



## Estimation of dietary intakes of fumonisins B<sub>1</sub> and B<sub>2</sub> from conventional and organic corn

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### Abstract

The dietary intakes of fumonisins from 60 samples of conventional and organic corn were assessed. A 13.3% of the conventional corn samples contained fumonisin B<sub>1</sub> and B<sub>2</sub> at mean levels of 43 and 22 ng/g, respectively, while 10% of the organic corn samples contained fumonisins at somewhat lower levels of 35 ng/g (FB<sub>1</sub>) and 19 ng/g (FB<sub>2</sub>). Overall, the fumonisin levels in the corn samples were much lower than the maximum level of 2000 ng/g (as the sum of FB<sub>1</sub> and FB<sub>2</sub>) proposed for unprocessed maize in a recent EU regulation. The fumonisins present in conventional and organic maize are estimated to contribute with very low percentages of 0.21% and 0.17%, respectively, to the level considered at risk for human health. Based on the data exposed in this paper, the farming system is probably not of decisive importance for the final contamination of agricultural products with these mycotoxins.

**Keywords** Fumonisins; Organic corn; Daily intakes