

Health for You: 14. Something Fishy!

What about Fish and Fish Oils?

Here is one of the situations where our Inspired Guidance is not only up-to-date, but really way ahead of the game! Notice this quote regarding fish:

“In many localities even fish is unwholesome, and ought not to be used. This is especially so where fish come in contact with the sewerage of large cities. We seldom have any fish upon our table. The fish that partake of the filthy sewerage of the drains may pass into waters far distant from the sewerage, and be caught in localities where the water is pure and fresh, but because of the unwholesome drainage in which they have been feeding, they are not safe to eat.”

14MR 326.

This is from 1895! They had none of the deadly chemical toxins we have today. If there was a problem starting then, what can we say now!?

I have heard some folk say as a reason for not eating fruit and vegetables that they may have pesticides on them. But they will sit down to a Tuna salad and think nothing of it. Now all the pesticides and herbicides and drugs and factory chemicals end up sooner or later in the water. The fish live in the water; but it is not as simple as merely some spray on a plant that can mostly be washed off; it is far more ominous than that!

People like to catch big fish right? Did you ever hear a fisherman boast of the nice little fish he caught? Now in the water there is a distinct food chain, water algae and plants have say, one part of toxins; then they are eaten by some little water creatures and those end up with 10X the toxins so we can say they have 10 parts. Now along comes a little minnow and he lives by eating those little water creatures, and he concentrates them about 10X again—10 X 10 is 100 so our little minnow has 100 parts toxins on board. Except for sardines, we don't usually eat minnows, so a little fish comes along and lives on a diet of minnows, and he concentrates the toxins 10X; now we have 1,000 parts toxins. Are you getting the picture? A large fish eats the little fish—10,000 parts; A real big fish eats the large fish—100,000 parts and a tuna which is a Huge fish eats that real big fish and now we have 1,000,000 parts concentrate of that original toxin in it—and you happily eat your tuna sandwich and feed it to your children, but spurn a fruit that maybe has 1 part toxin on it that mostly could be washed off.

See why plants are the better way to go? No food chain—plants don't eat other plants. Even with land animals we are getting this concentration of toxins; even a grass-fed cow would have X 10 parts and these days the food animals are often fed ground up carcasses of dead food animals—so you can get 100 parts or more concentrated in them. Play it safe! Eat Plants!

You Don't Need Fat From Dead Fish to Be Healthy

Shared Online by Janice Stanger PHD: <http://perfectformuladiet.com/>

Every fish taken out of the sea by people can disrupt ecosystems. Dolphins and other animals and birds that must eat fish may then starve. Modern fishing practices are simply not sustainable.

Fish and fish oil hype is everywhere, inundating news stories, ads, and doctors' offices. The fatty component of dead fish is touted as the magic bullet for just about any health concern, from cardiovascular disease to poor memory.

There's only one problem with these claims – they are not true. However, the fish and fish oil ballyhoo does hold a core of important information. If you want to benefit, it's critical to sort the fact from the fiction.

Here's the deal. You need two types of essential fatty acids: omega-6s and omega-3s. These substances are called "essential" because they are necessary for health and you can get them only from food.

Omega-6s are generally pro-inflammatory. Inflammation is a normal body function necessary for survival. Acute inflammation fights off infections and is an integral part of the process of healing from injury.

Omega-3s, on the other hand, are anti-inflammatory. These fats temper the action of omega-6s to keep inflammation from getting out-of-control and damaging your body.

The important thing is the *balance* between omega-6s and omega-3s. You really don't need much of either on a daily basis. But for every molecule of omega-3s that you eat, you should consume one to three molecules of omega-6s.

The problem is that most people eat ten to twenty molecules of omega-6s for every one of omega-3s. Since omega-6s are concentrated in most animal foods and vegetable oils, to be in balance it's essential to cut way back on these foods. Eliminating these choices from your diet is the best course. You'll still get plenty of omega-6s from whole plant foods.

You don't need much omega-3 or omega-6, but the balance between these two essential fats is critical. Even with fistfuls of fish oil tablets, you can still be off balance if you eat a lot of animal foods and vegetable oil.

Omega-3s on the other hand, are in fewer foods. These fats are most abundant in wild plants, but most people eat food grown on farms. Common plant foods that are excellent sources of omega-3s include ground flaxseeds, chia seeds, walnuts, and leafy greens. Omega-3s are also found in certain kinds of fish and fish oil, hence the hype.

Some people worry that their bodies cannot process the "short chain" omega-3s in plant foods into the more active "long chain" varieties, EPA and DHA, found in fish. Since our ancestors thrived for millions of years [sic] without omega-3 supplements or regularly (if ever, in most cases) eating fish, this concern seems a bit nonsensical.

