

## Heavy metal risk in marine animals and seafood consumed in Asturias

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### INTRODUCTION & AIM

Marine organisms tend to accumulate heavy metals in their tissues (Jeziarska & Witeska, 2006), making them one of the main sources of heavy metals exposure for the population (Sorsa et al., 2016)

Nowadays, the Commission Regulation (EU) 2023/915 established the legal maximum levels for heavy metals in food. Also, international organizations, such as the World Health Organization (WHO) determined the maximum quantity of a contaminant that can be ingested without posing any risk to human health

The aim was to assess the potential health risk of heavy metal ingestion for consumers in Asturias due to seafood consumption

### METHODOLOGY

Google Scholar and Web of Science were chosen as the primary engines for our literature search

Key words employed: “Arsenic”, “Asturias”, “Cadmium”, “Cantabric”, “Crustacean”, “Fish”, “Heavy Metals”, “Lead”, “Mercury”, “Mollusk”, “Seafood”, “Shellfish”, and “Trace Metals”

If no index was originally used in the article, TWI was calculated as a general health index in accordance with the recommendations made by EFSA

### RESULTS



### CONCLUSIONS

The european eel (*Anguilla anguilla*) was the most contaminated fish

The mussel (*Mytilus galloprovincialis*) was the most polluted shellfish

Salmonids seems the safest seafood options available for consumption

Overall, seafood marketed in Asturias could be considered safe to eat regarding heavy metal contamination

### REFERENCES

EUR-Lex (2023). Commission Regulation (EU) 2023/915 on maximum levels for certain contaminants in food and repealing Regulation (EC) No 1881/2006. *Official Journal of the European Union*, L119/103. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32023R0915>. Accessed 15 January 2025

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