A SURVEY OF CITRININ AND OCHRATOXIN A IN FOOD AND FEED IN BELGIUM

C. MEERPOEL1,2, A. VIDAL1, Y. BAS1, B. HUYBRECHTS3, E. TANGNI3, M. DEVREESE2, S. CROUBELS2 and S. DE SAEGER1

1 Department of Bioanalysis, Centre of Excellence in Mycotoxicology and Public Health, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium
2 Department of Pharmacology, Toxicology and Biochemistry, Faculty of Veterinary Medicine, Ghent University, Merebeke, Belgium
3 Chemical and Physical Health Risks, Organic Contaminants and Additives, Sciensano, Tervuren, Belgium

* Corresponding author: Celine.Meerpoel@UGent.be

Introduction

CITRIRISK PROJECT: Sources of CIT
Toxicity, Toxicokinetics? Risks?

Material and methods

Sample prep*
4 g of sample
10 mL acidified H2O
20 mL organic extraction solvent (ACN)
1 h extraction
No CHERIS salts
Salting out
Evaporation of 1 mL of upper layer
Reconstituted sample
LC-MS/MS analysis

*Small modifications per matrix

Results

CIT and OTA are frequently detected in food and feed from the Belgian market.

Uncertainties
Livestock is exposed: carry-over to edible tissue?
CIT contamination not regulated*: maximum allowed concentration?
*Except for RYR: 2 mg/kg
Link with nephrotoxicity: public health hazard?

Use of results
• Selection of a higher number of samples of the main contaminated food groups.
• Investigate risk of contaminated feed for animal health.
• Performance of a risk assessment by using occurrence and toxicokinetic data: exposure assessment and risk characterization for both Belgian population and pig and poultry sector.

Acknowledgements
This research was funded by the Belgian Federal Public Service of Health, Food Chain Safety and Environment through the contract R7.6/030 CITRIRISK.

Contact
Celine.Meerpoel@UGent.be

Universiteit Gent
@ugent
Ghent University

Acknowledgements
This research was funded by the Belgian Federal Public Service of Health, Food Chain Safety and Environment through the contract R7.6/030 CITRIRISK.

Contact
Celine.Meerpoel@UGent.be

Universiteit Gent
@ugent
Ghent University

© University of Ghent