to elicit responses from the respondents. The data were analyze with frequency and simple percentages.
The findings indicated that:
(a) Nutrition do have a great impact on the academic performance of pupils in Nursery Schools
(b) The school certainly has an important role to play in improving the nutritional status of children
(c) Parents to a large extent do have the greatest role to play in ensuring the nutritional intake of their children.

On the basis of these above findings, it was recommended that Government should make compulsory the inclusion of nutritional education in school curriculum as this will go a long way in fostering nutrition among nursery pupils, Schools should organize seminars for parents and teachers on the importance of improving health of their children through balance diet and inclusion of all classes of food. Parents and guardians should work hard to earn sufficient funds for their children and wards to feed adequately.

CHAPTER ONE

INTRODUCTION

Background to the Study

More than a quarter of children in Sub-Saharan Africa under the age of fifteen are underweight as a result of inadequate nourishment and deprivation, which makes them more prone to illness and less able to concentrate in class, according to the EFA Global Monitoring Report (UNESCO 2011). The over- or under-consumption of one or more significant macro- or micronutrients in relation to the individual's physiological and pathological requirements results in malnutrition, a clinical illness (Ecker & Nene 2012). When the body is deprived of the food it requires to survive properly, malnutrition develops. Poor nutrition may be caused by a lack of food or a diet that is imbalanced and low in one or more nutrients (Chinyoka & Naidu, 2013). When they are young, children who do not get enough of the essential elements calcium, potassium, and vitamin C will not be able to function at their best in kindergarten (Nabarro et al. 2012). Connell (2010) argues that although 14% of high birth weight children experienced the same thing, 34% of low birth weight children either repeated grades or were placed in special education schools.

According to a different study, increased levels of grade repetition and poor food are the two main causes of low birth weight (Bray et al., 2010). Families can help their kids eat right so they can do well in school by understanding the effects that food deficits can have on learning. This reveals how a child's food affects their intellectual success in nursery school. No nation can afford to waste its resources, especially the brainpower of its citizens. But that is precisely what occurs when children's brains suffer irreversible harm from vitamin inadequacy. Examining the nutritional value of the food that students consume each day while attempting to learn and the effect that this nutrition has on academic performance is one potential solution for enhancing academic achievement. Human existence, fitness, and growth over the lifespan depend heavily on nutrition. From the earliest phases of fetal development, birth, and through adulthood and old age, proper food and nutrition are crucial for longevity, physical growth, mental development, success and competitiveness, fitness, and well-being (WHO 2000). The role of "fuel" in an automobile is analogous to the significance of nutrition in human life and scholastic accomplishment. Similar to machines, our cells require routine upkeep to remain in good functioning order. The cells become sluggish and unproductive if they do not receive enough nutrient-rich fuel. Early childhood (preschoolers) healthy eating practices and a balanced diet support a child's intellectual, physical, and emotional growth and development at their best. A balanced diet is a total diet that includes a

range of foods and provides enough of the nutrients required for optimal health. It provides the body with the high-quality nutrients it needs to operate properly. A healthy, balanced diet and nutrition are crucial for children's academic development. Children who receive proper nutrition and a balanced diet will start out life with healthy eating habits that will help them realize their full potential. A healthy, balanced diet is essential for improving learning and increasing brain function. Through all stages of life, nutrition is a highly important factor and key pillar of human health, life, and brain development. For endurance, physical growth, cognitive development, and productivity, a balanced diet is essential. A well-balanced diet full of vitamins, minerals, proteins, carbs, and fats is crucial for young children's intellectual and physical development. Human health, development, and growth depend on nutrients. Malnutrition is caused by the body not receiving enough nutrients. The effects of diet on pre-schoolers' academic achievement are similar to those of fuel on a car. Examining the nutritional content of the meals young kids eat each day is one way to see if you can boost their intellectual performance in pre-school. The appropriate kind of food is fed to kids, which helps to enhance their diet and may help with cognitive development. Preschoolers' cognitive and academic performance is significantly impacted by a balanced diet. Children's cognition, concentration, and energy levels for academics have been shown to improve when they have access to nutrition that includes protein, carbohydrates, and glucose.

Proper nutrition helps children to maintain and regain good health and to prevent illness. The consumption of an insufficient diet or food that is not balanced, leads to malnutrition diseases such as obesity, pellagra, night blindness, rickets, goiter, anemia, and so on. Nutrition may affect both physical, mental and emotional challenge of children and may also lead to children and may also lead to brain retardation (Ojo Rotimi 2012).

Statement of the Problem

Any individual's performance level, but particularly that of children, depends greatly on their diet. Nigerian students' academic performance has come under scrutiny throughout the years. It's crucial to provide children with a healthy diet because doing so can have a hugely favorable impact on their academic performance.

Despite the availability of educational materials, there are insinuations that the assimilation rate of students in nursery schools may be decreasing. Malnutrition or over nutrition may be major contributing factors to this issue, and both may have a poor effect on preschoolers' academic performance. The lack of a proper diet for young learners makes it difficult for them to focus in class; some of these kids even wind up dozing off or losing interest, which has a negative impact on their academic achievement. These issues made it necessary for this study to analyze and conduct a

critical analysis of the perceived impact of diet on the academic performance of pupils in nursery schools.

Research Questions

The following research questions were raised to guide this study:

1. What is the perceived impact of nutrition on children's academic performance?
2. What is the role of school in improving nutritional status of children?
3. What is the role of parents in children's nutritional intake?

Purpose of the Study

The study intends to find out the opinion of teachers on the perceived impact of nutrition on the academic performance of pupils in nursery schools

Specifically, it seeks to:

1. Ascertain the perceived impact of nutrition on children's academic performance.
2. Identify the role of school in improving nutritional status of children.
3. Identify the roles parents play in children's nutritional intake.

Significance of the Study

Findings of this study will make known the perceived impact of nutrition on pre-school children's academic performance. In order to ensure that pre-school children in Benin City have a balanced diet and promote excellent health, it is

envisaged that the study would be of great benefit to the state and municipal administrations. This study would give parents and teachers the knowledge they need to effectively manage the limited resources at their disposal in order to supply and fulfill the nutritional and balanced diet meal requirements for kids to succeed academically. It will also be used by other researchers as a resource. This study is important since it offers a wealth of data on how nutrition affects a child's academic achievement. This study will inspire parents, teachers, school administrators, and other caregivers to focus on encouraging a child's academic achievement with a suitable, balanced diet.

Scope and Delimitation of the Study

The study focuses on the perceived impact of nutrition on the academic performance of pupils in Benin City. The study is delimited to some selected Local Government Areas in Benin City, Edo State.

Limitation of the Study

This study was constrained by a lack of funding to conduct the research as planned, as well as by the short amount of time allotted for it and the researcher's concurrent involvement in other academic work, which may have shortened the amount of time committed to it.

Definition of Terms

Nutrition: Is the science that deals with all the various aspect of which food is composed and the way in which proper nourishment is brought about.

Academic Performance: Academic performance is the scores pupils obtain to show how well a pupil does or perform based on their learning experiences

Malnutrition: The condition caused by an improper balance between what an individual eats and what he requires to maintain his health.

