Effect of food consumption pattern on the risk of obesity and cardiovascular diseases among market women in Owo, Ondo State, Nigeria

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Consumption of obesogenic diet coupled with sedentary lifestyles is some of the major culprit to the development of obesity which invariably leads to cardiovascular and metabolic diseases. The effect of food consumption pattern on the occurrences of obesity and cardiovascular disease among market women in Owo was accessed. A total of 151 market women were randomly selected from three different markets in Owo metropolis. Semi-structured questionnaire was used for the collection of data. Respondent nutritional status was accessed using anthropometry indices and dietary assessment via 24-hour dietary recall. Findings showed that the mean waist circumference, hip circumference, BMI and waist-hip ratio of the women were 90.7±12.25 cm, 102.97±1.02 cm, 26.48±4.74 kg/m² and 0.88±0.54 respectively. Respondents that were overweight were 38.4% while 20.6% were obese. About 5.3% were hypertensive. There was significance relationship at p<0.05 between waist-hip ratio, BMI and blood pressure of the market women. Energy intake of the respondent was 101% of RDA while protein intake was 132% of RDA. However, vitamin A, E, C and B6 were less than RDA as they were 44%, 28%, 52% and 62% respectively. Also calcium was less than RDA at 48%. The prevalence of overweight and obesity shows increased risk of the occurrence of cardiovascular diseases and this trend should be prevented.

Waist-to-height ratio is an indicator of metabolic risk in children

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Introduction: Abdominal fat, particularly visceral, is associated with an increased risk of metabolic complications. The waist-to-height ratio is used to assess abdominal fat in individuals of all ages.

Objective: To identify the capability of the waist-to-height ratio (ICE) to detect metabolic risk in children of school age.

Methods: We studied children between 6 and 12 years, we identified obesity with body mass index (BMI) ≥85th percentile and abdominal obesity with ICE≥0.5, blood glucose levels, cholesterol and triglycerides were measured in all participants. We determined sensitivity, specificity, PPV and NPV of the ICE and BMI to identify metabolic abnormalities. ICE and BMI were compared to determine which has better efficiency diagnosed.

Results: 223 children (106 women and 117 men), 66 (28.7%) were studied showed a metabolic disorder, 51 subjects had hypertriglyceridemia, hypercholesterolemia 27 and 9 hyperglycemia. ICE identified in these children, to a point equal to or greater than 0.5 cut, sensitivity of 100% for hyperglycemia, hypercholesterolemia 93% for and 76% for hypertriglyceridemia (p=0.0001).

Conclusions: ICE is an efficient indicator to identify metabolic risk in children of school age.

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