

20 questions and answers about farmed Norwegian Salmon

Farmed Norwegian fish are among the healthiest and best food you can eat. Every stage of production is monitored by the authorities. The majority of the farmed salmon in shops today is from Norway.

● SAFE FOOD ●

1. Is farmed Norwegian fish safe to eat?

Yes. The authorities in Norway recommend that Norwegians eat more seafood, both lean and fatty fish (such as farmed salmon).

2. Who monitors the content of Norwegian Salmon and Norwegian Fjord Trout?

The Norwegian Food Safety Authority and the National Institute of Nutrition and Seafood Research take samples and analyse them. Last year, samples were taken from 9000 farmed fish.

3. Does farmed Norwegian Salmon contain more heavy metals than fish in the wild?

No. The presence in Norwegian Salmon fillets of undesirable substances such as PCB, dioxins and heavy metals has been closely monitored for more than 10 years. The levels of undesirable substances are comparable to those found in mackerel, NVG herring and North Sea herring and are far below the limits set by the Norwegian authorities.

4. Does farmed Norwegian Salmon contain any dangerous residues of therapeutic agents?

No. No evidence has been found of illegal therapeutic agents or of legally used therapeutic agents exceeding legal limits. The authorities perform thousands of tests each year, and the latest tests carried out in May 2010 confirm this picture.

5. Some claim that salmon lice or sea lice are carcinogenic?

Such claims are completely unfounded. To claim a risk of cancer is a monstrous inaccuracy and one that has been repudiated by all public professional bodies, including the Norwegian Food Safety Authority and the Norwegian Institute of Public Health. Extensive research has been carried out into this.

6. What determines the content of environmental pollutants in fish?

The feed on which the fish are fed. Fish farming is controlled food production. The producer knows exactly what the fish are eating and fish feed producers are subject to stringent quality controls.

7. Can we have faith in the studies carried out by the Norwegian authorities?

Yes. Farmed Norwegian Salmon is exported to 100 countries. This would never have been achieved without the quality being very high and the fish safe to eat. All of these countries carry out their own checks of Norwegian Salmon imports.

8. Are genetically modified (GMO) Norwegian Salmon being sold in the shops?

No. Norway and a number of other countries in the ISFA (International Salmon Farmers' Association) have rejected production of GMO salmon. Neither has Norway approved genetically modified plants or fish for cultivation/aquaculture, and the Norwegian authorities intend to pursue a restrictive line on this issue.

● WELL-BEING AND WELFARE ●

9. Do fish endure cramped conditions in fish farms?

No, farmed fish in Norway have plenty of space. Norwegian fish farms comprise 2.5% fish and 97.5% water, as required by Norwegian law. It is important to the health and well-being of the fish that they have plenty of space.

10. Is farmed Norwegian Salmon often in ill health?

No, the health of farmed fish stocks is extremely good. While production of farmed Norwegian Salmon has greatly increased, the incidence of outbreaks of disease has actually decreased. The reason for this is the development of good vaccines and stringent hygienic demands.

11. Why are farmed fish not fed immediately prior to slaughtering?

It is entirely normal to stop feeding the fish prior to slaughtering. This is done for hygienic reasons, as the intestines of the fish must be completely empty of feed and because it makes the fish more robust when being handled. After being hungry, the fish tackles stress better and thus gives better quality on slaughtering. This is done in compliance with applicable legislation and is carried out within the framework of animal ethics. Fish in the wild are also known to live for longer periods without food.

12. Is farmed Norwegian Salmon full of therapeutic agents?

No, antibiotics are practically no longer used in Norwegian Salmon farming, because the fish remain generally healthy throughout their lifecycle.

● WHAT DO FARMED NORWEGIAN SALMON EAT? ●

13. Do farmed Norwegian Salmon eat only fish?

No, marine raw materials comprise about 50% of fish feed. Fish meal and fish oil is made from fish such as anchovies, blue whiting, herring, sand eels and capelin from Norway's fisheries industry. An increasing proportion of the protein and fat requirement is being met by plant raw materials, which equates to an equivalent reduction in the need to use fish caught in the wild as raw material in fish feed. Of all farmed animals, salmon is most efficient at converting feed to food.

14. What does fish feed consist of?

Farmed Norwegian Salmon eat dried feed in the form of pellets. Each pellet contains the nutrients that salmon need: fat, proteins, carbohydrates, vitamins and minerals. Proteins and fat come from fish meal and fish oil and from plant protein and plant oils. The carbohydrates in fish feed come from wheat and corn. Fish feed also contains vitamins and minerals, as well as additives, astaxanthin and antioxidants.

● ENVIRONMENTAL AND SOCIAL RESPONSIBILITY ●

15. Is salmon farming the reason why fish resources in the wild are becoming depleted?

No. The depletion of fish stocks in the wild is not caused by fish farming but by over-fishing resulting from poor fisheries management. The use of species of wild fish in the production of fish meal and fish oil is practiced all over the world. Five million tonnes of fish meal are produced annually and Norwegian fish farming accounts for less than 10% of this (6.8 % in 2007). The rest is used for other farmed animal production in agriculture and in feed for other species of fish. Of the volume of fish oil produced in the world, some 22% goes to farmed Norwegian Salmon.

16. Where do the fish caught in the wild and used in fish feed come from?

Most of the marine raw materials are fished in the northern Atlantic Ocean, in addition to which some marine raw materials come from the south-eastern region of the Pacific Ocean. Provided that fish stocks are responsibly fished and managed and there is no consumer market for the types of fish caught, they can be advantageously used as raw material in fish and animal feed.

17. Does feeding salmon with fish caught in the wild not amount to misuse of natural resources?

No, salmon fishing is the most resource-efficient method of animal food production. Today, about 1.15 kg of feed is used to produce 1 kg of Norwegian Salmon. About 2-2.5 kg of fish caught in the wild go into producing this amount of feed. By comparison, salmon in the wild consume about 10 kg of food to grow 1 kg.

Whereas disposing of fish silage (cut-offs, head, bone, skin) was previously a problem, today it is increasingly used in the production of fish meal and fish oil. Fish cut-offs make up 14-16% of the marine ingredients (meal and oil respectively) in fish meal.

18. Is it not silly to use one type of food to produce another type of food, as is the case with salmon?

No, most animal food production such as meat, milk and eggs is based on feed made from raw materials that could also be consumed by humans (feed in concentrated form). Most people eat meat and fish, which is in line with the varied and balanced diet recommendations of the health authorities. The WHO considers that seafood intake should be increased in order to improve the general health of the population. In order to meet the need for seafood for the world's population, the UN's Food and Agriculture Organisation is of the opinion that this can only be achieved through increased production of seafood from fish farming.

19. Why is fish caught in the wild and used in feed for salmon not used as food for humans?

Not all species of fish are suitable for or in demand as food directly for human consumption.

20. Are the therapeutic agents used in treating salmon lice not dangerous to the environment and crustaceans?

Norway's fish farming industry uses different therapeutic agents to treat lice, including wrasse and therapeutic agents that are approved by the Norwegian Medicines Agency only after careful study. Strict control of the use of such agents minimises their use and hence their impact on the environment. The use of therapeutic agents is severely restricted during the summer months (June, July, August), which is the main season when crustaceans in the vicinity of fish farms shed their shells.

MORE INFORMATION?

LATEST VERSION AND MORE FACTS CAN BE FOUND HERE: WWW.FHL.NO/PAPERS
CONTACT INFO FOR FACTS ABOUT NORWEGIAN SALMON: LAKSEFAKTA@SEAFOOD.NO

