



Percieved Effects of Proper Nutrition among Secondary School Students in Awka South Local Government Area of Anambra State Nigeria

NNAEMEZIE, NKIRU ONYINYECHUKWU¹, NWANKWO NONYELUM STELLA², AND IBE IJEOMA M.A.³

Nnamdi Azikiwe University, Awka Anambra¹, Nwafor Orizu College of Education Nsugbe ², Federal College Of Education (Technical Asaba Delta State)³

no.nnaemezie@unizik.edu.ng¹, nwankwostella100@gmail.com², ibeassumpta2@gmail.com³

ABSTRACT

Introduction: Proper nutrition has so many benefits and for one to live a healthy life there is need for people to be aware of the effects of proper nutrition. The study determined the perceived effects of proper nutrition among secondary school students in Awka south Local Government Area of Anambra State.

Methods: Three research questions were raised. Cross sectional designed was used in the study. The population of the study comprises of 92,883 junior and senior secondary school students in Awka south local government area of Anambra state. The sample of the study was 201 Junior and Senior secondary school student gotten through simple random sampling technique. The instrument for Data collection was a questionnaire titled Perceived effects of proper nutrition questionnaire (PEPNQ). The Validation was done by three experts, the validity was done through pilot testing and co-efficient gotten was 0.76. The research questions were analyzed using mean responses.

Results: The result showed that secondary school student perceived proper nutrition as effective but some of their responses were affected by the variables of the study.

Conclusion:Based on the findings of the study, it was recommended that proper nutrition education should be programmed both on Television and Radio stations so that both parents and student would gain more knowledge of the proper nutrition.

Introduction

Not everyone has the knowledge of proper nutrition and their benefits to health. Lesley (2017) defined nutrition as nourishment or energy that is obtained from consuming food or the process of consuming nourishment and energy in the proper amount. Lesley (2017) as stated by world Health organization that proper nutrition is an adequate well-balance diet combined with regular physical activity. Since we are individual in a lot of daily activities in order to carry out these activities a large amount of energy is required. This energy comes from the food we consume. Food is vital as it provides the energy needed for growth, repair and other life processes.

World Health Organization (2021) stated that nutrition is a critical part of health and development. Better nutrition is related to improved infant, child and maternal health strong immune systems, safer pregnancy and child birth, lower of non-communicable diseases (such as diabetes and cardiovascular diseases) and longevity. Healthy children learn better anybody with proper nutrition are more productive and can create opportunities to gradually break the cycles of poverty and hunger. Kenneth (2021) defined nutrition as the assimilation by lining organizations of food materials that enable them to grow maintain themselves, and reproduce. Proper nutrition can help prevent disease and promote health. There are six categories of nutrient that the body needs to acquire from food they are protein carbohydrates, fat fibers, vitamin and minerals and water (Farlex 2021).

Unfortunately, for many of us proper nutrition is far from what we get from what we get from our daily diet. People are observed with junk food, processed food that comes from a box and many of us eat little or worse yet no whole real food that provides the body with the proper nutrition that it needs. Everyone including children and the elderly needs proper nutrition to stay healthy. Nutrition for children is based on the same principles as nutrition for adults. Healthy eating in childhood and adolescence is important for proper growth and development and to prevent various conditions (centers for disease control and prevention (CDC 2021).

According CDC (2021) they recommend that people aged two years older follow a healthy eating pattern that includes the following: A variety of fruits and vegetables, whole grains fat-free and low-fat dairy products, a variety of protein foods and oils CDC (2021), proper nutrition during the first two

years of life is vital for healthy growth and development. Starting proper nutrition practices early can help children develop healthy dietary patterns. Despite all the focus on children being overweight or underweight, many parents still get confused especially when it comes to what types of food to give to children.