Moreover, people on plant-based diets have measurably lower rates of heart disease than those who eat animals, so they don't seem to be lacking anything vital. A recent European study demonstrated that even high levels of fish oil supplements did not decrease markers of inflammation in healthy adults, so the long-chain fats alone are of questionable value. What counts is the overall pattern of eating.

However, if you are truly concerned, you can assure you meet your full quota of long-chain omega-3s by taking widely-available supplements made from marine algae.

Now that you have this basic understanding, consider seven important reasons why you should aim to get all your omega-3s from plants rather than from fish or fish oil supplements.

First, plants are the original source of the omega-3 fatty acids in fish. These animals consume omega-3-rich marine algae rather than making these fats themselves. Wouldn't you rather get your nutrients right from the source, rather than recycled second-hand through another creature?

Second, fish concentrate the dangerous persistent organic pollutants swamping our oceans, as well as mercury, a hazardous heavy metal. Plant omega-3 sources have way lower amounts of both these toxic substances. Lab studies show that even distilling fish oil still leaves behind unacceptable amounts of persistent organic pollutants, which disrupt your body's hormones and threaten fetal and early childhood development.

Third, plant food sources of omega-3s contain a rainbow of nutrients. You will be treating yourself to vitamins, minerals, fiber, and a spectrum of phytochemicals (beneficial substances that protect your body that are found only in plants). Fish, on the other hand, offers less of value. Both the plants and fish (but not their isolated oils) contain protein, a commonplace nutrient that pretty much nobody in developed countries lacks. Cholesterol is abundant in fish, and absent in plant foods.

Fourth, fish may be infested with parasites and bacteria that cause food poisoning. Plants are significantly less likely to have these problems.

Fifth, plant sources of omega-3s cost a lot less. You can get a pound of organic flaxseed for about two dollars and grind it at home with a coffee grinder. You certainly won't get much omega-3s from fish for such a low cost. Note: be sure to grind your flaxseed so you can get all the goodness out of them.

Sixth, fish is not a sustainable source of omega-3s. With the human population growing and the fish population plummeting, there are not remotely enough fish for everyone. You can help counter overfishing and leave marine ecosystems to recover by spurning fish.

Finally, plants are prettier than dead fish and smell way more appealing. Enjoy your food. Once you stop eating fish for a few weeks, your taste for them will start to fade as you learn to appreciate appetizing whole plant food choices.

So you can find the truth yourself behind the hype. Eat a varied diet based on whole plant foods, with marine algae supplements or, better yet, ground flax seed, and watch your health truly thrive.

Intrigued? Now you can use our Whole Foods Blog Finder to target informative, fun postings on plant-based nutrition. Quick information at no cost!

Blog posting by Janice Stanger, Ph.D. Janice authored 'The Perfect Formula Diet', the smart person's [nutrition book](#) built on sustainable food choices. Enjoy six kinds of whole foods for permanent, hunger-free weight loss and health.

Fish Contains Worm Larvae Ten Reasons Seafood Is Not Safe or Appetizing

Government, media, and even health professionals flood you with advice to load up your diet with fish and fish oil. The alleged health benefits of eating fish center on two nutrients: omega-3 fatty acids and protein.

Don't be fooled by industry and government hype. Plants are the base of the food chain on planet earth. Plants are nutrient factories, while animals are nutrient consumers. Fish are animals, and as such get all their nutrients from plants or from smaller fish who ate plants.

On a whole foods, plant-based diet, you get all the nutrients in fish, plus many more. Your food is beautiful and appealing. All you give up on a plant-based diet are the dangerous drawbacks of fish.

Here are ten reasons to throw fish out of your diet and back into the water where they belong.

One. While fish does contain long-chain omega-3 fatty acids, these animals get this fat by eating marine algae that made the omega-3s in the first place. No animal has the ability to manufacture omega-3s.

Unhealthy fats come packaged with fishy omega-3s. For example, according to a US Department of Agriculture database, 3 ounces of cooked wild salmon has about a gram of dangerous saturated fat – just about exactly that same amount it has of omega-3s. Plus this salmon has 47 milligrams of cholesterol, a substance your body makes naturally and that contributes to clogged arteries when you eat it.

You can get all the omega-3s you need from plants, which form this beneficial fat in the first place.

Two. A much-touted “benefit” of fish is its high concentration of animal protein. Few know that animal protein can directly raise the amount of cholesterol in your blood, in addition to the role that animal fat also plays in this process. Excessive dietary protein can damage your kidneys and liver and may spark the chronic inflammation that underlies most chronic illness.

