

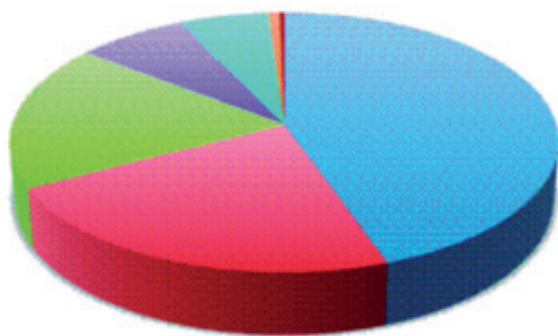
Less than 1% of fish catch is destined for fish oil supplements

Overfishing decreases as people and pets eat less meat



Resolutely choosing for meat to solve the problem of overfishing is just a little too thoughtless. It seems logical, but a significant fraction of the fish catch ends up in animal feeds, mainly as fishmeal.

In industrial **animal husbandry** pigs, poultry and (to a lesser degree) ruminants are raised on fishmeal from deep-sea fishes, added to their feed as a complete source of protein. Fisheries that rely on fishmeal production are operating throughout the world's oceans, except in Antarctica. For those who eat industrially produced meat 16,2 million tonnes of fish are sacrificed annually, which is quite a burden on fish stocks.



- Aquaculture (farmed fish)
- Feed for poultry (livestock)
- Feed for pigs (livestock)
- Dry food for pets & fur animals
- Canned food for cats
- Feed for ruminants (livestock)
- Fish oil supplements

Globally, over 40% of all wild fish caught is not or not directly exploited for human consumption, but has above purposes (as raw fish, fish oil and mainly as fishmeal)

Also **pet** keeping is burdensome for fish stocks. Domestic cats consume **2,5 million tonnes of wild fish** per year, processed as raw fish in canned premium foods. An **additional 2,9 million tonnes of wild deep-sea fish** are processed as fishmeal in dried feeds for pets and fur animals. These are hard figures that, according to insiders, are even underestimated.

How about fish oil production?

Annually, **1 million tonne of wild deep-sea fish is used to produce fish oil, which is roughly 1% of total fish catch.** In 2002 **81 % of fish oil** was used for feeding farmed fish, with projections of 88% to be used for fish farming by 2010. The residual 12% remains available for the production of fish oil supplements. Contrary to what many people assume, the manufacturing of fish oil supplements has a relatively low impact on fish stocks. Which does not mean that the manufacturers of these supplements should not make ongoing efforts to safeguard the future of all fish species.

The sustainable approach of **Minami Nutrition** guarantees that only fish that are not threatened with extinction are used to manufacture the high quality fish oil supplements. These are small deep-sea fishes (**herring, mackerel, sardines, anchovies**) caught in the southern hemisphere around **Antarctica**.



Minami Nutrition uses only small fish such as mackerel, anchovy and herring for the production of its food supplements obtained from deep off-shore regions and which are also sustainable fish species.

Sources:

De Silva SS, Turchini GM. Towards understanding the impacts of the pet food industry on world fish and seafood supplies. *J Agric Environ Ethics* 2008; 21(5):459-467.
 Alder J, Campbell B, Karpouzi V, Kaschner K, Pauly D. **Forage fish: from ecosystems to markets.** *Annu Rev Environ Resour* 2008; 33:153-66.
 Campbell B, Alder J. **Fishmeal and fish oil: production trade and consumption.** 2006; p47-66 In: Alder J, Pauly D (eds.). *On the multiple uses of forage fish: from ecosystems to markets.* Fisheries Centre Research Reports 14(3). Fisheries Centre, University of British Columbia (ISSN 1198-6727).