

References - Risk Assessment of T-2 and HT-2 mycotoxins in Food

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Bates, B.; Lennox, A.; Prentice, A.; Bates, C.; Page, P.; Nicholson, S.; Swan, G. (2014) National Diet and Nutrition Survey Results from Years 1, 2, 3 and 4 (combined) of the Rolling Programme (2008/2009 - 2011/2012) [Main heading \(publishing.service.gov.uk\)](#).

Bates, B.; Cox, L.; Nicholson, S.; Page, P.; Prentice, A.; Steer, T.; Swan, G. (2016) National Diet and Nutrition Survey Results from Years 5 and 6 (combined) of the Rolling Programme (2012/2013 - 2013/2014) [Main heading \(publishing.service.gov.uk\)](#).

Bates, B.; Collins, D.; Jones, K.; Page, P.; Roberts, C.; Steer, T.; Swan, G. (2020) National Diet and Nutrition Survey Results from years 9, 10 and 11 (combined) of the Rolling Programme (2016/2017 to 2018/2019). [National Diet and Nutrition Survey \(publishing.service.gov.uk\)](#).

COT (2018) Statement of T-2 toxin (T2), HT-2 toxin (HT2) and neosolaniol (NEO) in the diet of infants aged 0 to 12 months and children aged 1 to 5 years. [cotstatement-t2ht2andneosolaniol.pdf \(food.gov.uk\)](#).

COT (2021) Statement on the potential risk(s) of combined exposure to mycotoxins. [Combined exposure to mycotoxins report \(food.gov.uk\)](https://www.food.gov.uk/news/news-detail/1044).

Croucher D. (2023) United Kingdom Oat Supply in the context of the Food Standards Agency / Food Standards Scotland Call for Data on T-2 and HT-2 Toxins. A Science & Evidence Based Review including additional data on UK Milling Barely. Confidential.

EFSA (2011a) Scientific Opinion on the risks for animal and public health related to the presence of T2 and HT2 toxin in food and feed. EFSA Journal **9(12)**: 2481. [T-2 and HT-2 toxins in food and feed | EFSA \(europa.eu\)](https://efsa.europa.eu/en/efsajournal/doc/2481).

EFSA (2011b) Use of BMDS and PROAST software packages by EFSA Scientific Panels and Units for applying the Benchmark Dose (BMD) approach in risk assessment. EN-113. pp190. [Use of BMDS and PROAST software packages by EFSA Scientific Panels and Units for applying the Benchmark Dose \(BMD\) approach in risk assessment | EFSA \(europa.eu\)](https://efsa.europa.eu/en/efsajournal/doc/2481).

EFSA (2017a) Appropriateness to set a group health based guidance value for T2 and HT2 toxin and its modified forms. EFSA Journal **51(1)**: 4655. [Appropriateness to set a group health based guidance value for T2 and HT2 toxin and its modified forms | EFSA \(europa.eu\)](https://efsa.europa.eu/en/efsajournal/doc/4655).

EFSA (2017b) Update: use of the benchmark dose approach in risk assessment. EFSA Journal **15(1)**: 4658. [Update: use of the benchmark dose approach in risk assessment - - 2017 - EFSA Journal - Wiley Online Library](https://onlinelibrary.wiley.com/doi/10.1002/efsa.2017.15.issue-1).

FAO/WHO (2001) WHO Food Additive Series: 47. Safety evaluation of certain mycotoxins in food. [T-2 AND HT-2 TOXINS \(JECFA 47, 2001\) \(inchem.org\)](https://www.inchem.org/documents/jecfa/jecmono/v47/jecfa47.htm).

Gordon G. (1985) Ipecacuanha induced emesis in the treatment of self-poisoned adults. Archives of Emergency Medicine **2**: 203-208.

JECFA (2022) Summary of Conclusions of 93rd meeting of JECFA [93rd Joint FAO/WHO Expert Committee on Food Additives \(JECFA\) - Food additives. Summary and conclusions. 2022](https://www.fao.org/food/additives-and-chemicals/93rd-joint-fao-who-expert-committee-on-food-additives-jecfa-2022).

JECFA (2023) Evaluation of certain contaminants in food: ninety-third report of the Joint FAO/WHO Expert Committee on Food Additives. [Evaluation of certain contaminants in food: ninety-third report of the Joint FAO/WHO Expert Committee on Food Additives](https://www.fao.org/food/additives-and-chemicals/93rd-joint-fao-who-expert-committee-on-food-additives-jecfa-2023).

Nathanail A.V., Varga E., Meng-Reiterer J., *et al.* (2015) Metabolism of the Fusarium Mycotoxins T-2 Toxin and HT-2 Toxin in Wheat. *J. Agric. Food Chem.* **63**: 7862–7872.

Percie du Sert N., Holmes A.M., Wallis R., *et al.* (2012) Predicting the emetic liability of novel chemical entities: a comparative study. *British Journal of Pharmacology* **165**: 1848-1867.

Pfeiffer R.L., Swanson S.P. & Buck W.B, (1988) Metabolism of T-2 toxin in rats - effects of dose, route, and time. *Journal of Agricultural and Food Chemistry*, **36**: 1227-1232.

Rafai P., Tuboly S., Bata A., *et al.* (1995a) Effect of various levels of T2 toxin in the immune system of growing pigs. *Vet. Rec.* **136**: 511-514 [Effect of various levels of T-2 toxin in the immune system of growing pigs - PubMed \(nih.gov\)](#).

Rafai P., Bata A., Vanyi A., *et al.* (1995b) Effect of various levels of T2 toxin on the clinical status, performance and metabolism of growing pigs. *Vet. Rec.* **136**: 485-489.

Rahman S., Sharma A.K., Singh N.D., *et al.* (2014) Clinico-haematological changes in T2 toxicosis in Wistar rats. *Indian Journal of Veterinary Pathology.* **38**: 22-28. <http://dx.doi.org/10.5958/0973-970X.2014.01129.8>

Roberts, C.; Steer, T.; Maplethorpe, N.; Cox, L.; Meadows, S.; Page, P.; Nicholson, S.; Swan, G. (2018) National Diet and Nutrition Survey Results from Years 7 and 8 (combined) of the Rolling Programme (2014/2015 – 2015/2016) [National Diet and Nutrition Survey \(publishing.service.gov.uk\)](#).

SCF (2002) Opinion of the Scientific Committee on Food on Fusarium toxins.

Part 6: Group evaluation of T2 toxin, HT2 toxin, nivalenol and deoxynivalenol. [Opinion of the Scientific Committee on Food on Fusarium toxins. Part 6: Group evaluation of T-2 toxin, HT-2 toxin, Nivaleno... \(europa.eu\)](#).

Wu W., Zhou H., Bursian S.J., *et al.* (2016) Emetic responses to T2 toxin, HT2 toxin and emetine correspond to plasma elevations of peptide YY3-36 and 5-hydroxytryptamine. *Archives of Toxicology.* **90**: 997-1007. [Emetic responses to T-2 toxin, HT-2 toxin and emetine correspond to plasma elevations of peptide YY3-36 and 5-hydroxytryptamine - PubMed \(nih.gov\)](#).

Zhang F., Wang L., Yang Z-H., *et al.* (2006) Value of mink vomit model in study of anti-emetic drugs. *World J. Gastroenterol.* **12(8)**: 1300-1302.