Proteins are the basis of all life, both plants and animals. These proteins are linked assemblies of 20 amino acids – the same aminos form both plant and animal proteins. Only plants can make essential amino acids, the ones you need from diet. Get your proteins directly from the plant factory, not the animal middleman.

Three. Fish concentrate persistent organic pollutants and other manmade contaminants. Persistent organic pollutants (POPs) are highly dangerous chemicals that include PCBs, DDT, dioxins, and PBDEs (flame retardants), among many others. Cancer, nervous system damage, behavior problems, Parkinson's disease, reproductive disorders, immune system disruption and autoimmune disorders, diabetes, and allergies can all result from exposure to POPs.

Animal foods are most likely the source of 89% to 99% of POPs in your body. A study of U.S. supermarkets found the product most contaminated with PBDE, a class of POPs used as flame retardants, was fish.

If you decide to go for distilled or “purified” fish oil in hopes of avoiding the POPs in whole fish, you are out of luck. Laboratory studies show that even distilled, highly processed fish oil capsules still contain these dangerous pollutants.

Fish farm owners may deliberately contaminate the fish they raise with drugs and other chemicals that are banned for human consumption. The goal is to keep these animals alive in the filthy, crowded conditions of fish farming. Imported seafood, which is most often tainted with these harmful contaminants (some carcinogenic) accounts for 80% of the fish Americans eat. The government inspects only about 1% of the fish that enter the US.

Fish is not accurately labeled and it is practically impossible to determine where it came from or how it was raised. So if you eat much fish, the likelihood that your meals contain toxic contaminants is overwhelming.

Four. Fish is the leading dietary source of mercury, a potent neurotoxin. While a developing fetus is most susceptible to this poison, adults can be harmed as well. There is no safe level of mercury in your food. Don't be fooled by "low mercury" fish. Virtually all fish are contaminated with this toxic metal, which also increases the risk of heart attack.

Five. Fish can also be contaminated by microbes that cause food poisoning. This is especially true for imported seafood and fish that have not been properly refrigerated somewhere between their death and your dinner plate. Possible pathogens in fish include E. coli, salmonella, staph, and botulism.

Six. When excess fertilizer and nitrogen (often from factory farms) floods fresh water, cyanobacteria thrive. These microbes produce a number of toxins. Microcystin, one of these toxins, harms the liver. In addition, it may be a tumor promoter and have an effect similar to estrogen on the body, disrupting reproduction. Microcystin accumulates in fish. If you eat enough of it, damage to your liver may be severe and irreversible. There is no easy therapy.

Seven. An adequate amount of omega-3 fatty acids is essential. An excessive amount, however, as may result if you consume fish oil or a lot of fish, has perilous consequences. An unnatural amount of these fatty acids can lead to increased bleeding time, interfere with wound healing, raise LDL cholesterol, and suppress the immune system

Eight. Fish oil tastes bad and leaves an unpleasant aftertaste. It can cause indigestion and burping. Fish oil is just plain gross. It's more susceptible than vegetable oil is to becoming rancid, and rancid oil can damage your liver. When fish start to decompose, unscrupulous companies may cover up the odor with chemicals – for example, a mixture of chlorine, trisodium phosphate, lemon juice, and copper sulfate.

Nine. Speaking of gross, parasitic worms and/or their larvae are common in fish, including the fish muscle that people eat. For example, one study found that every single one of 50 wild sockeye salmon caught during their spawning migration contained the larvae of the parasitic worm *Anisakis simplex*. Eight-seven percent of the larvae were in the salmon's muscle, the part of the animal that people eat. A National Institutes of Health fact sheet on the fish tapeworm, another parasite, warns that these worms can infect humans who eat raw or undercooked freshwater fish. The worm will grow in your intestinal tract, possibly becoming 30 feet long and causing anemia and intestinal blockage.

To avoid humans becoming hosts for fish parasites, the U.S. government mandates that all seafood that is to be served raw be frozen at very low temperatures for extended periods of

time. Note these are temperatures often not achieved by home freezers. However, there is no guarantee that the business which supplied the fish you are eating actually complied to the extent the larvae were frozen to death.

Even if all the fish larvae you eat are dead, killed either by cooking or freezing, you can have an allergic reaction to them. Even if you have no reaction and are not infested, how appetizing is it to eat worm larvae? Would you order worm larvae in a restaurant? When you think about it, wouldn't you rather just have a nice black bean burrito or hummus sandwich?

