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Removing and detoxifying methods of patulin: A review

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#### ACCEPTED MANUSCRIPT

## 1 Removing and detoxifying methods of patulin: A review

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#### **Abstract:**

Patulin is a toxic metabolite produced by molds, which is often found in many fruits and their products. It poses a serious threat to human health due to eating the foods contaminated by patulin frequently. So it is very important for people to find an ideal method for removing or detoxifying patulin in foods. Physical, chemical, and biological methods have been widely studied to remove or degrade it. This article reviews the latest development in the removal and detoxification of patulin using physical, chemical, and biological methods, points out their disadvantages, summarizes the degradation products and their safety of patulin, and draws the degradation pathway of patulin. Presently, no any singular method is ideal in removing or detoxifying patulin in foods, and a combination of various methods may be the better choice. Meanwhile, more attention should be paid to developing the advanced detoxification equipments during exploring the detoxification methods of patulin.

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Keywords: Patulin; Detoxification method; Degradation product; Degradation pathway; Safety

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