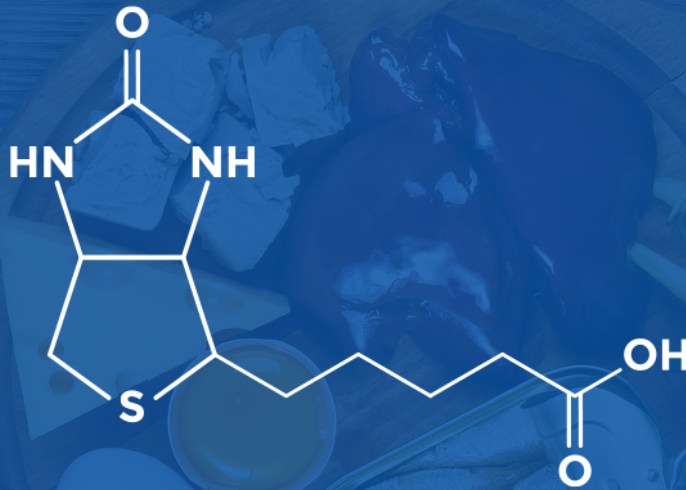


# Vitamin B7



**Vitamin B7 (BIOTIN = VITAMIN H)** is one of the B group water-soluble vitamins that is stable at room temperature and is not destroyed by cooking. It is reported as biotin, determined by ELISA.

## Vitamin H = BIOTIN



### Functions/Health effect:

Biotin plays a vital role in assisting enzymes to break down fats, carbohydrates, and proteins in food. It also helps to regulate signals sent by cells and the activity of genes.

Biotin supplements are often glamorized as a treatment for hair loss and to promote healthy hair, skin, and nails. Although the deficiency of biotin can certainly lead to hair loss and skin or nail problems, evidence showing a benefit of supplementation is inconclusive.

### Sources:

Food should be the first choice when looking for sources of biotin, which usually binds to protein. Vitamin B7 is found in foods like eggs, milk, bananas, red meat, seeds, nuts, baker's yeast or oysters.

Those who frequently enjoy raw eggs in recipes for mayonnaise, Caesar dressing, or eggnog may, however, reconsider. Raw egg-whites contain avidin, a glycoprotein that inhibits the absorption of biotin. Cooked eggs are not an issue because avidin is broken down when heated.

### Did you know that?

The name "biotin" derives from the Greek word "bios" (to live) and the suffix "-in", a general chemical suffix used in organic chemistry. Hungarian scientist Paul Gyorgy began investigating the factor responsible for egg-white injury (toxic symptoms in dogs, cats, rabbits, and humans) in 1933 and in 1939, he was successful identifying what he called "Vitamin H" (the H represents Haar und Haut, German terms for hair and skin).

The Recommended Dietary Allowance (RDA) for biotin does not exist due to lack of evidence. Instead, there is an Adequate Intake (AI) level, which is assumed to ensure nutritional adequacy. The European Food Safety Authority (EFSA) has set the AI value at 40 µg/day for adults and from 20 to 35 µg/day for children ages 1-17 years, the AI increases with age.

Biotin is a popular nutritional supplement for horses and cattle as it prevents problems such as chronic laminitis, cracked hooves, or dry, brittle feet incapable of holding shoes. Cattle lameness due to hoof problems is common, with herd prevalence estimated at 10 to 35%. Consequences of lameness include less food consumption, lower milk production, and increased veterinary treatment costs.

Food  
division

