OBESITY AMONG STUDENTS IN PUBLIC SECONDARY SCHOOLS IN DELTA STATE

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Abstract

This study examined obesity among students in public secondary schools in Delta State. The descriptive survey design was used in the investigation. The population of the investigation was 11311 SS11 students' in public secondary schools in Delta State. The researcher sampled 1131, representing 10 % of SS11 students in public secondary schools in Delta State. The instrument used in the research was designated the "obesity among Students Questionnaire" (OHTSQ). Items on the instrument were assessed with the four points scoring scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point). Out of 1131 copies of the instrument administered, 1121 copies representing 99%, were recovered. Urban SS11 students were 631, while Rural SS11 students were 490. Mean rating and standard deviation were applied to answer the four research questions, while the z test was used to test the two null hypotheses fashioned to guide the research at 0.05 levels of significance. Findings revealed that the factors responsible for obesity among students in public secondary schools in Delta State were high. The consequences of obesity

among students in public secondary schools in Delta State were high. There was no significant difference between "male" and "female" SS11 students on management approaches to obesity that have negative health influence among students in public secondary schools in Delta State. There was no significant difference between "urban" and "rural" SS11 students' management approaches to obesity among students in public secondary schools in Delta State. It was concluded in investigation that the the factors responsible for obesity that relate to health threats among students in public secondary schools in Delta State were high. The consequences of obesity among students in public secondary schools in Delta State were high. "Male" and "female" SS11 students do not differ on management approaches to obesity that have negative health influences among students in public secondary schools in Delta State. It was concluded that health threats among students in public secondary schools in Delta State were high. It was also recommended that stakeholders organise seminars, workshops and lectures to enhance the students' consciousness of the negative influence of obesity among students.

Keywords: Delta state, Obesity, students, Health threats, Public secondary schools.

Introduction.

In the 67 sessions of the World Health Assembly (2014) held in Geneva, Switzerland, the World Health Guidelines creation body alerted humanity over increasing cases of childhood obesity and its relationship to severe health problems. In their investigation, the WHO (2014) established that the quantity of obese newborns and teenagers aged 0 to 5 years amplified from 31 million internationally in 1990 to 44 million in 2012. The WHO African Region noted that UDJCSE

the figure of obese children amplified from 4 to 10 million. The Organisation cautioned that if the present tendencies persist, the figure of obese "newborns" and "adolescents" will boost to 70 million by 2025 and devoid of intercession, obese "newborns and "adolescents" will probably persist in being obsessed with babyhood, teenage "years" and "maturity". Approximations of the figure of plump students differ from investigation to investigation, but the situation is common and on the increase (Epstein et al. 2015).

Obesity is a medicinal state in which surplus body plump builds up to the level that it may have an unfavourable outcome on healthiness, guiding to abridged existence expectation or amplified healthiness harms. It frequently commences with obtaining a small number of pounds which may occur unobserved. It is not easy to prescribe the amount of carbohydrates students should eat as the quantity needed is influenced by a range of issues. Adequate carbohydrates should be eaten so that the blood sugar level from a carbohydrate source is sustained at about 80 milligrams per 100 millilitres. Suppose students consume 70 grams of protein on a daily "basis" and "limit" fat ingestion to about 25% of total calories consumed. In that case, the remainder of the diet should consist of mainly carbohydrate foods in an amount which sustains the weight of students within the appropriate boundary for height, sex and general bone arrangement.

The sum of calories needed to safeguard the weight at steady height calories usually differs among students. A regular confirmation of weight on a scale is a great approach to frequently verify if the calories consumed to sustain the weight at a constant level. No particular worth would be relevant to every student of a specific height since every student varies in chest width and deepness, hip and bone thickness, muscularity and length of truck comparative to entire body height.

According to the United States of America National Research Council (2017), calories for students are based on the age level of 25, 45 and 65 years old. The USANRC has indicated a daily intake of 3,200 calories for male students and 2,300 calories for female students at 25 years. From 13 to 19 years old, students have additional requirements for every nutrient. Since the development curves for "male" and "female" students vary in this period, diverse levels of calorie ingestion are recommended. Female students have the most energy needs among students between 13 to 15 years of age. In this period, the recommended ingestion of calories is 2,600, which may be shortened to 2,400 calories for students between 16 to 19 years of age. For male students between 13 to 15 years, 3,100 calories daily are recommended. Students between 16 to 19 years old need about 3,600 calories daily.

