Background

In this guide

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This is a paper for discussion. This does not represent the views of the Committee and should not be cited.

1. The mycotoxins T-2 and HT-2 were previously assessed by the Committee on the 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.

2. In 2020, the European Commission (EC) proposed establishing maximum levels (ML) for the mycotoxins T-2 and HT-2 in foods, which were lower than the current indicative levels set out in the European Commission Recommendation 2013/165/EU. Following the proposal, maximum legislative levels came into force in the European Union (EU) on the 1st of July 2024. These maximum levels were established for the sum of T-2 and HT-2 toxins only. Maximum levels were not established for the 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.

3. In light of the new maximum levels proposed, the COT was asked by the Food Standards Agency (FSA) to assess the risk to UK consumers from T-2 and HT-2 in foods. As part of this work, the COT considered “the existing health-based guidance values (HBGVs) for T2 and HT2 mycotoxins set by the European Food Safety Authority (EFSA) and the Joint FAO/WHO Expert Committee on Food Additives (JECFA)” in February 2023 (TOX/2023/04). At that time, only the summary and conclusions of JECFA’s 93rd meeting in 2022 were publicly available , and did not include the complete toxicological dataset used for their risk assessment. At this meeting however, JECFA established a new group acute reference dose (ARfD) for T-2, HT-2 and DAS of 0.32 µg/kg bw, and also a group Tolerable Daily Intake (TDI) of 0.025 µg/kg bw for T-2, HT-2 and DAS, alone or in combination.

4. The COT noted that these HBGVs were broadly in line with EFSA’s health-based guidance values (HBGVs) which were established in 2017 (a group ARfD of 0.3 µg/kg bw for T-2, HT-2 and NEO and a group TDI of 0.02 µg/kg bw for T-2 (x 1), HT-2 (x 1) and NEO (x 0.3)). Overall, the COT was content to continue applying EFSA’s HBGVs for future risk assessments.

5. To assist the COT with the assessment of the risk 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. Following the call for evidence, a scoping paper was discussed at the COT meeting in July 2024 (TOX/2024/24). Due to the significant uncertainties in the preliminary exposure assessment, the Committee was unable to conclude on the possible risk of any exceedances of the HBGVs. This discussion paper provides an updated exposure assessment taking into consideration the comments and suggestions by the Committee.

6. In addition to the updated exposure assessment, annual time-trend analysis has been provided to visualise how levels of the sum of T-2 and HT-2 in cereal grains have varied across successive years.