



Vitamin and Mineral Supplements

EXTENSION

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Millions of Americans take supplements daily. However, most people do not need to take extra vitamin and mineral supplements. A balanced diet based on the USDA MyPlate Plan is the best way to get all the nutrients you need.

Supplements Do Have a Role

Supplements do have a role in some situations. You may lack certain nutrients if you usually eat a poor diet or omit a major food group. If you do not eat vegetables, you may not get enough vitamin A or folate. If you do not eat meat, you may not get enough iron.

People who use very low-calorie diets may need a vitamin or mineral supplement. It is difficult to get all the nutrients you need in a small number of calories. In pregnancy and lactation the body's need for many nutrients increases. Doctors often recommend vitamin and mineral supplements for women who are pregnant or lactating.

Some medicines lower the appetite or change the way the body uses nutrients. Drug-nutrient interactions may increase the risk of vitamin or mineral deficiency. Both over-the-counter and prescription drugs can change your vitamin or mineral needs. For example, large amounts of aspirin could increase your need for iron.

Older adults are often at risk for poor diets. They may not be able to afford the food they need. Many older adults have very low food intakes. Chewing or swallowing problems, digestive problems or medicines used by older adults may lead to poor diets.

This does not mean you should take vitamin or mineral supplements automatically or view them as a substitute for food. Before taking vitamin or mineral supplements on your own, consult a doctor or a registered dietitian. A simple dietary change may be all that you need.

Vitamin or Mineral Deficiency Diseases

Vitamin or mineral deficiency diseases can be difficult to diagnose. Diseases have many possible causes. For example, anemia can result from a deficiency of vitamin C, folate, iron, copper, B6, B12, or protein. Anemia can also be totally unrelated to diet.

Symptoms by themselves cannot accurately diagnose a disease. A symptom signals that something is wrong - not what is wrong. Being tired could be a symptom of iron deficiency, folate deficiency, or totally unrelated to diet. Skin problems can result from a deficiency of vitamin A, niacin, or a reaction to a new soap. Be careful of claims for vitamins or minerals to cure or prevent a symptom or disease.

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Increased vitamin or mineral intakes are needed to correct a nutritional deficiency. Taking large amounts of a vitamin or mineral approaches drug therapy and requires the help of a doctor. However, people often take large amounts of vitamins or minerals on their own in hope of preventing or curing a disease. This practice is not only a waste of money, it can be dangerous.

Misleading Claims

There are many false claims made about vitamins and minerals. For example, false claims are often made that vitamin E and zinc delay aging. There is no scientific evidence that extra amounts of these nutrients beyond the dietary reference intakes will slow down aging.

Claims that vitamins or minerals help reduce stress or provide energy are false. Life stresses do not increase your need for vitamins or minerals beyond recommended dietary allowances. In addition, vitamins and minerals do not provide energy. Energy comes from carbohydrates, proteins, and fats in food. Vitamins and minerals do have a role in the release of energy from food. However, extra vitamins and minerals beyond the dietary reference intakes do not provide additional energy.

Expensive supplements are not necessarily better. You may hear that natural supplements are better than other forms. The body cannot tell the difference between natural and synthetic forms. There is no reason to pay extra for a "natural" supplement.

Overdoses Can Be Dangerous

More is not always better when it comes to nutrition. Extra vitamins and minerals are not always good for the body. Large amounts of some vitamins or minerals can have serious side effects. Large amounts of the fat-soluble vitamins A and D can cause serious illness. Large amounts of B6 can cause nerve tissue damage.

Too much or too little of one vitamin or mineral can hinder the body's use of another—for example, too much zinc can lower the body's storage of copper. You need a balanced diet to get all the vitamins and minerals your body needs in the right amounts.

A Balanced Diet, Not Supplements

Most healthy people can meet their nutritional needs through a balanced diet rather than supplements. Vitamin and mineral supplements do not contain all the vitamins and minerals your body needs in the right amounts. In fact, supplements may provide a poor balance of vitamins or minerals.

Foods also provide protein, fat, carbohydrate, water and fiber in addition to vitamins and minerals. Different foods provide different vitamins and minerals. Some foods are better sources of certain vitamins and minerals than others. As a result, you need foods from all MyPlate food groups. No one food group is more important than the other. The best way to get all the nutrients you need each day is to follow the USDA MyPlate Plan.

Recommended amounts from each MyPlate food group each day for a reference 2,000-calorie diet are:

- 6 oz. of grains
- 2 1/2 cups of vegetables
- 2 cups of fruit
- 3 cups of dairy
- 5 1/2 oz. of protein foods
- 6 teaspoons of oil

Tips for Using Supplements

You should not take individual vitamins or minerals unless recommended by a doctor. One possible exception is calcium. Most combination vitamin and mineral supplements do not contain enough calcium to meet the dietary reference intake.

If you take a supplement, the best guide is to choose a combination vitamin and mineral supplement. Choose one that contains a variety of vitamins and minerals, in amounts no more than 100 percent of the dietary reference intakes.

If your doctor or registered dietitian decides you need a supplement, only take a single dose. Do not take additional supplements to replace missed meals. Also, do not double up on doses if you are not feeling well.

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