



Position paper on T2 /HT2 in oats and oat products

Through its Oat Millers Committee (OMC), CEEREAL represents the oat milling industry in the EU, in particular in the UK, Ireland, Germany, Denmark, Sweden and Finland.

This paper presents the OMC's positions and concerns in relation to the ongoing discussion on T2 and HT2 toxins in oats, oat products.

We fully support the Commission's and Council's work in assessing the situation with regards to T2 and HT2 in oats and oat products and offer our assistance.

However, there are a number of issues that we feel need to be addressed prior to being able to judge on the necessity and appropriateness of setting maximum levels for T2/HT2.

A priority has to be placed on the **avoidance of the formation** of T2 and HT2 in the field. Therefore the farming community has to be provided with a **manual of good agricultural practices**, as the current EU recommendation on the prevention and reduction of fusarium toxins in cereals is not applicable for T2 and HT2 in oats. In addition, advice on biodiversity protection from Environment bodies is contradictory and may in fact cancel out other risk prevention advice.

We also believe that there should be a **thorough risk-benefit assessment** which takes into account the proven benefits of the consumption of oat products.

Other important points of concern include:

- There still is a **shortage of scientific data**
- **No rapid analysis** test method yet exists
- The consumer's exposure to T2 and HT2 and the **risk for the consumer** has still been **insufficiently assessed**

→ If at some point of the discussion the experts come to the conclusion that risk management of T2 and HT2 requires maximum limits, we could support an **entry level for raw oats and a second level for the finished product**.

→ In this case, however, a **consistent link between the two** is essential taking into account established reduction rates of T2 and HT2 from raw oats to the finished product.

Review of current knowledge

T2 and HT2 toxins in oat products

The Oat Millers Committee of CEEREAL will continue to gather data on the incidence and levels of T2/HT2 in oats and oat products and to share this knowledge appropriately from time to time. We will also, where practical, offer our support to those projects aimed at understanding the causes of these toxins in cereals and especially in oats, and in that way encourage the formation of practices and arrangements that reduce the level of incidence and therefore risk.

- That data shows that low levels are found in oat flakes and oat meal but high levels in oat by-products.
- Oats are affected by different Fusarium fungi with a different biology and toxin production; in addition, the time and mechanism of infection are unknown.
- Processing substantially reduces T2 and HT2 levels in oat products for human consumption
 - A first reduction occurs during harvest and delivery cleaning
 - A second reduction occurs during sorting and sieving at the mill
 - De-hulling further decreases the levels: with a significant reduction observed at high levels, while there is a lower reduction at low levels.
 - Sorted cleaning of de-hulled oats – it has been observed that the discoloured fraction is higher in T2-HT2

Summary of CEEREAL-OMC T2-HT2 study in oats

Aim & Scope:

Evaluation of the level of T2/HT2 in oat flakes, oats and oat by-products.

- Distribution of T2/HT2 in raw oats, oat flakes and by-products
- Reduction rate in oats, oat flakes and by-products
- Level of T2/HT2 in flakes of different origin
- From 2005 – 2008 crops

Study layout:

Analysis of over 1.000 samples over 3 years with samples originating from mills in the UK (45%), Germany (45%), Finland and Ireland

Method of analysis: LC-MS/MS - **Laboratory:** Gesellschaft für Bioanalytik GmbH

Sampling protocol: based on EU Regulation 401/2006

First results have been presented during the 5th Fusarium Forum in Jan 2008. A follow-up presentation will be given at the 6th Fusarium Forum in February 2009.

CEEREAL/OMC. December 2008.