

What's the Scoop? Common Misconceptions About Vitamins and Minerals

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The Scoop



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What's the Scoop? Common Misconceptions About Vitamins and Minerals

Misconception:

Recommended dietary allowances (RDAs) refer to the amounts of vitamins and minerals you need from dietary supplements, such as multivitamins.

Fact:

RDAs refer to the amounts of vitamins and minerals you need from all sources—food, beverages, and if you take them, dietary supplements.



In most cases, whether you need a vitamin or mineral supplement depends on how much you get from the foods and beverages you consume each day. For example, the RDA for calcium is 1,000 milligrams per day for many adults. If you get that much from foods and beverages, you shouldn't need a calcium supplement unless your health care provider recommends it. There are some exceptions for certain vitamins and minerals. For example, if you could become pregnant, you should get 400 micrograms a day of folic acid from dietary supplements and/or fortified foods in addition to what you get naturally from foods. This helps reduce the risk of serious birth defects, called neural tube defects.

For more information about RDAs, see our [vitamin and mineral fact sheets](#).

Misconception:

Because our bodies don't fully absorb the vitamins and minerals in foods and beverages, you must consume more than the RDAs to get enough.

Fact:

RDAs take absorption into account, so consuming more isn't needed.

Unless you have a health condition that impairs your ability to absorb vitamins and minerals, aim for the RDAs. This will help ensure you get enough of all essential vitamins and minerals; you don't need to calculate how much your body absorbs. However, if you have Crohn's disease, celiac disease, alcohol use disorder, or other health conditions, talk with your health care provider. Your vitamin and mineral needs might be slightly different than those for other people.

Misconception:

B vitamins are water soluble, so they are safe at high doses.

Fact:

B vitamins are water soluble, but not all of them are safe at high doses.

Three of the B vitamins—vitamin B6, folate, and niacin—have upper limits for safety, and consuming high amounts can cause health problems.

Others, like vitamin B12, are considered safe at any dose. Unless your health care provider recommends otherwise, it's safest to avoid high doses of most vitamins and minerals.



Our [vitamin and mineral fact sheets](#) have more details.

**Misconception:**

Because a vitamin B12 deficiency can make you feel tired or weak, taking vitamin B12 supplements will give you extra energy.

Fact:

Vitamin B12 supplements will not increase your energy level if you already get enough.

If you have a vitamin B12 deficiency, taking vitamin B12 supplements or getting vitamin B12 injections from your doctor should make you feel better. But taking vitamin B12 will not give you extra energy if you already get enough.

Learn more in our [vitamin B12 fact sheet](#).

Misconception:

Eating salty foods like canned soups and crackers will help you get enough iodine because the salt provides iodine.

Fact:

Almost all processed foods are made with salt that does not contain iodine.

Using “iodized” salt at home can help you get enough iodine, but the salt in most processed foods does not. When purchasing salt to use at home, check the label to ensure that the salt provides iodine or is iodized. Many specialty salts, such as sea salt, kosher salt, Himalayan salt, and fleur de sel, are not iodized.

See our [iodine fact sheet](#) for more details.

Misconception:

All vitamins and minerals are listed on the Nutrition Facts labels on food products.

Fact:

Only vitamin D, calcium, iron, and potassium are required on Nutrition Facts labels unless the food is fortified with other vitamins and minerals.

Naturally occurring vitamins and minerals don't always appear on Nutrition Facts labels. Chia seeds, for example, are very high in magnesium, but many chia seed packages don't list magnesium because it isn't one of the four nutrients required to be listed. On the other hand, fortified breakfast cereals and other foods with *added* nutrients must list all added vitamins and minerals on the Nutrition Facts label.

The FDA has more information on [Nutrition Facts labels](#).

Nutrition Facts	
4 servings per container	
Serving size	1 cup (227g)
Amount per serving	
Calories	280
% Daily Value*	
Total Fat 9g	12%
Saturated Fat 4.5g	23%
Trans Fat 0g	
Cholesterol 35mg	12%
Sodium 850mg	37%
Total Carbohydrate 34g	12%
Dietary Fiber 4g	14%
Total Sugars 6g	
Includes 0g Added Sugars	0%
Protein 15g	
Vitamin D 0mcg	0%
Calcium 320mg	25%
Iron 1.6mg	8%
Potassium 510mg	10%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

In the News



A daily multivitamin/mineral supplement might enhance memory in older adults

In a recent clinical trial known as COcoa Supplement and Multivitamin Outcomes Study Web ([COSMOS-Web](#)), older adults who took a daily multivitamin/mineral (MVM) supplement for one year had better memory than those who took a placebo, and the improvement remained, on average, over three years of use.

The trial included 3,562 adults with an average age of 71 who took a regular MVM for seniors or placebo (inactive pill) daily for three years. Participants completed a series of online tests to assess memory and other cognitive skills at the start of the study and annually thereafter.

Researchers found that the MVM enhanced "immediate recall" memory after one year, and the improvement remained when averaged over three years of MVM use. The MVM didn't improve performance on other cognitive tests.

These results add to similar findings from the [COSMOS-Mind](#) trial. This trial found that older adults who took a daily MVM for three years had improved memory and cognitive function compared with those who took a placebo.

For more information, see our [MVM fact sheet](#).

[Take the NIH Virtual Tour](#). Explore the main NIH campus via an interactive map and get to know the people that are working to turn discovery into health.

¿Habla español?

Consulte [nuestra información basada en la ciencia](#) para ayudarle a tomar las mejores decisiones para su salud con respecto al uso de suplementos dietéticos.



Have more questions about dietary supplements? Ask the Office of Dietary Supplements (ODS).

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