

COMPETITIVE ELISA FOR AFLATOXINS AND OCHRATOXINS DETECTION

M. BADEA¹ M. MUNTEANU¹ L. LAZORIEC¹
G. COMAN¹ P. RESTANI²

Abstract. *Mycotoxins have attracted worldwide attention because of their impact on humans and animals health.*

The most frequent toxigenic fungi in Europe are Aspergillus, Penicillium and Fusarium species. They produce aflatoxin B1 transformed into aflatoxin M1 found in the milk, as well as Ochratoxins and Zearalenone. These mycotoxins are under continuous survey in Europe, but the regulatory aspects still need to be set up and/or harmonised at European level.

Direct competitive ELISA was used for aflatoxin M1 and ochratoxin A detection from reference and real samples (milk, coffee). Calibration curves were plotted and limits of quantification were calculated. A recovery degree of 98.66% was obtained for spiked sample (coffee).

Key words: *aflatoxins, ochratoxins, ELISA, milk, coffee*

¹Transilvania University of Brasov, Faculty of Medicine, Romania

²University of Milan, Dept. of Pharmacological Sciences, Italy