Pre-school Children: Young human beings below the official school starting age, who are enrolled in an early childhood program run by professionally trained adults in which play and learning are combined.

Health: This is the condition of being sound in body, mind, and spirit. It is a condition in which someone or something is thriving or doing well.

Balanced diet: It is the diet that contains the six classes of food taken in right proportion.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter deals with the review of literature and the related work on the perceived impact of nutrition on the academic performance of pupils in nursery schools in Benin City, Edo state. The review of related literature was discussed under the following headlines:

- Concept of nutrition and the issue of balance diet
- Importance of balanced diet to pre-school children's health and cognitive development
- Relationship between nutrition and academic performance among pre-school children
- Ways the School environment can have a positive influence on the balanced diet and academic performance of young children (pre-school children)
- Factors affecting the impact of nutrition in pre-school children's academic performance
- Ways parents can help to improve balanced diet among children in preschool
- The effect of Malnutrition on children's cognitive development
- Empirical studies/review
- Summary and conclusion

Concept of nutrition and the issue of balance diet

Throughout the whole life span, nutrition is a crucial pillar of human survival, health, and development. For survival, physical development, mental development, performance and productivity, health, and general well-being, correct eating and good nutrition are crucial from the earliest stages of fetal development through birth, infancy, childhood, adolescence, adulthood, and old life. It is a crucial component of both national and human development (WHO, 2002). The study of nutrition examines how food impacts physiological processes that rely on dietary absorption by the body (Growth, energy production, repairs of the body tissue etc). Diets and diseases caused by nutrient deficiencies are two topics covered in nutrition science (Sixth Edition of the Concise Medical Dictionary). In medical settings, the term "nutrition" can refer to a patient's requirement for meals as well as nutritional supplements given by an IV or IG tube. Another component of nutrition is identifying the seven essential types of nutrients that each person requires. A nutrient is a substance found in food, such as protein, carbohydrate, fat, vitamin, mineral, fiber, and water. The way of life has significantly changed over time. Children are taking up these bad eating habits from modern households, where quick and less nourishing meals have become the norm.

What nutrients do young learners need?

To support good development and health, young learners need a lot of nutrients. Children in the UK do not eat enough to meet some of their daily dietary requirements (scientific Advisory committee, 2005). The reasoning behind the dietary needs for children and teenagers is up for debate. Actually, a number of studies encourage a change to approaches that take into account the "functional benefits of food and concepts like optimal nutrition, which emphasize the prevention of specific negative health outcomes" (Aggett, 2004). Nutrient regulation and optimization are the fundamental components of a healthy diet. Actually, the only poorly managed diets are those that are individual and dependent on health. Age, gender, and health status all have varying effects on it. The quantity of each nutrient that a person needs depends on their capacity to digest that amount of that nutrient as well as their capacity to absorb and use each type of nutrient (British nutrition foundation, 2005).

It is common knowledge among parents that children need to consume a "balanced diet." A balance of what, though? The nine nutrients that a child needs to eat each day are as follows:

Protein

A child's body needs protein to form cells, digest food into energy, fight infection, and transport oxygen. Foods high in protein include meat, poultry, fish, eggs, nuts, beans, dairy products, and poultry.

Carbohydrates

Despite the current diet fad of "cutting the carbs," carbohydrates are the body's primary source of energy. They support a child's body's utilization of protein and fat for tissue synthesis and repair. Sugars, starches, and fiber are the three main types of carbohydrates, however kids should consume more starches and fiber and less sugar. Foods with high carbohydrate content include: Pasta, potatoes, rice, crackers, breads, and other foods

Fats

Children's bodies are able to store fats, which are a fantastic source of energy for them. Additionally, they are crucial for ensuring that the body uses certain other nutrients properly. Whole-milk dairy products, cooking oils, and meat are among the foods that are high in fat. Fish, nuts, and meat

Calcium

For children to develop strong bones and teeth, calcium is crucial. The operation of the heart, muscles, and nerves as well as blood clotting depend on it. Milk, cheeses,

yogurt, ice cream, egg yolks, broccoli, spinach, tofu, and other foods are rich sources of calcium.

Iron

Children need iron to develop healthy blood that transports oxygen to all of the body's cells. Red meats, liver, poultry, shellfish, whole grains, beans, nuts, and iron-fortified cereals are some of the foods that are high in iron.

Folate

Folate is crucial for children as well as expectant mothers. One of the B vitamins, folate is essential for a child's cells to grow and develop normally. Anemia may result from this vitamin deficiency. Whole-grain cereals, lentils, chickpeas, asparagus, spinach, black or kidney beans, Brussels sprouts, and asparagus are examples of foods high in folate.

Fiber

A child's intestinal regularity is aided by fiber. It may also help lower the risk of developing cancer and heart problems later in life. Whole grains, cereals, chickpeas, lentils, kidney beans, seeds, and nuts are among the foods that are high in fiber.

Vitamin A

For both children and adults, vitamin A has several uses. It promotes development, aids eyes in adjusting to bright and low lighting, maintains healthy skin, and fights

infection. Vitamin A-rich foods include carrots, sweet potatoes, squash, apricots, spinach, broccoli, cabbage, fish oils, and egg yolks.

Vitamin C

Beyond warding off the common cold, vitamin C has further benefits. It also serves as a binding agent for cells, fortifies blood vessel walls, aids in wound healing, and is crucial for the development of sturdy bones and teeth. Citrus fruits (such oranges, strawberries, tomatoes, potatoes, melons, cabbage, broccoli, cauliflower, spinach, papayas, and mangos) and melons are some examples of foods high in vitamin C.

To grow and develop to their greatest capacity, children require the proper nourishment at the appropriate time. The first few years of a child's life are the most crucial in terms of what, when, and how they consume. However, many newborns and young children today do not get the nourishment they require to live and grow. Young children's meals often consist of cereals with minimal fruit, vegetable, egg, dairy, fish, or meat. Sugar-filled beverages and packaged snacks with lots of fat and sugar are being served to kids more frequently. Early childhood meals should be carefully monitored since shortages in vital vitamins and nutrients, such as vitamin A deficiency, can weaken children's immune systems, raise their risk of blindness, and even cause them to pass away from common childhood illnesses like diarrhea. It can be difficult to meet a child's nutritional demands in the early years, and many parents struggle to provide their children with enough wholesome food that is safe,

inexpensive, and age-appropriate. The cornerstone of preventing malnutrition in all its manifestations is enhancing the nutritional value of children's diets and feeding practices in the earliest years of life. Child survival and growth are fundamentally dependent on good nutrition. Children who are well-fed have superior capacities for development, learning, play, and involvement in extracurricular activities at school. Additionally, they are more crisis-resistant. However, many kids today lack the nutrients they require to live healthy lives, and this is especially true for the most disadvantaged and defenseless kids. The three most obvious signs of malnutrition—stunting, wasting, and overweight—affect at least one in three children under the age of five. Stunted children have brains that may never fully develop cognitively and are too short for their age, making it difficult for them to learn as children, earn as adults, and fully participate in their societies. 144 million children under the age of five are affected by stunting. 47 million kids worldwide are impacted by wastage. Children who are wasting are excruciatingly underweight, have compromised immune systems, and are more likely to pass away. Worldwide, about 38 million children under 5 are overweight. Childhood obesity is on the rise everywhere in the globe, but it is most prevalent in middle-income nations as global food systems change and processed foods heavy in fat, sugar, and salt are consumed more frequently.

