

## Investigating Different Types of Cinnamon in Iran with Attention to Its Toxicity and Contamination

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### **Abstract**

**Introduction:** The present research is a resource-based retrospective study with reference to conducted studies and the results of the cinnamon study by referring to various foods and attaries (groceries) factories such as Golha, Bartar, Yekoyek, and Hati Kara companies in Iran has been answered to the questions related to probable toxicity of cinnamon.

**Methods and results:** In this study, which is both a research and library study for this research topic, referring to sites, articles, journals, and various search engines including Science Direct and Google Scholar and SCOPUS, provide necessary information in regard to cinnamon types, cinnamon history, Cinnamon advantages and disadvantages, types of cinnamon ingredients, were found to be the cause of the toxicity of the probable types of cinnamon, and the results obtained that were related to the subject. According to the obtained data, it was found that cinnamomum zeylanicum bloom (Cinnamomum verum J. Presl) is less common (0-486 mg/kg) and (190 mg/kg) also it is known as a good cinnamon for cinnamon cassia (Chinese) (Cinnamomum aromaticum Nees or Cinnamomum cassia (L) J. Presl) (coumarin is between 40 and 12180 mg / kg in the sample) and 700 mg/kg, and in Iran, abundance, import and use of cinnamon zeylanicum (Ceylon) is more than the other.

**Conclusions:** According to obtain results, it was not proved camarin hepatic toxicity among the whole population and highest sensitivity was observed among people with previous hepatic disease, its daily use (permissible use on a daily basis is 1.5 mg/kg). With regard to this fact that in Iran, cinnamon as is used a flavoring of food and medicine, and the frequency of more Indian cinnamon (Ceylon , zeylanicum) than other cats in market due to higher quality. It can be concluded that with the max daily usage is (for a person body weight 60 kg) 1.5 mg of comarin per day, humans may be exposed to its complications, and that in Iran cinnamon species, which is most commonly used for cinnamomum zeylanicum cinnamon food, medicine (diabetes, etc.) and in various industries, and that it is not possible to enter this amount of comarin per day through the use of cinnamon to the body, it can be said that Iran is not exposed to the (probable) toxic side effects.

**Keywords:** Cinnamon, Comarin, Toxicity, Contamination, Cinnamon Cassia, Cinnamon zeylanicum.