Food Standards Agency confirms fish caught from Lough Neagh is safe to eat

The FSA has today confirmed it is safe for people to eat fish from Lough Neagh if it is properly gutted and the fillets are rinsed with clean water to remove any contamination from the gutting process.

This update is based on the results of testing carried out to determine the levels and type of toxins present in water and fish during a large scale cyanotoxin-producing algal bloom affecting Lough Neagh last year. No toxins were detected in the edible flesh of fish and an assessment of our test results has been published.

> ‘Toxicologists from the FSA have reviewed the test results from our new sampling programme alongside independent experts from our advisory Committee on Toxicity. The findings support our initial assessment that fish produced by fisheries from Lough Neagh is safe to eat, where they are properly handled and gutted. No toxins were found in the edible flesh of any fish sampled. As expected, microcystins, a type of toxin, were found at various levels in parts of fish that are not eaten, such as the guts and liver.
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> ‘These results mean that we have been able to lift our previous precautionary advice for anglers not to eat fish they may catch on Lough Neagh. This was because, unlike commercial fisheries, there was a potential for an increased risk associated with the personal handling and evisceration of parts of the fish where toxins can accumulate. With this new information, we are now advising that recreational anglers can enjoy eating the fish they catch but they should take care when handling and gutting the fish to prevent contamination of the edible parts of the fish with toxins that may be present in internal organs. Before cooking or freezing the fish, fillets should be rinsed with clean water to remove any contaminants from the gutting process. Advice remains that recreational fishing should not take place in areas of visible algal bloom and fish that are displaying abnormal behaviours, are dead or dying should not be eaten.
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> ‘We believe that due to various environmental factors, this issue is not going away. That is why we have requested additional funding for sampling of fish in Lough Neagh throughout this year and into next.’
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> Professor Robin May, Chief Scientific Advisor for the FSA

Food businesses, such as commercial fisheries, are being reminded to follow good processing procedures such as proper evisceration to remove intestines, liver and gills where cyanotoxins can accumulate.

Safety of fish from Lough Neagh used in animal feed

As part of the testing of fish from Lough Neagh, the FSA assessed the risk of using fish viscera (intestines and liver) from Lough Neagh in animal feed. Although these parts of the fish are not eaten by people, they can be used as an ingredient in animal feed only if they are considered not likely to cause a risk to human health. The FSA assessed this risk and we determined that, while it would be undesirable to eat viscera contaminated with microcystins, it is not likely to be harmful to humans at the levels detected.

We have also found that whole roach (a type of fish) from Lough Neagh is supplied to feed some zoo animals. The safety of this roach depends on several factors, including its end use and the overall diet and species of the animals consuming the roach. The FSA is gathering further information on supply and liaising with the relevant organisations to consider the risk. Zoos can continue to feed roach to their animals, but we will keep this advice under review as we gather further information.

Background to testing

Samples of eel, roach, perch, pollan and bream were taken from Lough Neagh in September 2023 and tested for a range of cyanobacterial toxins that are known to be present in toxin-producing algal blooms including microcystins, nodularins, anatoxin, cylindrospermopsin and saxitoxin. Nodularins, anatoxin, cylindrospermopsin and saxitoxin were not found in any samples.

Microcystins were not found in the edible flesh of fish, however levels were detected in various parts of viscera in fish (particularly the guts and liver), which are removed prior to consumption as part of the evisceration process.

Currently there are no UK or EU regulatory limits laid down for cyanotoxins in fish and therefore, no standardised sampling and testing programmes to assess cyanotoxin levels in food that take place on a routine basis. Instead, the sampling described above was directly commissioned in response to the algal bloom that occurred last year.