



# B

## VITAMIN B<sub>2</sub>

### B Vitamins: Establishing Healthy Growth

#### VITAMIN B<sub>2</sub> BASICS

Also known as: Riboflavin

Important for: Metabolism, tissues and organs, growth, vision

Animal Sources: Milk and milk products, lean meat, eggs, liver

Grain/Fruit/Vegetable Sources: Leafy green vegetables, yeast, whole grain cereals

#### OVERVIEW

Vitamin B<sub>2</sub> is a water soluble vitamin that is part of the vitamin B complex group. Vitamin B<sub>2</sub> plays an important role in metabolizing carbohydrates, fats and proteins, and is required for proper functioning of the tissues and organs. This vitamin has been found to neutralize “free radicals” that can damage cells and DNA. In addition, vitamin B<sub>2</sub> stimulates growth and reproduction and plays a role in sight mechanisms.

#### DISCOVERY AND HISTORY

Vitamin B<sub>2</sub> was discovered in 1922, and the active ingredient in vitamin B<sub>2</sub> was isolated in 1933 by Richard Kuhn and T. Wagner-Jauregg, who discovered the fluorescent green-yellow substance in an effort to find a substance to stop the disease pellagra. Riboflavin was the first vitamin discovered to be part of an enzyme system – a key milestone in biochemical research.

#### VITAMIN B<sub>2</sub> DEFICIENCY

Lack of adequate food intake is the major cause of vitamin B<sub>2</sub> deficiency. India and other parts of Asia are places where populations still suffer from vitamin B<sub>2</sub> deficiency. A deficiency of vitamin B<sub>2</sub> leads to health problems, including:

- Cracks and sores on lips, tongue and at corners of mouth
- Sensitivity to bright light
- Impaired vision
- Itchy eyes
- Inflamed mucosal membranes
- Fatigue
- Digestive problems
- Swelling and soreness of the throat

#### POPULATIONS AT RISK OF VITAMIN B<sub>2</sub> DEFICIENCY

- Children living in poverty who have inadequate diets
- The elderly
- Chronic dieters
- People who don't consume milk (such as vegans)