Vitamin B2 (Riboflavin)

Function:

Riboflavin helps to metabolize foodstuffs into energy. Riboflavin is converted into its active forms, flavin adenine dinucleotide (FAD) and flavin mononucleotide (FMN). FAD and FMN are primarily involved as cofactors in oxidation-reduction reactions for flavoproteins, essential for cellular energy production and respiration. Riboflavin has a role in antioxidant status by activating glutathione reductase, which regenerates reduced glutathione.

Deficiency Symptoms:

Clinical signs of riboflavin deficiency are less clear-cut than other B Vitamins, but include depression, dizziness, sore or burning lips, mouth, and tongue, photophobia, burning, itching or teary eyes, and loss of visual acuity in early stages. More severe deficiency symptoms for riboflavin are dermatitis (nasal, scrotal), glossitis, cheilosis, angular stomatitis, and corneal vascularization. Frequently, riboflavin deficiencies overlap with niacin, pyridoxine, or iron deficiencies. There is no specific name for riboflavin deficiency disease.

Repletion Information:

Dietary Sources rich in riboflavin (per serving) include:

Nutritional Supplements  Nutritional Yeasts
Meats and Dairy Products  Green Leafy Vegetables
Grain Products  Enriched Grains

The 1989 RDA for riboflavin is 1.2-1.8 mg for adults. There is no evidence of toxicity from oral administration of riboflavin, except for rare cases of sensitivity.