Ten. Finally, 90% of the large fish in the ocean have already been killed and the oceans are being overfished at a totally unsustainable rate. A recent panel of 27 top scientists concluded the oceans are on the brink of catastrophic extinction. Does that one fish you plan to eat make a difference? Yes, it does. Every time you eat, you vote for either survival or extinction. Which will it be?

You may be thoroughly confused by now, thinking of all the studies you've heard about that say fish is healthy. Well, those are the industry and government hyped studies. Actually, a mountain of studies show fish does NOT have positive effect on health, but you never hear about those.

For example, a study published in *American Journal of Clinical Nutrition* in 2009 followed 195,204 adults for almost 3 million person-years. The researchers found that eating a lot of fish increased the risk of developing type 2 diabetes. Another study, published in 2011 in *American Journal of Epidemiology*, found that men with higher levels of long-chain omega-3 fatty acids (which often indicates eating more fish or fish oil) were more likely to develop high-grade prostate cancer.

What's more, the studies that do show any benefit for fish and fish oil are comparing people who eat fish (people who are generally health conscious and may pair their fish with spinach and baked sweet potatoes) with people who eat a standard diet of fast food burgers, chips, and donuts. If you were to compare the health of people who eat fish and fish oil to the health of people on a whole foods, plant-based diet, you don't need much imagination to see who would come out on top.

Humans are land animals, not natural fish eaters. Animals designed by nature to eat fish catch their food without manufactured hooks or nets. True fish eaters, such as seals, dolphins, pelicans, and grizzly bears, eat their prey raw and whole.

If you were meant to eat fish, you would have the teeth and digestive system to bite into, chew, and swallow an entire raw fish, including not just the carefully filleted muscle. You would chomp down on and consume the skin, bones, fins, guts, and eyes. Does this sound appealing to you, or even possible? If the answer is no, you are not designed to eat fish.

You have zero requirements for consuming fish or fish oil. Seafood, far from being necessary to your health, can speed its destruction. The total fish nutritional package, when you balance the omega-3s against all the toxic components, is decidedly negative. Instead of seafood, see your food for what it really is. You will happily choose plant-based nutrition.

If you want to learn more about how a whole foods, plant-based diet gets you the omega-3s you need in a healthy package, check out the post [Five Ways You Thrive with Flax Seeds for Pennies a Day](#).

Blog posting by Janice Stanger, Ph.D. Janice authored [The Perfect Formula Diet: How to Lose Weight and Get Healthy Now With Six Kinds of Whole Foods](#). This easy-to-follow eating plan is built on whole food plant-based diet that can prevent, and even reverse, most chronic disease as well as get you to your perfect weight. And this book does not advise you to eat worm larvae.

Why Consuming Fish for Omega-3s Is Like Eating Radioactive Vegetables

You can't eat a single nutrient in isolation. This includes overhyped omega-3 fatty acids. Whether you get these nutrients from food or pills, they're part of a package.

Here's an illustration. Just imagine for a moment you want to get more fiber into your diet and decide vegetables are the way to do this. So you buy some veggies, but they were grown near Japan's Fukushima Daiichi nuclear plant and have low levels of radioactivity. Not enough to kill you right away, but enough to raise your cancer risk through the rest of your life. How likely are you going to be to want those veggies? The fiber and everything else good in the veggies is there, but the radioactivity pollutes the whole package. You can't have one without the other.

Essential fatty acids give you a similar choice. Do you want your omega-3s packaged with dangerous components that make you sick? Especially when you can get them in packages with lots of other substances that boost your health?

Fish and fish oil, which cleverly written ads and even many nutrition "experts" push for their omega-3s, come most often packaged with a load of undesirable components:

- Mercury
- Toxic persistent organic pollutants
- Cholesterol
- Saturated fat
- Parasites
- Microbes that cause food poisoning
- Drugs used on fish farms
- Destruction of the marine ecosystem that supports life on our planet.

Overfishing and destructive fishing practices are destroying marine ecosystems, killing millions of dolphins, whales, turtles, sea birds, and seals, not to mention trillions of fish. You can refuse to participate in this process by eating flax seeds instead of fish.

Lab analysis proves that even factory distillation leaves many pollutants behind in fish oil. So although the omega-3s are present, so are a lot of things you don't want, but have to accept if you choose this package. Remember, plants are the base of the food chain, so there is no desirable nutrient in fish that did not originate in far more nutritious plants.

Just the Flax, Ma'am

Flax seeds are a way better option, a package of gifts you want. Keep in mind you need to grind flax seed to get its nutritional benefits. The seed has a very hard shell. If you don't grind it before eating, it will go through your digestive system intact and you get no benefit. The best way to grind flax is in a coffee grinder. Grind enough for a week or two and keep it refrigerated, or buy it already ground. Eat two tablespoons a day sprinkled on cereal, oatmeal, salads, wraps, grains, or mixed in smoothies.

