Should Everyone Be Taking a Vitamin D Supplement?

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A daily vitamin D supplement may soon be recommended for people in Britain.

The British government is currently debating a proposal put forth by the independent Scientific Advisory Committee on Nutrition, an independent body similar to the U.S. Preventive Services Task Force, recommending that everyone age 1 and older take the supplement. The reason: Britain’s dreary weather and the fact that there are few natural sources of vitamin D (the sun aside, only a few foods provide it) prevent most Britons from getting enough vitamin D. If the government agrees, this could result in new guidance for the entire British population.

But if you think about it, the U.K. isn’t the only place with a disproportionate amount of cold, dark days. Just think of people living in the northern parts of the U.S., who may experience longer, more drawn-out winters. Should people living in those parts of the country also be taking supplements, per the recommendation in Britain?

We asked the experts, who broke down what we need to know before popping the pills.

First, understand why vitamin D is necessary for health

Vitamin D is integral to absorbing calcium and phosphorous and promoting healthy bone growth. Too little vitamin D can contribute to osteomalacia (soft bones) or osteoporosis (weak bones), both of which increase the risk of fracture.

Sadly, though, “the natural sources of vitamin D are few and far between,” says Amit Mehta, MD, a family practitioner at the Geisinger Medical Group in Lockhaven, Pa. He cites egg yolks, fatty fish, liver, vitamin D-enriched milk, and certain kinds of mushrooms grown in UV light as among the only foods that contain vitamin D. It’s also difficult, in his view, to assess just how much sun exposure is healthy for the skin, even though vitamin D is only made when the skin is exposed to UV rays.

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According to the National Institutes of Health (NIH), we need to expose our bodies to the sun without sunscreen for about 10 to 15 minutes three times a week in order to synthesize adequate vitamin D. This, of course, can vary depending on factors such as latitude (where you live) and skin color (darker skin requires more sun time than fairer skin), Mehta says.
However, dermatologists say it’s important to wear sunscreen when outside in the sun due to skin cancer risk, and sunscreen blocks the sun’s UV rays. (Though the Skin Cancer Association notes that no studies have shown that vitamin D deficiency is linked with sunscreen use.)

You should take a vitamin D supplement (maybe)

According to the NIH, children younger than a year old should get 400 international units (IU) of vitamin D per day. From age 1 to 70, it’s recommended to get 600 IU of vitamin D per day, and for adults over age 70, it jumps to 800 IU a day. (For reference, 3 ounces of salmon provides 447 IUs per serving, and a cup of fortified milk has 100 IUs.)

Doctors tend to recommend supplements mainly only for young children and older adults, since deficiencies in these two groups can have the most disastrous consequences, says Mehta. These include rickets (a softening and distortion of the bones that typically results in bowlegs in kids) and the previously mentioned osteomalacia (where bones can fracture easily).

For the rest of the population, though, Mehta tells Yahoo Health that he would not prescribe vitamin D supplements unless the person demonstrates symptoms of a vitamin D deficiency or if a deficiency comes up in a screening.

However, Michael Holick, MD, PhD, a professor of medicine, physiology, and biophysics at the Boston University School of Medicine, tells Yahoo Health that he puts all of his patients on vitamin D supplements — and not just because they live in the cold Northeast. In his view, climate has nothing to do with healthy vitamin D levels, or lack thereof.

“Upward of 80 percent of the population of India is vitamin D deficient,” Holick, who is the author of The Vitamin D Solution, tells Yahoo Health. “Even in the equator, your body can only make vitamin D between 10 a.m. and 3 p.m., and that’s the time most people in hot countries are avoiding the sun. Going out in the early morning and late afternoons will not make vitamin D, so levels have nothing to do with living in sunny or sun-strapped countries.”

But as much as he thinks supplements are essential, Holick also strongly advocates that they be taken in conjunction with a healthy diet that includes foods containing vitamin D and daily sun exposure. He has created an app called dminder that calculates a time for safe sun exposure for every individual, based on age, height, and skin type, and determines how many IUs of vitamin D they’re making while outside.

Meanwhile, James Cioffi, MD, an internist with Community Care Physicians in Troy, N.Y., is unsure about supplements. He does not recommend them for every patient and he does not measure vitamin D levels “unless we’re worried about them.”

Related: Overweight? You Might Need a Lot More Vitamin D

That said, he does note that it’s not easy for most people to manufacture the requisite amount of vitamin D by sun exposure alone, although a diet that includes foods like meat and vitamin D-enriched milk can help.
Ultimately, you should talk with your doctor before starting to take any supplements, including those for vitamin D.

**Vitamin D deficiency isn’t always obvious**

Someone who tests as being deficient in vitamin D may exhibit no symptoms of deficiency at all. The symptoms can also be quite generic — tiredness and fatigue, joint and muscle pain, and skin rashes, among others. However, doctors say there’s a link between serious, prolonged deficiencies and illnesses like cancer, cardiovascular disease, osteoarthritis, psoriasis, and even autoimmune conditions.

Screenings are the best way to assess vitamin D levels and potential deficiencies, but they are not commonplace because many insurance companies do not cover the expensive tests, says Cioffi.

According to Holick, vitamin D deficiency is a key contributor to many serious illnesses, and he believes “you could potentially reduce health care costs by 25 percent by improving the vitamin D levels of the population.”

**It’s possible to OD on vitamin D**

Today, with vitamin D front and center as a panacea for anything from healthy bones to healthy hair, many people are buying over-the-counter supplements without consulting their physicians — and in the long run, this could prove risky, Mehta says.

“Too much vitamin D can result in hypercalcemia, or too much calcium, which then causes excessive thirst and urination,” says Mehta. “If the calcium levels are not brought back to normal, calcium deposits can form in the heart, liver, and kidney, which can lead to serious organ damage.”

**Related: Too Much Vitamin D Could Be as Bad for You as Too Little**

It’s important to underscore, though, that vitamin D toxicity can never happen as a result of excessive sun exposure, “as our body stops making it once we have adequate levels of vitamin D,” Mehta says. “We call this the negative feedback loop. However, most toxicity is caused by taking excessive amounts of supplements, so I advise people not to take any supplements without consulting their physician.”

While some recent studies have shown that too much vitamin D could be dangerous, Holick notes that “vitamin D toxicity is one of the rarest medical conditions in the world and we have shown that even 10,000 units a day will not cause any harm to healthy adults.”

**Vitamin D supplements don’t always work**

When Cioffi notes low levels of calcium and vitamin D in his patients, he typically puts them on supplements of both. But it’s often the case that “a couple of years later, when we retest
their vitamin D levels, we don’t see any change at all in their levels,” he says. “So it’s not clear that the supplements work.”

In fact, many people with low vitamin D levels who take supplements don’t, in Cioffi’s experience, bring those levels up to normal. “The supplements are, for the most part, over-the-counter and unregulated and they may not be absorbed well,” he says.

More importantly, “there are always issues with compliance: People will tell you that they take [the supplements] but actually they’re not and they just don’t want you to disapprove of them,” he says. “It’s a complex issue in which multiple factors are involved in, and there are always variances that are difficult to account for.”

Read this next: Clear Link Found Between Vitamin D Deficiency and Alzheimer’s Disease

Reference:

https://www.yahoo.com/health/a-daily-vitamin-d-supplement-may-soon-be-127506951967.html