**Original article:**

**Effect of economic status and changes in blood parameters in school going girls at first step of adulthood**

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**Abstract**

The study was conducted to show the relation and the effect of menarche on some biochemical parameters on blood serum of secondary school girls at menarche. From two different socioeconomic status (48) samples were collected from girls students [18 which live in higher socioeconomic status as (group I) and 30 in low socioeconomic status as (group II) with menstrual cycle and (20) school girls without menstrual cycle from different socioeconomic status as control out of which 8 which live in higher socioeconomic status, 12 in low socioeconomic status to each group] with ages ranges between (12-15) year.The biochemical parameters studied were iron, total iron binding capacity (TIBC), unsaturation iron binding capacity (UIBC), transferrin, haemoglobin (Hb), vitamin C and E. No significant difference between biochemical parameters when measures within group I and II when compared with their controls, but there were significant decrease between group II and I when compare together in all biochemical parameters except that Hb and vitamin E.Also the results showed no correlation between measured biochemical parameters and age at menarche and nutrition.

**Keywords :** Total iron binding capacity