Here are five ways these tiny powerhouses nourish your needs.

First, flax seeds are high in omega-3s. The only two essential fats you need from food are omega-3s and omega-6s. These fats are part of your cell membranes. They help regulate cholesterol metabolism, also providing the building blocks for hormone-like substances that are critical in regulating various bodily functions such as blood pressure, blood clotting, and immunity.

Flax seeds come with a very pretty package of health gifts. The same cannot be said of fish and fish oil.

Omega-6s are like the gas pedal in a car and omega-3s are like the brakes in terms of inflammation. You need both to keep cruising down the road at an ideal speed. However, to suggest that inflammation can be turned off by omega-3s, like turning off a light with a light switch, is inaccurate and way oversimplifies the incredible complexities of your body.

In thinking of these fatty acids, the primary question is balance, not deficiency. Wild plants have about equal amounts of omega-3s and omega-6's. However, farmed or domesticated plants, for the most part, have far more omega 6's than 3's.

Flax seeds in an exception to this general rule and are a bountiful source of omega-3s. The main myth you will hear is that your body cannot transform the "short-chain" omega-3s in flax into the "long-chain" omega-3s that are also required.

The myth that humans cannot make long chain omega-3's we need fails miserably. Research does not support this idea. For example, a recent European study of over 14,000 adults contrasted the levels of long-chain omega-3s in the blood of fish eaters, meat eaters, vegetarians, and vegans. The fish eaters consumed way more long chain omega-3s than the other groups did. However, the amounts of these long-chain fatty acids measured in the blood varied little among the groups. In other words, the people who ate the least long-chain omega-3s were most efficient at converting the short chain (such as found in flax seeds) to these long chain forms.

Processed vegetable oils are generally high in omega-6s. These interfere with your body's natural ability to convert short chain omega-3s to long chain omega-3s. Why? Both types of omegas use the same enzyme to accomplish the transformation. Eat whole foods and avoid processed oils, whether in a jar or a tub of margarine.

The assertion people can't make long-chain omega-3s fails any common sense test. Since our ancestors thrived for millions of years without omega-3 supplements or regularly (if ever, in most cases) eating fish, this concern is a bit nonsensical.

However, there is a core of truth. The same enzymes that help your body form long-chain omega-3s also help your body make long-chain omega-6s. How do you know you have the enzymes that enable these conversions? Let's start with the fact you are alive. You could not survive without these enzymes. However, if you eat lots more omega-6's than you do omega-3's, the 6's can swamp out the 3's. This is most likely to happen if you consume vegetable oils, which are concentrated omega-6 sources. Stick to whole plant foods without added oils.

Second, flax seeds are high in fiber, which fish and fish oil totally lack. Fiber helps sweep toxins and excess hormones from your body. If you have any issues with constipation, see how well flax seeds can get rid of this issue for you. Research also indicates that fiber lowers blood pressure, reduces the risk of cardiovascular disease, and decreases insulin resistance.

Third, flax seed is a whole food with many protective phytochemicals (beneficial nutrients found only in plants). Lignans, a phytochemical found in substantially higher amounts in flax seeds than in almost any other plant, have been shown to have potent anti-tumor effects for prostate, breast, and colon cancers. For example, one study found that lignans significantly reduced the growth rate of prostate cancer, possibly by depriving tumors of their blood supply and causing the cancer cells to self-destruct.

Studies indicate that lignans may also lower the risk of cardiovascular disease. This phytochemical reduces cholesterol and systemic inflammation.

Fourth, flax seeds are amazingly affordable. In fact, your daily two tablespoons should cost you about 7 or 8 cents if you buy whole flax seed and grind it yourself. If you buy it already ground, you'll pay a few pennies more. Contrast this with the cost of fish, fish oil, or drugs. If a medication were this powerful, you can bet no drug company would sell it for a few cents. Flax seeds are jewels that just about anyone can afford. So much for the notion that health has to be expensive. You can buy several days worth of flax seed for pennies. No one is getting rich. Hence no ads, no hype. Only value for you.

Fifth, flax seeds are widely available and convenient. As more people are learning about their benefits, flax seeds are soaring in popularity. You can find them in any natural foods store and even many supermarkets. Order online if you cannot find them locally.

Flax seeds, although unique and powerful, will not in themselves overcome the health consequences of a diet based on animal and manufactured foods. Instead, see flax seeds as a desirable part of a whole foods, plant-based diet. Blog posting by Janice Stanger, Ph.D.