According to American Academy of pediatrics (2021) during The early state of life, it's almost all about the milk whether it is breast milk, Sinned food or combination of the two. Breast milk or formula will provide practically all nutrients a body needs for the first year of life. For toddlers and preschoolers because of their growth there might be increase in appetite and they tend to eat a lot and might lose their appetite suddenly. At that stage they need a lot of calcium in order to develop strong and health bone and teeth also they need fiber which would aid digestion and prevent constipation. At the age of 6 or 7years, their body need's crabs (Sugars) fat, and sodium, but should be eaten in moderation as two much can lead to unneeded weight gain and other health problems. Among pre-teenagers and Teenagers, categories and calcium requirements is very high calcium is more important than ever during the twenties and teenage years because the majority of bone mass is built during this time encouraging kids to have milk, milk products or calcium-rich alternators should have them get more calcium.

Water makes up more than half of kid's body weight and is needs to keep all parts of the body functioning properly. Nutritional needs during adolescence, is higher than any other time and when proper nutrients are not consumed, could lead to adverse effects on an adolescent well-being energy and health. According to Stanner (2006) a poor diet during adolescent can cause a number of immediate health problems such as iron deficiency anaemia obesity, diabetes and dental carries in the short term. The long term implication includes, increasing risk of obesity, heart disease, diabetes cancer and osteoporosis in adult life. There is also evidence of low intakes of several infamous and minerals circulation during folate, zinc, calcium, magnesium and iron) amongst adolescents, particularly teenage girls come of whom appear to be avoiding important sources of those micronutrients (e.g. milk and meat). Two much emphasis on body weight and body image might also promote eating disorders at that stage. Acceding, to the study conducted by Skinner and Woodburn (1984), most of the teenagers did not know food sources of nutrients other than the commonly known best source. They also find it difficulty selecting a notorious meal unless the meal followed traditional pattern. For adolescent to adhere to proper nutrition would depend on their perception of what proper nutrition is all about perception means according to merriam-webster (2021) as the way one thanks about or understand someone or something. Therefore, the students would be able to identify the effect of proper nutrition if they can recognize the importance of each class of nutrient and what the give the body.

So many factors can affect the perception of the effect of proper nutrition among secondary school students. For this study, Age level of education and school the positive effects of proper neutrino and the need for adolescent within the secondary school stage to engage in proper nutrition brought necessitated this study to determine the perceived effects of proper nutrition among secondary school student in Awka south L.G.A of Anambra state.

Purpose of the study

The main purpose of this study was to determine the perceived effects of proper nutrition among secondary school students in Awka south Local Government Area of Anambra State. Specifically, the study demined the:

1. Perceived effect of proper nutrition among secondary school students based on their age.
2. Perceived effects of proper nutrition among secondary school students based on their level of education
3. Perceived effects of proper nutrition among secondary school students based on school type.

Research Questions

The following research questions guided the study:

1. What are the perceived effects of proper nutrition among secondary school students in Awka south L.G.A of Anambra State based on their Age?
2. What are the perceived effects of proper nutrition among secondary school student in Awka south L.G.A of Anambra state based on their level of education?
3. What are the perceived effects of proper nutrition among secondary school students in Awka south L.G.A of Anambra state based on their school type?

Methods

The design of the study was a cross-sectional research design. According to Thomas (2020), a cross-sectional study is a type of research design in which one collect data from many different individuals at a single point in time in cross-sectional research one observe variables without influencing them. The area of the study was Awka south Local Government Area of Anambra state. The area was created in 1989 from Awka Local Government Area. It is bounded in the north by Awka North Local Government Area in the east by Oji River Local Government Area of Enugu state, On the South by Anaocha local Government Area of Anambra State. The population of the study consisted of 92,883 junior and senior secondary school students in Awka south L.G.A both public and private schools (ministry of Education, Awka 2020). The sample of the study was 201 junior and senior secondary school students drawn from the various secondary schools used for the study. The schools are selected through simple random sampling from the 38 secondary schools in Awka south local Government were 18 are public schools and 20 are private owned secondary schools and 20 are private owned

