

# Health tip: Supplementation 101



## What are dietary supplements?

Dietary supplements are intended to add to or supplement the diet, and they are different from conventional food. Generally, dietary supplements are advertised to treat, diagnose, or cure preventive diseases. These supplements are technically a drug, even if it is labeled as a dietary supplement. Supplements are ingested and come in many forms such as tablets, capsules, soft gels, gel caps, powders, bars, gummies, and liquids.<sup>1</sup>

## Supplement Types

- 1. Vitamins:** Vitamins help your body grow and function properly. Some vitamins help you resist infections and keep your nerves healthy, while others may help your body get energy from food or help your blood clot properly.<sup>2</sup>
- 2. Minerals:** Minerals are also necessary for your body to function properly. They are elements that our bodies need that can be found on the earth and in foods. Some minerals, like iodine and fluoride, are only needed in very small quantities. Others, such as calcium, magnesium, and potassium, are needed in larger amounts.<sup>2</sup>
- 3. Botanicals:** Botanicals are plants or plant parts that are used for medicinal or therapeutic properties, flavors and/or scents. Herbs are also considered botanicals. Products made from botanicals are used to improve health are typically called herbal products, botanical products or phytomedicines.<sup>1</sup>
- 4. Amino Acids:** Amino acids are typically sold as a dietary supplement to enhance exercise and athletic performance. These products may come in many forms, including tablets, liquids, powders, and bars.<sup>3</sup>
- 5. Live Microbials:** Live microbials include supplements such as pro and prebiotics. Specifically, probiotics are made of good live bacteria and/or yeasts that naturally live in your body. These supplements are made up of good bacteria that help keep your body healthy and functioning properly.<sup>4</sup>

## Supplement Benefits

If taken properly, supplementation may be beneficial in many ways. Specifically, supplements may help you improve or maintain your overall health. Additionally, supplements may help you meet your daily requirements of essential nutrients.<sup>1</sup>

## Risks of Supplements

When taking dietary supplements, be alert to the possibility of a bad reaction or side effect (also known as an adverse event). Problems may occur especially if you combine supplements, mix medicine with supplements, take too much of a supplement, or take supplements in place of prescribed medications.

The FDA does NOT have the authority to approve dietary supplements for safety and effectiveness, or to approve their labeling, before the supplements are sold to the public. Under the FD&C Act, it is the responsibility of dietary supplement companies to ensure their products meet the safety standards for dietary supplements and are not otherwise in violation of the law. While the FDA does not approve dietary supplements, the agency is doing what they can to regulate them. The FDA periodically inspects dietary supplement manufacturing facilities to verify companies are meeting applicable manufacturing and labeling requirements.<sup>1</sup>

### Things to consider prior to starting a supplement<sup>1</sup>:

- Take only as described on the label. Some ingredients and products may be harmful when consumed in high amounts, when taken for a long time, or when used in combination with certain drugs or foods.
- Do not substitute a dietary supplement for a prescription medication or to replace eating healthier foods.
- Do not assume that the term “natural” to describe a product ensures that it is safe.
- Be wary of hype surrounding a particular product. Credible health advice is generally based upon research over time, not a single study.
- Learn to spot false claims. If something sounds too good to be true, it probably is.
- Finally, look for a certification on the label, such as the USP seal, that tests products and verifies the product is of quality.

*Consult your physician prior to taking any supplements, especially if you are taking any prescription medications.*



Sources:

1. U.S. Food and Drug Administration. <https://www.fda.gov/consumers/consumer-updates/fda-101-dietary-supplements>. 2022. Accessed October 2024.
2. National Institute on Aging. <https://www.nia.nih.gov/health/vitamins-and-supplements/vitamins-and-minerals-older-adults>. 2021. Accessed October 2024.
3. National Institutes of Health Office of Dietary Supplements. <https://ods.od.nih.gov/factsheets/ExerciseAndAthleticPerformance-HealthProfessional/>. 2024. Accessed October 2024.
4. Cleveland Clinic. <https://my.clevelandclinic.org/health/treatments/14598-probiotics>. 2023. Accessed October 2024.