Conclusions - Annex A to TOX/2025/26

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83. The COT has been asked by the FSA and FSS to assess the risk to the UK population to T-2 and HT-2 statement from consumption of oat, wheat, barley and products thereof.

84. Based on the data received through the FSA and FSS call for evidence, chronic exposures to oats (combined) at the 97.5th percentile consumption rate were of toxicological concern in infants and toddlers, while exposures in children and vegetarians were undesirable but unlikely to result in health concerns. Chronic mean exposures and all acute exposures were not of toxicological concern. This is in line with the COT's conclusion on the risk of T-2 and HT-2 in the infant diet (COT, 2018). Based on a 2015 mycotoxin survey of oat-based products (FSA, 2015), acute exposures were all below the EFSA group

ARfD and therefore not of toxicological concern, while for chronic exposures the EFSA group TDI was exceeded. Hence, an effect on health could not be entirely excluded. This conclusion relates to the information described under “Oats combined and all processed grains” (paragraphs 68-70).

85. Chronic exposures from RTE foods suggest a significant concern to consumer health, especially in infants and toddlers, however also for some foods in adults and vegetarians, mainly oat porridge. While acute exposures in adults, especially vegetarians were undesirable, exceedances of the ARfD for infants and toddlers were of potential concern, if they were to occur at the levels reported. However, the estimated exposures were based on very limited data and were subject to a high degree of uncertainty. In addition, samples on sum of T-2 and HT-2 were only available for infant foods, for all other foods samples either T-2 (only) or HT-2 (only) were available. This conclusion relates to the information described under “Ready to Eat (RTE) foods” (paragraphs 71-78).

86. The exposure estimates from RTE foods are significantly higher than exposure estimates from processed oat grains, unprocessed oat grains, or all processed grains (oats combined, wheat, and barley grains). It is unclear why this is the case and may have been influenced by several factors and uncertainties in the data:

a) in terms of year-to-year variability, it was not possible to link the submitted data on RTE foods to an identifiably ‘bad’ year for T-2 and HT-2 levels,

b) the relatively small data set and use of mean and maximum occurrence values,

c) the assessment of individual mycotoxins rather than the sum; and,

d) RTE foods potentially being targeted samples for reports of high occurrence levels.

This conclusion relates to the information described under “Ready to Eat (RTE) foods” (paragraph 78).

87. The COT noted that industry testing from raw commodities to RTE foods, or more generally on finished products, would be useful to provide a more comprehensive dataset and more reliable exposure assessment. This conclusion relates to the information described under “Ready to Eat (RTE) foods” (paragraph 78).

88. Exposures to processed grains were based on a commodity approach and calculated by using the median across the occurrence data, while exposures to RTE foods, due to the limited number of samples, were calculated on a food-by-food basis and mean and maximum occurrence level. RTE foods only provide a very limited snapshot of exposures to final food products and direct comparison to exposures from all grains was therefore not possible. The analytical method used may further add to the uncertainties in the exposures from RTE foods, where a low level/non-detect was determined to be below LOQ, the LOQ was used as the occurrence level to estimate exposures. As some methods may not have been sensitive enough, with high LOQs this would have resulted in relatively high "occurrence levels". Using the mean and max as well as individual mycotoxins, rather than the sum of T-2 and HT-2 added further uncertainties. The large exceedances of the TDI that have been derived from RTE foods (22, 26, 70-fold) only occur when using the maximum occurrence with the 97.5^{th} percentile consumption rate. As such, it is unlikely that a consumer would be exposed to this level chronically. The mean occurrence level combined with the mean consumption rate would most likely be a more realistic exposure scenario with exposure estimates being lower, indicating a lower risk. This conclusion relates to the information described under "Ready to Eat (RTE) foods" (paragraphs 71-78).

89. While year-to-year variability of T-2 and HT-2 occurrence in cereal grains (as shown in Figure 2) may potentially affect acute exposures due to hot spots or a particularly bad year leading to occasional high exposures, chronic exposures to the sum of T-2 and HT-2 from grains were calculated on a commodity basis. Consumption was modelled based on all foods containing the grains and occurrence was calculated at the LB and UB median. Therefore, these were the most representative estimates of chronic exposure. This conclusion relates to the information described under "Methodology" (paragraphs 42-46).

90. Overall, based on the occurrence data provided via the call for evidence for processed grains (oat, barley and wheat) and the limited number of RTE foods, a health concern arising from chronic exposures, especially for infants and toddlers cannot be excluded. However, given all the uncertainties, the estimated exposures for RTE foods may not be reliable and not representative of RTE foods. To confirm this, the Committee recommended the acquisition of a larger dataset for the sum of T-2 and HT-2 in RTE foods. This conclusion relates to the information described under the sections "Risk characterisation" (paragraphs 64-78) and "Uncertainties and assumptions" (paragraphs 79-82).

Secretariat

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