secondary schools stratified random sampling technique was used to select the number of students from each school. The selection helps to get the 201 students that were finally used for the study. The instrument for data collection was a questionnaire on perceived effects of proper nutrition Questionnaire (PEPNQ). It was a researcher developed Questionnaire based on the experience, interview, and literature reviews done by the researcher. The closed-ended instrument was in two sections (A and B) section was on demographic data of the respondent whole section B was one the perceived effects of proper nutrition it was judged using like scale of rating, that is strongly, Disagree, Disagree. Neutral Agree and strongly Agree. Content and face validity of the instruments was established with the help of three experts two from the Department of, Human kinetics and Health Education and one from the Department of Education foundations. The questionnaire was tested for reliability by doing a pilot test of distributing 20 copies of the questionnaire. It was collected from the students who are not students from the schools to use for the study. Cronbach Alpha; internal consistency measure was used to establish the reliability of the study the co-efficient of reliability was 0.76 and therefore was considered high and adequate for the study. The data was analyzed used SPSS version 25. The research question was analyzed used meaning responses. The mean value was used to take decision on whether it was agreed or disagreed.

Decision Rule The data was analyzed used SPSS version 25. The research question was analyzed used meaning responses. The mean value was used to take decision on whether it was agreed or disagreed.

Decision Rule

4.21 – 500 – strongly Agree

3.41 – 420 – Agree

2.61 – 340 - Neutral

1.81 – 260 – Disagree

1.00 – 1.80 – Strongly Disagree.

Research Question 1: What are the perceived effects of proper nutrition among secondary school students in Awka south L.G.A of Anambra state based on their Age?

Table 1: perceived effects of proper nutrition among secondary students based on age.

S/N	EFFECTS OF PROPER NUTRITION	(N=667)10-15 yrs		(N=88)16-21 yrs		(N= 46)21-above	
		Means	RMK	Means	RMK	Means	RMK
1	Weight management	4.02	A	4.03	A	3.85	A
2	Optional Childhood growth and development	3.56	A	3.45	A	3.61	A
3	Increases one's life span and keeps onus's healthier as they age	3.28	N	3.25	N	3.29	N
4	It boosts the immune system						
5	It makes one to always have better mood	3.83	A	3.75	A	3.78	A
6	Decreases heart disease	3.39	N	3.35	N	3.29	N
		3.84	A	3.76	A	3.78	A
7	Decreases cancer risk Improves one's memory	3.69	A	3.63	A	3.78	A
8	Enables strong bones and teeth	3.40	N	3.33	N	3.25	N
9	Makes one sleep well	4.50	A	4.32	A	4.59	A
10		3.17	N	3.50	A	3.67	A

N = 201, A- Agreed, N – Neutral

Table 1 shows the responses of students on the perceived effects of proper nutrition based on the students age, the students aged 16-21 year perceived that proper nutrition could lead to weight management. They were neutral concerning proper nutrition as effective in increasing one's life span and keep one healthier as they age. Also agreed that proper nutrition help in boosting immune system. All the student of all ages was neutral about proper nutrition improving one's memory. They agreed that it decreases heart diseases, decreases Cancer risk. The student age 10-15 years were neutral about proper nutrition making on sleep well. All the students agreed that optional childhood growth and development.

Research Question 2: What are the perceived effects of proper nutrition among secondary school students in Awka south L.G.A of Anambra state based on their level of education?

Table 2: Perceived effects of Proper Nutrition among Secondary School students based on level of Education.

S/N	EFFECTS OF PROER NUTRITION	JUNIOR LEVEL		SENIOR LEVEL	
		N =25		N = 76	
		MEANS	RMK	MEANS	RMK
1	Weight management	4.17	A	4.00	A
2	Optional childhood growth and development	3.17	N	4.03	A
	Increases one's life span and keeps one's healthier as they age				
3	It boosts the immune system	3.13	N	3.84	A
4	It makes one to always have better mood	4.50	A	4.51	A
5	Decreases heart diseases				
6	Decreases cancer risk	2.97	N	2.93	N
7	Improve one's memory	4.33	A	4.44	A
8	Enables strong bones and teeth	4.17	A	4.35	A
9	Makes one sleep well	4.00	A	4.24	A
10		4.67	A	4.58	A
		3.67	A	3.84	A

N= 201, A= Agreed, N- Neutral

The students at both level of education agreed that weight management could be achieved by maintaining proper nutrition. The junior level student were neutral about proper nutrition be able to enhance optimal childhood growth and development, but different for student in the senior level. The students of all level of education agreed with proper nutrition boosting the immune system, decreasing heart disease, decreasing cancer risk improving one's memory, enables strong bones and teeth and making one sleep well but neutral with proper nutrition making one to always having a better mood.

