

Review of: "Concentrations of Polychlorinated Naphthalenes in Food and Human Dietary Exposure: A Review of the Scientific Literature"

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Potential competing interests: No potential competing interests to declare.

The review manuscript under consideration falls short in delivering new insights or substantial updates when compared to Domingo's earlier work from 2004. A considerable portion of the content appears redundant, echoing information that has already been presented in past publications. This repetition limits the value of the review, as it neither advances our understanding of polychlorinated naphthalenes (PCNs) nor brings any fresh perspectives to the table. A review is expected to synthesize the latest research, provide new interpretations, or at the very least, update the audience with recent developments. Unfortunately, this manuscript does not meet these expectations.

One significant shortcoming is the challenge in comparing results across different studies due to notable variations in methodologies. This lack of standardization complicates efforts to draw reliable conclusions from the reviewed data. Moreover, the conclusion that dietary exposure to PCNs poses minimal health risks lacks depth, particularly given the absence of a thorough risk analysis that accounts for regional variations in PCN levels. The review predominantly focuses on studies from certain regions, such as China and Korea, failing to provide a balanced, global perspective on PCN research.

Additionally, the review heavily relies on outdated references, neglecting to incorporate more recent studies or relevant new data. This oversight weakens the credibility and relevance of the review. The discussion of the potential health implications of PCN exposure is superficial, especially concerning vulnerable populations. Despite highlighting the scarcity of data on human dietary intake of PCNs, the review does not adequately address this research gap or propose future research directions to fill it.

The conclusions presented are overly broad and do not accurately reflect the nuances of the data. This generalization could lead to misleading implications regarding the safety of dietary exposure to PCNs. For future reviews to be more impactful, it is crucial to address these deficiencies. A comprehensive and nuanced assessment of the risks associated with PCNs is needed, taking into account the latest research findings, standardizing methodologies, considering regional differences, and focusing on vulnerable populations. By addressing these gaps, future reviews could provide a more robust and reliable evaluation of the health risks related to PCN exposure.