Slow Down Aging: It's All in What You Eat

There just may be a fountain of youth in that salmon plate special.

By Beth Levine



The search for the Fountain of Youth may be over. Omega-3s—those famous fatty acids that may help with a variety of conditions such as arthritis, depression, heart disease, and more—have just added another potential health benefit to the list: They may slow a biological effect linked to aging.

Ohio State University researchers recently completed a study in which 106 adults, average age of 51, were randomly divided into three groups. For four months, the control group received a daily capsule that mimicked what the typical American diet gets in terms of oil composition (heavy on Omega-6 fatty acids and lower in healthy Omega-3s). Another group received 1.25 grams of Omega 3 fish oil; the third got 2.5 grams. (Neither of the last two Omega-3s doses are large; they fall within the RDA recommendations for fish oil.)

The surprising result: Both groups that took Omega-3s had reduced destruction in part of their DNA that slows the aging process. The group that took the larger dose showed a bigger effect. "The DNA parts that were affected were the ends of chromosomes, called telomeres. What we think happens in aging is the telomeres get shortened. This is indicative of wear and tear on the cells, which can lead to cell death," says Dr. Martha Belury, Ph.D., R.D., who is a Professor in the department of Human Nutrition at Ohio State University.

In this study, people who showed a dramatic change in the Omega 6-Omega 3 ratio (the Omega-3s increased in relationship to the Omega-6s) showed longer telomeres. Dr. Belury adds, "We think that the lengthening of telomeres, or reducing the shortening of telomeres, is associated with longevity in humans."

But, she adds, "We believe what the ratio is telling us is the change is truly a result of Omega-3 supplementation. These people did not change their Omega-6 levels, nor do we think people should. We think that people really need to just increase their Omega-3s. So don't work on bringing your Omega-6s down, just work on increasing your Omega-3s."

Other results from the study showed that Omega-3s reduce:

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- Oxidative stress: Damage done by free radicals, long associated with an increased risk for many chronic diseases associated with aging like diabetes, Alzheimer's, heart disease, and some types of cancers.
- Inflammation: When inflammation is chronic, it can lead to variety of health issues such as some cancers and rheumatoid arthritis.

Dr. Belury cautions, "We're not saying that Omega-3s will protect you if you take them, but it may reduce your risk, depending on other factors such as genetics and lifestyle choices."

If you want in on this Fountain of Youth, take 2.5 grams daily in capsule form, and eat oily cold water fish (salmon, mackerel, sardines, halibut) two to three times a week. Other foods with Omega-3s: Flax seeds, walnuts, edamame, flax, canola and olive oil, winter squash and beans. *Caution:* If you are on blood thinner medications such as Coumadin, check with your physician prior to taking Omega-3 supplements since they can also thin blood.

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