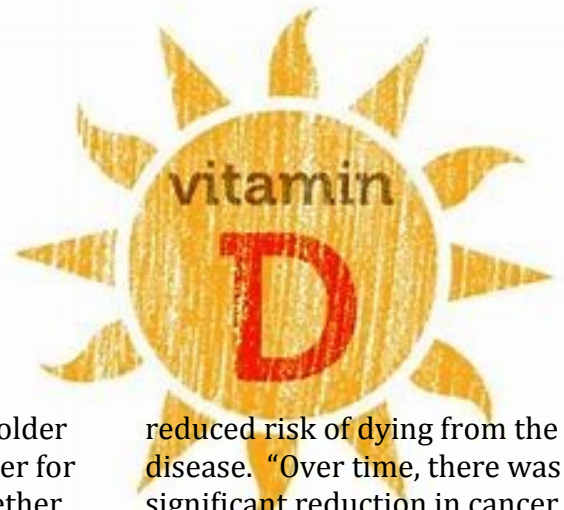


The Great **Vitamin D Debate**

It's been hailed as a lifesaving wonder supplement.
But recent research throws some shade on the
"Sunshine Vitamin."



REMEMBER WHEN VITAMIN D was merely the patron saint of strong bones (and defender against rickets?) That started to change about two decades ago, when studies began to show that people with lower levels of vitamin D in their blood could be at higher risk for cancer, heart disease, and diabetes. At the same time, Americans concerned about the dangers of sun exposure were continuing to slather on sunscreen. Since our body makes D when our skin is exposed to sunlight (in addition to absorbing it from certain foods; see "D-licious,") people began to fear that they weren't getting enough, and sales of the vitamin skyrocketed. Medicare claims for vitamin D tests increased 445% between 2007 and 2016. Some experts started advising that all people load up on D: In 2011, the Endocrine Society even published guidelines recommending supplementation. And today consumers take more D than any other supplement, according to a 2018 survey from ConsumerLab.com.

Now, on the basis of an important long-term trial, it seems our D mania wasn't entirely justified.

The Vitamin D and Omega-3 Trial (VITAL) launched in 2010 and followed a healthy, racially diverse group of 25,871

American men age 50 and older and women age 55 and older for up to six years. To see whether more D really is better, some patients were randomly assigned supplements with a moderately high daily dose of 2,000 IUs (international units), while others got a placebo. The entire medical establishment eagerly awaited VITAL's outcome because it was the biggest and best-designed vitamin D trial to date, according to Clifford Rosen, MD, professor of medicine at Tufts University School of Medicine and senior scientist at Maine Medical Center's Research Institute. Previous studies suggesting an inverse relationship between low D levels and cancer risk had shown only an association, not causation. Doctors hoped VITAL would reveal whether it was indeed worth taking vitamin D pills specifically to prevent cancer, heart disease, and stroke.

The results, released in November 2018, were less than miraculous: Taking vitamin D did not significantly affect the odds of having a heart attack or stroke or developing cancer (for example, breast, prostate, or colorectal cancers).

There was, however, one area where D shone: After 2 years of taking D, participants who developed cancer had a 25%

reduced risk of dying from the disease. "Over time, there was a significant reduction in cancer deaths," says study co-director JoAnn E. Manson, MD, a professor of medicine at Harvard Medical School, epidemiologist, and women's health expert. "It may be that when people with cancer take vitamin D, the tumors become less invasive and less likely to metastasize. This is a promising finding that needs further research." (As for VITAL's other object of inquiry, fish oil: Taking it did seem to show a reduction in heart attacks, especially among African Americans.)

So what does this mean for you? Here's how to find your D sweet spot.

600 IUs Per Day

This is the baseline dietary amount recommended by the US government's Institute of Medicine for adults age under age 70 (800 IUs for older adults) for optimal bone health. Too little D can mean softer or brittle bones, increasing your risk of fracture.

10,000 IUs Per Day

Some doctors recommend taking this amount or more based on observational studies that found links between D levels and health outcomes. But as Manson says, "Such studies can't prove a

cause-and-effect relationship.” Most experts discourage taking more than 4,000 to 5,000 IUs per day since higher amounts can be toxic and result in kidney damage or stones, increased blood calcium, or simply nausea and constipation, says Rosen. “Taking more than 5,000 IUs per day is referred to as mega dosing, and we would advise against it unless your healthcare provider is telling you that you need that amount.” says Manson. (See “D for Deficiency?,” for reasons you might require extra D.

2,000 IUs Per Day

The Endocrine Society says this amount may be necessary for adults to ward off D deficiency. VITAL confirmed that taking 2,000 IUs per day was safe and did not cause side effects.

Manson’s bottom line: Supplement in moderation. “If you want to hedge your bets and take 1,000 to 2,000 IUs per day, that’s very reasonable.” She adds that this year she and other researchers will be sharing even more findings to provide better guidance about the risk-benefit trade-off of D supplements, including some news about its effect on diabetes and cognitive function.

So in her words, “stay tuned.”



D-LICIOUS

While vitamin D isn't found naturally in many foods, these are all stellar sources:

FATTY FISH (THREE OUNCES COOKED)

trout: 648 IUs swordfish: 564 IUs salmon: 444 IUs
mackerel: 388 IUs canned sardines: 92 IUs

PORTOBELLO MUSHROOMS

316 IUs per 1/2 cup

FORTIFIED WHOLE MILK

128 IUs per cup

FORTIFIED YOGURT

80-120 IUs per cup

FORTIFIED SOY MILK

116 IUs per cup

FORTIFIED ORANGE JUICE

100 IUs per cup

FORTIFIED ALMOND MILK

96 IUs per cup

EGGS

44 IUs per cup

FORTIFIED CEREALS

8-100 IUs per 1/3 to 1 1/4 cup

D for Deficiency?

Five factors known to affect the level of vitamin D in your blood:

COMPROMISED GUT OR LIVER HEALTH

People with celiac disease, Crohn’s disease or other G.I. problems often have trouble absorbing enough vitamin D. Likewise, a liver that doesn’t function properly may not synthesize or absorb vitamin D

LIVING NORTH OF SAN FRANCISCO, ST. LOUIS & RICHMOND, VIRGINIA

The farther you are from the equator, the more difficult it is for your body to synthesize enough vitamin D during the winter, regardless of sun exposure.

DARK SKIN

The pigment melanin makes it harder for the body to convert ultraviolet light to vitamin D

EXCESSIVE AIR POLLUTION

Research has found that particles in the air can prevent the sun’s UVB rays from reaching the skin, potentially lowering the affected population’s vitamin D level

MEDICATIONS

Steroids, antiseizure medications and certain cholesterol-lowering drugs can interfere with vitamin D metabolism - ask your doctor to be sure.