

# Vitamin B2

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See also comparison of actual and checked version ([https://www.wikilectures.eu/index.php?title=Vitamin\\_B2&diff=-&oldid=11205](https://www.wikilectures.eu/index.php?title=Vitamin_B2&diff=-&oldid=11205)).

Riboflavin or vitamin B<sub>2</sub> is part of coenzymes flavinadenine mononucleotide (FAD) and flavin mononucleotide (FMN), plays a key role in oxidative metabolism.



## Source

A small amount is found in many foods. Main sources are meat, milk and milk products; good sources are also fish, offal (inner organs), eggs, and whole grain cereals. Milling of cereals removes most of vitamin B<sub>2</sub> - some countries (e.g. USA) fortify cereal products with riboflavin.

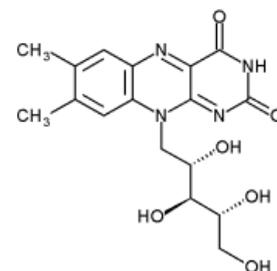
**Recommended daily intake** for adults: 1.2 to 1.5 mg <sup>[1]</sup>

## Deficiency

According to several population studies, the deficiency is widespread in developing countries, where diet is poor in animal foods, vegetables and fruits, and where cereals are milled (white flour)<sup>[2]</sup>. Frequently the deficiency is secondary due to malabsorption, enterocolitis, coeliac disease, chronic hepatitis; in children often after the use of broad-spectrum antibiotics. It may develop in cancer, cardiac disease, diabetes<sup>[2]</sup>

**Clinical picture:** The description of the signs of riboflavin deficiency is somewhat inconsistent in various scientific publications. Riboflavin deficiency occurs almost always together with deficiencies of other group B vitamins, which may cause some of the signs described in literature<sup>[3]</sup>. The signs most frequently described are: angular stomatitis, peeling lips (cheilosis), glossitis, and normocytic normochromic anemia<sup>[3]</sup>.

**Laboratory evaluation:** decreases secretion of vitamin B<sub>2</sub> in urine (normal values are 106–638 nmol/l<sup>[4]</sup>), decreased concentrations of glutathione and glutathione reductase in erythrocytes.



Vitamin B2 structure

## Excess

Signs of excess are not known.

## Links

### Related articles

- Fat Soluble Vitamins
- Water Soluble Vitamins

### Reference

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## **Bibliography**

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