

CONSIDERATION BY THE ACNFP OF MORINGA STENOPETALA AS A TRADITIONAL FOOD FROM THIRD COUNTRIES

Background

At the 136th meeting of the Advisory Committee on Novel Foods and Processes (ACNFP), the traditional food from a third country notification dossier for *Moringa stenopetala* dried leaf powder was considered.

The product seeking authorisation is a powder obtained by washing and drying the leaves, then mechanically milling the dry leaves. The applicant claimed that products from *Moringa stenopetala* tree have been consumed in Ethiopia for over 25 years, and that the powder resembles that of *Moringa oleifera* species, with previous history of consumption in the EU and currently commercialised in powder form.

The applicant intends to market *Moringa stenopetala* leaf powder for use in the following categories: peeled, cut and shredded fruits and vegetables, dried fruits and vegetables, foods suitable for people intolerant to gluten and herbal and fruit infusions. The summary of the application can be viewed on the Commission website.

The Committee's discussion

The advice of the Committee to the Food Standards Agency is summarised below. Please note the Committee did not consider any potential health benefits or claims arising 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 made several general comments, including that the dossier lacked structure, and failed to follow the EFSA Guidance Document for traditional food authorisations. This made accessing the information provided for assessment difficult. It was noted that many of the resources that were presented were either not peer reviewed literature and/or did not address the areas for consideration in a safety assessment.

Additionally, members commented that the product seeking authorisation was not the food consumed traditionally but a “processed product derived from a traditional food”, and that the potential risks from exposure to concentrated components of the leaf were not explored. The dossier contains no evidence that *Moringa stenopetala* flour has been produced and consumed safely in Ethiopia; indeed, their own consultant's report states that this is a “new product”.

Members highlighted that the production process was not clearly described, which raised concerns as to how any authorised product would be produced to ensure EU standards. This, coupled with no analysis of the applicant's product, did not allow assessment of whether potential risks are managed effectively in the process. Members also suggested that clarification was needed on the acceptability under EU

regulations of using *Bacillus thuringiensis* for insecticidal and fungicidal purposes during cultivation.

The Committee pointed out that a product with a low water content, added to the UV treatment received, would reduce the potential microbiological risk. However, potential for fungal growth, highlighted in the supporting material, raised concerns about potential microbial risks. In particular, the development of mycotoxins and whether this would be managed in the proposed production process.

The Committee expressed significant concerns that the glycosides, flavonoids and antinutritional factors mentioned in the dossier could have adverse effects which were not explored. Some flavonoids are known to interact with medications commonly used in the EU, but this potential risk had not been investigated in the dossier.

Another substantial concern raised by the Committee was the information from the applicant describing the use of *Moringa stenopetala* dried leaf powder as a flocculant in water treatment. It apparently adsorbs heavy metals, including cadmium and lead, when in contact with contaminated water. Depending on the mechanism of action, members were concerned that the nature and quality of the water sources in which the leaves are washed during production might affect the concentrations of heavy metals in the final product.

The Committee noted that the applicant did not perform a literature review, thereby missing the opportunity to add to the understanding of the risks the food might pose. Members also commented that the applicant had not considered possible allergenicity risks which made assessment of this high protein food incomplete. In considering the intended use and intake, members considered that these were not clear and that, when suggesting potential uses, these had not been matched to European Union intake recommendations for their type of food.

Conclusions

The Committee identified several areas of concern where further information and assessment would be required to provide reassurance that *Moringa stenopetala* dried leaf powder could be used safely by the EU population. The Committee therefore considers there are clear safety concerns in relation to potential and unevaluated risks from concentrated chemicals within the leaf powder vs the leaf. The Committee also noted that the applicant did not perform a risk assessment with respect to the levels of glycosides and flavonoids in the leaf powder. The Committee noted that traditional use of *Moringa stenopetala* flour had not been established, and concluded that the information provided by the applicant was insufficient to demonstrate the safety of the product.