

7-2010

# Omega-3 Benefits

Winston J. Craig

*Andrews University*, [wcraig@andrews.edu](mailto:wcraig@andrews.edu)

Follow this and additional works at: <https://digitalcommons.andrews.edu/luh-pubs>



Part of the [International and Community Nutrition Commons](#)

---

## Recommended Citation

Craig, Winston J., "Omega-3 Benefits" (2010). *Lake Union Herald*. 410.  
<https://digitalcommons.andrews.edu/luh-pubs/410>

This Article is brought to you for free and open access by the Lake Union Herald at Digital Commons @ Andrews University. It has been accepted for inclusion in Lake Union Herald by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact [repository@andrews.edu](mailto:repository@andrews.edu).

Some nuts and seeds are good sources of omega-3.



About one gram of omega-3 is needed per day.

## Omega-3 Benefits

BY WINSTON J. CRAIG

**T**he risk of heart attack and stroke in the Greenland Inuit is only one-tenth that of Danish Eskimos living in Greenland. Why such a huge difference? The Danes eat a typical Western diet while Greenland Eskimos consume a diet rich in seafood, comprised of whale, seal meat and fish. This diet high in fat and cholesterol would normally be associated with a high risk of heart disease.

The conundrum was resolved when it was discovered that the marine-rich Inuit diet provided about ten grams a day of omega-3 fat, mainly the polyunsaturated fatty acids, EPA and DHA. Since then other studies have shown that one to two servings a week of fatty fish lowers the risk of cardiovascular disease. This discovery led to a big push to eat more fish.

Omega-3 fat exerts a number of useful physiological functions. It protects a person against cardiovascular disease by significantly lowering blood triglyceride levels, inhibiting blood clots and lowering the risk of arrhythmias. It can also lower blood pressure levels in hypertensive patients but does not consistently affect blood cholesterol levels. Omega-3 fat appears to improve the circulation and reduce the risk of a person having a second heart attack.

In addition, omega-3 possesses anti-inflammatory properties and has some value for the treatment of rheumatoid arthritis and ulcerative colitis. Preliminary evidence suggests that omega-3 can delay the growth of tumors and inhibit the appearance of breast, colon and prostate cancer. There appears to be a connection between omega-3 fat and cognitive development, and omega-3 may be helpful in cases of depression and anxiety.

How do vegetarians get sufficient omega-3 without eat-

ing fish or consuming fish oil supplements? Some plants do contain alpha-linolenic acid (ALA), an omega-3 fat with similar properties to EPA and DHA. The body can convert ALA—though not very effectively—into EPA and DHA. This conversion is more effective for women than for men, and excessive amounts of dietary omega-6 do hinder the conversion. The best plant sources of ALA omega-3 include flaxseed flour, flaxseed oil, chia seeds, walnuts, hemp seeds, butternuts, canola oil, soy nuts, tofu and soy oil. Pecans, purslane and green peas also contain small amounts.

Fish do not actually synthesize omega-3 fat, they obtain it from the microalgae in their diet. The DHA omega-3 fat, extracted from microalgae, is now added to fortified soy beverages, juices, mayonnaise, breakfast bars and other foods. In addition, the vegetarian DHA source is available as tablets. Chicken eggs are a good source of omega-3 fat when the chickens are fed a diet of flax seed, canola seeds, greens or fish oils.

Are there any health concerns for those consuming fish? Yes. Fish can be contaminated with mercury and other heavy metals, as well as PCBs and other environmental contaminants. Consuming large amounts of fish oils may increase the risk of bleeding and of hemorrhagic stroke, and worsen the control of blood sugar in persons with diabetes.



Winston Craig, Ph.D., RD, is a professor of nutrition at Andrews University.