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AAC Recommendation on the differential food safety characteristics of farmed fish

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Background

European citizens have the right to access safe, wholesome food that meets the highest quality standards. The European Union's general food law regulation¹ provides a high level of protection of human life and consumers' interests in relation to food while ensuring the effective functioning of the European Union internal market.

All food placed on the European Union market is guaranteed to meet an adequate level of safety. However, guidance on safe consumption quantities and contaminants' exposure assessments are regularly published by the European Food Safety Authority (EFSA) and by the national food safety agencies.

Fish makes an important contribution to an overall healthy diet by providing highly bioavailable protein and essential amino acids, fatty acids (such as long chain Omega-3 polyunsaturated fatty acids) and certain vitamins and minerals (vitamins A, B12 and D, potassium, iodine and selenium). Nevertheless, fish consumption can also entail food safety hazards that must be appropriately managed. Consumers must be educated about these risks so they can develop responsible consumption habits.

Fish are among the very few foodstuffs in the European Union for which significant quantities of the same animal species can be found on the market arriving from two very different production methods: farmed or caught.

This recommendation is not about establishing whether farmed fish are safer than caught fish or vice versa. This recommendation is about ensuring public food safety authorities provide consumers with accurate and differential information about the food safety risks related to fish species depending on their production method (farmed or caught). Scientific research indicates that although no significant differences are observed in consumer food safety beliefs concerning wild versus farmed fish, in general, farmed fish are perceived to be less affected by marine pollution, heavy metals and parasites.²

This recommendation has examined the opinions of the scientific panel of the European Food Safety Authority (EFSA) concerning contaminants in the food chain related to the safety assessment of wild and farmed fish³ by reviewing a report mainly focused on dioxins and mercury. However, other relevant hazards must also be taken into consideration, alongside the intense consumer risk perceptions of these other hazards, about which consumers read in the media (based on facts or on misinformation).

¹ Regulation (EC) 178/2002 establishes the general principles and requirements of food law, including the role of the European Food Safety Authority and procedures in matters of food safety: https://bit.ly/3pE1fqd

² Consumer beliefs regarding farmed versus wild fish: https://bit.ly/3zpeMWT

³ EFSA. Opinion of the scientific panel on contaminants in the food chain on request from the European Parliament related to the safety assessment of wild and farmed fish: https://bit.ly/35gVghm

An example of the differential food hazards of fish associated with production methods is the presence of zoonotic parasites, like anisakis. The Aquaculture Advisory Council (AAC) recently produced a recommendation on the *Revaluation of the risk assessment of parasites in farmed fish products*.⁴

Another example is the risk associated with ciguatera poisoning. Ciguatera is the worldwide leading toxin-related, non-bacterial foodborne disease associated with the consumption of aquatic animal products. Although this problem mainly affects tropical reef fish, some parts of the European Union are seeing an increase in cases of ciguatera poisoning, and alarming stories regularly appear in the media. The EFSA has recently published an external scientific report on the *Risk characterisation of ciguatera poisoning in Europe*. This report refers to the ciguatera risk stemming from certain fish species, but some of these species can arrive on the market as both caught and farmed products. Unfortunately, the report does not cover fish production methods, therefore implying that the problem equally affects wild or farmed fish. Nonetheless, ciguatera only affects wild fish whose flesh is contaminated due to toxins because of their feeding habits, and this situation does not apply to farmed fish.

Other examples of foodborne hazards include mercury, dioxins, polychlorinated biphenyls (PCBs) and microplastics. These hazards are not completely absent in farmed fish, but farmed fish display significantly lower levels of these contaminants than their wild counterparts.

The underlying reasons for the food safety risk differences between production methods (farmed versus caught) is that fish are contaminated through their eating habits and their feed intake, and some wild species live for long periods before their capture, allowing bioaccumulation of toxins, whereas farmed fish are slaughtered at a young age. In addition, caught fish feed on uncontrolled wild prey taken from the sea waters that carry a considerable load of contaminants, depending on the region. On the other hand, farmed fish are fed compound feeds that are under the control of the fish farmer and subject to safety controls as strict as those undertaken for the final food products themselves.

The AAC believes that the lack of differentiation between fish production methods (farmed versus caught) in food risk assessment reports and in consumption guidance documents is not deliberate. Instead, it is the result of rear view thinking that does not take the existence of farmed fish into consideration.

⁴ AAC. Revaluation of the risk assessment of parasites in farmed fish products: https://bit.ly/2RSICU8

⁵ EFSA. Risk characterisation of ciguatera poisoning in Europe: <u>https://bit.ly/3cUIECi</u>

Recommendations:

- The AAC calls on the European Commission, the European Food Safety Authority and national food safety agencies to acknowledge that numerous species of finfish that are placed on the European Union market can be either farmed or caught from the wild.
- 2. The AAC emphasises that the European Commission, the European Food Safety Authority and national food safety agencies must recognise that different production methods (farmed versus caught) can entail different food safety risks.
- 3. The AAC asks the European Commission and the Member States to ensure that fish related food risk assessment reports and consumption guidance documents clearly specify whether they refer to caught fish, to farmed fish or to both.
- 4. The AAC asks the European Commission and the Member States to ensure that research on fish food safety financed with public funds differentiates, whenever appropriate, farmed fish from caught fish in the content of calls for projects and in the final result reports to be disseminated.



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