According to Neumann (2017), obesity is described as weight that goes beyond standard weight for height or weight for age by 20%. Approximation of the figure of obsessed students differs from investigation to investigation, but the circumstance is "widespread" and "on the increase" (Epstein et al., 2015).

In a study, Brook et al. (2015) ascertained a significant relationship between heredity, environmental issues and obesity among students. They further found that heredity and environmental issues were responsible for 20 and 60% of the variation in obesity. In an investigation, the United States of America (2012) found that the number of the overweight young person's tripled, and the figure of overweight infants was twofold. One predominantly all-inclusive programme was developed by the Students' Heaviness Management Hospital at the University of Pittsburgh School of medication (Epstein et al., 2015).

Statement of the Problem.

Obesity is one of the major widespread health harms among students in public secondary schools in Delta State. It commences with an alteration in ways of life among students. Though there is a broad difference in students' development patterns, a number of them add too much weight and turn out to be overweight. Many students consider that their obese state is "normal" and "it is senseless" for them to attempt to correct the situation. Obesity, among them, results in diseases such as hypertension, Type 2 Diabetes, hyperlipidemia, "coronary heart diseases", and "other unceasing infirmities".

Some students in public secondary schools in Delta State are taking on more calories than their body requires. Some have "big bones" and "well-developed muscles" which weigh much heavier than those students of lighter body construct. Some students in public secondary schools in Delta State are now heavier than "they used to be" and "are not adjusting" their body mass.

Research Questions

- What are the forms of obesity among students in public secondary schools in Delta State?
- What are the factors responsible for obesity among students in public secondary schools in Delta State?
- What consequences does obesity have among students in public secondary schools in Delta State?
- What is the management approach to obesity that has a negative health influence among students in public secondary schools in Delta State?

Hypotheses

- There is no significant difference between "male" and "female" SS11 students on management approaches to obesity that have negative health influence among students in public secondary schools in Delta State.
- There is no significant difference between "urban" and "rural" SS11 students' management approaches to obesity among students in public secondary schools in Delta State.

Purpose of the Study

The purpose of this study is to investigate obesity among students in public secondary schools in Delta state. Mainly, the researcher investigated.

- The forms of obesity that relate to health threats among students in public secondary schools in Delta State.
- The factors responsible for obesity that relate to health threats among students in public secondary schools in Delta State.
- Consequences of obesity among students in public secondary schools in Delta State.
- Management approaches of obesity among students in public secondary schools in Delta State.

- There is no significant difference between "male" and "female" SS11 students on management approaches to obesity among students in public secondary schools in Delta State.
- There is no significant difference between "urban" and "rural" SS11 students' management approaches to obesity among students in public secondary schools in Delta State.

Review of Related Literature.

Concept of Obesity

Obesity is the most widespread variation from the usual development established among students. It is described as heaviness that goes beyond standard heaviness for tallness or heaviness for age by 20% (Neumann, 2017). Obesity tends to be self-spreading, and the chaos it fashions repeatedly is the reason for further confusion. When a person is overweight, the plump situation persuades such individual to move about fewer, and as a result, such individual use fewer calories. The vigour in the unexploited calories is then accumulated as extra body fats. Together, the additional inactive survival of the overweight individual repeatedly outcome in the stage of aloneness, which encourages the intake of further food or beverages, which further adds to the buildup of body overweight. It is an extreme buildup of fat in the body, typically under the skin of the abdomen, buttocks, arm and thigh. The person is overweight, and his weight is above standard. The state may occur if food intake is surplus energy (Opadiji, 2021).

Investigations on Obesity among Students

In a related study, Seidell (2010) observed that there are indications that a huge amount of the next age group was turning out to be "obese" and "overweight" at a prior age. In a similar exploration, the University of Toronto (UOT, 2010) observed that eating regularly may be advantageous to students.