When youngsters are lacking in vital vitamins and other micronutrients, less obvious types of malnutrition, such as hidden hunger, can develop. More than 340 million children under the age of five suffer from these micronutrient deficiencies, which slow down their growth, erode their immune systems, and harm the development of their brains. We only eat on a diet throughout the day. And a balanced diet is one that includes enough of the nutrients we need each day. Six essential nutrients—fats, protein, carbohydrates, water, vitamins, and minerals—make up a balanced diet. The meals we eat include all these nutrients. The amounts of nutrients in various foods vary. Depending on a person's age, gender, and state of health, different nutrients may be needed.

According to Oxford Dictionary, a balanced diet is one that offers sufficient levels of the nutrients required for optimum health while also including a range of various food kinds. According to the World Health Organization's definition from 2015, a healthy diet is a tool or method that helps ward off non-communicable diseases (NCDs), such as diabetes, heart disease, stroke, and cancer, as well as malnutrition in all of its manifestations.

The following reasons why a balanced diet is crucial are listed by WHO (2015):

a. Good physical and mental health are correlated with a balanced diet.

b. It promotes healthy body development.

c. The ability to work is also increased.

d. A healthy, balanced diet improves a person's capacity to fend off or resist disease.

The following are some elements of a balanced diet:

Oil and fats: Oil and fats provide a portion of the energy we need. Fats can be found in fatty foods like butter, oil, cheese, etc.

Proteins: Our bodies require proteins to grow and to repair physical damage. Additionally, protein aids in the development of muscle. It can be found in dairy products, sprouts, beef, eggs, chicken, and other foods.

Carbohydrates: Carbohydrates provide the energy we need to process. We get our energy from carbohydrates. Rice, wheat, bread, and other foods all include carbohydrates. Our main source of nourishment is cereal.

Minerals and vitamins: Fibre, vitamins, and minerals all increase the body's resistance to illness. Fruits and vegetables are the main sources for us. Mineral deficiency in the body can result in deficiencies such anemia and goitre.

Importance of balance diet on preschool children's health and cognitive Development

Today's kids and families are frequently quite busy. Making it challenging to eat daily meals prepared at home frequently, convenience and takeout food are a large part of children's diets. These foods, however, can be harmful. Their impact on

children's health may be detrimental. Certain issues brought on by improper diet can persist into adulthood. Even worse, they may progress to become chronic illnesses.

A balanced diet has numerous advantages for children, claim Wolf and Burkman (2006). It can also help them maintain a healthy weight, improve their minds, stabilize their energy, and alleviate stomach pain, headaches, muscle tension, and fatigue. It can also help prevent mental health conditions like depression and anxiety. A balanced diet and a nutrition-focused approach are also two of the easiest and most crucial approaches to stop the development of disease. With a good diet, many chronic diseases can be avoided. These include obesity, high blood pressure, type 2 diabetes, and heart disease. Children who consume a balanced diet and exercise good eating habits are more likely to carry such habits into adulthood. Parents must teach their children balanced meals and healthy eating habits while they are still young. They will be able to continue eating as usual. As a result, they will be able to stop chronic illnesses that can develop in childhood or later in life.

Overall, learning is improved in children who eat properly and rapidly. It supports the growth and maintenance of kids' memory capacities as well as their capacity for paying attention while learning.

Relationship between nutrition and academic performance among preschool children

According to a study done in 2010 at the University of Alabama in Birmingham, eating habits, a healthy diet, and sleep patterns are all related to young children's success in school. The Centers for Disease Control and Prevention concur with this. For more than 20 years, child health advocates in the United States have experimented with children's diets. Initial research emphasized the advantages of enhancing young children's health. Likewise, better diet has the potential to have a good impact on how well kids behave and succeed academically.

The link between better nutrition and improved learning, fewer absences from school, and improved behavior in kids leads to less disruptions in the classroom, according to available evidence, even though researchers are still trying to show it conclusively. These are the associations between diet and academic achievement, following a 2010 study by the University of Alabama at Birmingham.

a. A healthy diet and exercise

Kids gain knowledge through play. Children who eat healthy will have the energy they need to play.

b. Improving Brain Function through Nutrition

Numerous studies demonstrate that a child's dietary status can have a direct impact on their mental capacity. For instance, even in its early stages, iron deficiency can

reduce dopamine transmission, which has a detrimental effect on cognition. It has been demonstrated that deficiencies in other vitamins and minerals, particularly thiamine, vitamin E, vitamin B, iodine, and zinc, impair cognitive function and mental focus. Supplementing with amino acids and carbohydrates can also enhance perception, intuition, and reasoning.

Studies have also shown that changes in food intake can affect how intelligent and cognitively capable preschoolers are.

c. Promote a Balanced Diet for Better Behavior and Learning Environments

Children who are well-nourished are more likely to arrive to school prepared to learn. Children are likely to miss fewer days of school and attend class more regularly because improvements in diet keep them healthier. According to studies, both sugar and hunger can have a harmful effect on children's behavior. When kids eat a balanced diet that contains protein, fat, complex carbohydrates, and fiber, these impacts can be mitigated.

Thus children will have more time in class, and children will have fewer interruptions in learning over the course of the school year. Additionally, children's behavior may improve and cause fewer disruptions in the classroom, creating a better learning environment for each child in the class.

d. Encourage a healthy diet to improve pupil's performance

The effect of a child's diet and nutrition on academic and behavioral results has drawn increased attention from sociologists and economists. In general, studies suggest that a better diet is linked to improved exam performance, and initiatives aimed at boosting kids' health also show a small boost in their performance on academic tests. According to other research, raising kids' academic performance results in more frequent task completion, higher arithmetic test scores, probably higher reading test scores, and higher attendance rates. Additionally, behavioral outcomes including tardiness and disciplinary referrals improved when soft drinks were no longer sold in school vending machines and were replaced with alternative beverages.

The possibility exists for children to succeed in school. They run the risk of not reaching their potential if proper nutrition is not provided. However, taking steps now to offer healthier options in schools can help prepare them for a prosperous future full with opportunities.

Ways the school environment can have a positive influence on balance diet and academic performance of young Children (Preschool Children)

According to Wilder (2004), schools can improve pupils' intake of a balanced meal that is high in nutrients. Research demonstrates that eating habits and other healthy behaviors are related to academic achievement, making healthy pupil's better learners. Both parents and kids view the school as a consultative entity. The following are some methods that schools can assist in ensuring that kids are eating a balanced diet:

a. Make nutrition education a component of the curriculum: Nutrition education can be incorporated into other classes as well as a comprehensive health education curriculum. For instance pupils could learn to count using images of fruits and vegetables, measure ingredients for a dish to teach fractions, grow vegetables in the classroom, and study various cultural culinary traditions.

b. By emphasizing the value of eating a balanced diet, teachers can serve as positive role models for kids.

c. The school website and the school newsletter should both regularly feature information on balanced diets for parents.

d. It is important to motivate communities and families to participate in balanced diet initiatives and educational activities through homework and classroom activities.

e. Rules governing the foods and drinks provided or sold at schools should be established (ensuring only healthy and balanced diet foods are made available).

f. A lesson on the value of a balanced diet to children's academic performance should be included in the teacher training or curriculum support materials.

g. At school events and parties, only foods that are part of a balanced diet should be provided.

