



THINK GREEN



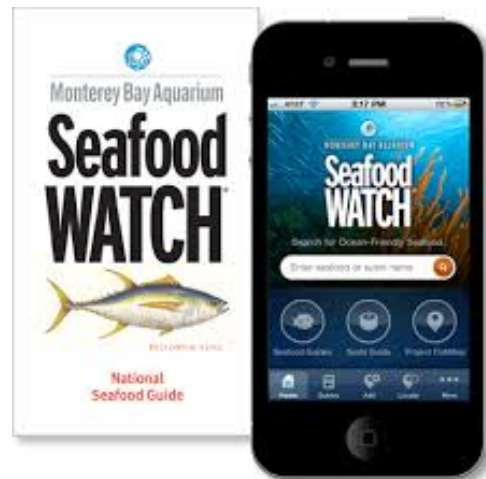
EAT GREEN

SUSTAINABLE SEAFOOD

Many of us strive to eat locally-harvested and sustainably-raised fruits and vegetables. It's a practice that's relatively easy to do in our area. But when it comes to following the same system for eating seafood, the picture gets a little, well murky.

What is sustainable seafood?

The Monterey Bay Aquarium, a leader in the global sustainable seafood movement for decades, defines sustainable seafood as that which is produced by methods protecting fish populations, their habitats and the communities that rely on them. The Monterey Bay Aquarium's Seafood Watch Program is still considered to be the most reliable source of information on the sustainability of species. Their Seafood Watch program has a well-known app and downloadable guides.



Ocean waters cover two-thirds of our planet's surface. International waters or the "high seas," which belong to no one nation, cover one-

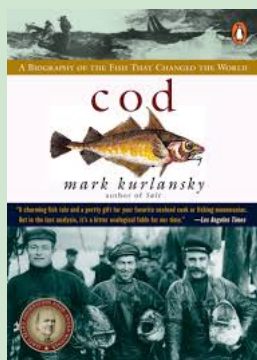
half of the earth's surface. These waters have been fished indiscriminately, if not haphazardly. The Seafood Watch Program maintains that *90 percent of fish populations are currently fished at, or above, their sustainable limits.*



We need look no further than our own backyard to see the results of unsustainable fishing. The Chesapeake Bay has experienced several seafood near-disasters, mainly due to overharvesting and pollution. Oysters, blue crab and striped bass (rockfish)

have all been brought back from the brink in recent decades through harvesting restrictions, pollution regulations, and aquaculture. Atlantic menhaden, vital to the bay's food chain, has remained at low levels since dropping dramatically in the 1990s. The Chesapeake Bay Foundation [website](#) chronicles the events that led to each species' troubled history.

You may have seen this blue label on seafood products. The Marine Stewardship Council (MSC) is an international nonprofit organization which sets standards for sustainable fishing. The MSC label indicates that a product comes from fisheries which comply with MSC's three standards: harvest sustainably so that fish populations are left productive and healthy; minimize environmental impact so that other species and habitats remain healthy; and assure that fisheries are well managed and compliant with relevant laws. The MSC was founded in response to the 1992 collapse of the northern Atlantic cod industry.



For a thorough, entertaining, and tragic look at the near decimation of a species, read Mark Kurlansky's *Cod: a Biography of the Fish that Changed the World* (Penguin Books, 1998)

Another aspect to consider is the carbon footprint of the seafood industry. Large-scale fishing operations travel great distances on the high seas while chasing migratory fish, thus ensuring massive fossil fuel use.

Where fish is found and the way it is harvested makes a difference. How can we help? This [Yale Climate Connections newsletter](#) tells us

why (informed) consumer decisions are so important in our climate-warming world.

What does seafood sustainability mean to me?

Most health and nutrition sources advise us to eat more fish, especially those containing omega-3 fats. But ... should we eat seafood that is farm raised **or** wild-caught **or** MSC-certified **or** caught only in US waters? Should we eschew long-line caught fish, Atlantic cod, and (critically endangered) bluefin tuna?

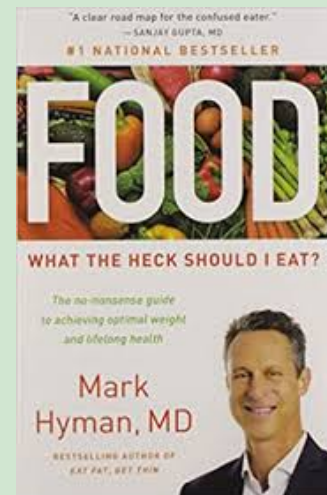
Let's get schooled about seafood!