In another research, International Obesity Task Force (2010) ascertained that obesity is significant to relate with Type 2 Diabetes, "heart diseases", and "other diseases" among students. Furthermore, there was a significant relationship between inactive standard of living, "rich diet", and "obesity" among students. In a comparable inquiry, Leh-chii (2010) observed that obesity is one of the major severe health harms confronting students in Asia. The occurrence of overweight students in numerous components of Asia was elevated, particularly among male students in urban schools.

In another inquiry, Brown (2010) instituted that the number of overweight inhabitants in the globe currently equals the number of starving, malnourished students. Some 1.2 billion are malnourished, and an equivalent amount or further now consume too- a great deal. More people than previously are underfed, and the figure of those malnourished and those overfed is escalating in every nation. We have fashioned a culture where our extent of physical actions has been so condensed that our caloric ingestion deeply goes beyond our caloric outflow, and that extra transforms into overweight.

In a comparable study, Brownell (2011) established that the outwardly continuous series of weight loss and weight increase by several dieters, described as unorganised dieting, could have negative outcomes on students. In a related study, The United States of America Centre

for Disease Control (USACDC, 2011) observed that students who consume food for a loss and increase of more than 25 pounds have a greater risk of becoming extinct ahead of time than students who smoke cigarettes. In a similar inquiry, the Times of London (TOL,2012) found a significant relationship between cancer and obesity among students.

In a similar study, Peto (2012) instituted that students who are deemed medically obese if their body mass is more than 20% over the pleasurable body mass for their age, sex, height and body construction. The pressure by some students to be skinny or increase weight at all prices may be exacting a severe toll. In a study, the Journal of Brazil (2014) instituted that students' development was influenced further than heredity but other issues. Good nourishment is the major assurance that appropriate development will happen. In a connected exploration, London Daily Telegraph (2014) found that distressing figures of female students were hopping foods due to nervousness concerning their "body shapes" and "desire" to "copy fashion models" and "musical celebrities".

In a related inquest, Dobbing (2014) established that there was no significant relationship between "fat babies" and "obesity" at a mature age. In connected research, Kushner (2014) found that The United States of America is the fattest nation globally. The quantity of obsessed Americans for more than 17 years increased to 28% of the number of inhabitants in 2010 from 24% in 2005. Overeating, "inadequate exercise", and "genetics" were the major reasons. In a related investigation, The USACDC (2014) observed that the number of obese students in America has increased from 12.5% in 1991 to 20% in 2013. In an akin inquest, "Food and Development Agency Consumer (2014) found a significant relationship between the amount of physical activity and weight loss.

In a similar analysis, Agranat-Meged (2015) ascertained that obesity significantly and positively relates to concentration shortage hyperactivity disarray. In a comparable study, Jabbour (2015) ascertained that overweight students at 30 years are prone to die at least three years. He further established that injury might have been made if students stayed long. In a related study, Epstein et al. (2015) found a significant relationship between obesity in parents and obesity in their children.

In a connected inquest, Lindner (2017) instituted that there was a significant relationship between regular physical exercise and lessening of body weight. Furthermore, regular physical activity has been revealed to create endorphin, a natural brain chemical which eases hopelessness and makes good health. In another investigation, Harvey (2016) ascertained that students in Australia are getting fatter and fatter fast. The percentage of obsessed students in Australia in the last ten years has become twofold. About 10% of students between 9 and 15 years require medical treatment due to their body mass dilemma. Furthermore, the percentage of overweight students could double again in the next ten years.

In a different inquiry, Lewis (2017) ascertained that overfeeding significantly and positively relates to a baby's becoming fat in adulthood. He further observed that obesity does not make noticeable instantly. In a comparable inquiry, The Italian National Institute of Nutrition (2017) observed that dishonourable Italian big eaters were sad persons whose existence was alienated by two pleasure-seeking. One that compels them to eat and an additional that requires an excellent physical appearance. Million of Italian grown-ups endeavour to manage their weight harm. 22 million stayed discontented with their foods and disgusted themselves but persisted in overeating.