Factors affecting the impact of nutrition in preschool Children's Academic Performance

Omeogun (2007) highlighted that a number of variables influence how well-balanced diets affect the academic performance of young children. He concurred that parenting style had a significant impact on how well-behaved a preschooler was. He went on to describe the following aspects that influence how well-balanced diets affect young children's academic achievement.

a. Parental background and socioeconomic status: This is indicated by financial and educational attainment. The effects of a balanced diet on a preschooler can vary depending on the parents' educational background. The ability to make informed

choices about your child's health and diet is provided by education. Parents with higher levels of education are more aware of the kinds of nutritious foods that will support their young child's growth and development, while parents with lower levels of education are less aware of the value of a balanced diet. As a result, this is a barrier to young children eating meals that are balanced diets. Your health is impacted by your income level. The impact of a healthy diet on a child's academic performance is made easier because parents with greater incomes are typically healthier and have adequate facilities. They have greater access to nutritious meals. Low-income individuals are more likely to reside in a community of deprivation and to experience circumstances that compromise their health.

b. Physical environment: A young child's health and wellbeing in the environment can be impacted by the physical environment, which can affect how well-balanced diets are received. The impact of a balanced diet on academic achievement in preschoolers is influenced by a number of other factors, including access to safe water, secure housing, good roads, a supportive environment, and clean air. The effects of a balanced diet, on the other hand, will be hampered by a healthy diet, but a balanced diet will be unduly impacted by a healthy diet, but a polluted learning setting the young child's academic performance will be impacted, and it will lead to poor health.

Ways parents can help to improve balance diet among children in preschool

Annecase and Christina Paxson showed that parents are the main guardians of their children's health in the book Health affairs (Vol. 21, No. 2, published March/April 2002). Children in preschool still need to be encouraged to develop healthy eating habits because they are still forming these habits. These young people want to study. Adult eating habits are frequently imitated by them. They require monitoring when eating because they are still developing their chewing and swallowing abilities.

For kids in preschool, consider these helpful mealtime tips:

a. A piece of fruit or a handful of nuts make simple snacks.

b. sat the colors of the rainbow! Put a variety of vegetables on colorful plates.

c. Include children in the cooking process; even if they only watch while you explain it, they are still learning.

d. Limit sugary drinks, including juices.

e. Take your time: do not rush through meals. Although it can be annoying, children who eat slowly are better able to gauge their hunger and quit when satisfied.

f. Avoid punishing a child for not eating, as this may cause a bad association to form.

They may occasionally feel the desire to finish everything on their plate, overeating and failing to pay attention to their bodies.

g. Using food as a reward should be avoided since it may educate children to turn to it for solace.

h. Make meals, give scheduled snacks, and restrict impulsive eating. Praise and encouragement, sometimes with a hug, can suffice as a reward for a child.

i. Encourage good dining manners. Instead of fiddling with food or at the dinner table, concentrate on eating.

j. Children who are playing or running around while eating risk choking. Have your youngster sit when eating.

K. Continue to provide a range of foods. Have the mindset that your child will eventually learn to eat practically all meals sooner or later.

l. Make eating as enjoyable as you can. You shouldn't force your youngster to eat. Never make your youngster "clear" their plate. Overeating could result from this, which would make your youngster put on too much weight. If snack options are restricted during the day, kids will be ravenous when it is time for meals.

m. Keep in mind that different fruits and vegetables have different combinations of nutrients depending on their color. Consider your food as a spectrum of colors. To ensure that your child is getting a wide variety of nutrients, try to

place as many different colored foods on their plate as you can. Foods with the hues of green, white, yellow, orange, blue, purple, and red come to mind. Play the game of "Can you think of a food that is this color?" with your youngster. How many various hues can we fit on your meal's plate?

n. Act as an example for others. It's crucial for parents to lead by example. Eat all of these wholesome foods on your own. Demonstrate to your youngster the fun they can have.

o. Use your creativity in the kitchen to make cooking fun. While preparing dinner, have fun by cutting food into humorous shapes and creating expressions with it. Give the youngsters free reign to experiment with the various flavors and textures of food.

p. Give them a selection of foods from which to choose for their meal. Children adore making decisions with adults!

q. You can also involve the kids in the grocery shopping. Describe the origins of the fruits and vegetables. Allow your youngster to shop for healthy foods on their own.

Give illustrations of wholesome eating practices. The actions of their parents are imitated by preschoolers. Your child will not learn to eat healthfully if you have unhealthful eating habits.

The effect of malnutritin on children's cognitive Development

Young children's brain function can decline due to malnutrition, which can also damage a child's ability to develop cognitively. Howard Taras from the University of California observes in 2008 that children's capacity to learn can be impacted by not eating a nutritious breakfast. According to Krista Casazza, PhD, RD, assistant professor in the Department of Nutrition Sciences, your brain cannot function if you are not consuming enough calories, which is generally an issue. But when children skip breakfast and head off to school, it can have an impact on their cognitive performance. Malnutrition has a negative impact on children's cognitive growth and may harm their brains. Children lose interest in studying and their ability to learn.

Empirical Studies/Reviews

When kids do not have a balanced breakfast, it can impact their ability to study, says Howard Taras from the University of California in 2008. The scholastic performance and cognitive functioning of undernourished children can be significantly improved, according to Taras, by providing them with a good breakfast. A study from the University of Alabama in Birmingham in 2010 found a correlation between healthy lifestyle choices like eating patterns, a balanced diet, and sleep patterns and academic success. According to Krista Casazza, PhD, RD, assistant professor in the Department of Nutrition Sciences, if you do not get enough calories,

your brain will not function, which is generally an issue. However, youngsters' cognitive performance may be impacted if they skip breakfast before school. Casazza advises providing entire grains, proteins, and fruits to children as a healthy morning meal. A high sugar level followed by a crash is what you want to avoid with sugary cereals. Through lunch, when they need to eat well again, a balanced breakfast will feed the body for a while and assist maintain their level of focus. They will not devour snacks frantically after school, according to Casazza, who claimed that this will keep them full until dinner. Offer healthy food like yoghurt, fruits, and vegetables if the kids do need to eat something before supper.

According to the U.S. Department of Health and Human Services (2008), people who eat a balanced diet and healthy foods are more likely to lead healthy lives. According to a study that was published in the Journal of the American College of Cardiology, early intervention in children will not only help them develop lifelong healthy habits, but it will also help their parents adopt healthier lifestyles to help their children perform better in school by providing them with a healthy, balanced diet.

