Background

In this guide

1. The mycotoxins T-2 and HT-2 were previously assessed by the Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT) in 2018 (COT, 2018) and 2021 (COT, 2021), reviewing their presence in the diet of infants and young children and the potential implications of combined mycotoxin exposure, respectively. The assessment in 2018 was based on a 2015 survey of mycotoxins in oat-based products (FSA, 2015). Estimated overall chronic dietary exposure to T-2 and HT-2 from consumption of oats and oat-based products was below the tolerable daily intake (TDI) for all age groups ranging from 4 months to adults aged 19 years and above, including high level consumers. The results of this survey, therefore, did not indicate a risk to consumer health from T-2 and HT-2 exposures. The COT was, however, unable to complete a risk assessment on the potential risk(s) from combined exposure to mycotoxins, mainly due to the lack of information on co-occurrence in food (COT, 2021).

2. In 2020, the European Commission (EC) proposed establishing maximum levels (MLs) for the mycotoxins T-2 and HT-2 in foods. These were lower than levels previously set out in the European Commission Recommendation 2013/165/EU. Following the proposal, MLs came into force in the European Union (EU) on the 1st of July 2024. These MLs were established for the sum of T-2 and HT-2 toxins only. MLs were not established for modified forms of T-2 and HT-2 (such as neosolaniol (NEO) or 4,15-diacetoxyscirpenol (DAS)) due to limited occurrence data and the absence of a suitable routine method available for their analysis. In light of the new EU MLs, the COT was asked by the Food Standards Agency (FSA) to assess the level of risk to UK consumers from dietary exposure to T-2 and HT-2 mycotoxins only.

3. As part of this work, in February 2023, the COT considered "the existing health-based guidance values (HBGVs) for T-2 and HT-2 mycotoxins set by the European Food Safety Authority (EFSA) and the Joint FAO/WHO Expert Committee on Food Additives (JECFA)" (TOX/2023/04). Following consideration of the evidence base for both evaluations the COT remained content, based on the scientific evidence, to align with the HBGVs derived by EFSA in 2017.

4. To assist the COT with the new assessment of the risk to UK consumers of T-2 and HT-2 from food, the FSA and Food Standards Scotland (FSS) undertook a call for evidence from July 2023 to October 2023. While T-2 and HT-2 have been detected in products of animal origin (POAO), probably due to contamination of feed (EFSA, 2017b), the EU has not introduced MLs for POAO and the FSA/FSS did not include occurrence data for meat and dairy products in its call for evidence. In line with the new European MLs for T-2 and HT-2, the data call focussed on the collection of occurrence data for T-2 and HT-2 from the cereals supply chain, from field level to ready to eat (RTE) food products. The EU did not establish MLs for these due to limited occurrence data and the absence of a suitable routine method available for their analysis. Modified forms of T-2 and HT-2 (such as NEO or DAS) were not included in the call for evidence and are not considered here. A discussion paper focussing on exposure to T-2 and HT-2 was presented to the COT in July 2024 (TOX/2024/24) and in March 2025 (TOX/2025/14) following feedback from the Committee.

5. This statement discusses the risk associated with exposure to T-2 and HT-2 mycotoxins in food, focussing on exposure from consumption of cereal grains and, where data were available, products thereof, i.e. foods prepared from recipes containing cereal grains.