In an additional exploration, The (USACDC (2017) found a significant relationship between quitting smoking and gaining weight among students. Furthermore, the average smokers who quit increase in weight from 6 to 8 pounds over a period of 5 years. In an associated study, the International Herald Tribune of Paris (IHTP, 2017) instituted that not more than 4 million students in the European Union will be successful in staying trim for more than one year, and more than one dieter in 50 in Europe will attain enduring weight loss. In a further inquest, Van-Horn (2018) observed a significant relationship between obesity and the enhanced threat of diseases. In similar research, Britain School Health Education Unit (2019) found that over 40 % of female students aged 13 to 14 go to school without eating breakfast.

In a further examination, Frasier (2019) instituted that students with small extents of development hormones are small for their age and frequently plump for their tallness. Their trunk and abdomens were disposed to be chunky, though their skull dimension might be usual for their age. In another investigation, Pollitti et al. (2020) established a significant relationship between obesity and hereditary.

Method

The descriptive survey design was used in the investigation. The population of the investigation was 11311 SS11 students' in public secondary schools in Delta State. The researcher sampled 1131, representing 10 % of SS11 students in public secondary schools in Delta State. The instrument used in the research was the "Obesity among Students Questionnaire" (OHTSQ)". Experts validated the tool. The researcher applied the split-half technique to establish the instrument's reliability through pilot testing. 50 SS11 students in public secondary schools in Edo state were administered the tool to establish the instrument's reliability.

The instrument's reliability was ascertained with the Pearson Product Moment Correlational Coefficient (r). The worth of Pearson Product Moment Correlational Coefficient (r) for the forms of obesity that relate to health threats among students in public secondary schools in Delta State was 0.81. The significance of Pearson Product Moment Correlational Coefficient (r) for the factors responsible for obesity-related health threats among students in public secondary schools in Delta State was 0.77. The significance of Pearson Product Moment Correlational Coefficient (r) for consequences of obesity among students in public secondary schools in Delta State was 0.69. The importance of Pearson Product Moment Correlational Coefficient (r) for the management approaches of obesity that have a negative health influence among students in public secondary schools in Delta State was 0.75.

The canvasser, with the support of competent study aiders in the administration of the instrument, was in the varied gathering used in the investigation to administer the instrument to SS11 students who were utilised in the study and guided them on how the instrument was filled. Items on the instrument were assessed with the four points scoring scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point). Out of 1131 copies of the instrument administered, 1121 copies representing 99%, were recovered. Urban SS11 students were 631, while Rural SS11 students were 490.

Mean rating and standard deviation were applied to answer the four research questions. A mean rating of 2.50 was presumed to be a significant level of recognition, while a mean rating under 2.50 was leftover. Z tests were applied to test the two null hypotheses fashioned to guide the research at 0.05 levels of significance.

Presentation of Results.

Research Question 1. What are the forms of obesity among students in public secondary schools in Delta State?

Table 2.	Mean	Rating	of	Respondents	on	the	Forms	of	obesity	among	Students	in	Public
Seconda	ry Scho	ools in D	Delt	a State.									

	Forms of obesity among	Urban SS11 Students					Rural SS11 Students			
S/N	Students in Public									
	Secondary Schools in	Ν	$\overline{\mathbf{X}}$	SD	Decision	Ν	$\overline{\mathbf{X}}$	SD	Decision	
	Delta State.									
1	Empty calories.	631	4.13	0.75	+	490	4.07	1.17	+	
2	Consuming an excessive	631	4.11	1.13	+	490	4.03	1.05	+	
	amount of carbohydrates.									
3	Consuming an excessive amount of glycogen	631	2.39	0.73	+	490	2.29	0.83	+	
4	Consuming an excessive amount of fructose.	631	2.33	0.85	+	490	2.25	1.17	+	
5	Consuming an excessive amount of ribose .	631	2.17	1.09	+	490	2.18	1.03	+	
	Total		15.13	4.55			19.92	5.25		
	Grand Mean		3.03	0.91			3.98	1.05		

 $+ = Agreed, - = \overline{Disagreed}$

The data in Table 1 shows the mean rating from items 1 to 5 on the forms of obesity among students in public secondary schools in Delta State. The respondents agreed on items 1 and 2 that empty calories and excessive amounts of carbohydrates were the forms of obesity among students in public secondary schools in Delta State.