Parents are the main guardians of their children's health, according to Annecase and Christina Paxson in the book Health affairs (Vol. 21, No. 2, published March/April 2002). Parents make decisions regarding their children's environment before and after birth, including the food that the young child in preschool eats, as

well as the quantity and quality of health care they receive, as well as the emotional support they offer. Parents' financial means, understanding of health practices and programs, children's own health and behavior, and the characteristics of the environment they live in are all taken into account when making decisions.

Further evidence that nutrition may alter how well we think was presented by Wood and Kretsch (2001). Studies with school-aged children show a direct link between inadequate nutrition and decreased academic performance. Additionally, iron has been demonstrated to be crucial for brain health. Details from a study looking at iron and its impact on academic concentration, conducted with men aged 27 to 47, were cited by Kretsch et al. A concentration test's poor scores were correlated with the subjects' bodies having less iron. Children with iron deficiency anemia have been found to have short attention spans, and low iron levels have been linked to both of these traits.

According to Wolf and Burkman (2006), a variety of dietary elements support brain function and neurotransmitter activity. Scientists advise a wide variety of foods as nutrient sources; the most significant ones currently understood are protein, fat, B vitamins, iron, chlorine, and antioxidants. Giving students the correct food options and a balanced diet enables them to form wholesome eating habits that will promote the brain's optimal function.

A good, balanced meal helps kids avoid or lessen tummy aches, headaches, tension headaches, and exhaustion, all of which interfere with learning. The ideal opportunity to teach children and their parents healthy breakfast habits, whether at home or school, exists for school workers, who have perfect access to the eating habits of students. Wolf and Burkman also draw attention to the consequences of skipping meals. The body prioritizes its need to maintain life-supporting activities over learning if it does not receive enough nutrients from eating each day. In many instances, skipping a meal has a negative impact on the body's ability to learn. Wolf and Burkman came to the conclusion that up to half of preschoolers from low-income homes skipped breakfast and that kids who eat a healthy, balanced breakfast pay better attention during school performance tasks, retrieve information more quickly and accurately, make fewer mistakes when solving problems, concentrate better, and perform more difficult tasks. It is also crucial what the child eats at breakfast.

A meal containing solely starch and sugar will only keep a child going for around two hours, but a breakfast containing protein, fat, and sugar will prevent blood sugar decreases for several hours. For a youngster who is expected to perform at his or her best in school, both academically and physically, a supper that contained foods from various dietary groups is ideal. Omeogun (2007) concurred that a child's parental background had a significant impact on the impact of excellent health

behavior. According to him, parents who have a high socioeconomic standing are more likely to have access to amenities that will increase the positive effects of good health. Parents with advanced degrees are more aware of the value of healthy behavior, which makes it simpler for them to urge their kids to engage in healthy habits like eating a balanced diet, which can improve their academic performance. Unlike parents with limited incomes, who still struggle to provide three square meals. They will not perceive the need to influence the preschoolers' eating habits; instead, they will encourage them to consume whatever is offered to them.

Summary and Conclusion

The purpose of this paper is to examine nutrition and its perceived impact on the academic performance and success of pupils in nursery schools. For healthy physical and mental development, proper nutrition and a balanced diet are essential. For the body and mind to function properly, appropriate nutrition is essential; nevertheless, some children may have difficulty getting it owing to a variety of reasons, including socioeconomic position, cultural obstacles, and personal preferences. Inadequate nutrition and a lack of knowledge about what nutrition and a balanced diet are and their importance to academic success fuel many of the academic and behavioral challenges that kids confront in the classroom. The problems of nutrition and a balanced diet, illiteracy, and misunderstandings can be

addressed in a number of ways. These actions are based on fundamental concepts like cooperation, inventiveness, and endurance. In order to make progress in all areas of academic achievement and to ensure the bright futures of all pupils, it is imperative to try to address the problem of the majority of preschool children populations suffering from obesity, eating disorders, or undernourishment. As such, a balance diet must be regarded as essential because it is the basis and foundation of children's academic success. Thus, the research on how nutrition affects children's academic performance that was covered in this chapter was done by several researchers.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter is concerned with the description of the method and procedures for this study. It will be discussed under the following sub-headings:

- Research Design
- Population of the Study
- Sample and Sampling Techniques
- Research Instrument
- Validation of Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Research Design

The design for this study is descriptive survey. It is to provide the opinion of respondents on the perceived impact of nutrition on the academic performance of pupils in nursery schools. Descriptive survey is used to describe characteristics of a popularity or phenomenon being studied. Descriptive survey is used to gather quantifiable information that can be used for statistical inference through data

analysis. Descriptive survey is devoted to the gathering of information about prevailing conditions or situations for the purpose of description and interpretation.

Population of the Study

The population of the study comprises of all private preprimary school teachers in Benin City, Edo State.

Sample and sampling techniques

The sample for the study comprised 100 teachers selected through convenience sampling technique.

Research Instrument

The instrument for this study is a prepared and well-structured questionnaire, which covered relevant variable of the research under consideration. It majorly consists of two sections. Section A of the questionnaire provides information on demographic data and details of the respondents which include sex, age, qualification, years of experience. While section B contains a set of structured questions which are to be administered to 100 respondents and it contains information on Perceived impact of nutrition on the academic performance of pupils in Benin City, Edo State. Items were structured as YES or NO scale which elicited responses on the questions asked. The instrument was scored using frequency and simple percentage. The questionnaire consists a total of 14 questions. The respondents were to provide

necessary response by ticking one out of two options structured in a two point scale, Yes or No that best describes their responses.

Validation of Instrument

The instrument was validated by the supervisor and two other lecturers in Education with regards to relevance of the research topic, content coverage, language appropriateness and clarity of expression. Appropriate corrections were made before the final copy.

Reliability of the Instrument

The test-retest approach was adopted by the researcher in establishing the reliability of the instrument. In doing this 30 copies of the questionnaire were administered to 30 selected respondents. 3 schools outside the sampled schools were used and 10 teachers from each of these schools were used. This was done before the main administration of the questionnaires. Afterwards two weeks another 30 copies of the same questionnaire were re-administered on the same group. Their responses on the two occasions were correlated using Persons Product Moment Correlation. A co-efficient of 0.85 was gotten and this was high enough to consider the instrument reliable.

Method of Data Collection

The questionnaire was personally distributed by the researcher to respondents in the 20 pre-primary schools, and it was then collected the same day.

Method of Data Analysis

To address the study questions, a frequency distribution table and simple percentage score were used to assess the data.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter is concerned with the analysis and interpretation of data, which were collected from the respondents during the investigation. The data obtained from questionnaire was scored and analyzed in simple arithmetic percentage by the researcher. This was done in order to provide answers to the research questions.

Demographic Data

A total 100 respondents (100 teachers) representing 100% of the total respondents filled the questionnaire and returned. The demographic variables used are Gender, Age, Educational qualification and Years of teaching experience. These variables are tabulated in frequencies and percentages respectively in Table 1, 2, 3 and 4

Table 1: Analysis of Respondents by Gender

`Gender	Frequency	Percentage %
Male	28	28
Female	72	72
Total	**100**	**100**

Table 1 clearly indicates that there is gender imbalance in pre-schools with majority of teachers being female.

