



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES

The Director-General

Brussels  
MARE.C.3/NG

Ms Yobana Bermúdez  
Chair of the Market Advisory  
Council (MAC)  
Regus EU Commission, 6 Rond-  
Point Robert Schuman, 1040  
Brussels

**Subject: MAC advice on the biochemical interaction between selenium and mercury in fishery and aquaculture Products.**

Dear Ms Bermúdez,

I would like to thank the Market Advisory Council (MAC) for its advice regarding potential biochemical interaction between selenium and mercury in fishery and aquaculture products. We have reviewed the advice and appreciate the insights and recommendations put forward in the context of the potential dietary benefits and risks associated with the consumption of fishery and aquaculture. I would also like to recognise the previous MAC advice on the nutritional benefits of the consumption of fishery and aquaculture products, which called for the recognition of the corresponding health benefits in policy initiatives as well as awareness raising. <sup>(1)</sup>

Given that the recommendations and any actions would mostly fall under the responsibility of DG SANTE, I received the following replies from the responsible colleagues.

Specifically with regard to the recommendation to undertake further work to better characterise the biochemical interactions between selenium and mercury, including potential dietary benefits and risks associated with the consumption of fishery and aquaculture products, I can confirm that DG SANTE has sent a mandate to the European Food Safety Authority (EFSA). The mandate includes a risk-benefit assessment of fish consumption in relation to the combined presence of dioxins (PCDD/Fs) and dioxin-like PCBs, perfluoroalkyl substances (PFAS), polybrominated diphenyl ethers (PBDE's), inorganic arsenic, dimethylarsinic acid (DMA) and methylmercury, in fish. Under this mandate EFSA will also assess possible evidence on the possible beneficial effects of selenium from fish consumption and its impact on mercury toxicity. The opinion is expected by 31 December 2027 and could serve as a reference for Member States to fine-

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<sup>(1)</sup> [Health & Environmental Value of Seafood – Market Advisory Council](#)

tune their consumption advice on fish. As regards the recommendations for future assessments, please be informed that:

- In accordance with Council Regulation (EEC) No 315/93 <sup>(2)</sup>, the EU sets maximum levels (MLs) for food contaminants only when a risk assessment by EFSA – based on occurrence, consumption, and exposure data – confirms that the presence of a certain contaminant in food can cause health risks.
- As regards mercury, after EFSA concluded in its 2012 opinion <sup>(3)</sup> that mercury exposure is of concern, MLs for mercury in food, including in fish, have been established in the Annex to Regulation (EU) 2023/915 <sup>(4)</sup>, on the basis of occurrence data and following the ‘As Low As Reasonably Achievable’ principle, when following good practices at all steps of the production chain.
- Once new occurrence data become available indicating a possible need to revise the MLs for a contaminant such as mercury, discussions with Member States are taking place to decide whether such revision needs to be initiated. Please be informed that the MLs for mercury in fish were revised in 2022.
- Should the upcoming risk-benefit assessment on fish consumption suggest a need to revisit EFSA risk assessment on mercury in food, DG SANTE may request an updated EFSA opinion, incorporating any new consumption data following revised national consumption advice; regulatory action would then depend on whether EFSA confirms mercury exposure to be of concern.

We are committed to working closely with the MAC and other relevant stakeholders to address the issues raised in this advice. Should you have further questions, please contact Ms Julia Rubeck, our Advisory Councils coordinator, via the functional mailbox [MARE-AC@ec.europa.eu](mailto:MARE-AC@ec.europa.eu).

Yours sincerely,

Charlina VITCHEVA

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<sup>(2)</sup> <http://data.europa.eu/eli/reg/1993/315/oj>

<sup>(3)</sup> <https://doi.org/10.2903/j.efsa.2012.2985>

<sup>(4)</sup> <http://data.europa.eu/eli/reg/2023/915/oj>