

METHYLCOBALAMIN B-12 PATCH

Methylcobalamin (mecobalamin, MeCbl, or MeB12) is a cobalamin, a form of vitamin B12. It differs from cyanocobalamin in that the cyano group at the cobalt is replaced with a methyl group.[1]

Methylcobalamin features an octahedral cobalt(III) centre and can be obtained as bright red crystals.[2] From the perspective of coordination chemistry, methylcobalamin is notable as a rare example of a compound that contains metal–alkyl bonds. Nickel–methyl intermediates have been proposed for the final step of methanogenesis.

Methylcobalamin is equivalent physiologically to vitamin B12,[3] and can be used to prevent or treat pathology arising from a lack of vitamin B12 intake (vitamin B12 deficiency).

Folate and folic acid are forms of vitamin B9 used for deficiency and to prevent pregnancy complications. Many foods contain folate or have folic acid added.

Since 1998, folic acid has been added to cold cereals, flour, breads, pasta, bakery items, cookies, and crackers, as required by federal law. Foods that are naturally high in folate include leafy vegetables, okra, asparagus, certain fruits, beans, yeast, mushrooms, animal liver and kidney, orange juice, and tomato juice. Folic acid is also available as a supplement, and is often used in combination with other B vitamins.

Folic acid is used for preventing and treating low blood levels of folate (folate deficiency) and high blood levels of homocysteine (hyperhomocysteinemia). People who are pregnant or might become pregnant take folic acid to prevent serious birth defects such as spina bifida. Folic acid is also used for many other conditions including depression, stroke, decline in memory and thinking skills, and many others.