# **UNSAFE TO EAT**

While fish is lower in fat than other types of meat, it is also excessively high in protein. Many people believe that we need lots of protein, but actually, getting too *much* protein has serious consequences. Studies show that diets high in animal proteins increase calcium excretion from the bones, contributing to osteoporosis<sup>1</sup>. Excessive protein intake is also linked to kidney failure and several types of cancer<sup>2</sup>. In addition, fish contains about twice the cholesterol per calorie as pork or beef, while plant foods contain none at all. Cholesterol buildup in the arteries is the main cause of cardiovascular disease, the number one killer in the U.S. In fact, CVD kills more people than the next five most common causes of death combined<sup>3</sup>.

Then there's pollution in the world's waters that poisons the flesh of sea creatures. Research shows that fish can accumulate up to 9 million times the concentration of toxins (like PCBs and DDT) from the waters in which they live. When people eat fish, they ingest these deadly toxins, which are then stored in their fat cells for years. Fish also absorb mercury that is released as toxic emissions from the smokestacks of coalburning power plants. The most dangerous concentrations accumulate in the flesh of large predators like shark, swordfish and albacore tuna—some of the most widely consumed fish. The FDA and EPA now warn pregnant women and nursing mothers that eating too much of these fish puts their unborn children at risk for neurological damage<sup>3</sup>. "Farmed" fish are no healthier to eat, since they swim in filthy water and are so sick they must be fed massive doses of antibiotics to be kept alive. People consume these chemicals when they eat farmed fish.

Some people eat fish to get recommended dietary allowances of Omega 3. However, you don't need to eat fish to get this essential fatty acid: flax is a rich plant-based source of Omega-3 that can be found in any health food store or purchased inexpensively online.

### **PLUNDERING THE OCEANS**

In the last half century, increased consumer demand for seafood and the application of technological advances have fueled a mass market for fish: the fishing industry now takes an annual catch of over 100 million tons of fish from the world's oceans<sup>5</sup>. Fisheries use sonar and satellitetracking equipment to locate schools of fish, and cover miles of ocean with gigantic driftnets that trap every creature in their path, laying waste to complex deep-sea ecosystems. Such indiscriminate industrialized fishing methods are to the ocean what clear-cutting is to forests, or what stripmining for minerals is to the earth. Species that are not economically valuable (such as sea turtles, dolphins, and sea lions) are discarded: over 27 million tons of aquatic animals are thrown, dead or dying, back into the ocean every year<sup>5</sup>. Other species like seals and birds are hunted and killed because they would otherwise consume lucrative fish, eating into the fisheries' profits. Another common technique is "longline fishing," in which a fishing line up to 60 miles long is embedded with thousands of hooks and trailed behind a single boat. Due to these and similar practices, overfishing has decimated marine ecosystems to the point where many species are declining rapidly and some even face imminent extinction. A recent study that analyzed data from five ocean basins collected since the 1950s reports that 90% of each of the world's large ocean species (including cod, halibut, tuna, swordfish and marlin) has disappeared from the world's oceans in recent decades<sup>6</sup>.

Intensive aquaculture (breeding fish on "farms") has been touted as the solution to chronically depleted stocks, and produces about 36 million tons of fish per year<sup>5</sup>. Crowded into caged enclosures, "farmed" fish live in water that is infested with bacteria which forms from a surplus of excrement. This can trigger algal blooms that suffocate or poison the fish. The fecal waste and the chemicals used to treat the water then contaminate fragile coastal estuaries where aquaculture operations are often built.

# **FISHING HURTS FISH**

Scientific research confirms that fish feel physical pain, just like mammals, as part of a biological survival mechanism: painful sensations alert fish to danger so that they can avoid it. Like other animals, including humans, fish have a complex nervous system consisting of sensory organs and receptors that enable them to experience both pain and pleasure<sup>7</sup>. Turning fish into food causes them unnecessary suffering: they are either violently removed from their natural habitat or raised in unnatural conditions, and in either case their lives are taken so that a human can eat their flesh. Humans certainly don't need to eat fish in order to live healthily: we can get all the nutrients we need from plant-based foods. It is merely people's personal preference for the taste of fish meat that is responsible for the suffering and death of billions of aquatic animals.

Then there is the objection that "fish eat other fish – they're going to die anyway, so we may as well eat them!" There are several problems with this reasoning. One is that, from an ecological viewpoint, "fish eating other fish" does not deplete stocks: only *humans* eating fish causes aquatic populations to decline and species to go extinct.

