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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Potential competing interests: No potential competing interests to declare.

This systematic review submitted for publication refers to the recent scientific literature on human exposure to metals and metalloids through the consumption of meat and meat products, focusing mainly on toxic metals and metalloids such as As, Cd, Hg, and Pb. According to PubMed and Scopus, Asia is the continent for which the most data have been reported since 2000, with China specifically being the country with the highest number of available papers on the topic of the present review.

Therefore, this review has focused only on Asian countries such as China, Bangladesh, India, Thailand, Iran, Korea, Saudi Arabia, Taiwan, Kurdistan, Pakistan, Iraq, and Armenia. As he expected, the concentrations of metals and metalloids in meat and meat products and the estimated intake derived from that consumption have shown notable differences among regions and countries. He pointed out that organic pollutants in meat and meat products are not, at least in Asian countries, one of the most relevant food groups contributing to human dietary exposure to toxic metals and metalloids.

The present article was aimed at reviewing the scientific data regarding the concentrations in meat and meat products - consumed in Asian countries - of various toxic metals/metalloids: As, Cd, Hg, and Pb, but also other elements with potential (mainly carcinogenic) health risks (Cr(VI) and Ni). The author reviewed the intake of these elements derived from meat and meat products has also been reviewed.

He points out that Asia is the continent for which more information on this topic has been published in the current century, with China being the country with the most available studies found in the scientific literature (databases PubMed and Scopus). The studies reviewed here correspond to several Asian regions and countries. As could be expected, important differences in the levels of metals/metalloids in meat and meat products have been observed. These differences depend on various factors, not only the specific country/region and the specific areas of sampling in each region/country but also the dietary habits of the different groups of the population. Logically, the highest values were found in those areas that are environmentally polluted by some specific element.

All scientific data are clearly presented by the authors. The table is well organized and clearly presents results.

A significant amount of references sustains the study presentation.

English is very good.

This manuscript is quite clearly written, presenting all available data and analytical methods described in previously reviewed and published articles. All the above data are supported by relevant references available in the databases cited in this review paper.

There is no part of this review in which all relevant and available references are not listed. All the mentioned data are described in detail, with a clear explanation.

The subject itself is interesting for the audience of the journal.

In my opinion, this review manuscript may be published in the presented form.