



Fish May Protect Against Blindness from Macular Degeneration

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Not all fats are bad for your health. While “saturated” fat, found in butter, lard and meat increases the risk of heart attack, stroke and other vascular diseases, “unsaturated” fats found in fish, nuts, flaxseeds and some vegetable oils may protect against them.

Unsaturated fatty acids are considered “essential” because our body needs them, but cannot make them. Omega-3 fatty acids are a type of “unsaturated” fats that have been shown to protect against a variety of diseases, such as heart attack, Alzheimer's, high cholesterol, arthritis, inflammation and arthritis. Fatty fish are rich in omega-3 fatty acids DHA and EPA and have been shown to promote health.

What Kinds of Fish and How Much?

The American Heart Association (AHA) recommends two 3.5 oz cooked, or about 3/4 cup servings of fish a week. Enjoy fish baked or grilled, not fried, and choose low sodium, low-fat seasonings such as spices, herbs, or lemon juice.

A simple acronym—SMASH—provides a list of fish particularly rich in omega-3. It stands for Salmon, Mackerel, Anchovies (or Albacore tuna), Sardines, and Herring. You can add lake trout and halibut to this list. Shrimp and shellfish are also high in omega-3, but shrimp is also high in cholesterol.

Tofu, soybeans, canola, walnut, pumpkin seeds, flaxseed, olive and their oils are rich in ALA, another omega-3 fatty that is converted into DHA and EPA in the body. Green leafy vegetables, such as spinach, kale and broccoli are also good sources of ALA.

Eye Health

Several studies have shown that diet rich in EPA and DHA protects against macular degeneration and cataract. One such study, published in Ophthalmology last year showed that individuals who consumed at least one serving of fish or shellfish per week were less likely to develop blindness from advanced macular degeneration compared to those who consumed fish and shellfish less frequently. So far such benefit has been shown only from food rich in DHA and EPA and not from ALA.

Supplements

Fish oil capsules contain variable amount of DHA and EPA. Therefore, dosing should be based on the amount of DHA and EPA, and not on the amount of fish oil. AHA recommends that those with documented coronary heart disease should consume about 1 gm of EPA+DHA. Those who wish to lower their serum triglyceride levels should aim for about 2 to 4 gm of EPA+DHA under a physician's care.

Risks

Consumption of more than 3 gm omega-3, equivalent of 3 servings of fish per day, may increase the risk of bleeding. Safe doses of omega-3 for individuals under 18 have not been determined; and fish oil supplements should not be used by children. Large predatory fish such as shark, swordfish, tilefish and king mackerel should be avoided because those are high in mercury. Some fish in the wild may contain potentially harmful contaminants, such as heavy metals including mercury, dioxins and polychlorinated biphenyls (PCBs). Therefore, the EPA recommends that pregnant or nursing women eat no more than a single 6 ounce meal per week of sport-caught fish. Supplements should be taken cautiously by those who bruise easily, have a bleeding disorder, or take a blood thinner such as aspirin, Plavix or Coumadin.