## FISH OIL SUPPLEMENTS BOOST MEMORY

(Omega-3 fatty acid supplements may boost memory in healthy aging adults)

In a new study, people 55 and older with age-related memory complaints who took the fatty acid supplements for six months had almost double the reduction in errors on a test that measures learning and memory skills, compared with those who took a placebo.

"The benefit is roughly equivalent to having the learning and memory skills of someone three years younger"

But the supplements do not appear to slow the progression of Alzheimer's disease in people who already have mild to moderate symptoms of the disorder, a second study shows.

## DHA BOOSTS MEMORY

Previous studies have shown that people who eat a lot of fatty fish score better on memory tests and are less likely to develop Alzheimer's disease. Animal research credited docosahexanoic acid (DHA), an omega-3 fatty acid that's abundant in fatty fish and algae.

But most people don't eat enough fish to reap DHA's benefits, Yurko-Mauro says. So she and colleagues put DHA supplements derived from algae to the test, pitting them against a placebo in 485 healthy people with an average age of 70.

Participants had mild memory complaints that often occur with age, such as forgetting names or appointments. They were randomly assigned to take supplements containing either 900 milligrams of DHA or placebo, once a day for six months.

At the start and end of the study, participants were given a memory test in which they were asked to look at patterns on a computer screen and later recall where each pattern was on the screen.

At the start of the study, people in both groups made an average of about 13 out of 30 possible errors on the test. Afterward, those given the placebo made an average of 2.4 fewer errors. In contrast, those given DHA supplements made an average of 4.5 fewer errors.

Blood levels of DHA doubled over the course of the study in people taking the supplements, and the higher a person's DHA level, the better the score on the test.

The supplements didn't cause any serious side effects.

DHA Does Not Slow Alzheimer's Progression In the second study, researchers from the National Institute on Aging-supported Alzheimer's Disease Cooperative Study compared fish oil supplements to a placebo in 402 people with mild to moderate Alzheimer's disease.

Participants took supplements containing either 2 grams of DHA or a placebo each day for 18 months.

"The hypothesis was that DHA would slow the rate of disease progression, but unfortunately that wasn't the case"

Treatment with DHA clearly increased blood levels of DHA, but memory worsened to a similar degree in both groups.

After 18 months, there was no significant difference between the two groups on any of the measures looked at, including a standard test that gauges the rate of deterioration of mental function.

DHA May Benefit Alzheimer's Patients without ApoE-e4 Then, study participants were divided into two groups depending on whether they had the so-called ApoE-e4 gene variant. It's associated with an increased risk of developing Alzheimer's disease.

In the people who had the ApoE-e4 gene variant, there was again no benefit from DHA treatment. In contrast, those without the ApoE-e4 gene variant who received DHA had a slower rate of memory decline.

"This is an intriguing provocative result, but requires further study for confirmation"

It's a mistake to compare this study to the one in healthy adults because they looked at such very different populations of patients.

But the conflicting findings raise the possibility that treatments for Alzheimer's have to be given very, very early to be effective.

Martek funded the study in healthy adults and provided the supplements for both studies.