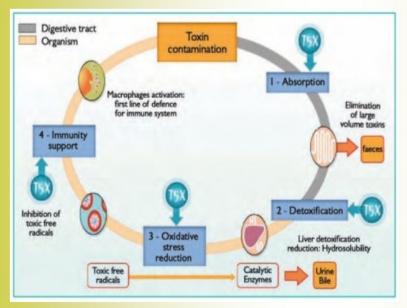
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DETERMINATION AND EVALUATION OF MYCOTOXINS IN FOOD, NEEDS OR NECESSARY?



Introduction: Mycotoxins are secondary metabolites of molds that have adverse effects on humans, animals, and crops that result in illnesses and economic losses. A.flatoxins, ochratoxins, trichothecenes, zearalenone, fumonisins, tremorgenic toxins, and ergot alkaloids are the mycotoxins of greatest agro-economic importance. Mycotoxins can be classified as hepatotoxins, nephrotoxins, neurotoxins, immunotoxins, and so forth. Cell biologists put them into generic groups such as teratogens, mutagens, carcinogens, and allergens. Exposure to mycotoxins is mostly by ingestion, but also occurs by the dermal and inhalation routes. The diseases caused by exposure to mycotoxins are known as mycotoxicoses. All mycotoxins are low-molecular-weight natural products (i.e., small molecules) produced as secondary metabolites by filamentous fungi. Mycotoxins usually enter the body via ingestion of contaminated foods, but inhalation of toxigenic spores and direct dermal contact are also important routes. Aims of the study was to elaborate the importance of determination and examination of mycotoxins in food in R.Macedonia.





Material and methods: The rapid methods for detection and measurement of mycotoxins are ELISA, LFD, FPIA and others. They are basic methods for evaluations of mycotoxins in food.

Conclusion: Quality assurance of data generated is highly important to reference laboratories monitoring cereals in food or feed, as inaccurate results could have dire consequences for public health or the economy.