Are Vitamin Supplements Necessary?

Since their discovery in the early 1900s, vitamins’ health benefits have attracted people. Annual sales of vitamin supplements approach $28 billion annually. Initially, consumers took supplements because of diagnosed vitamin deficiencies. More than 100 years ago, people who suffered from debilitating diseases such as scurvy and rickets were miraculously cured by adding a key nutrient to their diet. It wasn’t enough to have adequate food to eat; diets had to be the right mix of foods that contained the seemingly miracle nutrients—vitamins.

If a little is good, more must be better!

In the United States, nearly half the adult population takes some form of multivitamin or mineral supplement. What makes this level of consumption all the more curious is that most of the users are not taking the supplements because they feel ill or exhibit symptoms of vitamin deficiencies. Rather, it seems to be based on the idea that if a little bit of something is good, then more is better. Most of the vitamins and minerals we need to remain healthy are only required in small amounts. So, do multivitamins work?

Enough is enough

While it is difficult to determine whether vitamin supplements make users healthier, it is much easier to test the idea that more is better. In 1994, a study in Finland investigated 29,000 men who smoked. In a controlled experiment, some of the men were given doses of vitamin E and vitamin A. The researchers found that the cancer rates in patients who took the vitamins increased!

It is important to consume the recommended daily allowance of vitamins, but taking large doses (also known as mega-doses) can be harmful. Doses of fat-soluble vitamins that are stored in the body as well as some of the water-soluble vitamins should be avoided to prevent unwanted side effects.

For example,
• Too much vitamin C (a water-soluble vitamin) can cause diarrhea and kidney stones, and
• Too much vitamin E (a fat-soluble vitamin) can cause blood-clotting problems.

A recommended dietary allowance

But what about taking a daily vitamin supplement? This kind of practice should not be harmful. But does it do any good? Medical research does not seem to find any benefit in taking daily vitamin supplements. According to the federal government’s 2015–2020 Dietary Guidelines for Americans, “nutritional needs should be met primarily from foods. Foods in nutrient-dense forms contain essential vitamins and minerals and also dietary fiber and other naturally occurring substances that may have positive health effects. In some cases, fortified foods and dietary supplements may be useful in providing one or more nutrients that otherwise may be consumed in less-than-recommended amounts.” But taking recommended doses doesn’t seem to do any harm either.

Nutrients of special public health concern in U.S. diets are calcium, potassium, dietary fiber, and vitamin D in both adults and children. Some people need nutritional supplements to treat medical conditions, such as women who take iron supplements during pregnancy or a person who takes supplements of a specific vitamin because of a diagnosed deficiency. So, what should a reasonable person do? How would you choose whether you need a daily dose of a multivitamin? And how much?