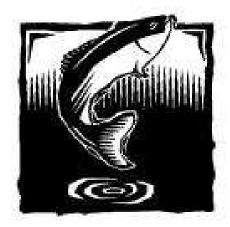
The second problem with this argument is that fish suffer *more* from being caught in nets or on hooks than by other fish. While being eaten by a predator is a relatively quick process lasting minutes if not seconds, fish can survive for several hours after being caught in nets or on hooks. Fish inhabit an entirely different atmosphere from us, and the sudden pressure change that occurs when they are pulled from the water can rupture their swim bladder and collapse their gills. When caught in trawling nets, they slowly die of suffocation or are crushed to death by the immense weight of tens of thousands of other sea creatures crammed together. Fish raised in aquaculture enclosures are killed in a

number of ways, including electrocution, clubbing and suffocation. Some "sport" fishermen (who catch fish using rod and hook) impale living fish and hold them underwater to prevent their flesh from "spoiling." No natural oceangoing predator imposes such prolonged torture on its prey.

Finally, humans don't need to eat sea creatures to survive, but certain aquatic predator species do. In fact, we don't need to eat animals at all to live long and healthy lives. It is this realization that leads compassionate people to ask, why is inflicting unnecessary suffering and death on other living creatures considered ethically acceptable in a society that offers an abundance of food choices that are not dependent on killing animals?

#### WHAT TO EAT

Not only are there plenty of delicious options among the fruits, vegetables, grains, beans, and nuts of the world, but you can also find veggie "fish" made of soy or other non-animal ingredients at most health food stores and on the menus of many vegetarian restaurants. You can also make foods on your own that taste like fish.



For great recipes and more information on transitioning to a vegetarian diet see our website **www.bayareaveq.org** 

Also sign up for our **Veggie Mentor Program** 

If you still eat fish, please think about the information in this brochure and consider reducing the amount of fish you eat. Better yet, if you become a vegetarian, you can improve your own health and conserve natural resources while reducing the amount of suffering in the world every time you eat.

Being a vegetarian is not as difficult as most people think. As an advocacy organization, Bay Area Vegetarians is committed to promoting the many benefits of a vegetarian lifestyle. Through our email lists and website, you can connect with the local vegetarian community and stay informed of activities throughout the Bay Area. If you've already decided to go vegetarian or vegan and need support, our mentorship program offers direct, personalized guidance from experienced vegans to help you make the transition with ease and at your own pace. Membership in Bay Area Vegetarians is free, and signing up is easy! You can learn more about us and vegetarianism by visiting our website. Thanks for your concern!

Mat Thomas

#### **REFERENCES:**

- 1. Zemel, MB. Calcium utilization: Effect of varying level and source of dietary protein. *American Journal of Clinical Nutrition*, 48: 880-883 (1988).
- El Nahas, AM & Coles, GA. Dietary treatment of chronic renal failure: ten unanswered questions. *Lancet*, 15 March 1986:597-600.
- 3. American Heart Association. *Heart and Stroke Statistical Update:* 2004 Update. Dallas: American Heart Association.
- 4. What You Need to Know About Mercury in Fish and Shellfish 2004 EPA and FDA Advice For Women Who Might Become Pregnant, Women Who are Pregnant, Nursing Mothers, Young Children (March 2004).
- 5. Amounts of aquatic animals caught/discarded/raised every year worldwide -
- www.yannarthusbertrand.com/us/clterre/part8/chap5/clt01.htm
- 6. Myers, R & Worm, B. Net losses: Industrialized fishing hits fish stocks. *Nature*, 15 May 2003.
- 7. Rose, J. The Neurobehavioral Nature of Fishes and the Question of Awareness and Pain. *Reviews in Fisheries Science*, 10: 1-38 (2003).

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Fish is often the last animal that people eat on their way to becoming vegetarian. Perhaps this is because they think that eating fish is healthier than other types of meat, or less damaging to the environment than factory farming. In addition, some people don't realize that fish can feel pain and suffer, just like humans and other animals do.

Thus, unaware of the impact that eating fish has on their health, the environment, and the fish themselves, incredulous meat eaters often ask vegetarians, "But you eat fish, don't you?" The answer to that question is no, vegetarians don't eat *any* animals, regardless of whether they walk, fly, or swim. The reasons people choose to be vegetarian vary, but tend to center around concern for their own health and the survival of others (animals, the planet, the world's starving populations, exploited workers).

Inside this brochure you will find evidence of the dangers that eating fish poses to people, the planet, and the fish themselves. Please take a few minutes to read it and consider these crucial issues with an open mind.

