

Poster



Assessment of the Subchronic Toxicity of *Salicornia ramosissima* Extract in Rats Over a 90-Day Period

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ABSTRACT

Lifestyle behaviours have been shown to influence the risk of stroke. Polyphenol-rich diet or the use of polyphenol-containing supplements are suggested as a potential strategy for stroke prevention, by improving lipid profiles, blood pressure, insulin resistance and systemic inflammation. In this context, *Salicornia ramosissima*, or glasswort, is a halophyte found along the Mediterranean and Atlantic coast that have been reported to exert a benefit in flies and mice animal models of stroke. Moreover, *Salicornia* extracts have been shown to be safe in healthy volunteers at short term, and to modulate several vascular parameters in patients after suffering a transient ischaemic attack. These positive results encourage further research to develop effective food supplements for the prevention or treatment of neurovascular disorders, particularly stroke. However, its use cannot be fully recognized without comprehensive biosafety studies. Therefore, a subchronic 90-days toxicity study was conducted following EFSA guidelines. A total of 80 Wistar rats (40 males and 40 females) were randomly assigned to three different doses of *Salicornia* extract or placebo. Animals were monitored for clinical symptoms as well as for food and water consumption. At the end of the study, the animals were sacrificed and blood samples were collected for haematological analysis. In addition, the organs were dissected and processed for histological analysis. The results obtained showed no signs of toxicity at the clinical, biochemical or histological levels at any dose, supporting the safety of this extract for future clinical studies.

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