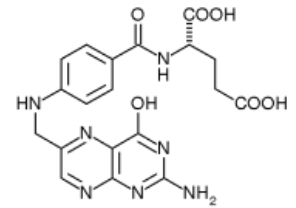


# Vitamin B9 (Folic acid)

Folic acid also is known as vitamin B<sub>9</sub>, folate or folacin . Includes a group of compounds: Folic Acid (contains pterin, p-aminobenzoic acid and glutamic ) and folic acid. Along with vitamin B<sub>12</sub> is essential for the formation of nucleic acids and thus for synthesis of DNA , participate in the transfer radicals and in all processes of cell division , it is important for cell division and tissue with high mitotic activity. Absorbed in the proximal parts of the small intestine and when excess it is excreted in the urine.



Vitamin B9 structure

## Source

Liver, yeast, green leafy vegetables, as well as whole grain cereals, meat, milk, eggs and legumes. The recommended daily adult dose: 400mg. In pregnancy, 600mg for prevention of congenital malformations (mainly cleft neural tube).

## Deficit

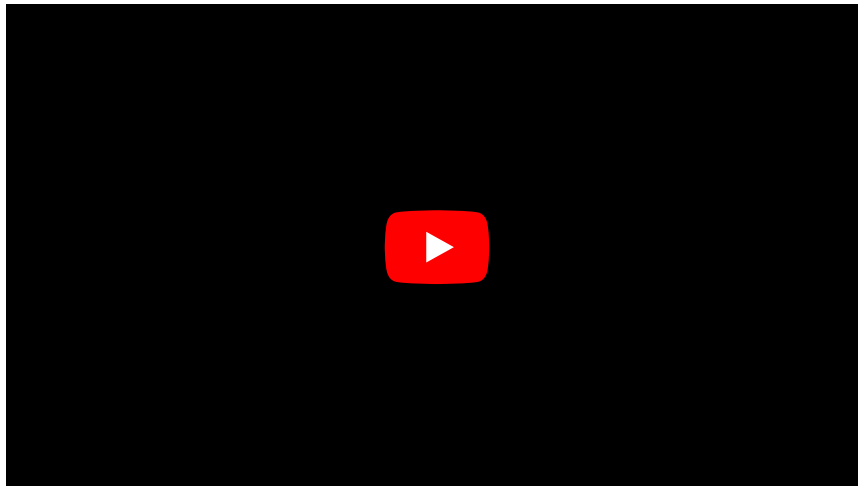
Deficiency of vitamin B<sub>9</sub> occurs in low supply, absorption or increased need during pregnancy. There is a megaloblastic anaemia , which is characterized by the presence of abnormal precursors of red blood cells in the bone marrow. Compared with normal cells are cells arising from these abnormal precursors of different shape, larger size, reduced viability and reduced ability to transport oxygen . Along with the lack of iron is its lack of a significant cause of anaemia in developing countries. Deficiency during pregnancy causes spina neural tube in the fetus.

- Laboratory evaluation: serum levels of folate, total homocysteine (increases in the absence, also in the absence of vitamin B<sub>12</sub>)

## Surplus

High intake of folic acid can mask vitamin B<sub>12</sub> , so the upper limit of the daily recommended intake of up to 1000 mg / day.

## Folate deficiency:



## Folate deficiency 2:



## Links

- [ws:Kyselina listová](#)

## Related articles

- [Fat Soluble Vitamins](#)
- [Water Soluble Vitamins](#)

## Bibliography

- BENCKO, Vladimír, et al. *Hygiene and epidemiology : selected chapters*. 2. edition. Prague. 2008. ISBN 80-246-0793-X.