Research Question 3: What are the perceived effects of proper nutrition among secondary school students in Awka south L.G.A of Anambra State based on their school type?

Table 3: Perceived effects of proper nutrition among secondary school students based on their school type.

S/N	EFFECTS OF PROPER NUTRITION	PUBLIC SCHOOL		PRIVATE SCHOOLS		MISSION SCHOOLS	
		N = 96		N – 55		N= 50	
		MEANS	RMK	MEANS	RMK	MEANS	RMK
1	Weight management	3.42	A	3.88	A	3.89	A
2	Optional childhood growth	4.23	A	4.34	A	4.20	A
3	Increases one's life span and keeps one healthier as they age	3.11	N	3.22	N	2.62	N
4	It boosts the immune system	4.07	A	4.13	A	4.26	A
5	It makes one to always have a better mood						
6	Decrease heart diseases	3.17	N	3.90	A	4.19	A
7	Decreases cancer risk						
8	Improves one's memory	4.50	A	4.32	A	4.59	A
9	Enables strong bones and teeth	4.50	A	4.10	A	4.19	A
10	Makes one sleep well	2.74	N	3.13	N	2.93	N
		4.00	A	4.17	A	4.03	A
		3.90	A	3.67	A	3.84	A

N = 201, A = Agreed, N= Neutral

Table 3 reveals that the students of either public, private and mission schools agreed that proper nutrition has effect on weight management optional childhood growth boosts the immune system decreases heart diseases, decreases cancer risk. Enables strong bones and teeth and makes one sleep well the students in public school were neutral about proper nutrition increasing one's life span and keep one healthier as they age. The various school types were also neutral about proper nutrition effecting and improving one's memory the students in public secondary schools were also neutral about proper nutrition making one to always have a better mood.

Summary of Major Findings:

1. The students not minding their school type perceived proper nutrition as effective
2. The students not minding their age perceived proper nutrition as effective.
3. The students not minding their level of education perceived proper nutrition as effective.

Discussion**Perceived effects of proper nutrition among secondary School students**

The secondary school students from the findings believed that proper nutrition could lead to weight management, decreases heart diseases, and decreases cancer risk. The secondary school student for the study were neutral concerning proper nutrition been effective in increasing one's life span and keeps one healthier as the age. Also they were neutral to the fact that proper nutrition makes one sleep well. This result is expected because in our society today, so many health problems has been linked to not having proper nutrition, conditions like weight, heart diseases, cancer and even diabetes. So for people to avoid some health problems, proper nutrition needs to be adhered to, so that people will not suffer unnecessarily.

Student were indifferent concerning being able to sleep well because sometimes, they believed that rest might have come through people being tired and not because of the food they eat, and this was common between the students age 10-15 years. The student age 16-21 years, has better understanding of the role of proper nutrition more than their counterpart who are also student. The findings of the study reveals that students at both levels of education that is both level of education that is both junior and senior levels of education agreed that proper nutrition could help in weight management. The junior students were neutral concerning the fact that proper nutrition enhances optimal childhood growth and development. The students agreed that proper nutrition boosts immune the immune system, decreases heart diseases, decreases cancer risk and improves ones memory, enables strong bones and also makes one sleep well. They do not agree from the finding that proper nutrition enable one to have a better mood. This result was expected because student agrees that eating food such as protein could increase ones mental state. They also believes that eating food containing calcium would make one have strong bones and teeth and that is why children are advised to eat biscuit bone.

