



## **Committee on the Toxicity of Chemicals in Food, Consumer Products and the Environment**

### **Statement on the Safety of Ginger Supplement Use in Pregnancy: Lay Summary**

1. In 2019 the Scientific Advisory Committee on Nutrition (SACN) agreed to conduct a risk assessment on nutrition and maternal health focusing on maternal outcomes during pregnancy, childbirth and up to 24 months after delivery; this would include the effects of chemical contaminants and excess nutrients in the diet. To support this, the Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT) were asked to review the risks of toxicity from chemicals in the maternal diet.

2. In May 2021, the COT considered the potential effects of ginger and ginger supplements during pregnancy and lactation and reviewed the available data on toxicity to the mother, effects on the development of the fetus or embryo, and possible interactions with drugs, as well as data on potential exposure to ginger.

3. Ginger (*Zingiber officinale*) is a flowering tropical plant originating in Southeast Asia. Ginger is commonly consumed as a spice in food or as a supplement. It is taken as fresh root, dried root powder and capsule (encapsulated dried powder) forms, as a liquid extract, preserved in syrup or sugar, and as a tea.

4. Ginger is growing in popularity as a natural remedy as it has been reported to modify the immune system to help the body respond to illness, and also to alleviate motion sickness and post-operative nausea and vomiting. Consuming ginger is one

of the ways suggested by the NHS and NICE guidelines that might alleviate mild to moderate nausea and vomiting in pregnancy. It has also been used as a dietary supplement and a traditional remedy in many cultures for this and other purposes.

5. Several ginger supplements are commercially available, with varying amounts of ginger. In addition to this, concentrated ginger shots (liquid form), containing large amounts of pressed ginger, are becoming increasingly popular. The differences in composition of these supplements add uncertainty to estimates of the amount of ginger being consumed.

6. Members noted that although different ginger extracts were not comparable across animal studies, there was some indication from these of undesirable effects in the early stages of pregnancy at high doses. It was stressed that in general there was no indication of toxicity in pregnant women and the fetus from the use of ginger in the diet as food. The lack of safety and toxicological information available on ginger use in pregnancy overall make it difficult to fully characterise the risks in this respect.

7. Generally, consumption of ginger in a traditional culinary manner within a diet is not considered a health concern. The Committee noted that from the evidence presented, the potential for contamination of ginger with heavy metals and/or mycotoxins cannot be excluded.

8. The COT concluded that there is no evidence to support changing the current NHS advice to pregnant women. This suggests that eating foods or drinks containing ginger might ease symptoms of morning sickness and states that during pregnancy a person should check with a pharmacist before taking ginger supplements.