Exposure - Citrinin

In this guide

65. Exposure to CIT was determined for women of child-bearing age (16-49 years), using consumption data from the National Diet and Nutrition Survey (NDNS) and occurrence data from the 2014 total diet study (TDS) (Bates et al., 2014, 2016, 2020; Roberts et al., 2018, FSA, 2014).

66. Occurrence data from all food samples analysed for CIT were below the limit of quantification (LOQ) and the exposures calculated are based on the lower bound (LB) and upper bound (UB) values. As the LB is zero for a commodity, it cannot be determined whether a commodity makes a contribution to the overall exposure.

67. Table 1 shows the estimated chronic exposure to CIT. Exposure estimates are presented as the LB and UB of the mean and 97.5th percentile exposures.

68. Mean total exposure to CIT for women of child-bearing age ranges from 0-17 ng/kg bw/day, whilst exposure in high consumers (97.5th percentile) ranges from 0-43 ng/kg bw/day. The food groups with the highest UB values are tea with a mean value of 6.2 ng/kg bw/day and a 97.5th percentile value of 23 ng/kg bw/day; instant coffee with mean value of 2.6 and 97.5th percentile value of 17 ng/kg bw/day; wine with mean value of 1.0 ng/kg bw/day, and 97.5th percentile value of 6.5 ng/kg bw/day.

Table 1: Estimated exposure (in ng/kg bw/day) to CIT from foods consumed by women of childbearing age (16-49 years) using data from the total diet study (Bates et al., 2014, 2016, 2020; Roberts et al., 2018). Exposure shown is as LB to UB.

Food Groups	**Exposure to CIT (ng/kg bw/day) *** **Mean**	**Exposure to CIT (ng/kg bw/day) *** **97.5th percentile**
Alcopops and cocktails	0-0.2	0-1.7
Alternatives to milk	0-0.1	0-0.7
Beer	0-0.7	0-9.4
Branded food drinks	0-0.2	0-2.2
Brown bread	0-0.1	0-0.6
Cider	0-0.3	0-2.9
Cocoa, drinking chocolate	0	0-0.2
Dried fruit	0	0-0.3
Dried pulses	0	0
Fruit juices and vegetable juices	0-0.8	0-4.5
Ground coffee	0-0.1	0-0.3

Herbs and spices	0-0.1	0-0.7
Instant coffee	0-2.6	0-17
Misc cereals Breakfast cereals	0-0.3	0-1.5
Misc cereals Buns cakes and pastries	0-0.3	0-1.5
Misc cereals Chocolate biscuits	0	0-0.4
Misc cereals FLOUR	0	0-0.4
Misc cereals Other cereal products	0-0.1	0-1.4
Misc cereals PASTA	0-0.9	0-3.7
Misc cereals Pizza	0-0.3	0-2.7
Misc cereals RICE	0-0.6	0-3.1
Misc cereals Savoury biscuits	0-0.1	0-0.5
Misc cereals sweet biscuits	0-17	0-0.8
Nuts	0-0.1	0-0.6
Other bread	0-0.3	0-1.6

Snacks	0-0.2	0-1.2
Takeaway Tea	0	0
Takeaway coffee	0-0.2	0-2.0
Tea	0-6.2	0-23
White sliced bread	0-0.4	0-1.8
White unsliced bread	0-0.4	0-1.8
Wholemeal and granary bread	0-0.5	0-2.2
Wine	0-1.0	0-6.5
Total	0-0.7	0-43

*Rounded to 2 significant figures and shown as LB to UB.

LB= Lower bound UB= Upper bound.

69. The carryover of CIT into animal products which is discussed in paragraph 7 is not included in the exposure assessment and would not be expected to significantly add to the exposure under normal, non-experimental, circumstances.