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叶酸与DNA甲基化

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Folic Acid and DNA Methylation

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摘要 营养表观遗传学作为表观遗传学的分支,是近年来研究很热门的一个学科。作为重要的表观遗传机制之一的DNA甲基化在营养表观遗传学及机体的生命活动中发挥着重要作用。营养素叶酸以提供甲基基团的角色参与了一碳单位的转移和利用、DNA合成及其甲基化过程,在维持基因组稳定性及机体健康状况方面起关键作用。本文旨在就叶酸生理功能及其与DNA甲基化之间的关系作简单概述。

关键词： 营养表观遗传学 DNA甲基化 叶酸

Abstract： Nutritional epigenetic, as a branch of epigenetic, is a very popular subject in recent years. DNA methylation, as one of the most epigenetic mechanisms, plays an important role in nutritional epigenetic and life activities. Meanwhile, folic acid as methyl donors involves in the transfer and utilization of one carbon unit, DNA synthesis and DNA methylation, which plays a key role in maintaining the stability of genomes and the body's health. This paper gave a summary about the physiological function of folic acid and the relationship between folic acid and DNA methylation.

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