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Vitamin A Status and Its Correlation with the Dietary Intake of Young Females of Lahore, Pakistan

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Abstract : This study was conducted in order to assess the dietary record and vitamin A status of young females of Lahore. A total sample of 376 consisted of 16 – 20 years of unmarried college going females. Three main tools were adopted: questionnaire, 3-day food diary and serum retinol test. The anthropometric measurements showed that a total of 32.6% of the sample was underweight (BMI < 18.5) and 54.5% had a healthy weight (BMI 18.5 – 22.9). The average Vitamin A intake of the sample was 257.95 µg/day while the RDA for the selected age group was 700 µg/day. The mean energy intake of the adolescents was 1153.64 kcal/ day, whereas the Estimated Energy Requirement (EER) for this age group was 2368 kcal/day. The mean serum Vitamin A level was 24.81µg/dL. 69.6% of the sample was deficient in serum Vitamin A i.e. serum retinol < 24 µg/dL. 30.4% had serum retinol in normal limit (24 – 84 µg/dL) from which 25.3% lied in lower limit (24 – 44 µg/dL) and only 5.1% had serum retinol in 44 – 64 µg/dL range. A slightly negative correlation (r = - 0.21, 95% confidence interval) was found between dietary intake of Vitamin A and serum Vitamin A It was concluded that the dietary intake of major nutrients and vitamin A is not adequate in the selected group. This is also confirmed by the lower serum retinol levels. Hence, vitamin An intake and status are generally inadequate, and vitamin deficiency is prevalent in the unmarried young females of Lahore.

Keywords : vitamin A, young Females, vitamin deficiency, Lahore
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