



## Liver damage from ethylene glycol poisoning in dogs

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Food products for animal purposes do not normally contain such a compound presented as ethylene glycol, because unlike propylene glycol that can be used by animal and human food industries, monoethylene glycol, because it is toxic, cannot be used for food purposes, because when ingested it causes liver damage and kidney failure, which can lead to the death of the animal in more serious cases. Mystery of Agriculture, Livestock and Supply (MAPA) identified changes in dog treat products in São Paulo in 2022 and in 9 other countries. As a result, two lots that had propylene glycol contaminated with Monoethylene glycol (AD5035C22 and AD4055C21) were withdrawn from the market. Aiming to alert companies and the population about the consumption of groceries with the ethylene glycol compound, being excessively toxic and lethal. The ethanediol composition is an antifreeze liquid used in automotive fluids, which can affect the gastrointestinal system, kidneys and brain. This is an extremely dangerous material with a very narrow safety margin and extremely serious and rapidly evolving poisoning. This is a literature review, which used as electronic databases: Scielo, e-Scientia, Embrapa Research Center and Revsalus. The search resulted in 10 articles, 5 of which were published between 2017 and 2022. In the present study, it was identified that MOG (monoethylene glycol) are polyalcohols toxic to humans and animals, with a lethal dose of 786 milligrams of ethylene glycol per kilo, and when metabolized in the liver, it can generate other compounds such as hydroxyethoxy-acetaldehyde and 2-hydroxy-acetic acid. Its intoxication occurs in three stages and in cases of large ingestion it can cause convulsions, paralysis, and cause the animal to be in a coma or to die. In the face of research carried out after February 7, 2022, 40 animal deaths were recorded after eating snacks for animals, thus interrupting their production, with this and great care and attention to ensure that the animal does not consume products with the presented compound. Keywords: intoxication, Ethylene glycol, toxic, industry and lethal.

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