Background and Introduction

In this guide

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This is a discussion paper. It does not reflect the views of the Committee. It should not be cited.

Background

1. In March 2025, the French Agency for Food, Environmental and Occupational Health and Safety (ANSES) published an opinion on their assessment of adverse reactions to the consumption of food supplements containing *Garcinia cambogia* (*G. cambogia*) (document in French). Their official webpage provided an overview and advised consumers to not consume food supplements containing *G. cambogia*.

2. Currently in the United Kingdom (UK), there are no safe levels or set limits established for the use of *G. cambogia* in food and drinks, including food supplements. In response to the ANSES review, the Food Standards Agency (FSA) and Food Standards Scotland (FSS) requests the Committee on Toxicity of Chemicals found in Food, Consumer Products and the Environment (COT) to perform a review of the opinion published by ANSES and assess the risk(s) associated with consumption of *Garcinia cambogia* in food supplements. In addition, the Committee is also requested to consider whether a safe level or maximum limit of *G. cambogia* for use in food and drink, including food supplements can be derived based on the current available data.

3. Points of consideration include:

i. What is the maximum dietary level of *G. cambogia* that can be added to/used in food and drink, including food supplements, to be consumed daily without appreciable health risk?

ii. Is there a link between consumption of food, drinks and food supplements, containing *G. cambogia* and adverse effects on health?

iii. What are possible subgroups of the general population that are more vulnerable or more sensitive to the adverse effects caused by *G. cambogia*?

4. The Secretariat has summarised the information presented in the ANSES Opinion from paragraph 17-92, as well as collated information from other regulatory authorities. The translation of the ANSES Opinion is attached as Annex A and B of this paper. It should be noted that the translation is not an official ANSES translation and was commissioned by the FSA for FSA use.

5. A literature search was carried out using the search string "Garcinia cambogia" AND "toxicity" in PubMed, Science Direct and Google Scholar. No filters or restrictions were used.

Introduction

6. The genus *Garcinia*, native to Asia and Africa, belongs to the *Clusiaceae* family and includes more than 300 species, such as *G. cambogia*. Various therapeutic effects have been attributed to this genus including anti-obesity, anti-ulcerogenic, antioxidant, anti-diabetes, anti-fungal, anti-inflammatory and anti-neoplastic (Chuah *et al*., 2013). The fruit has been consumed as a tea in Ayurvedic medicine for inflammation and stomach complaints, while the fruit rind has a history of traditional use as a food ingredient and preservative.

7. The European Novel Food List does not consider G. *cambogia* as a novel food; however, advises that other legislation may restrict the placing on the market as a food in the EU or in some Member States (EC, 2023).

8. The UK Medicines and Healthcare products Regulatory Agency (MHRA) deems that products containing *G. cambogia* are not classed as medicinal provided that they contain the whole herb and not the extract; hydroxycitric acid (HCA). While the whole herb is not regarded as medicinal and is known to have common food uses, when HCA is extracted from the herb its concentration will greatly exceed that found in the natural fruit and it is regarded as a medicinal substance with a known ability to modify physiological functions.

9. This only applies to ingested products. Neither whole *G. cambogia* nor its HCA extract is known to be capable of exerting a pharmacological effect when used topically, for example in cosmetics.

10. It is important to note that not all *G. cambogia* extracts are created using the same manufacturing process or have the same HCA inclusion rate in the final product. The anti-obesity properties of *G. cambogia* have been attributed to HCA, which is present in the rind or epicarp of the fruit at 10-30% by weight. Extracts can contain between 20–60% HCA (Semwal *et al*., 2015; Jakopin, 2019). HCA is susceptible to lactonization during manufacturing (evaporation and concentration), as such in commercially available samples of *G. cambogia*, HCA is present as its calcium salt for stability (Jena *et al*., 2002).