



B

VITAMIN B₉

B Vitamins: Establishing Healthy Growth

VITAMIN B₉ BASICS

Also known as: Folic acid, folate

Important for: Red and white blood cells, nerve cells

Animal Sources: Liver, milk, dairy products, egg yolk

Grain/Fruit/Vegetable Sources: Dark leafy green vegetables, beets, wheat germ, yeast, peanuts, oranges, beans

OVERVIEW

Vitamin B₉, also known as folic acid or folate, is a water soluble vitamin and is part of the vitamin B complex group. It plays a key role in helping the body make healthy new cells and is very important before and during pregnancy.

DISCOVERY AND HISTORY

While there was great progress made toward discovery in the early 1930s, vitamin B₉ was officially discovered in 1941 by Henry Mitchell. It was also isolated in 1941. The name folic acid comes from “folium,” which is the Latin word for leaves, because it was first isolated from spinach. It wasn’t until the 1960s that scientists linked vitamin B₉ deficiency to birth defects.

VITAMIN B₉ DEFICIENCY

Vitamin B₉ deficiency is one of the most common vitamin deficiencies in both developing and developed countries. It can result from insufficient intake, poor absorption, abnormal metabolism or increased vitamin requirements, such as during pregnancy or when breastfeeding. Deficiency symptoms include:

- Tiredness
- Loss of appetite
- Megaloblastic anemia (oversized, immature red blood cells)
- Weakness
- Fatigue
- Neurological problems
- Digestive problems
- Severe birth defects in the brain (anencephaly) and spine (spina bifida) – due to deficiency during pregnancy

POPULATIONS AT RISK OF VITAMIN B₉ DEFICIENCY

- Pregnant women
- Breastfeeding women
- Women of childbearing age
- Infants
- Children
- The elderly
- People on weight-loss diets
- People with stomach disorders (celiac disease, sprue, Crohn’s disease)
- People undergoing drug treatment (for epilepsy, cancer or an infection)