The sample for Urban SS11 students was 631 with a mean rating of 3.03, and a standard deviation of 0.91 and the sample for Rural SS11 students was 490 with a mean rating of 3.98 and a standard deviation of 1.05. The substantial level of acceptance for the research was 2.50. The ratings of "urban" and "rural" SS11 students were higher than the significant level of acceptance. This signifies that the forms of obesity among students in public secondary schools in Delta State were high.

Research Question 2. What are the factors responsible for obesity among students in public secondary schools in Delta State?

	Factors Responsible	Urban SS11 Students				Rural SS11 students			
S/N	for obesity among								
	Students in Public	Ν	$\overline{\mathbf{X}}$	SD	Decision	Ν	ĪX	SD	Decision
	Secondary Schools in								
	Delta State								
1	High fat foods	631	4.19	1.07	+	490	4.14	0.74	+
2	Heavier body mass	631	4.15	1.11	+	490	4.11	1.15	+
3	Storage of unused	631	4.13	0.79	+	490	4.07	0.83	+
	calories in the body.								
4	Lack of exercise	631	4.07	1.15	+	490	4.02	1.15	+
5	Sedentary life	631	4.01	1.06	+	490	3.96	0.67	+
6	Accumulating an	631	3.95	0.85	+	490	3.93	1.14	+
	unusual amount of								
	carbon dioxide in the								
	blood due to difficulty								
	breathing.								
7	Abnormally low	631	3.93	0.76	+	490	3.87	0.83	+
	amount of oxygen in								
	the arterial blood.								
8	Lesser than normal	631	3.87	1.15	+	490	3.81	1.17	+
	energy disbursement.								
9	Watching more	631	3.83	0.78	+	490	3.75	0.81	+
	television than normal								
	weight youths.								
10	Eating of calorie	631	3.71	1.09	+	490	3.72	1.06	+
	concentrated food								
	Total		39.84	9.81			39.38	9.55	
	Grand Mean		3.99	0.98			3.94	0.95	

 Table 2. Mean Rating of Respondents on the Factors Responsible for obesity among

 Students in Public Secondary Schools in Delta State?

+ = Agreed, - = Disagreed

The data in Table 2 shows the mean rating from items 1 to 10 on the factors responsible for obesity among students in public secondary schools in Delta State. The respondents agreed on all the items that high-fat foods, heavier body mass, storage of unused calories in the body, lack of exercise, sedentary life, accumulation of an unusual amount of carbon dioxide in the blood due to difficulty in breathing and abnormally low amount of oxygen in the arterial blood, lesser than normal energy disbursement, watching more television than normal weight youths and eating of calorie concentrated food were factors responsible for obesity among students in public secondary schools in Delta State.

The sample for Urban SS11 students was 631 with a mean rating of 3.99 and a standard deviation of 0.98, and the sample for Rural SS11 students was 490 with a mean rating of 3.94 and a standard deviation of 0.95. The substantial level of acceptance for the research was 2.50, and the ratings of "urban" and "rural" SS11 students were higher than the significant level of UDJCSE

acceptance. This connotes that the factors responsible for obesity among students in public secondary schools in Delta State were high.

Research Question 3. What consequences does obesity have and health threats among students in public secondary schools in Delta State?

Table 3. Mean Rating of Respondents on the Consequences of obesity among Students inPublic Secondary Schools in Delta State.

	Consequences of obesity	Urba	n SS11	Studen	ts	Rural SS11 Students			
S/N	among Students in Public								
	Secondary Schools in	Ν	$\overline{\mathrm{X}}$	SD	Decision	Ν	$\overline{\mathbf{X}}$	SD	Decision
	Delta State.								
1	High death rate.	631	4.17	1.09	+	490	4.21	1.12	+
2	Hypertension	631	4.13	0.77	+	490	4.16	0.79	+
3	Type 2 Diabetes	631	4.11	1.13	+	490	4.14	1.13	+
4	Coronary heart diseases	631	4.07	0.81	+	490	4.12	0.85	+
5	Arthritis	631	4.05	1.15	+	490	4.07	1.12	+
6	Cancer	631	4.01	0.73	+	490	4.01	0.86	+
7	Kidney failure	631	3.98	1.12	+	490	3.97	1.11	+
8	Neuritis	631	3.94	0.83	+	490	3.95	0.81	+
9	Shortness of breath.	631	3.93	1.19	+	490	3.83	1.14	+
10	Sleeplessness	631	3.85	1.16	+	490	3.82	1.08	+
	Total	631	40.24	9.98	+	490	40.28	10.01	+
	Grand Mean		4.02	1.00			4.03	1.00	

