Infants and children are especially vulnerable to mycotoxin exposure, mostly because of a lower detoxification capacity, rapid growth and high intake of food and water per kg body weight.

**Key insights**

The four main mycotoxins that influence human health are the aflatoxins, fumonisins, deoxynivalenol and zearalenone. These compounds are thought to alter the cellular and biochemical functions of the intestine, resulting in micronutrient deficiencies, systemic immune activation and impaired nutrient uptake. In Africa, the majority of the population are subsistence farmers who grow, store and prepare their own staple foods. Consequently, a large proportion of infants and young children receive these staple foods that are contaminated with mycotoxins.

**Current knowledge**

Regardless of high exposure levels and the burden of mycotoxins on the health economics of various low-income countries, mycotoxins have been largely overlooked from a public health perspective. Thus, knowledge of the effects of food-borne mycotoxins on the growth and health of infants and young children is critical for overcoming this public health challenge.

**Practical implications**

Results from aflatoxin studies indicate that this toxin can cross the placenta and is present in the umbilical cord and in breast milk. Furthermore, there are seasonal differences in the levels of aflatoxin in cord blood and breast milk. Due to low breastfeeding rates across Africa, there was a significant association between weaning status and aflatoxin exposure levels. Higher aflatoxin exposure (both in utero and in early life) was strongly associated with stunting and/or underweight. Children with fumonisin intakes exceeding the provisional maximum tolerable daily intake were significantly shorter and lighter. Very little is known about the effects of deoxynivalenol and zearalenone on childhood growth and development.

**Recommended reading**