

**ASSOCIATION BETWEEN FOOD INTAKE AND
HEALTH STATUS WITH THE NUTRITIONAL
STATUS OF SCHOOL CHILDREN AGE 9-11
IN SEMARANG CITY**



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ABSTRACT

Association Between Food Intake And Health Status With The Nutritional Status Of School Children Age 9-11 In Semarang City

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Background: Malnutrition, a major risk factor for a number of infectious diseases, including acute upper respiratory tract infections (AURTI), is common in developing countries. Nutritional status is an important index of the quality of life. Anthropometric examination is a tool almost mandatory in any research to assess the health and nutritional conditions in childhood. Physical measurements such as weight, height, arm and calf circumference and triceps skin fold thickness of the children have been widely used to determine the health and nutritional status of the community.

Objectives: To analyze the correlation between food intake and health status to nutritional status of 9 – 11 years old children in Semarang.

Methods: The study was a correlation study carried among school children in Semarang aged 9-11 years old. Data obtained during the study were height, weight, age, energy and protein intake and frequency of AURTI experienced in the last two months. Energy and protein intake were measured using semi quantitative food frequency method., while nutritional status were in z-score of W/A,H/A, Wt/H and BMI. Data are presented in the descriptive analyses and Sperman correlation.

Results:

Overall, food intake (energy and protein) of 9-11 years old children in Semarang is normal with $\geq 90\%$ RDA, health status of 9-11 years old children in Semarang is good enough, nutritional status of 9-11 years old children in Semarang are mostly normal, however about 20 % are obese and less than 5 % are skinny and stunted. There was a correlation between energy intake with nutritional status with indicators BMI, W/A, H/A, and W/H, but there was no relationship between protein intake with nutritional status with indicators BMI, W/A, H/A, and W/H. Health status using AURTI incidence was not correlated with nutritional status using all indicators.

Conclusion & Recommendation: The health authority and school authority should pay more attention either to the malnourished children as well as the obese children in the elementary schools and design programs to correct the nutritional status in order to increase the health status of children, through the school health program. It should be suggested to parents implement balanced nutrition guidelines/ diet, to avoid the development of obesity among elementary school children by developinhg special program of nutrition education to prevent malnutrition as well as obesity.

Keywords: *Food intake, health status, nutritional status.*