Table 2: Analysis of Respondents by Age

Age	Frequency	Percentage%
20 - 25	14	14
26 - 30	31	31
31 - 35	39	39
36 and Above	16	16
Total	**100**	**100**

Table 2 shows the distribution of age range of preschool teachers in some selected Local Government Area of Edo state. It further shows that 14 (14%) respondents are between the ages of 20- 25 years, 31 (31%) respondents are between the ages of 26-30, 39 (39%) respondents are between the ages of 31-35 years, and 16 (16%) respondents are between the ages of 36 years and above.

Table 3: Analysis of respondents by educational qualification

Educational Qualification	Frequency	Percentage%
SSCE	18	18
OND	8	8
NCE	20	20
HND	5	5
B.Sc	4	34
B.ED/B.A	10	10
PGDE	3	3
MSC	2	2
M.ED	Nil	Nil
Total	**100**	**100**

The findings from table 3 revealed that 18 respondents representing 18% are SSCE holders, 8 respondents representing 8% are OND holders, 20 respondents representing 20% are NCE holders, 5 respondents representing 5% are HND holders, 34 respondents representing 34% are B.Sc holders, 10 respondents representing 10% are B.ED/B.A holders, 3 respondents representing 3% are PGDE holders, 2 respondents representing 2% are M.Sc holders

Table 4: Analysis of respondents by years of teaching experience

Years of teaching experience	Frequency	Percentage%
Below 5 years	6	6
6 - 10 years	57	57
11 - 15 years	35	35
16 - 20 years	1	1
21 years and above	1	1
Total	**100**	**100**

Table 4 shows that majority of the respondents which was 57 (57%) had work and teaching experience between 6 - 10 years. Teachers with experience below 5 years were 6 (6%) and teachers with teaching experience of between 11-15 years were 35(35%).The study revealed that few teachers with professional experience of between 16-20 years was just 1(1%) and teachers with teaching experience of between 21 years and above was also 1 (1%).

Analysis of data based on items in questionnaire

Research Question 1: What is the perceived impact of nutrition on children's academic performance?

Table 5: The perceived impact of nutrition on children's academic performance

S/N	Items	Yes%	No%	Total%
1.	Improved nutrition has the potential to positively Influence pupils academic performance	100(100%)	0(0%)	100(100%)
2.	Good nutrition helps pupils show up at school and ready to learn	85(85%)	15(15%)	100(100%)
3	Nutritional status can directly affect mental capacity among nursery pupils	94(94%)	6(6%)	100(100%)
4	A higher quality diet is associated with better performance in exams	76(76%)	24(24%)	100(100%)
5.	Eating healthy food helps to improve pupils participation in classroom activities	96(96%)	4(4%)	100(100%)

From table 5 above, item 1 clearly reveals 100 respondents representing 100% agreed that improved nutrition has the potential to positively Influence pupils academic performance. Item 2 reveals 85 respondents representing 85% agreed that good nutrition helps pupils show up at school and ready to learn while 15 respondents representing 15% disagreed. Item 3 reveals 94 respondents representing 94% agreed that nutritional status can directly affect mental capacity among nursery pupils while 6 respondents representing 6% disagreed. Item 4 from the table above reveals 76 respondents representing 76% agreed that a higher quality diet is associated with better performance in exams while 24 respondents representing 24% disagreed. Item 5 reveals 96 respondents representing 96% agreed that eating healthy food helps to improve pupils participation in classroom activities while 4 respondents representing 4% disagree.

Research Question 2: What is the role of school in improving the nutritional status of children?

Table 6: The role of the school in improving the nutritional status of Children

S/N	Items	Yes (%)	No (%)	Total (%)
6.	Eliminating the sale of soft drinks. and replacing them with fruit juice has a positive impact on pupils learning outcome	75(75%)	25(25%)	100(100%)
7.	The school should promote good dietary hygiene and sanitation practices	99(99%)	1(1%)	100(100%)
8.	Inclusion of nutritional education in school curriculum goes a long way improving the nutritional status of pupils	90(90%)	10(10%)	100(100%)
9.	School gardens can help to improve the nutrition and education of pupils	74(74%)	26(26%)	100(100%)
10.	Educating parents, teachers and caregivers on the nutritional needs of children at the early stages goes a long way in improving their nutritional status	96(96%)	(4(4%)	100(100%)

From table 6 item 6 above, it reveals that 75 respondents representing 75% agree that eliminating the sale of soft drinks in schools and replacing them with fruit juice has a positive impact on pupils learning outcome while 25 respondents representing 25% disagree. Item 7 reveals 99 respondents representing 99% agree

that the school should promote good dietary hygiene and sanitation practices while 1 respondent representing 1% disagree. Item 8 reveals 90 respondents representing 90% agree that, inclusion of nutritional education in the school curriculum goes a long way in improving the nutritional status of pupils while 10 respondents representing 10% disagree.

Item 9 from the above table reveals 74 respondents representing 74% agree that school gardens can help to improve the nutrition and education of pupils while 26 respondent representing 26% disagree. Item 10 reveals 96 respondents representing 96% agree that educating parents, teachers and care givers on the nutritional needs of Children at the early stage goes a long way in improving their nutritional status while 4 respondents representing 4% disagree.

Research Question 3: What is the role of parents in children's nutritional intake

Table 7: The role of parents in children's nutritional intake

S/N	Items	Yes (%)	No (%)	Total (%)
11.	Healthy eating habits must be taught to children at a very young and tender age	98(98%)	2(2%)	100(100%)
12	The educational background of parents can influence eating habits of children	77(77%)	23(23%)	100(100%)
13.	Parents with low income status show little to no concern about improving, impacting and providing balanced diet for children	66(66%)	34(34%)	100(100%)
14.	Parents with high socio-economic status ensure that their children are given balanced and healthy diet	85(85%)	15(15%)	100(100%)

From table 7, item 11 reveals 98 respondents representing 98% support that healthy eating habits must be taught to children at a very young and tender age while 2 respondents representing 2% refute. Item 12 reveals 77 respondents representing 77% support that the educational background of parents can influence the eating habits of children while 23 respondents representing 23% refute. Item 13 reveals 66 respondents representing 66% support that parents with low income status show little

to no concern about improving, impacting and providing balanced diet for children while 34 respondents representing 34% refute. Item 14 reveals 85 respondents representing 85% support that parents with high socio-economic status ensure that their children are given balanced and healthy diet while 15 respondents representing 15% refute.

Discussion of Findings

From the findings from research question one the perceived impact of nutrition on children's academic performance , it was discovered that improved nutrition has the potential to positively Influence pupils academic performance, proper nutrition also aids pupils show up at school and motivated to learn and even boost their cognitive, affective and Psychomotor development, a higher quality diet is associated with better performance in exams and eating healthy food helps to improve pupils participation in classroom activities.

This is in line with the research work done by Howard Tara (2008), who noticed that children's ability to learn can be impacted when they don't eat enough in the morning. The scholastic performance and cognitive functioning of undernourished children can be significantly improved, according to Taras, with a good breakfast. Therefore, providing children with a range of food nutrients encourages them to adopt a balanced diet and fosters brain development (Wolf and Burkman 2006). Additional evidence that nutrition may play a part in influencing

how well children think was presented by Wood and Kretsch (2001). In a similar vein, Wolf and Burkman (2006) noted that several dietary elements support brain function and neurotransmitter activity and that scientists advise a wide variety of foods as nutrient sources; the most significant nutrients currently recognized are protein, fat, B Vitamins, iron, chlorine, and antioxidants. In conclusion, providing students with a balanced diet and the correct food options enables them to establish wholesome eating habits that will promote the brain's optimal function.

