

Research program IZS VE 14/13

**Mycotoxins fate in my kitchen: what happens to mycotoxins when cooking pasta or polenta?
Analyses of mycotoxins residues and an evaluation of consumers exposure to mycotoxins derived
from cereal-based traditional Italian food commodities**

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Among several agricultural commodities which may be contaminated by mycotoxins, wheat and maize represent the most important source of cereals in Europe. In Italy, in particular, these cereals are the basis for the production of the most typical and popular food commodities represented by: pasta, bread and (in some areas like Regione Veneto) polenta.

The objectives of this project are the evaluation of consumers exposure to mycotoxins ingested via traditional Italian cereal-based food commodities, starting from the of the contamination of wheat four, maize flour, and pasta by Deoxynilvalenol (DON), Aflatoxins (AF), Fumonisins (FB), Zearalenon (ZEA) and Ochatoxin A (OTA) both in the product present in the market and after typical cooking or preparation processes.

In particular we intend to evaluate the effect of cooking on the mycotoxins contamination of pasta, polenta as it would occur everyday in a typical Italian kitchen. The final purpose is an evaluation of a probable exposure of the population to these contaminants through these materials and the possible benefits of the food processing as a basic strategy of detoxification of food before ingestion.