

Viability of biological, physical and chemical detoxification treatments on Aflatoxin B1 from peanuts in the food chain

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Objectives

Evaluate the applicability of Aflatoxin B1 decontaminating methods in peanuts from a food industry perspective

1.1 million tonnes

of groundnuts were imported in Europe in 2018.

5.4%

market increase between 2014 and 2018.



77%

of the peanuts imported in Europe are re-exported to other European countries as such or processed.

The Netherlands

is the first importer of groundnuts in Europe. Nearly 70% of all their imported groundnuts are re-exported from the Netherlands.

3.3 Kg/year

are consumed in average per capita in Germany; the largest consuming country in Europe.



Source: CBI (2020) The European market potential for groundnuts

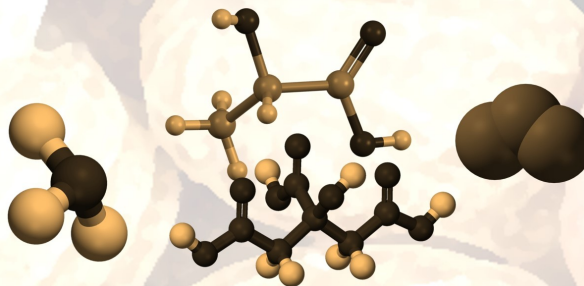
Biological methods

- Soil Bacteria
 - Fungi
- Lactic acid bacteria
 - Enzymes



Chemical methods

- Ammonia
- Lactic and citric acid
- Ozonation



Physical methods

- Heat treatment
- Irradiation
- Electrolyzed water
- Pulsed light



Conclusions



Some methods might affect the quality of the product, but there are interesting alternatives. Even so, there's a lack of reasons to see it as a worth investment.

