COMPARATIVE STUDY OF THE NUTRITIONAL STATUS AND DIET QUALITY OF ADOLESCENTS IN SELECTED GOVERNMENT-OWNED AND PRIVATE BOARDING SCHOOLS IN OGUN STATE

BY

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ABSTRACT

Unhealthy dietary practices has been associated with malnutrition, especially in adolescents. Understanding the quality of diet consumed by adolescents is essential to reducing the burden of malnutrition. This study assessed and compared the nutritional status and diet quality of adolescents in selected government- and private-owned boarding schools in Ogun State. A total of 248 adolescents were selected from 5 public and 3 private secondary schools using simple random sampling. Data on socio-demographic characteristics, food consumption pattern, diet quality and nutrient intake were obtained using semi-structured, food frequency, diet quality and 24-hour dietary recall questionnaires, respectively. Nutrient intake and anthropometric data were analyzed using a Total Diet Assessment and Anthro-plus softwares, respectively. Nutrient intake adequacy was assessed using standard procedure. Data were presented using frequencies, percentages, and median. Independent t-test, Chi-square and correlation analysis were done to test for association among variables at $p<0.05$. Results showed that about 45.2% of the adolescents were male adolescents, 64.9% were within 15 – 18 years of age. Public school adolescents consumed more pulses (73.2%), whole grains (4.9%), deep fried food (50.4%), processed ultra packaged snacks (44.7%) and fruits (13.8%) compared to their private school counterparts, while private school adolescents consumed more of fast foods (23.2%), dark leafy vegetables (96%), eggs (40.8%), nuts and seeds (40.8%), milk (44.8%) and red meat (62.4%) compared to their public school counterparts. There were significant ($p<0.05$) differences in the micro- and macronutrient intakes of the public and private school adolescents. Also, there were significant ($p<0.05$) differences in the adequacy of nutrient intake of public and private school adolescents. Public school adolescents compared to their private school counterparts had inadequate intakes of

fiber, vitamin A, B-vitamins, calcuim, phosphorus, sodium, potassium, iron and magnesuim. There were no significant ($p<0.05$) differences in the body mass index of public and private school adolescents, however underweight (1.2%), overweight (13.8%) and Obesity (1.6%) were more prevalent in public school adolescents. Similarly, waist circumference and waist-hip ratio significantly ($p<0.05$) differed among public and private schools, however, there were no significant ($p<0.05$) difference between the Global Dietary Recommendations score of public and private school adolescents. In addition, private school adolescents had a higher minimum dietary diversity (84%), nut and seed consumption (49%), sweet food (99%) and soft drink consumption (44%) compared to public school adolescents. There was low fruit consumption among adolescents in both public and private schools. In conclusion, adolescents in both public and private schools exhibit unhealthy dietary pattern, however malnutrion is more prevalent among adolescents in public schools compared to those in private schools. Interventions to improve diet quality especially increased consumption of fruits, nut and seed is essential to improve micronutrient intake among in-school adolescents in the study area.