



## Vitamin B2

### AT A GLANCE

#### Introduction

Vitamin B2, also called riboflavin, is one of the most widely distributed water-soluble vitamins. The term flavin originates from the Latin word flavus referring to the yellow colour of this vitamin. In the body, riboflavin occurs primarily as a component of the coenzymes.

#### Health Functions

A sufficient intake of vitamin B2 (riboflavin) is important as it helps the body to

- convert food (carbohydrates) into glucose, which is used to produce energy.
- neutralize free radicals that can damage cells and DNA. This neutralizing antioxidant effect may reduce or help prevent some of the damage contributing to the aging process as well as the development of a number of health conditions such as heart disease and cancer.
- convert vitamin B6 and vitamin B9 into active forms.

#### Disease Risk Reduction

##### Eye-related diseases

There is some preliminary evidence that vitamin B2, along with other micronutrients, might help prevent damage to the lens of the eye which can lead to cloudy vision (cataracts).

#### Other Applications

*Please note:*

*Any dietary or drug treatment with high-dosed micronutrients needs medical supervision.*

##### Migraine headaches

Studies indicate that people who get migraines may decrease the frequency and duration of the headache by taking vitamin B2 (riboflavin) supplements.

#### Intake Recommendations

Dietary recommendations for vitamin B2 exist in many countries, where mean values vary between 1.3 and 1.6 mg riboflavin daily for adult males, and between 1.1 and 1.3 mg per day for females.

## Supply Situation

Most healthy people who eat a well-balanced diet get enough vitamin B2. However, some population groups may be at risk of riboflavin deficiency because of poor diet.

## Deficiency

Individuals who have inadequate food intake are at risk of vitamin B2 deficiency, particularly children from low socio-economic backgrounds, elderly people with poor diets, chronic dieters, and people who exclude milk products from their diet (vegans).

Symptoms of riboflavin deficiency include fatigue, slowed growth, digestive problems, cracks and sores around the corners of the mouth, swollen magenta tongue, eye fatigue, and swelling and soreness of the throat.

## Sources

The most important and common dietary sources are milk and milk products, lean meat, eggs and green leafy vegetables. Yeast and liver have the highest concentrations, but they do not bear much relevance to modern-day nutrition.

## Safety

Vitamin B2 (riboflavin) is generally considered safe, even at high doses.

### **Drug interactions**

*Please note:*

*Because of the potential for interactions, dietary supplements should not be taken with medication without first talking to an experienced healthcare provider.*