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- Document Title** : *Serum 25-hydroxyvitamin D level in male school children in Jeddah*
مستوى ٢٥ هيدروكسي فيتامين د المصلي لدى أطفال المدارس الذكور في جدة
- Document Language** : Arabic
- Abstract** : Humans vitamin D is obtained from two sources, 1) via daily consumed diets, 2) through cutaneous synthesis in the presence of ultraviolet light supplied by sunlight or other ultraviolet B light. The importance of vitamin D levels in adolescence and adults are very critical to the health of bone, therefore the relationship between vitamin D level and micro mineral such as (Ca⁺², P⁺³, Mg⁺², Fe⁺²) and the habitual foods intakes are investigated in this study. To achieve this target 102 boys and 75 girls has been recruited in this investigation. Blood sample were collected from those subjects and the following measurement has been taking place for each sample, a) determination of vitamin D level, b) determination of micro mineral status and c) collect data by FFQ to investigate the daily diets any intake according to the pyramid food guide to find out the link between consumption of different food and vitamin D level in those subjects. The findings results obtained from this study have shown that the level of vitamin D in boys are ranged between (11.45 – 82.84 nmol/L) which indicated that some subjects are lower than the normal range (22.46 – 93.84 nmol/L), whereas the level of vitamin D in the girls ranged between (6.9 – 88.7 nmol/L) which indicated again that some subjects are much lower than the normal range. The analysis of micro minerals results revealed that the level of Ca²⁺ in the boys ranged between (0.69 – 2.57 mmol/L) whereas in the girls ranged between (1.85 – 2.53 mmol/L). Iron in boys ranged between (1.42 – 32.18 umol/L) (normal is 10.6 – 28.3 umol/L) whereas in girls the range is between (1.21 – 53.44 umol/L) (normal 6.6 – 26.0 umol/L) which indicate that some subjects has very high iron level and a considerable number are lower than the normal range in both subject. The phosphorus level have shown in both groups (boys and girls) to be around the normal range (0.87 – 1.45 mmol/L) where boys level ranged between (0.55 – 1.65 mmol/L) whereas the girls between (0.80 – 1.8 mmol/L) except one case which has very high level (6.3 mmol/L). The magnesium in boys are ranged between (0.35 – 0.95 mmol/L) which indicated they are lower than the normal range (0.65 – 1.05 mmol/L), whereas in girls are ranged between (0.65 – 0.97 mmol/L) which almost are in the normal range. Due to an immense data presented in FFQ, we summarized an interest results in this part, for instance there are a significant differences between boys and girls concerning the consuming of the fifth groups (I – V) of food in food pyramid guide. The general conclusion found that the boys consumed an amount of food more than the girls. The outcome conclusion of this study indicated that the level of vitamin D in boys are close to the normal range whereas in the girls are lower than the normal range and this is the normal results should be expected due to the traditional lifestyle for women in Saudi Arabia.
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