Dietary supplements: Do we need them, or can we get all our nutrients from food?

By Jennifer LaRue Huget, Published: August 23

In an ideal world, no one would need dietary supplements. Our balanced diets would provide all the vitamins, minerals and other nutrients our bodies need.

Alas, the world of American eating is far from ideal. And that, some nutrition experts and supplement advocates argue, is why we need dietary supplements.

The latest federal data show that more than half of U.S. adults use dietary supplements, mostly multivitamins. But do we really need all those pills?

Depends on whom you ask. The latest version of the federal Dietary Guidelines for Americans urges us to get our nutrients primarily from food:

“A fundamental premise of the Dietary Guidelines is that nutrients should come primarily from foods. Foods in nutrient-dense, mostly intact forms contain not only the essential vitamins and minerals that are often contained in nutrient supplements, but also dietary fiber and other naturally occurring substances that may have positive health effects.”

This “food first” approach is based on the emerging understanding that our bodies may process nutrients in food differently from those supplied by supplements and that foods contain scores of compounds whose synergy may be what makes them good for us.

The document also points out that “sufficient evidence is not available to support a recommendation for or against the use of multivitamin/mineral supplements in the primary prevention of chronic disease for the healthy American population.”

But, as I wrote in 2009, meeting your daily dietary needs without using supplements is a challenge, even when you’re choosing ultra-healthy foods under a professional dietitian’s guidance.

It’s a widespread challenge. Society has “invested a lot in the science behind the Dietary Guidelines for Americans,” says Duffy MacKay, vice president for scientific and regulatory affairs for the Council for Responsible Nutrition, a dietary supplement trade group. “When you think about people and what they’re eating, a significant number are not meeting those benchmarks.”
Robert Post, deputy director of the U.S. Department of Agriculture’s Center for Nutrition Policy and Promotion, says too few Americans are meeting all their nutritional requirements and that dietary supplements, used sensibly, can help fill gaps in our diets. In particular, he notes, the guidelines single out four “nutrients of concern” that most of us need more of to maintain good health: potassium, Vitamin D, calcium and fiber (see chart).

But Post, like the guidelines, calls for people to get their fill of those four nutrients from food and to consider supplements only for a handful of dietary deficiencies related to our stage of life and dietary preferences. Those include:

**Iron:** Women who are able to become pregnant need more iron, especially heme iron, which the body absorbs more readily than non-heme iron. Heme iron is found in lean meat and poultry; non-heme iron is in white beans, lentils, spinach, enriched breads and cereals. Foods rich in Vitamin C can aid iron absorption. Adult males need just 8 mg of iron per day; women need 18 mg, and pregnant women need 27 mg.

**Folate:** Women who can bear children also should eat more foods containing folate, such as beans, peas, oranges, orange juice and dark-green leafy vegetables such as spinach, kale and mustard greens. Because folate and folic acid (the nutrient’s synthetic form) help prevent neural-tube defects in infants, women who can become pregnant should consume 400 micrograms of folic acid (from fortified foods or supplements); pregnant women should consume 600 mcg of folic acid daily.

**Vitamin B12:** Some people age 50 and older have trouble absorbing Vitamin B12 from food. To compensate, people 50 or older should increase consumption of cereals fortified with this vitamin or take supplements of it. Because B12 occurs naturally only in animal-based protein, vegetarians and vegans also should eat fortified cereals or take supplements. Most adults need 2.4 mcg per day.

Roberta Anding, director of sports nutrition at Texas Children’s Hospital and a spokeswoman for the American Dietetic Association, advises consulting a physician or dietitian to determine the types and quantities of supplements that might benefit you. You can also consult the National Institutes of Health’s Office of Dietary Supplements Web site (ods.od.nih.gov) for information, including potential interactions between supplements and medications. “Too much of a good thing is not a good thing,” Anding says. “The dose determines whether it’s beneficial or it’s poison.”

MacKay, whose job might seem to require him to push supplements over food, observes that good nutrition is “not an either-or situation.”

“Focus on food first. Maintain a varied diet,” MacKay suggests. “Once you take a snapshot of your diet, then figure out where to supplement to make sure you get everything you need.”

The USDA is adamant that people try to get the fiber, potassium, Vitamin D and calcium they need by eating more fruits and vegetables. But the Harvard School of Public Health suggests a daily multivitamin, calling it “a great nutrition insurance policy.”

MacKay agrees with that approach.

A multivitamin can smooth the “ups and downs of diet,” he says. “It’s not a magic bullet, and it’s not promising anything, just filling in.”