

Review of: "A Literature Review on the Levels of Toxic Metals/Metalloids in Meat and Meat Products in Asian Countries: Human Health Risks"

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The topic addressed by the review is undoubtedly of interest in the context of public health. Heavy metals and metalloids are among the most toxic environmental pollutants, so reducing their presence in the environment and avoiding exposure through food is necessary to reduce the health risks for exposed people. This review makes a good effort to elucidate the risk of exposure to heavy metals and metalloids by consuming red meat and its derivatives.

Some aspects could improve the introduction of the document, such as mentioning the maximum recommended intake for red meat and its derivatives or the average per capita intake/consumption of red meat in Asian countries.

The manuscript is generally very descriptive, including aspects that could have been reduced or avoided. According to the wording and description of the identified studies, heavy metals and metalloids were identified in multiple foods, not only red meat, which makes it difficult to identify the real problem associated with the consumption of red meat and its derivatives. Focusing on heavy metals and metalloid concentrations determined in red meat and red meat products could be better.

The section on methodologies for detecting heavy metals and metalloids could be eliminated or complemented by including more technical details, potential detection limits, or which technique is recommended or presents better results for detecting heavy metals and metalloids in meat, etc. The strategy(ies) used in the studies can complement the information presented in Table 1.

A recommendation is to mention in more detail about the search period—was it 2000-2024? What were the inclusion and exclusion criteria for the studies? How many documents were identified, and how many were finally included? What percentage of studies were identified per country?

Finally, the discussion should better highlight the maximum recommended intake levels for heavy metals and metalloids, how the consumption of red meat and their derivatives could exceed these levels (how much should be consumed), in which country or countries there is more risk, and which products should be limited in the diet.