+ = Agreed, - = Disagreed

Table 3 was on the consequences of obesity among students in public secondary schools in Delta State. The respondents agreed on all ten items high death rate, hypertension, Type 2 Diabetes, coronary heart diseases, arthritis, cancer, kidney failure, neuritis, shortness of breath and sleeplessness.

The sample for Urban SS11 students was 631 with a mean rating of 4.02 and a standard deviation of 1.00, whereas the sample for Rural SS11 students was 490 with a mean rating of 4.03 and a standard deviation of 1.00. The substantial level of acceptance for the research was 2.50, and the ratings of "urban" and "rural" SS11 students were higher than the criterion level of acceptance. This connotes that the consequences of obesity among students in public secondary schools in Delta State were high.

Research Question 4. What are the management approaches to obesity among students in public secondary schools in Delta State?

Table 4. Mean Rating of Respondents on the Management Approaches of Obesity among Students in Public Secondary Schools in Delta State.

+ = Agreed, - = Disagree

The data in Table 4 shows the mean rating of 2.50 on the management approaches to obesity among students in public secondary schools in Delta State. The respondents agreed on all the ten items that a thorough medical examination by school medical practitioners, the students identified as obsessed should be given healthier foods and exercises. The ministry of health should provide school guidance on primary care trust on how to perform the checks., the body should drop 40 to 50 pounds of unnecessary weight, vitamins desires of the body are fully met, mineral desires of the body are fully met, follow the recommendation of the doctor in foods that you require, the blood and urine should be cautiously scrutinised to discard any severe illnesses and reduction of body fat under medical experts. UDJCSE 112

The sample for Urban SS11 students was 631 with a mean rating of 4.03 and standard deviation of 1.00, while the sample for Rural SS11 students was 490 with a mean rating of 3.98 and standard deviation of 0.92. Using the Substantial level of acceptance for the research as 2.50, the ratings of "urban" and "rural" SS11 students were higher than the criterion level of acceptance. This connotes that the management approaches to obesity among students in public secondary schools in Delta State were high.

Hypothesis 1. There is no significant difference between "male" and "female" SS11 students on management approaches to obesity **that have negative health influence** among students in public secondary schools in Delta State.

Table 4. z test of Significant Difference between "male" and "female" SS11 Students on Management Approaches of Obesity that have Negative Health Influence among Students in Public Secondary Schools in Delta State.

. States	Ν	X	SD	Df	Level of	Calculated	Critical	Decisions
					Significance	z-Value	z-Value	
Urban SS11 students	631	61.33	6.51					Note
Rural SS11 students	490	63.51	7.79	999	0.05	1.45	196	Signif Accept
								Ho ₁

Significant at 0.05 < P level

Table 4 signified that the calculated z value of 1.45 was less than the critical z value of 1.96. As a result, the null hypothesis was accepted. This connotes that there was no significant difference between "male" and "female" respondents on factors responsible for obesity that relate to health threats among students in public secondary schools in Delta State.

Findings.

- The factors responsible for obesity among students in public secondary schools in Delta State were high.
- The consequences of obesity among students in public secondary schools in Delta State were high.
- The management approaches to obesity among students in public secondary schools in Delta State were high.
- There was no significant difference between "male" and "female" SS11 students on management approaches to obesity that have negative health influence among students in public secondary schools in Delta State.
- There was no significant difference between "urban" and "rural" SS11 students' management approaches to obesity among students in public secondary schools in Delta State.

Discussion of Results.

What are the Forms of Obesity among Students in Public Secondary Schools in Delta State?

Facts in findings showed the forms of obesity among students in public secondary schools in Delta State. These findings as also in line with the results of the World Health

Organisation (2014) that obesity is a remedial condition in which extra body plump upsurge to the height that it might have an adverse result on physical condition, leading to reduced survival anticipation or improved health problems. It regularly starts with acquiring a miniature amount of pounds which might transpire undetected.

