

Abstract

The Impact of Oral Contraceptive Use on Selected Vitamins and Minerals in Women of Reproductive Age [†]

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Abstract: Childbearing women on combined oral contraceptive agents (COCs) have been linked with the development of various diseases and possible deficiencies in serum micronutrients. This study aimed at investigating the vitamins and trace mineral changes associated with the use of COCs among child-bearing healthy women in the Gaza Strip. A comparative cross-sectional study was designed. After informed consent was obtained, questionnaires, anthropometric measurements, and blood samples were collected from a total of 90 women of childbearing age (45 used different contraceptive methods, and 45 used COCs). The mean hemoglobin, hematocrit, and red blood cells that obtained from the COCs users group were significantly lower than those in the non-users group ($p < 0.001$, $p = 0.073$, and $p = 0.047$, respectively). There was a significant association between the use of COCs and cholesterol level ($p = 0.044$). In addition, there was a statistically significant difference in the levels of homocysteine and vitamin B6 between the groups ($p = 0.008$ and $p = 0.010$, respectively). The present study indicated the possibility of micronutrient deficiencies in women on combined oral contraceptive agents.



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