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Abstract

Folate being an important vitamin of B Complex group in our diet plays an important role not only in the synthesis of DNA but also in the maintenance of methylation reactions in the cells. Folate metabolism is influenced by several processes especially its dietary intake and the polymorphisms of the associated genes involved. Aberrant folate metabolism, therefore, affects both methylation as well as the DNA synthesis processes, both of which have been implicated in the development of various diseases. This paper reviews the current knowledge of the processes involved in folate metabolism and consequences of deviant folate metabolism, particular emphasis is given to the polymorphic genes which have been implicated in the development of various diseases in humans, like vascular diseases, Down's syndrome, neural tube defects, psychiatric disorders and cancers.

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