What Factors Responsible for obesity among Students in Public Secondary Schools in Delta State.

The findings showed that the factors responsible for obesity among students in public secondary schools in Delta State were high. This finding was in agreement with the results of Brown (2010) that the amount of overweight inhabitants in the globe currently equals the number of starving, malnourished students. Some 1.2 billion are malnourished, and an equivalent amount or further now consumed too- a great deal. More people than previously are underfed, and the figure of those malnourished and those overfed is escalating in every nation. We have fashioned a culture where our extent of physical actions has been so condensed that our caloric ingestion deeply goes beyond our caloric outflow, and that extra transforms into overweight. These findings also agree with the United States of America Centre for Disease Control (2011) that students who consume food for loss and increase of further than 25 pounds have a greater risk of becoming extinct ahead of time than students who smoke cigarettes.

What Consequences does Obesity have among Students in Public Secondary Schools in Delta State?

Facts in findings showed that the consequences of obesity among students in public secondary schools in Delta State were high. This finding was in accord with the results of the International Obesity Task Force (2010) that obesity is significant to relate with Type 2 Diabetes, heart disease and other diseases among students. These findings also were in harmony with the result of Brownell (2011) that the outwardly continuous series of weight loss and weight increase by several dieters, described as unorganised dieting, could have negative outcomes on students. This finding was also in accordance with the findings of Whitmoyer (2019) that students who permit surplus fat to build up in their body pay an elevated penalty for such carelessness in terms of abridged energy, impaired wellbeing and abridged existence period. Furthermore, obesity is a recognised issue of importance in such chaos as hypertension, heart diseases, stroke, diabetes, gallstones, some kinds of cancer, cirrhosis of the liver and hypercholesteremia.

What is the Management Approach to Obesity that has Negative Health Influence among Students in Public Secondary Schools in Delta State?

Facts in findings showed that the management approaches to obesity among students in public secondary schools in Delta State were high. This finding was in agreement with the results of Epstein et al. 2015) that one predominantly all-inclusive programme was developed by the students' heaviness management Hospital at the University of Pittsburgh School of medication.

There is no Significant Difference between "Male" and "Female" SS11 Students on Management Approaches of Obesity among Students in Public Secondary Schools in Delta State.

Facts in findings showed no significant difference between "male" and "female" students on management approaches to obesity among students in public secondary schools in Delta State. This finding was in line with the result of Brook, Huntley and Slack (2015) that there

was no significant difference between "male" and "female" students on management approaches to obesity among students in secondary schools.

There is no Significant Difference between "urban" and "rural" SS11 students' management approaches to Obesity among Students in Public Secondary Schools in Delta State.

Facts in findings showed no significant difference between "urban" and "rural" SS11 students' management approaches to obesity among students in public secondary schools in Delta State. These findings confirmed with the results of the United States of America (2012) that there was no significant difference between "urban" and "rural" students on management approaches to obesity among students in secondary schools **Conclusion.**

- The factors responsible for obesity that relate to health threats among students in public secondary schools in Delta State were high.
- The consequences of obesity among students in public secondary schools in Delta State were high.
- The management approaches to obesity among students in public secondary schools in Delta State were high.
- Management approaches and health threats among students in public secondary schools in Delta State do not significantly differ.

Recommendations

The World Health Organisation should establish a commission to end babyhood obesity

- Stakeholders in secondary education should organise seminars, workshops and lectures to enhance students' consciousness of the negative influence of obesity among students.
- The medical practitioners in public secondary schools in Delta State should initiate medical examinations in which students are weighed at 4 and 10 to stave off obesity.
- The medical practitioners should utilise measurements they obtained from students to calculate their body mass index, which can offer a signal of hale and hearty weight. This entails determining the student's tallness in meters and multiplying that figure by itself. They then divide their weight in kilograms by this figure to come up with a body mass index
- An average body mass index is between 18.5 and 24, 9 with 25 classified as overweight and 30 as obsess. On the other hand, when determining the hazard of obesity in students, medical practitioners should take into description the age and gender of students.
- Public secondary schools in Delta State should purchase Pulse Oximeter C2A healthiness machines to reduce obesity among students.

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