



The Effects of Mycotoxins on Human and Animal Health—a Special Focus on the Cellular and Molecular Mechanisms Responsible for Mycotoxin Toxicity

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Message from the Guest Editors

Mycotoxins are secondary metabolites synthesized mainly by fungi belonging to the *Aspergillus*, *Fusarium* and *Penicillium* genera.

The contamination of cereals and agricultural products by mycotoxins may lead to a variety of adverse health effects, ranging from acute to chronic toxicity, with serious health implications for both humans and animals.

Mycotoxins' toxic effects are characterized by lesions in target organs such as the liver and kidneys and in the pulmonary, intestinal, immune and central nervous systems, which can vary according to the type of toxin, time of exposure, mycotoxin concentration, animal species, sex etc.

At the cellular level, many processes such as apoptosis, genotoxicity, oxidative stress and inflammation have been described as being responsible for the effects of mycotoxins. However, more research is needed in order to explain the molecular mechanisms involved in mycotoxin toxicity.





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