

Title Mycotoxin menace and peoples' access to healthy and safe food in India
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Abstract

Mycotoxins are gaining importance due to their deleterious effects on human and animal health. They occur frequently in the tropics because of high temperature, moisture, unseasonal rains and flash floods which further enhance fungal proliferation and mycotoxin production. The prevalence and level of human exposure to mycotoxins in India is alarming. The chronic health risks are particularly prevalent in India where the diets are highly prone to mycotoxigenic fungi and mycotoxins due to poor harvesting practices, improper storage and transport. For the past three decades, several disease outbreaks due to mycotoxins were reported in the country wherein poultry, cattle and humans had lost their lives. The involvement of mycotoxins, especially incidence of aflatoxins and ergot alkaloids are much higher in these outbreaks than the fumonisins and trichothecenes (T-2, DON). Disease outbreaks due to mycotoxins continue to be problems of significant public health importance in the country. India has a staggering human population of more than 1 billion, of whom nearly 40% live below the poverty line. It is very difficult to imagine their access to completely safe and toxin-free food since people are forced to consume less expensive, poor quality food grains because of their poor purchasing ability. Mycotoxin contamination may develop as a result of fungal action before and after harvest and also during storage. The task ahead is challenging, particularly in highly populated parts of the world. Therefore, the strict control of food quality is necessary to avoid such disease outbreaks.