Analysis of research question two revealed that respondents agreed to a high extent that the school do have a great role to play in improving nutritional status of children and this can be supported by: Eliminating the sale of soft drinks in schools and replacing them with fruit juice , Promoting good dietary hygiene and sanitation practices, Inclusion of nutritional education in the school curriculum, Setting up of school gardens, and educating parents , teachers and caregivers on the nutritional needs of children at the early stage. Supporting these findings is Wilder's (2004) opinion that schools are crucial to improving children's intake of a nutritious and balanced diet. Parents view the school as a resource.

The result of the analysis in research question three confirmed that parents do have a great role in children's nutritional intake, as they are to teach healthy eating habits to their children at a very young age. This is consistent with Annecase and Paxson's (2002) explanation that parents are the primary guardians of their children's

health. It also concurs with Omeogun (2007), who highlighted that parental background had a significant impact on the impact of good health behavior in the pre-school child.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is examined under the following sub-headings; summary of the study, conclusion, recommendations and suggestion for further studies.

Summary

This study made an overview of the perceived impact of nutrition on the academic performance of pupils in nursery schools in Benin City. Three research questions were formulated to guide the study:

a. What is the perceived impact of nutrition on children's academic performance?

b. What is the role of the school in improving nutritional status of children?

c. What is the role of parents in children's nutritional intake?

Descriptive survey research design was adopted for the study. The sample of the study comprised 100 teachers which were randomly selected from 20 nursery schools, 5 teachers from each school making a total of 100 respondent. Data collected were analyzed using frequency count and simple percentage.

The study revealed the following:

a. That nutrition do have a great impact on the academic performance of pupils in nursery schools

b. The school certainly has an important role to play in improving the nutritional status of children.

c. Parents to a large extent do have the greatest role to play in ensuring the nutritional intake of their children.

The primary nutrients that many parents feed their kids are carbs and proteins. Some parents and teachers are still unaware that schools may influence and improve nutrition by encouraging kids to consume healthy diets and giving parents advice on what to feed their kids, especially during school lunch.

Conclusion

From the findings of this study, it could be concluded that nutrition indeed has a great impact on the academic performance of pupils in nursery schools as improved nutrition has the potential to positively enhance pupils' academic performance also better nutrition helps pupils show up at school and ready to learn. Furthermore, eating healthy food helps to improve pupils' participation in classroom. Provision of balanced diet to children will help to improve their health and also improve their academic performance. Healthy diet also helps to fight against diseases, fatigue and malnutrition among nursery school children.

However, recent studies have shown that the quality of a child's diet can have a real effect on their performance at school. Nutritionists often start by reminding us that children need adequate nutrition to provide them with energy. Children are constantly on the move at school and they are also growing rapidly. They need a range of nutrients and vitamins to support the growing process. A really beneficial

start to the day is breakfast. Recent research shows that those children who ate a healthy breakfast had behaved better, were less hyperactive and had better standardized test results than those who skipped breakfast. The kind of breakfast given to children also have an impact on their learning. When a child is given healthy diet, he is more advantaged to learn faster and better. A well improved nutrition also helps to improve the attention span of children. When a child eats well, such a child will grow well in all developmental areas, both physically and cognitively.

Therefore this study concludes that it is important to improve the nutritional diet of nursery pupils, in order for them to excel academically and live a better fulfilling lifestyle.

Recommendations

Based on the findings and conclusion of this study, the following recommendations were made.

1. Government should make nutritional education inclusive in school curriculums as this will go a long way in fostering nutrition among nursery pupils

2. Schools can improve balanced diet through teaching the children and also advising the parents on balanced and healthy foods they can give their children, especially in the morning.

3. Parents and guardians ensure that their children's meals are nutritiously packed and junks free.

Suggestions for further Studies

The following suggestions for additional research were made:

1. Whenever any research of this nature is to be conducted, a large population should be used for better representation and thorough study.

2. To determine whether the results of this research could be acceptable in other areas or will greatly help to eliminate parent negligence on the impact of nutrition to their children and, in turn, brighten students' performance in school, this study should be expanded to other local government areas and even other states.

REFERENCES

Adolphus K., Lawton C.L., Dye L. The effects of breakfast on behavior and academic performance in children and adolescents. Front. Hum. Neurosci. 2013;7:425. doi: 10.3389/fnhum.2013.00425. [PMC free article] [PubMed] [Cross Ref] [Google Scholar]

Benton, D. & Roberts, G. (1988). Effect of vitamin and mineral supplementation on intelligence in a sample of schoolchildren. *The Lancet*, 140–143

Benton, D. & Buts, J. (1990). *Vitamins/mineral supplementation and intelligence*. *The Lancet,* 335, 1158–1160.

Benton D; ILSI Europe The influence of children's diet on their cognition and behavior. Eur J Nutr. 2008 Aug;47(S3) Suppl 3:25–37. http://dx.doi.org/10.1007/s00394-008-3003-x pmid: 18683027

Bryan, J., Osendarp, S., Hughes, D., Calvaresi, E., Baghurst, K. & van Klinken, J. (2004). Nutrients for cognitive development in school-aged children. Nutrition Reviews, 62(8), 295–306.

Cueto, S. (2001). Breakfast and dietary balance: The enKid study. *Public Health Nutrition, 4,* 1429–1431.

Delange, F. (2000) The role of iodine in brain development. Proceedings of the Nutrition Society, 59, 75–79.

Eysenck, H., & Schoenthaler, S. (1997). Raising IQ level by vitamin and mineral supplementation. In R. Sternberg and E. Grigorenko (Eds.), Intelligence, heredity and environment (pp. 363 – 392). Cambridge: Cambridge University Press.

Florence, M., Asbridge, M., & Veugelers, P. (2008). Diet quality and academic performance. *Journal of School Health,* 78, 209–215.

Gómez-Pinilla F. Brain foods: the effects of nutrients on brain function. Nat Rev Neurosci. 2008 Jul;9 (7):568–78. http://dx.doi.org/10.1038/nrn2421 pmid: 18568016

Hodgkin E. *Nutrition and academic achievement: Are they related?*. An international journal of faith, thought and action 2007.

Hollar, D., Messiah, S., Lopez-Mitnik, G., Hollar, T., Almon, M., & Agatston, A. (2010). Effect of a two-year obesity prevention intervention on percentile changes in body mass index and academic performance in low income elementary school children. American *Journal of Public Health*, 100(4), 646–653.

Jamison DT. Child malnutrition and school performance in China. J Dev Econ. 1986;20(2):299–309.

Jones, T., Borg, W., Boulware, S., McCarthy, G., Sherwin, R., Tamborlane, W. (1995). Enhanced adrenomedullary response and increased susceptibility to neuroglygopenia: Mechanisms underlying the adverse effect of sugar ingestion in children. *Journal of Pediatrics*, 126, 171–177.

