Food contagion by aflatoxins: a sociocultural perspective

O contágio alimentício pelas aflatoxinas: uma perspectiva sociocultural

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ABSTRACT

Aspergillus *fungi* are responsible for the production of substances called aflatoxins, represented mainly by subtype B1. These mycotoxins cause the contamination of grains, such as peanuts, corn and soybeans, industrialized food products and animal products. There are numerous causes of this problem, such as: the poor packaging of planting, harvesting and storage, poor access to technologies and information. In addition to offering great risk to food contamination, they also harm health, since they lead to acute, chronic poisoning and hepatocarcinoma. This literature review seeks to elucidate what are the sociocultural factors related to this food contamination by aflatoxins. We selected articles and books on gastroenterology and microbiology of greater relevance in the area studied from 1995 to 2022, in English and Portuguese, with the descriptors "aflatoxin" and "hepatocarcinoma" and combinations between them. The digital databases used to search for scientific articles were PubMed and SciELO. Poor packaging can involve two approaches: during planting and after harvest. In planting, factors such as improper handling of the crop and environmental control of the plantations put the integrity of the grains at risk. Whereas, after harvesting, improper storage and transportation also predispose to this fungal contamination. It is evident that the lack of access to information about this risk and appropriate technologies for cultivation and stock, as well as prevention measures, a fact that occurs mainly in developing countries, favor this chain of contagion. It is concluded, from this theme, that the gaps in knowledge about aflatoxins, techniques and technologies offer, with food contamination, risks to public health, since such substances are present in most of the world's agricultural production and are highly carcinogenic, with a great relationship with the emergence of hepatocellular carcinoma, which intensifies with the scarcity of adequate information on prevention of contamination.

Keywords: Aflatoxins; *Aspergillus*; Public health; Food contamination.