

# Introduction and Questions

## Introduction

1. As part of the current programme of work on the maternal diet, the Committee considered the use of dietary supplements during pregnancy. A scoping paper ([TOX/2020/51](#)) was presented, reviewing the commonly used dietary supplements during pregnancy. These were supplements that were not officially recommended by the relevant authorities, but which were promoted by anecdotal evidence and unofficial sources as having various purported benefits. The review was confined to herbal dietary supplements which would be regulated under food law, and which would not be considered to be traditional herbal medicines which are the responsibility of the Medicines and Healthcare Products Regulatory Agency (MHRA). Following this review, the COT agreed ginger required further investigation, noting that human, animal and *in vitro* data were available.
2. In May 2021, the Committee considered the potential effects of ginger and ginger supplements during pregnancy and lactation. Paper [TOX/2021/26](#) (Available on the COT website) reviewed the available data on toxicity to the mother, effects on the development of the foetus or embryo, and possible interactions with drugs as well as data on potential exposure.
3. Overall, it was concluded that there were limited data. The human data presented were not strongly indicative of any toxicological concern but there were some indications of possible adverse effects and a lot of uncertainties. Ginger did not appear to be systemically toxic but did appear to have reprotoxic effects at high supplemental doses. The Committee suggested looking at the animal data in closer detail to determine the point of departure (No Observed Adverse Effect Level - NOAEL), followed by calculating the potential exposure to supplements to determine whether there was cause for concern.
4. Paper [TOX/2021/51](#) provided further information with respect to animal studies, contaminants and exposure to ginger supplements, primarily centred on the effect of ginger on prostaglandins, reproductive and developmental toxicity and the possible contaminants present in ginger.

5. The members noted that although the different ginger extracts were not comparable, they did appear to exhibit some biological activity in the early stages of pregnancy. It was reiterated that there was no indication of general systemic toxicity from the use of ginger.

6. A draft statement was considered in July 2022 ([TOX/2022/42](#)), drawing on the information provided in the previous discussion papers to form an overall conclusion on the safety of the use of ginger and in particular ginger supplements in the maternal diet.

7. The current statement includes additional studies identified by the COT to further inform the available database, with regard to the possible influence of ginger components on cyclooxygenase (COX) and prostaglandin activity. A summary of all the studies considered has also been tabulated in Annex B for reference.

## **Questions for the Committee**

i. Does the additional information provided change the final conclusion of the statement?

ii. Does the information provided on red ginger need to be considered and incorporated into this statement?

iii. Does the committee have any further comments on the content and structure of this statement?

**Secretariat**

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