

Farmed Vs. Wild-Caught Fish



It's hard to know which underwater life we should consume - wild versus farmed seafood. There is great interest in the health benefits of omega-3 fats, but concerns about the contamination and environmental impact of farmed fish. Recent statistics show that globally roughly 50% of our seafood supply is from each source.

Fish farming also known as Aquaculture, is the commercial farming of aquatic organisms in enclosures (tanks, pens, or netted areas) in lakes, rivers and oceans. But even this definition isn't always crystal clear. Some wild seafood starts its life in a hatchery and is then released into the wild, and some farmed fish start childhood roaming free and are then placed in pens.

Nutrition:

Wild-caught fish consume a more varied diet including things like kelp, algae, seaweed and other smaller fish found in their natural environment. As a result, wild fish contain slightly higher amounts of several vitamins and minerals than farmed fish, and these differences are not likely significant. In contrast, farmed fish diets often include monocrops such as soy, corn and canola which do not provide the same variety. Due to this more restrictive diet, farmed salmon flesh is grey in colour. To rectify this, natural and artificial colourants are added to their feed to bring about the desired shade of pink, found naturally in wild salmon.

Omega-3:

One of the main reasons we eat fish is that it is an excellent source of omega-3 fat. Cold-water fatty fish (salmon, mackerel, sardines, trout, herring, etc.) have the highest concentrations of omega-3 fats compared to other species. In terms of who has more - farmed vs. wild, farmed fish win. They cannot swim as freely as wild fish, so they wind up heavier than their wild counterparts with more total fat including Omega 3's.

Contaminants:

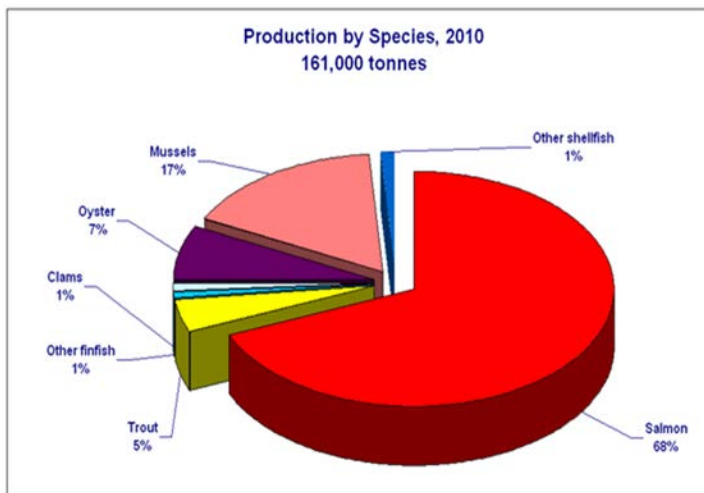
In terms of PCBs, wild fish score a little bit better. However, PCB levels are well within acceptable limits for both wild and farmed fish. Bear in mind that fish are not the only culprits. PCBs are found in all kinds of animal products including beef, pork, higher fat milk, and milk products. To reduce your intake, a diet lower in overall meat products is prudent.

Regarding mercury, anything higher in the food chain contains more mercury, as these fish inherit all the mercury already contained in the smaller fish they eat. Older fish also contain more because they have had more years to accumulate it. Swordfish, shark, king mackerel, orange roughy, tilefish and fresh and frozen tuna pose the greatest risk. Incidentally, all of these types of fish are found in the wild, not in farms. Young children and pregnant or nursing mothers should avoid these types of fish. Albacore tuna is higher in mercury than other types of canned tuna and should be also be limited during pregnancy and childhood. Bottom line nutritionally: There is general consensus that the health benefits of consuming fish (wild or farmed) significantly outweigh the risks



Environmental Implications

The environmental considerations of farm versus fresh are complex. Scientists have estimated that if we keep fishing the same way we are today there will be no wild fish for commercial harvest by 2048, so clearly, things need to change. When fish farming was new, it was accused of polluting the ocean, spreading parasites and disease to wild species, and depleting stocks of smaller fish used to feed the fish in the pens. Now there is a move toward safer and more sustainable methods such as "inland tank" farming which pose less risk to wild species. For excellent and thorough information on this subject, please check out SeaChoice at SeaChoice.org, a Canadian watchdog formed by five conservation groups. They factor in all kinds of data into their recommendations such as waste pollution, habitat, antibiotic use, fish feed, escapes and parasite risk to native species. In terms of a bottom line, they provide a green, yellow and red label system to help guide consumers toward sustainable seafood.



Canadian Aquaculture by Species



Maple Glazed Rainbow Trout or Salmon



- 2 tsp (10 ml) Paprika
- 2 tsp (10 ml) Chili Powder
- $\frac{1}{2}$ tsp (2.5 ml) Cumin Seed
- 1 tsp (5 ml) Brown Sugar
- 2 tbsp (30 ml) Maple Syrup
- 24 oz (.72 kg) Rainbow Trout

Preparation

1. Heat broiler to high (500 degrees Fahrenheit).
2. Combine first 5 ingredients and rub onto the fish fillets.
3. Baste with the maple syrup mixture, broil fish 4 minutes, turn fish, baste again and broil for another 4 minutes or until done when tested with a fork. Do not overcook

Recipe adapted from: Niagara Health System Cardiac Rehab Heart Healthy Recipes

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