



## **The impacts of pesticide use in food production as a potential bioaccumulator in breast milk**

### **Os impactos da utilização de agrotóxicos na produção de alimentos como potencial bioacumulador no leite materno**

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#### **ABSTRACT**

The ingestion of food contaminated by pesticides enables several pathologies in humans, such as mainly the bioaccumulation of agrochemicals in breast milk, which highlights a scenario of extreme concern, since these products have a high potential to induce genetic disorders not only in the mother, but also to the baby through breastfeeding. The purpose of this literature review is to highlight the toxicological action that the use of pesticides in agricultural crops provides to newborns through breastfeeding. The methodology used was based on 15 scientific articles, which were found through a search with a filter for the English language and the Boolean operator "AND", being carried out on the Scientific Library Online (SciELO) and PubMed digital platforms, using the descriptors indexed in DeCS / MeSH: Milk human; Agrochemicals; Bioaccumulation; Poisoning. The references were filtered by selecting those published between 2015 and 2023. In view of the results obtained, pesticides that use organochlorines in their composition, such as glyphosate, for example, stand out, which confer easy absorption through the skin. After absorption, the substances can diffuse between membranes and accumulate in organs with high levels of fat, such as breast tissue, mainly. Thus, milk from lactating women promotes the exposure of newborns to these toxicological substances, which can stimulate the development of cancer, leukemia, lymphoma, and brain tumor, followed by the impairment of the immune system. This situation becomes even more alarming because breast milk is the only food that provides the essential nutrients for infant growth, causing not only the pathologies mentioned above but also a series of chronic psychomotor disorders. In conclusion, it can be inferred that the use of pesticides in crops causes a series of permanent and neoplastic disorders to newborns, thus impairing healthy child development.

**Keywords:** Breast milk, Agricultural pesticides, Bioaccumulation, Chronic intoxication.