Kleinman, R., Murphy, J., Little, M., Pagano, M., Wehler, C., Regal, K., & Jellinek, M. (1998) Hunger in children in the United States: Potential behavioral and emotional correlates. Pediatrics, 101(1), e3.

Kleinman RE. Diet, breakfast, and academic performance in children. Ann NutrMetab. 2002;46(1):24–30.

Lieberman, H. (2003). Nutrition, brain function, and cognitive performance. Appetite, 40, 245–254.

McKnelly: nutrition and school performance. livestrongcom 2015.

Meyers, A., Sampson, A., Wietzman, M., Rogers, B., & Kayne, H. (1989). School breakfast

Nelson, M. (1992) Vitamin and mineral supplementation and academic performance in schoolchildren. Proceedings of the Nutrition Society, 51, 303–313.

Nelsonl, C., Walker, S., Chang, S., & Grantham-McGregor, S. (1998). Nutrition and education: A randomized trial of the effects of breakfast in rural primary school children. *American Journal of Clinical Nutrition*, 68, 873–879.

Price, J. (2012). De-fizzing schools: The effect on student behavior of having vending machines in schools. Agricultural and Resource Economics Review, 41(1), 92–99.

Ross C.E., Wu C.-L. The links between education and health. Am. Sociol. Rev. 1995;60:719–745. doi: 10.2307/2096319. [CrossRef] [Google Scholar]

Sandstead, H. (2000). Causes of iron and zinc deficiencies and their effects on brain. *Journal of Nutrition,* 130, 347–349.

Schoenthaler, S., Amos, S., Doraz, W., Kelly, M., & Wakefield, J. (1991). Controlled trial of vitamin – mineral supplementation on intelligence and brain function. Personality and Individual Differences, 12, 343–350.

Sigfúsdóttir ID, Kristjánsson AL, Allegrante JP. Health behaviour and academic achievement in Icelandic school children. Health Educ Res. 2007 Feb;22(1):70–80. http://dx.doi.org/10.1093/her/cyl044 pmid: 16766605

Sorhaindo, A., & Feinstein, L. (2006). What is the relationship between child nutrition and school outcomes. Wider Benefits of Learning Research Report No.18. Centre for Research on the Wider Benefits of Learning

Storey, H., Pearce, J., Ashfield-Watt, P., Wood, L., Baines, E., & Nelson, M. (2011). *A* randomized controlled trial of the effect of school food and dining room modifications on classroom behaviour in secondary school children. *European Journal of Clinical Nutrition, 65, 32–38.*

Woodhouse, P. D. Lamport, and A. Mark, "The relationship of food and academic performance: a preliminary examination of the factors of nutritional neuroscience, malnutrition, and diet adequacy," Christian Perspectives in Education, 5 (no.1)http://digitalcommons.liberty.edu/cpe/vol5/iss1/1. View at: Google Scholar

APPENDIX

INSTITUTE OF EDUCATION

DEPARTMENT OF EDUCATIONAL MANAGEMENT

UNIVERSITY OF BENIN

BENIN CITY

Dear respondent, I am an undergraduate student of the above named institute and university. I am currently conducting a research on the topic "Perceived impact of Nutrition on the academic performance of pupils in Nursery Schools in Benin City, Edo State". You been selected as one of the respondents to answer questions about this issue. I kindly request that you please provide information required in the questionnaire below. The objective is to provide accurate and objective information about the issue under investigation.

Be rest assured that all information provided will be treated with utmost confidentiality and will be used for academic purpose only.

Thank you for your cooperation

Yours faithfully

Eruyogho Ighomo
Researcher

QUESTIONNAIRE

SECTION A

From each item, select or tick [√] in the box, the option that best applies to you.

1. Gender: Male [ ] Female [ ]
2. Age bracket: 20-25[ ] 26-30[ ] 31-35[ ] 36 and above [ ]
3. Educational qualification: SSCE [ ] OND [ ] NCE [ ] HND [ ] B.SC [ ] B.ED/B.A [ ] PGDE [ ] M.Sc [ ] M.ED [ ]
4. Years of teaching experience: Below 5 years [ ] 6-10years [ ] 11-15years [ ] 16-20years [ ] 21 years and above [ ]

SECTION B

Please carefully read each of the item below and tick the best option that suits each questions below:

S/N		YES	NO
1.	Improved nutrition has the potential to positively influence pupils' academic performance.		
2.	Good nutrition helps pupils show up at school and ready to learn.		
3.	Nutritional status can directly affect mental capacity among nursery pupils		
4.	A higher quality diet is associated with better performance in exams		
5.	Eating healthy food helps to improve pupils participation in classroom activities		
6.	Eliminating the sale of soft drinks in schools and replacing them with fruits juice has a positive impact on pupils learning outcome		
7.	The school should promote good dietary hygiene and sanitation practices		

8.	Inclusion of nutritional education in the school curriculum goes a long way in improving the nutritional status of pupils		
9.	School gardens can help to improve the nutrition and education of pupils		
10.	Educating parents, teachers and care givers on the nutritional needs of children at the early stage goes a long way in improving their nutritional status		
11	It is the role of parents to ensure their children are eating healthy		
12.	The educational background of parents can influence eating habits of children		
13	Parents with low income status show little or no concern about improving, impacting and providing balanced diet for their children		
14.	Parents with high socio- economic status ensure that their children are given balanced and healthy diet		

SAMPLE OF THE STUDY

S/N	SCHOOLS	LOCAL GOVERNMENT	NO OF TEACHERS
1	ADESOTU	OVIA- NORTH EAST	5
2	WINNERS SCHOOL	OVIA- NORTH EAST	5
3	GRACELAND ACADEMY	OVIA- NORTH EAST	5
4	GEONA ACADEMY	OVIA- NORTH EAST	5
5	SPLENDID VILLE DAYCARE, NURSEEY AND PRIMARY SCHOOL	OVIA- NORTH EAST	5
6	SACRED HEART INTERNATIONA SCHOOL	OVIA- NORTH EAST	5
7	COAT OF ARM	OVIA- NORTH EAST	5
8	BOILING POINT ACADEMY	OVIA- NORTH EAST	5
9	SALVATION GROUP OF SCHOOL	OREDO	5
10	EMMANUEL FOUNDATION EDUCATION CENTRE	OREDO	5
11	OUR LADY OF APOSTLE (O. L. A)	OREDO	5
12	GREATER TOMORROW INTERNATIONAL SCHOOL	OREDO	5
13	CETA INTERNATIONAL SCHOOL	OREDO	5
14	NOSAKHARE MODEL EDUCATION CENTRE	OREDO	5
15	ABC WONDERLAND SCHOOL	EGOR	5
16	QUINCY ACADEMY	EGOR	5
17	JADIZ	EGOR	5

S/N	SCHOOLS	LOCAL GOVERNMENT	NO OF TEACHERS
18	BETHEL NURSERY AND PRIMARY SCHOOL	EGOR	5
19	GREENVILLE ACADEMY	EGOR	5
20	MUSTARD SEED	EGOR	5
	TOTAL		100