

Big studies give mixed news on fish oil, vitamin D

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This undated photo provided by Amarin in November 2018 shows a capsule of the purified, prescription fish oil Vascepa. Although fish oil taken by healthy people, at a dose found in many supplements, showed no clear ability to lower heart or cancer risks, higher amounts of a purified, prescription fish oil, such as Vascepa, slashed heart problems and heart-related deaths among people with high triglycerides, a type of fat in the blood, and other risks for heart disease. (Amarin via AP)

Taking fish oil or vitamin D? Big studies give long-awaited answers on

who does and does not benefit from these popular nutrients.

Fish oil taken by healthy people, at a dose found in many supplements, showed no clear ability to lower heart or cancer risks. Same for vitamin D.

But higher amounts of a purified, prescription fish oil slashed [heart problems](#) and heart-related deaths among people with high triglycerides, a type of fat in the blood, and other risks for heart disease. Doctors cheered the results and said they could suggest a new treatment option for hundreds of thousands of patients like these.

Up to 10 percent of U.S. adults take fish oil . Even more take vitamin D , despite no major studies to support the many health claims made for it.

"Those who peddle it promote it as good for everything," but in this definitive test, vitamin D "showed a big nothing," said Dr. James Stein, a heart specialist at the University of Wisconsin-Madison. He had no role in the studies or ties to the companies involved.

Results were revealed Saturday at an American Heart Association conference in Chicago and published by the *New England Journal of Medicine*.

ABOUT FISH OIL

These oils, also called omega-3 fatty acids, are found in salmon, tuna and certain other fish. They reduce triglycerides and inflammation and may have other effects . There are different types, including EPA and DHA.

One study tested 4 grams a day of Amarin Corp.'s prescription Vascepa, which is concentrated EPA, in more than 8,000 patients with high triglycerides and a greater risk of heart problems for various reasons. All

were already taking a statin such as Lipitor or Zocor to lower cholesterol. Half were given Vascepa and the rest, mineral oil capsules as a comparison.

After five years, about 17 percent of those on Vascepa had suffered one of these problems—a [heart attack](#), stroke, heart-related death or clogged arteries requiring medical care—versus 22 percent of the others.

That worked out to a 25 percent reduction in risk. Looked at individually, heart attacks, heart-related deaths and strokes all were lower with Vascepa. Only 21 people would need to take Vascepa for five years to prevent one of the main problems studied—favorable odds, Stein said.

Side effects may be a concern: More people on Vascepa were hospitalized for an irregular heartbeat—3 percent versus 2 percent of the comparison group. Doctors say that's puzzling because other research suggests fish oil lowers that risk.

The concern with the heart rhythm problem is that it can raise the risk of stroke, but there were fewer strokes among those on Vascepa, said study leader Dr. Deepak Bhatt of Brigham and Women's Hospital in Boston.

Vascepa costs around \$280 a month; many insurers cover it. Amarin sponsored the study and some study leaders work or consult for the company.

A BROADER TEST

The other study tested a lower 1 gram daily dose of a different type of fish oil—an EPA/DHA combo sold as Lovaza or Omacor and in generic form—in 26,000 people with no prior heart problems or cancer.

After about five years, rates of a combined measure of heart attacks, strokes and other problems were similar for fish oil users and a comparison group. Cancer rates and deaths also were similar.



This undated photo provided by Amarin in November 2018 shows capsules and packaging for the purified, prescription fish oil Vascepa. Although fish oil taken by healthy people, at a dose found in many supplements, showed no clear ability to lower heart or cancer risks, higher amounts of a purified, prescription fish oil, such as Vascepa, slashed heart problems and heart-related deaths among people with high triglycerides, a type of fat in the blood, and other risks for heart disease. (Amarin via AP)

There were fewer heart attacks in the fish oil group—145 versus 200 in the comparison group. The study leader, Dr. JoAnn Manson at Brigham and Women's, called that "a substantial benefit," but several independent experts disagreed because of the way the study was set up to track this

and certain other results.

"These findings are speculative and would need to be confirmed in a separate trial," said the Cleveland Clinic's Dr. Steven Nissen.

FISHY COMPARISONS?

Both studies share a problem: the oils used for the comparison groups, which may not have been true placebos. The Vascepa study used mineral oil, which interferes with statin drugs, raises cholesterol, and might have made the comparison group fare worse and made Vascepa look better than it truly was.

The other study used olive oil, which might have helped that comparison group do better, possibly masking any benefit to the others from fish oil.

Leaders of both studies say any effect from the comparison oils isn't enough to alter the main results, and independent experts agreed. But Nissen, who is leading another [fish oil](#) study, is using corn oil as a comparison.

THE 'SUNSHINE' VITAMIN

Manson's study also tested vitamin D, which the skin makes from sun exposure. It's tough to get enough from foods like milk, eggs and oily fish, though many foods now are fortified with it. Some studies have found that people with lower levels of D are more likely to develop cancer, but it's not known if supplements alter that risk.

Study participants took 2,000 international units of D-3 (the most active form of vitamin D, also called cholecalciferol) or fake vitamin pills for five years.

Vitamin D did not affect the odds of having a [heart](#) attack or stroke or developing cancer. After excluding the first two years of use, researchers saw fewer cancer deaths among those on the vitamin—112 versus 149 in the placebo group.

"Cancer can take years to develop" so a difference may not show up right away, Manson said. "This looks promising" and people will be studied longer to see if the trend holds up, she said.

Several other experts said these numbers just hint at a possible benefit that needs more study.

"These 'positive' results need to be interpreted with caution," Dr. Clifford Rosen of Maine Medical Center Research Institute and Dr. John Keaney Jr. of the University of Massachusetts wrote in a commentary in the medical journal.

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