

Peer Review

Review of: "PFC/PFAS Concentrations in Human Milk and Infant Exposure Through Lactation: A Comprehensive Review of the Scientific Literature"

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The article summarizes a series of data retrieved from the scientific literature, using the PubMed and Scopus databases, regarding PFAS concentrations in the breast milk of women not occupationally exposed. Where available, the estimated daily intake of these compounds by breastfed infants was also considered. Results are categorized by continent and country/region and show substantial variability in PFAS concentrations, influenced by geographic location, sampling year, and the specific PFAS analyzed. Among the compounds identified, PFOS and PFOA are the most commonly detected, along with PFHxS and PFNA, which are the only PFASs with regulated maximum levels in some food products.

The topic addressed is interesting and important as it compares available data from 4 continents (Asia, Europe, America, Africa). The Introduction and Research Strategy are clear and well explained. As for the data and studies reviewed, there are a lot of them, so they make reading the text tiring. The data for some areas are given in tables, which also contain a lot of text, so perhaps they could be summarized and presented differently so that the differences between geographical areas jump out at you. For example, the "Occurrence/concentrations of PFOS and PFOA" column could be divided into 2 columns reporting the concentrations of the 2 analytes separately, indicating a single unit of measurement in the table header, so that only numbers are present within the table. Only the most frequently found PFASs in the scientific literature could be included in the table, perhaps naming only those more rarely examined in the text. In the "Daily intakes of PFCs/PFAS through milk by breastfeeding infants" column, sub-columns could be created with individual PFASs, reporting for

each study only the value found. "References" are clearer if reported as Table 1 (and not Table 2), and a column could be added indicating the year of sampling.

Graphs could also be used to represent the data collected. For example, for each PFAS examined, box plots could be used to show the median, minimum, and maximum values found in different geographic areas of the same continent and box plots comparing the total data from the 4 continents. Trends over the years of PFAS levels in the same geographic area could be depicted with histograms.

Declarations

Potential competing interests: No potential competing interests to declare.