

# Pantothenic Acid Fact Sheet for Consumers



Pantothenic acid helps turn the food you eat into the energy you need.

## What is pantothenic acid and what does it do?

Pantothenic acid (also called vitamin B5) helps turn the food you eat into the energy you need. It's important for many functions in the body, especially making and breaking down fats.

## How much pantothenic acid do I need?

The amount of pantothenic acid you need depends on your age and sex. Average daily recommended amounts are listed below in milligrams (mg).

Life Stage	Recommended Amount
Birth to 6 months	1.7 mg
Infants 7–12 months	1.8 mg
Children 1–3 years	2 mg
Children 4–8 years	3 mg
Children 9–13 years	4 mg
Teens 14–18 years	5 mg
Adults 19 years and older	5 mg
Pregnant teens and women	6 mg
Breastfeeding teens and women	7 mg

## What foods provide pantothenic acid?

Pantothenic acid is naturally present in almost all foods. It is also added to some foods, including some breakfast cereals and beverages (such as energy drinks). You can get recommended amounts of pantothenic acid by eating a variety of foods, including the following:

- Beef, poultry, seafood, and organ meats
- Eggs and milk
- Vegetables such as mushrooms (especially shiitakes), avocados, potatoes, and broccoli
- Whole grains, such as whole wheat, brown rice, and oats
- Peanuts, sunflower seeds, and chickpeas

## What kinds of pantothenic acid dietary supplements are available?

Pantothenic acid is available in dietary supplements containing only pantothenic acid, in B-complex dietary supplements, and in some multivitamin/multimineral supplements. Pantothenic acid in dietary supplements is often in the form of calcium pantothenate or pantethine. Research has not shown that any form of pantothenic acid is better than the others.

## Am I getting enough pantothenic acid?

Most people in the United States get enough pantothenic acid. However, people with

a rare inherited disorder called pantothenate kinase-associated neurodegeneration can't use pantothenic acid properly. This disorder can lead to symptoms of pantothenic acid deficiency.

### What happens if I don't get enough pantothenic acid?

Pantothenic acid deficiency is very rare in the United States. Severe deficiency can cause numbness and burning of the hands and feet, headache, extreme tiredness, irritability, restlessness, sleeping problems, stomach pain, heartburn, diarrhea, nausea, vomiting, and loss of appetite.

### What are some effects of pantothenic acid on health?

Scientists are studying pantothenic acid to understand how it affects health. Here's one example of what this research has shown.

#### High cholesterol and triglyceride levels

The form of pantothenic acid called pantethine is being studied to see if it helps lower total cholesterol, low-density lipoprotein (LDL or "bad") cholesterol, and triglyceride levels. It's also being studied to see if it raises levels of high-density lipoprotein (HDL or "good") cholesterol. The results of these studies so far are promising, but more research is needed to understand the effects of pantethine dietary supplements taken alone or combined with a heart-healthy diet.

#### Can pantothenic acid be harmful?

Pantothenic acid is safe, even at high doses. However, taking very high doses of pantothenic acid supplements (such as 10,000 mg per day) can cause an upset stomach and diarrhea.

### Are there any interactions with pantothenic acid that I should know about?

Pantothenic acid is not known to interact or interfere with any medicines.

Tell your doctor, pharmacist, and other healthcare providers about any dietary supplements and prescription or over-the-counter medicines you take. They can tell you if those dietary supplements might interact with your medicines or if the medicines might interfere with how your body absorbs, uses,

or breaks down nutrients.

### Pantothenic acid and Healthful Eating

People should get most of their nutrients from food, according to the federal government's *Dietary Guidelines for Americans*. Foods contain vitamins, minerals, dietary fiber, and other substances that benefit health. In some cases, fortified foods and dietary supplements may provide nutrients that people otherwise might consume in less-than-recommended amounts. For more information about building a healthy diet, see the *Dietary Guidelines for Americans* and the U.S. Department of Agriculture's MyPlate.

### Where can I find out more about pantothenic acid?

#### For general information on pantothenic acid:

- Office of Dietary Supplements Health Professional Fact Sheet on Pantothenic Acid

#### For more information on food sources of pantothenic acid:

- U.S. Department of Agriculture's (USDA) FoodData Central
- Nutrient List for pantothenic acid (listed by food or by pantothenic acid content), USDA

#### For more advice on buying dietary supplements:

- Office of Dietary Supplements Frequently Asked Questions: Which brand(s) of dietary supplements should I purchase?

#### For information about building a healthy diet:

- MyPlate
- *Dietary Guidelines for Americans*

### Disclaimer

This fact sheet by the Office of Dietary Supplements (ODS) provides information that should not take the place of medical advice. We encourage you to talk to your healthcare providers (doctor, registered dietitian, pharmacist, etc.) about your interest in, questions about, or use of dietary supplements and what may be best for your overall health. Any mention in this publication of a specific product or service, or recommendation from an organization or professional society, does not represent an endorsement by ODS of that product, service, or expert advice.



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Updated: July 11, 2019