

## Abstract

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**Background:** In low and middle income countries, malnutrition especially among children is an increasing health problem. According to Egyptian national surveys, prevalence of malnutrition in school children is high, however, data is lacking at the regional level. The current study aimed to assess the nutritional status, as well as the socio-demographic and lifestyle factors affecting it, among rural school children.

**Design and Methods:** A school based cross sectional survey was conducted among rural school children (6-17years) in Manshit El Gamal village in Tamia district of Fayoum Governorate- Egypt- from October 2014 to April 2015. A sample of 736 students were included in the study. Weight, height, and age were used to calculate z-scores of the three different nutritional indicators. Sociodemographic, lifestyles and dietary habits were collected using a pretested interview questionnaire. **Results:** Stunting (HAZ <-2SD), underweight (WAZ<-2 SD), and wasting (WHZ <-2SD) were 34.2%, 3.4% and 0.8% respectively, while over nutrition based on (WHO/NCHS) reference population BMI z-score was 14.9%. Stunting was higher in females 36.2% than males 32.9% though not significant. Whereas, obesity significantly decrease with age and was higher in males 17% than females 12.1% with a significant different in the age group 10-13 years. Age, reduced poultry consumption and escaping breakfast were risk factors for malnutrition, while daily fruit consumption was a protective one.

**Conclusion:** Malnutrition is highly prevalent in rural school children of Fayoum governorate in line with the national prevalence and significantly associated with children age, gender, mother's education and regularity of father's work.