



# Is Fish a Health Food, or Have We Just Let It Off the Hook?

By Sofia Pineda Ochoa, MD  
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Many people equate eating fish with doing something good for their health. This may be due to the illusion that fish swim in clean waters, or to the fact that they have a very different shape and form than the land animals we use for food. There even seems to be a deeply ingrained notion that aquatic animals are not part of the animal kingdom classification and that consuming fish is similar to—and just as beneficial as—consuming plant foods.

So, should we be eating fish to promote health?

## Four Major Problems With Fish

### 1. Animal protein and IGF-1

Just like the proteins in dairy, eggs, and meat, the protein in fish also contains a higher proportion of essential amino acids, which results in our bodies producing increased levels of the hormone IGF-1 (insulin-like growth factor 1).<sup>[i] [ii] [iii]</sup>

IGF-1 stimulates cell division and growth, and it is associated with cancer proliferation and malignancy. The role of IGF-1 in cancer promotion is well understood, and animal protein, including fish, is associated with increased circulating levels of this hormone (and thereby with increased risk of cancer development).<sup>[iv] [v] [vi] [vii] [viii]</sup>

### 2. Cholesterol and saturated fat

While fish is frequently touted for its preformed long-chain omega-3 fatty acids (EPA and DHA), it is important to note the following:

- Although some fish contain a small (but nutritionally adequate) amount of these essential nutrients, most of the remaining fats in fish meat are saturated fats and cholesterol which (despite popular opinion to the contrary) are highly associated with cardiovascular disease.
- For example, three ounces of bass has some 74 milligrams of cholesterol, [about the same](#) as the 75 milligrams of cholesterol found in a 3-ounce

serving of beef.<sup>[ix]</sup>

- Fish only contain omega-3 fatty acids because they get them from the plants they eat. Omega-3 is found in whole plants like nuts, seeds, beans, vegetables and fruits in adequate amounts.
- As humans, we do not need to eat any cholesterol in our diets, as our bodies synthesize all the cholesterol we need for our physiologic functions. Eating cholesterol despite this fact can be problematic for our health, as it increases our risk of developing heart disease.

### 3. Contaminants and pollutants

Fish are very commonly the subject of health risk advisories, the majority of which are caused by contamination of their ocean habitat with heavy metals like mercury, industrial byproducts like dioxin and PCBs (polychlorinated biphenyls), and pesticides/insecticides like chlordane and DDT.<sup>[x]</sup>

A recent study sampled fish from around the world and found unsafe levels of mercury in up to 84 percent of them (and the situation promises to only get worse, as mercury emissions are continuing to increase on a global scale).<sup>[xi]</sup>

Mercury is a neurotoxic heavy metal that is difficult to eliminate from the body once ingested. It can cause a wide variety of neurologic disturbances and can inhibit normal cardiac physiology when it accumulates in the heart muscle.<sup>[xii]</sup> It also has the capacity to cross the placenta barrier in pregnant women and can cause central nervous system damage to a developing fetus.<sup>[xiii]</sup>

### 4. What fish doesn't have

Another important factor to consider beyond the dangerous qualities of fish (animal protein, cholesterol, fat, and toxins), is what it lacks. Fish, like beef and other meats, is also missing fiber, beneficial carbohydrates, healthy phytochemicals, and macronutrients in the right

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proportions, which makes it a poor choice as a health-promoting food.

## But Fish Is “Less Bad” Than Red Meat, Right?

In some respects, fish does appear to be less disadvantageous to health than some other animal foods. However a food doesn't become a health food just because it may have less severe problems as compared with something else that's even more harmful to our body. In terms of weight, diabetes risk, and other important health indicators, [researchers find](#) that fish eaters might do better than meat eaters as a group, but they don't do nearly as well as plant-based eaters.

## In Conclusion ...

Consumption of fish should not be encouraged from a health perspective, given not only its unacceptable levels of mercury, dioxin, and PCBs (the toxicity of which is well established), but also the cholesterol and saturated fat content, and the inherent increased cancer risk associated with animal protein in general.

The ideal (or “gold standard”) diet from a health standpoint remains a whole-food, plant-based diet, which means eating vegetables, grains, legumes, nuts, fruits, and seeds, while excluding animal food (like fish).

This is a fortuitous fact too, because plant-based foods are also generally far easier to produce, use less water, and generate a significantly lower environmental footprint than do animal foods. In contrast, the practice of obtaining animal foods (including fish) for human consumption devastates the environment on many different fronts, and is simply not sustainable at current and ever-growing demand levels.)

<https://youtu.be/hssMHSCjEzU>

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