



Patient education: Malnutrition (The Basics)

Written by the doctors and editors at UpToDate

Please read the [Disclaimer](#) at the end of this page.

What is malnutrition?

Malnutrition is the medical term for when your body is not getting the right nutrients to meet its needs. Doctors might also use the term "malnourished" to describe a person with malnutrition.

The food we eat is made up of nutrients. The human body needs certain types of nutrients, in certain amounts, to work properly. There are 2 main groups of nutrients we get through food:

- **Macronutrients** – These are proteins, fats, and carbohydrates. These give the body energy. You need a balance of all 3 types.
- **Micronutrients** – These are vitamins and minerals. They help to make sure that the body is working well.

When most people hear "malnutrition," they think of a specific type of malnutrition called "undernutrition." This is when the body is **not getting enough** nutrients.

This article will use the word "malnutrition" to mean "undernutrition." But there is another type of malnutrition called "overnutrition." This is when the body is getting too many nutrients.

What are the symptoms of malnutrition?

Symptoms can include:

- Losing weight or having a low body weight
- Loss of muscle or fat
- Lack of appetite

- Feeling very tired or weak
- Changes to the skin and hair
- Mood changes
- Swelling (from the body holding on to water)

A person can be overweight and still be malnourished. For example, if a person is overweight but not getting enough protein or other important nutrients, they could still be malnourished.

What are the causes of malnutrition?

There are many different causes of malnutrition. These include:

- **Not having access to nutritious food** – In some cases, healthy food can be hard to get or very expensive. Or people might have easy access to things like processed snacks or fast food, but have a harder time getting meat, fruit, or vegetables. Older adults might also have trouble leaving home to shop for themselves. All of these things can make it hard to get enough food, or to get the right nutrients.
- **Not knowing about proper nutrition** – Many people are not taught about nutrition. They might not know if they are getting the right balance of nutrients.
- **Lack of appetite** – This can be caused by a health problem, medicine, treatment, depression, or alcohol or substance use. For example, cancer can make people lose weight. So can certain cancer treatments.
- **Problems eating, chewing, or swallowing** – Some people have trouble eating enough because of nausea. Or they might have trouble chewing or swallowing because of problems with the mouth or esophagus. (The esophagus is the tube that connects the mouth to the stomach.)
- **Cachexia** – This is a problem that happens with certain long-term illnesses. With cachexia, a person often loses their appetite. But there are also changes in the way the body uses nutrients. The body starts burning more calories than it is taking in.
- **Malabsorption** – This is when the small intestine has trouble absorbing nutrients from food. (The small intestine is part of the digestive system.) This means that nutrients pass out of the body without being used.
- **Eating disorders** – These are a type of mental health problem that affects a person's behavior around eating. For example, a person with anorexia nervosa might want to

weigh less than is healthy. Because of this, they might not eat enough nutrients.

- **Serious illness, surgery, or injury** – Certain serious illnesses, surgeries, or injuries can make it hard to eat. This is especially true if you have to stay in the hospital or are very sick.

How is malnutrition diagnosed?

The doctor, dietitian (nutrition expert), or nurse will start by asking you questions and doing an exam. They might also:

- Weigh you, to see if your weight has changed
- Measure your body fat
- Measure your muscle mass and strength
- Do lab tests to check for specific micronutrient imbalances or other problems

How is malnutrition treated?

This depends on what is causing your malnutrition, and how severe your symptoms are. Generally, your doctor, dietitian, or nurse will try to treat the underlying cause of malnutrition.

Other treatments are done to increase your nutrients. These might include:

- Oral nutritional supplements – These are special foods designed to be a quick source of calories and protein. Many come as a drink. But there are also other forms such as powders or bars. These can be found at a grocery store or pharmacy. Sample brand names include Boost, Ensure, and Premier Protein.
- Nutrition support – This is when you get nutrients through a feeding tube or IV.
- Working with a dietitian – A dietitian is an expert on food and nutrition. They will help make sure that you are getting the right nutrients for your body.
- Vitamin and mineral supplements

If your malnutrition is severe, you might need to be treated in the hospital.

Can malnutrition be prevented?

Maybe. Not all causes of malnutrition can be prevented. Some people also have a higher risk because of things like where they live. But in general, it helps to learn about nutrition and eat a well-balanced diet. You can also learn more about how to prepare food in ways that help you get the most nutrients.

When should I call the doctor?

Call for advice if:

- You gain or lose weight without trying to.
 - You feel faint, weak, or very tired – These can be signs of anemia. This is a problem with red blood cells. One type of anemia is caused by not having enough iron.
 - You have tingling or numbness and pain in the hand or feet, or bone pain – These can be signs of a vitamin deficiency or anemia.
-

More on this topic

[Patient education: Malnutrition – Discharge instructions \(The Basics\)](#)

[Patient education: Diet and health \(The Basics\)](#)

[Patient education: Vitamin supplements \(The Basics\)](#)

[Patient education: Calcium and vitamin D for bone health \(The Basics\)](#)

[Patient education: Anorexia nervosa \(The Basics\)](#)

[Patient education: Nausea and vomiting with cancer treatment \(The Basics\)](#)

[Patient education: Mouth sores from cancer treatment \(The Basics\)](#)

[Patient education: Dysphagia \(The Basics\)](#)

[Patient education: Depression in adults \(The Basics\)](#)

[Patient education: Mouth sores \(The Basics\)](#)

[Patient education: Diet and health \(Beyond the Basics\)](#)

[Patient education: Calcium and vitamin D for bone health \(Beyond the Basics\)](#)

[Patient education: Managing loss of appetite and weight loss with cancer \(The Basics\)](#)

All topics are updated as new evidence becomes available and our [peer review process](#) is complete.

This topic retrieved from UpToDate on: Oct 06, 2023.

This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the

user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific patient. It is not intended to be medical advice or a substitute for the medical advice, diagnosis, or treatment of a health care provider based on the health care provider's examination and assessment of a patient's specific and unique circumstances. Patients must speak with a health care provider for complete information about their health, medical questions, and treatment options, including any risks or benefits regarding use of medications. This information does not endorse any treatments or medications as safe, effective, or approved for treating a specific patient. UpToDate, Inc. and its affiliates disclaim any warranty or liability relating to this information or the use thereof. The use of this information is governed by the Terms of Use, available at <https://www.wolterskluwer.com/en/know/clinical-effectiveness-terms> ©2023 UpToDate, Inc. and its affiliates and/or licensors. All rights reserved.

Topic 141278 Version 1.0

→