

COMMITTEE ON TOXICITY OF CHEMICALS IN FOOD, CONSUMER PRODUCTS AND THE ENVIRONMENT

Overarching statement on the potential risks from contaminants in the diet of infants aged 0 to 12 months and children aged 1 to 5 years: lay summary

The Committee on Toxicity (COT) was asked by the Scientific Advisory Committee on Nutrition (SACN) to review the risk of toxicity from chemicals in the diets of infants (aged 0 to 12 months) and young children (age 1 to 5 years). The reviews will identify new evidence that has emerged since the Government's recommendations were formulated and will appraise that evidence to determine whether the advice should be revised.

The COT identified a number of chemicals in 2015¹, which may be present in the diets of infants and young children and for which advice may be needed. The following statement discusses the conclusions of the COT regarding a number of these chemicals:

- **Alcohol:** In the absence of any more recent information, the COT confirmed its previous advice for breastfeeding women to not drink more than 1 or 2 units of alcohol once or twice a week. As children aged 0 to 5 years would not be consuming alcohol directly, the current statement does not require any further assessment in this age group.
- **Caffeine:** In the absence of any more recent information, the COT confirmed its previous advice for pregnant and breastfeeding women to consume less than 200 mg caffeine per day. As children aged 1 to 5 years would not be expected to be consuming high-caffeine beverages no further assessment for this age group is required.
- **Food additives:** Food additives are regulated under EU law and therefore outside the remit of the COT.
- **Legacy chemicals:** The COT concluded, in line with the 2012 overarching statement, that there is no indication of concern for human health at present levels of these chemicals in the diet of infants and young children. It was also noted that levels of these chemicals are expected to decline further over time.
- **Soya phytoestrogens:** In the absence of any more recent information, the COT concluded that uncertainties remain about the safety of soya-based formula in infants and young children, and that in the absence of medical needs, soya-based formula should be used only in exceptional circumstances and under medical supervision.
- **Vitamin A:** Following its update in 2017, the COT concluded that the possibility of adverse effects cannot be excluded in high consumers, primarily those who regularly eat liver. However, if effects did occur it would be in a

¹ <https://cot.food.gov.uk/sites/default/files/TOX2015-32%20Feeding%20Review%20Scoping%20Paper.pdf>

small proportion of consumers. The COT found no scientific basis for a change in current Government advice, including the recommendation that infants over 6 months of age should not have more than one portion of liver per week.

- Trans fatty acids: SACN is currently reviewing saturated fat, including information on how intakes of trans fatty acids are changing over time. No advice from COT is currently needed.
- Perchlorate: In the absence of any recent UK-specific data, the COT based its assessment on a recent evaluation by the European Food Safety Authority (EFSA). The chronic and short-term exposures for all age groups of infants and young children are of potential concern, particularly in the case of those with mild to moderate iodine deficiency.
- Chlorate: In the absence of any recent UK-specific data, the COT based its assessment on a recent evaluation by EFSA. Chronic dietary exposure is of potential concern to high consumers in all age groups of infants and young children, particularly to those individuals with mild to moderate iodine deficiency. Single acute exposure to chlorate at levels found in food and drinking water are unlikely to cause adverse effects, including in vulnerable individuals.
- Furan: The exposures in the diet of infants and young children are of potential concern to human health. However, the COT acknowledges that its assessment is based on worst case assumptions. There have been efforts to reduce concentrations of furan (and methylfurans) in food and such efforts should therefore continue.
- Chromium: The COT concluded that the estimated dietary exposures of infants and young children do not indicate excessive chromium intake and are not of toxicological concern. Similarly, environmental exposures from dust, soil and air are not of toxicological concern.
- Selenium: The COT concluded that the dietary exposure from breastmilk or other foods in infants and young children are unlikely to be of toxicological concern.
- Zinc: The COT concluded that the estimated dietary exposures do not indicate excessive zinc intake and are unlikely to be of toxicological concern. The COT however noted, that all health based guidance values (HBGVs) and upper level (UL) are derived from adults, making it difficult to identify a HBGV or UL that is applicable for all age groups of infants and children.

Chemicals identified for review and not included in this statement have been or will be subject to a full review or will be published in a subsequent addendum to the overarching statement at a later date. The remaining chemicals are listed in Annex 1 of the overarching statement.

The full COT statement can be found here:

<https://cot.food.gov.uk/sites/default/files/cotoverarchingstatement.pdf>

Lay Summary to COT statement 2019/02