

## **Nutritional status, physical activity, and dietary habits among grade 10 students in Nallur Education Division**

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**Background and objective:** There is a dual burden of malnutrition in Jaffna with high levels of underweight and increasing rates of overweight/obesity. Body Mass Index (BMI) is widely used to assess nutritional status. This research describes the nutritional status, physical activity, and dietary habits among grade 10 students in Nallur Education Division.

**Methods:** This descriptive cross-sectional study was carried out among grade 10 students of the Nallur Education Division using multi-stage cluster sampling. Body weight was measured using a weighing scale and height by a portable stadiometer. BMI was calculated using the standard formula ( $\text{weight}(\text{kg})/\text{height}^2(\text{m}^2)$ ). Results were analyzed using chi-square test.

**Results:** In total, 767 students participated in the study. The median BMI was 19.17 kg/m<sup>2</sup> (males 18.83, females 19.57). Almost two-thirds (65.2%) of the sample had a BMI within the normal range with only 3.4% recording a BMI in the obese range. Low levels of physical activity were observed in 60.5% of the sample. In the study, the majority (64.5%) of students consumed healthy foods. There was no evidence of an association between physical activity ( $p=0.92$ ) or dietary habits ( $p=0.27$ ) with BMI. There was an association between family income and BMI where students reporting higher income are more likely to be overweight ( $p=0.006$ ).

**Conclusion:** Most grade 10 students in Nallur Education Division are in the normal BMI range with healthy dietary habits, but physical activity levels are low. BMI is associated with family income.

**Keywords:** BMI, Physical Activity, Dietary Habits, Jaffna