

MEDICAL BREAKTHROUGHS

RESEARCH SUMMARY

TOPIC: OMEGA-3 FISH OIL NO HELP FOR HEART HEALTH?
REPORT: MB #4848

BACKGROUND: Omega-3 fatty acids are one of the two major classes of polyunsaturated fatty acids, also called PUFAs, that consist of long chains of carbon atoms with a carboxyl group at one end of the chain and a methyl group at the other. PUFAs are different than saturated fatty acids in that they have two or more double bonds between carbons within the fatty acid chain. The majority of scientific research on the potential health benefits of consuming Omega-3s is focused on dietary supplements like fish oil. Studies had linked higher intakes of fish and other seafood with improved health outcomes. However, it is still difficult to determine if this is exclusively because of the presence of the omega-3 fatty acids or if other elements of seafood nutrients are responsible.

(Source: <https://ods.od.nih.gov/factsheets/Omega3FattyAcids-HealthProfessional/#h7>)

IMPLICATIONS: Many people take omega-3 fish oil supplements to promote heart health. For many years, the American Heart Association has recommended eating two servings of fish a week and in 2017 the association also recommended taking supplements to slightly lower the risk of dying after or heart failure or recent heart attack. However, they also stated that these supplements do not prevent heart disease. One of the common heart health complications people attempt to treat with omega-3s is atrial fibrillation, or AFib, an irregular or "quivering" heartbeat. More than 33 million people worldwide are currently affected by this condition and are at higher risk for stroke and heart failure. In a study of nearly 26,000 with no previous heart problems, one group received 840 mg of omega-3 fatty acids, and another received placebo. Over five years the researchers documented 900 AFib events and found that events were not exclusive to omega-3 use. Thus, concluding that the omega-3 supplements had no effect in preventing atrial fibrillation.

(Source: <https://www.cnn.com/2020/11/15/health/fish-oil-doesnt-help-heart-health-wellness/index.html>)

NEW RESEARCH: A new study from the Cleveland Clinic confirms the results of the previous study as well as indicates possible negative effects. The STRENGTH trial consisted of 13,078 patients also randomized to either receive high-dose omega-3s, equivalent to a prescription-strength supplement, or placebo. The trial initially had neutral results showing no significant reduction in major adverse cardiovascular events for either group. Then a double-blind multicenter trial took place including patients who were randomized at 675 different hospitals in North America, Europe, South America, Asia, Australia, New Zealand, and South Africa. The patients received either 4g daily of omega-3 carboxylic acid (CA) or a placebo of corn oil. The primary endpoint events consisted of cardiovascular death, non-fatal heart attack, non-fatal stroke, coronary artery revascularization, and hospitalization for unstable angina. The trial was stopped by the monitoring committee after 1,384 patients experienced a primary endpoint event. The research determined no clinical benefits of omega-3 CA compared to placebo and found that omega-3 CA actually resulted in a 67 percent increase in atrial fibrillation.

(Source: <https://newsroom.clevelandclinic.org/2020/11/15/cleveland-clinic-led-trial-finds-high-doses-of-a-prescription-fish-oil-do-not-reduce-major-cardiac-events-in-high-risk-patients/>)

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com