There are a number of labels and logos on seafood products. Which are important and which may be marketing strategies? Here's a lengthy [explanation](#) of how to de-code seafood labels from Food and Water Watch, a non-profit whose mission is to generate political power to address food, water, and climate issues.



A good rule-of-thumb is to eat small rather than large fish. Large fish absorb mercury and other contaminants consumed by the fish in their food chain. Some studies recommend eating skipjack tuna as it is the smallest of tuna species, the most abundant in our oceans, and often caught by pole and line method. White albacore tuna, by contrast, has three times the mercury levels as skipjack.

Mark Hyman, MD has a very thorough discussion of seafood in his book *Food: What the Heck Should I Eat?* (Little, Brown Spark, 2018). He addresses nutrition, omega-3 fatty acids, mercury levels, and other contaminants in the seafood we eat. In summary, Hyman recommends that we eat more fish, especially those with high levels of omega-3s (wild Alaskan salmon is best); stay away from farmed fish unless organically raised; eat low on the oceanic food chain, the smaller the better. He includes several organizations we can turn to for advice and recommendations. [Global Aquaculture Alliance](#) promotes responsible aquaculture practices and education, Natural Resources Defense Council has a [buying guide](#) citing mercury levels in fish, and the Environmental Working Group has a [consumer guide](#) to buying healthy seafood.



From a health and nutrition standpoint, we need to consume omega-3 fats, and they are most available in oily fish (salmon, mackerel, sardines, etc.). Depending on their feed, farm-raised fish often have high levels of the less desirable omega-6 fats and very little omega-

3s. These are both essential fatty acids which must be consumed in a delicate balance. [But most of us already consume more omega-6 than needed due to its very high levels in processed oils, and thus present in almost all processed foods] This *Healthline Media* [article](#) explains the function of these fatty acids.

Recommendations? Solutions?

In his most recent book, *A Life on Our Planet* (Grand Central Publishing, 2020), noted English broadcaster and natural historian Sir David Attenborough talks of “rewilding the seas” by addressing the oceans’ most pressing needs: to capture carbon, restore biodiversity, and provide the world’s population with enough fish to eat.

There are currently over 17,000 Marine Protected Areas (MPAs) worldwide, setting aside portions of ocean waters as no-fish zones, and providing relief to overfished populations. In time, fish can recover to promising levels, which makes them easier to catch, so less fossil fuel is used in trying to find them. Attenborough also maintains that many current fishing methods are indiscriminate. Trawl nets capture unintended as well as target species, and dredging methods destroy the ocean floor and its ecosystems.

A Life on Our Planet
My Witness Statement and Vision for the Future
David Attenborough



Fish farming (aquaculture) is often considered to be a respite for wild seafood harvesting. It’s a vast global industry, with Asia dominating. According to the National Atmospheric and Administration (NOAA) Fisheries, Asian countries produce nearly 90% of the world’s farmed seafood (with China producing 62% alone). NOAA Fisheries [reports](#) confirm **the US imports over 80% of the seafood we**

eat, one-half of which is farm raised. The aquaculture industry in the US has regulations restricting the use of antibiotics and other medicines, as well as facilities inspections and analysis of fish feed; these regulations may not be present in Asian countries.

What’s a consumer to do?

Of great benefit to consumers is information of how and where the fish we purchase was caught; sometimes more importantly, what are the fishing regulations in that country? Our best practice as consumers is to ask - while dining or shopping - whether a business sells sustainable seafood. This simple question sends the message that we are interested in eating a certain type of food.

Many sources recommend buying fish through local community supported fisheries. This provides the buyer with the best chain of information from catch to consumer. Finding a source of locally caught fish will reduce the carbon footprint involved. And the Seafood Watch

app from Monterey Bay Aquarium mentioned above gives you the most up-to-date information on a specific species' sustainability.

If we are inclined to eat sustainably, we need to look for current, relevant information and ask questions!

SOME GREEN THOUGHTS



"We have eaten into the core fish stocks, the **capital** of the ocean, and we should be limited to eating off the **interest** only."

-Sir David Attenborough, natural historian

"If ever there was a fish made to endure, it is the Atlantic cod... But it has among its predators - man, an openmouthed species greedier than cod."

Mark Kurlansky, author