

## **SUMMARY PAPER**

### **SUMMARY OF THE ACNFP'S CONCLUSION ON THE TRADITIONAL FOOD NOTIFICATION FOR COFFEA LEAVES (*Coffea arabica* and *Coffea canephora*)**

#### **Background**

At the 139th meeting of the Advisory Committee on Novel Foods and Processes (ACNFP) the traditional food from a third country notification dossier for *Coffea* leaves (*Coffea arabica* and *Coffea canephora*) was considered. These are the leaves of the *Coffea* plants used to produce coffee beans. Traditionally they have been handpicked from the plants and used to brew a tea in countries such as Ethiopia. In some cases, herbs, spices and milk are added to give sustenance to the drink.

The applicant is seeking authorisation for the herbal infusion made from coffee leaves to be drunk immediately after brewing, with or without added spices, herbs and or milk; and as an herbal infusion ingredient in other beverages to be used immediately as an ingredient after brewing. The summary of the application can be found on the [Commission's website](#).

The advice of the Committee to the Food Standards Agency is summarised below. Please note the Committee did not consider any potential health benefits from consuming the food as the focus of the novel food assessment is to ensure the food is safe, not misleading and not putting consumers at a nutritional disadvantage.

#### **The Committee's discussion**

##### Identity of the traditional food

The Committee recognised that some data had been provided to support use of fresh coffee leaves in a tea-like drink in third countries. The application lacked clarity as to the permissions sought and how these related to the traditional product. It was unclear whether the permission was for dried leaves to use as a tea or for a ready to drink product made from the *Coffea* leaf infused water. The applicant had indicated that 20g of *Coffea* leaves were used per litre of water, but it was unclear if this was similar to the traditional product.

##### Production Process

The Committee raised concerns over the processing and sorting of the leaves before their transport to Denmark, as this information was not included in the notification. The Committee noted that the moisture content of the leaves before transport was not provided and hence the Committee could not rule out the possibility of growth of moulds during transport to the factory. This raised concerns about the level of microbes and of potential mycotoxins in the leaves and whether these were effectively controlled.

The Committee noted that stability issues had not been taken into consideration in managing the production process. Members expressed the opinion that despite

pasteurisation being effective in minimising bacterial contamination, spores will survive this process and limit the shelf life of each batch of fresh leaves. It is important to measure the shelf life of the fresh leaves so that any risks can be properly assessed.

The Committee noted the information provided about coffee bean processing but concluded that leaf processing could not be directly compared to this. Coffee beans are fermented and roasted, altering the food safety risks, and therefore the controls needed.

### Compositional data

The Committee noted that the applicant had assessed parameters such as chlorogenic acid and caffeine concentrations. However, they suggested that a comparison of the level of these compounds in the product seeking authorisation, as consumed, with similar beverages like tea and coffee, would have helped to put this information in context.

The Committee raised concerns that the composition of the leaves had not been fully analysed. Of concern, were the level of antioxidants such as polyphenols extracted into the hot water. Levels of compounds such as mangiferin would need to be considered to understand any potential safety risks to be managed.

Members raised concerns that no consideration was given to ochratoxin. It was noted that this is present on coffee beans from traditional production processes and the potential of this to occur in or on the leaves needed to be considered.

The Committee commented that it was unclear whether the analyses provided were for the brew, or from the leaves and at what point of the process the samples had been taken.

### Specification

The Committee noted that the natural variability of the product, was not considered in detail in the notification. For instance, leaves from different provenances, different harvests, different ages and seasons should be considered to ensure that the specification reflects natural variability.

The Committee were unclear on the proportions of *Coffea canephora* and *Coffea arabica* that were being used in the coffee leaf blend or if they were used interchangeably. This should be stated together with whether the leaves are processed separately and then blended together or mixed before processing.

Members noted that while the company seeking authorisation did not use copper-based fungicides, these are commonly used in coffee production. As the authorisation would be generic, it would be important to ensure copper levels were appropriately controlled.

### Proposed conditions of use for the EU market

The Committee were unclear as to whether the notification was for leaves for brewing and drinking at home, or to produce a brew to be used as ingredient, or both. If the product is going to be used in both formats then information and analysis should be provided for both.

No information was provided about the products and /or beverages that the herbal infusion ingredient might be added to on the production line. This raised concerns as the Committee could not conclude whether the products and the level of exposure were safe.

Members were concerned that some form of intake exposure had not been calculated to understand the use of the product in the diet. For example, they would have liked to see information to put in context the exposure from this product compared to the wider cumulative consumption of compounds such as polyphenols in the diet.

The Committee noted that while the applicant had considered a maximum level of consumption based on the Chlorogenic Acid content, it was contextually inaccurate given individual's abilities to consume liquids. What is required is a statement of the exposure as the product is consumed and what this means for someone who drinks two cups of the product per day.

### **Consultation response**

The Committee noted the consultation response had provided information on the use of Coffea leaves as a tea-like drink in the coffee houses of Victorian London. This additional information indicated some consumption of coffea leaf tea but it is unclear if this represents a significant history of consumption. A separate process is available if the respondent would like to explore this further, but the information does not alter the Committee's assessment of the potential food safety risks conducted under the traditional food process.

### **Conclusion**

The Committee identified several areas of concern where further information and assessment would be required to provide reassurance that the Coffea leaf product could be used safely by the EU population. This was in part because it was unclear what products were seeking authorisation and how this/these compared to the traditional product.

Several potential risks from the production process needed to be explored further in order to provide reassurance that the product, as would be produced in the EU, was adequately controlled. However, the main issue for the Committee was ensuring the composition of the product as consumed, was appropriately specified including the polyphenol content in the context of the natural variability of plant-based products.