

ABSTRACT

Oral Acute Toxicity Study of Guar Gum Powder in Rats (*Rattus novergicus*) “Literature Review”

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Guar gum, a polysaccharide derived from the guar plant (*Cyamopsis tetragoloba*) contains galactomannan and is widely applied for use as an antidiabetic agent, food substitution, and weight loss. However, guar gum also contains toxic compounds including globulin, fluoroacetate, and nutrient absorption inhibitors such as trypsin inhibitors, hemagglutinin, saponins and polyphenols. Therefore, it is necessary to do a toxicity test to ensure the safety of guar gum during use in the community. The method used is a scoping review using 8 databases including Science Direct or Elsevier, SAGE Journals, Pubmed.gov, Oxford, EFSA Journal, Springer, J-Stage and Google Scholar. From the results of the review obtained LD₅₀ guar gum data in rats between 420 to 10000 mg/kgBB per day, it can be concluded that guar gum is not acutely toxic to rats.

Keywords : Guar gum, Toxicity test , LD₅₀, Rats