The finding of the study revealed that all the students agreed that proper nutrition has effect on weight management, optimal childhood growth, boost the immune system, decrease heart diseases, decreases cancer risk, enables strong bones and teeth and makes one sleep well. Students in public schools were neutral about proper nutrition increasing one's life span and keeping one healthier as they age. The various school types were neutral about proper nutrition affecting and increasing ones memory. Students in public schools were neutral about proper nutrition making one have better. Some of the indifferences experienced by public school students might be because of their level of exposure in ideas concerning nutrition the students in other classes of schools might be children from rich and average home were proper nutrition is being practiced so they might be aware of some the effects of proper nutrition and what it does to the human body

Conclusions

Based on the findings of the study, the following conclusions were made; proper nutrition does so many things to the human body and also has good effects also as seen I some of their responses.

They agreed generally that proper nutrition is effective in weight management, optimal childhood growth boosts the immune system, decreases heart diseases and cancer risk. Makes someone have strong bones and teeth and make one sleep well.

Though the student were neutral about proper nutrition making one have a better mood, increasing or improving ones memory and increasing one's life span and keeping one healthier as they age, but in all they agreed to level of proper nutrition. The level of their agreement shows that proper nutrition is effective.

Implications of the findings.

The findings of the study showed that proper nutrition is highly effective and for one to live a healthy live, one has to be optimal in nutrition. Based on the variables of the study, some of the variables has influence on their response, age affected their in some because of their level of understanding of the subject matter. The same goes for the class level the seniors were more knowledgeable on the effects of proper nutrition. This implies that nutrition should be taught in schools especially public schools to ensure that student is not disadvantaged by their family background as seen in public schools.

Recommendations

The following recommendations were made based on the findings and conclusions of the study:

1. Nutrition should be compulsorily taught in schools to help student gain more knowledge about nutrition and proper nutrition
2. School children's food should be occasionally checked so that students and their families will be able to understand what proper nutrition is all about.
3. Programmes on proper nutrition should be organized both on television and Radio so that parent at home could be engaged and understand what proper nutrition is all about

References

- 1 American Academy of Pediatrics (2021). Childhood nutrition. Retrieved from [https://healthy children. Org English/healthy. Living/nutrition/page/childhood.nutrition.aspx](https://healthy.children.org/English/healthyLiving/nutrition/page/childhood.nutrition.aspx)
- 2 Centers for Disease Control and Prevention (2021). Childhood Nutrition facts. Retrieved from

- <https://www.cdc.gov/healthyschools/nutrition/facts.htm>.
- 3 Farlex (2021). Nutrition. Retrieved from <https://mechanical-dictionary-the-free-dictionary.com/nutrition>
 - 4 Food and Agriculture organization of the United Nations (2021). Nutrition. Retrieved from <https://www.pao.org/nutrition/en/>
 - 5 Food facts for healthy choices (2006). Nutrition for children and Adolescent. Retrieved from <https://eufic.org/en/health-living/article/child-and-adolescents-nutrition>
 - 6 J.D skinner and MJ Woodburn (1984). Nutrition knowledge of teen-agers. Journal of school Health; 54 (2): 71-14,
 - 7 Lesley F. (2021). What is proper Nutrition? Retrieved from <https://www.seeds-supplements.com/rain-seed-nutrition/proper-nutrition-mean/>
 - 8 Medical News Today (2021), what is nutrition, and why does it matter. Retrieved from Merriam-webster (2021). perception retrieved from <https://www.Merriam-webster.com/dictionary/perception>.
 - 9 Sara stanner (2006). Nutrition and teenagers. Women's Health medicine;1(1):6-10 Thomas Lauren (2020). what is a cross-sectional study. Retrieved from <https://www.scribbr.com/methodology/cross-sectional-study/#N:~:text=A%20cross-sectional%20study%20>
 - 10 Stewart Truswell (2021). Nutrition, Retrieved from <https://www.britannica.com/science/nutrition> last-accessed 4th Dec,2021. <https://www.medicalnewstoday.com/article/60774>
 - 11 World Health Organization (2021). Nutrition. Retrieved from <https://www.who.int/health-topics/nutrition> last accessed 27th Nov,2021.