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ABSTRACT FORMAT

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Title : Prevalence of Vitamin B12 among school children in northern districts of West Bank, Palestine

Purpose: Vitamin B12, which is normally involved in the metabolism of every cell of the body, is important for the normal functioning of the brain and the nervous system, and for the formation of the blood, but also fatty acid synthesis and energy production. The serum measure used to assess vitamin B12 status of a population cut-offs recommended by WHO is <150 pmol/L (200 pg/mL). The cut-off of 150 pmol/L represents the serum concentration below which clinical symptoms of deficiency (e.g. neurological, cognitive and hematological) start to appear. The aim of this study is to determine the prevalence of vitamin B₁₂ among palestinian adolescents (10-18 years old) in north West Bank and to assess associated sociodemographic variables. **Methodology:** A cross-sectional study was conducted by collecting data randomly from 404 adolescents (10-18 years old) from Tulkarm and Qalqilia districts. Vitamin B12, Haemoglobin (Hb) and Mean corpuscular volume (MCV) levels were determined alongside a designed questionnaire to obtain different demographic and other factors from participants. **Results:** The overall Hb (<12 g/dl), B12 (< 200 pmole/L) and MCV (>92 fl) levels among participants were 18%, 44%, and 2.5%, respectively. Based on these results, the study concluded that B12 deficiency among our school children participants is 2.5%. There were no significant associations between rates of haematological levels and associated factors such as place of residence, family income, number of family members as well as food habits (P-value > 0.05). **Conclusion:** The study recommends a comprehensive study covering all areas in Palestine to determine the normal level of vitamine B12.