

SUBSTANTIAL EQUIVALENCE OPINION

Chia Seed (*Salvia hispanica*)

The Food Safety Authority of Ireland (FSAI) received an application in November of 2016 from Thirst Quenchers UK for an opinion on the substantial equivalence of their chia seed (*Salvia hispanica* L.) to chia seed already authorised as a novel food on the EU market. The novel chia seed is compared to chia seed authorised for the EU market by Commission Decision 2009/827/EC, Commission Implementing Decision 2013/50/EU and FSAI's authorisation letter of 2015 to Wow Food and Drinks Ltd.

The novel chia seed is grown in Central and South America and following harvesting is cleaned by mechanical means to remove any extraneous material, including metal, before packaging and storage. Using microbiological, organoleptic and nutritional indicators, the applicant determines that their chia seed is stable for at least 3 years under normal storage conditions. The production of fruit juice and fruit juice blends with added chia seed begins with the preparation of whole, mashed or ground chia seed which is pre-hydrated in water before addition to the beverages. The fruit juice or fruit juice blends with added chia seed are pasteurised before packaging in transparent containers.

Chia seed falls within the category of “*foods and food ingredients consisting of or isolated from plants and food ingredients isolated from animals, except for foods and food ingredients obtained by traditional propagating or breeding practices and having a history of safe food use*” as set out in *Article 1.2(e)* of the novel food Regulation (EC) No. 258/97.

Composition

The applicant demonstrates through batch test results that the composition of the novel Chia seed supplied from the manufacturers are substantially equivalent to the authorised comparator in terms of dry matter, protein, fat, carbohydrate, crude fibre and ash.

The applicant has also provided data on the relative levels of the different fats, minerals and vitamins present in the novel chia seeds, with no significant differences evident compared to the existing comparators.

Parameter	EU Specifications ^{a, b}	Novel chia seed
Dry Matter (%)	91 – 96	91 - 97
Protein (%)	20 – 22	19 – 24
Fat (%)	30 – 35	29 – 35
Carbohydrate (%)	25 – 41	25 – 41
Crude fibre (%)	18 – 30	18 – 33
Ash (%)	4 - 6	2 – 6

a: Commission Decision 2009/827/EC b: Commission Implementing Decision 2013/50/EU

Nutritional Value and Metabolism

The novel chia seed and the authorised comparator are compositionally very similar and therefore the nutritional value and metabolism of both products would not be expected to differ.

Intended Uses

The novel chia seed is to be used in the same food categories and at the same levels that are set out in Commission Decision 2009/827/EC, Commission Implementing Decision 2013/50/EU and the 2015 authorisation letter from the FSAI to Wow Food and Drinks Ltd. The food categories include bread products, baked products, breakfast cereals, fruit, nut and seed mixes, pre-packaged seed and fruit juices and fruit juice blends with added chia seed.

Level of Undesirable Substances

Batch analysis demonstrates satisfactory results for the presence of heavy metals (arsenic, cadmium, lead and mercury), pesticides, mycotoxins and possible microbial contaminants (yeasts/moulds, coliforms, *Staphylococcus aureus*, *Bacillus cereus*, *Salmonella*, *E. coli*. and *Enterobacteriaceae*).

Conclusions

The FSAI is satisfied from the information provided that chia seed marketed by Thirst Quenchers UK is substantially equivalent to chia seed authorised for the EU market by Commission Decision 2009/827/EC, Commission Implementing Decision 2013/50/EU and 2015 authorisation letter from the FSAI approving the use of chia seed added to fruit juices and fruit juice blends. The designation of the novel ingredient in foodstuffs will be “Chia (*Salvia hispanica*) seeds” in accordance with *Article 2* of Commission Implementing Decision 2013/50/EU. When the seed is sold in pre-packaged form, the consumer will be informed through the label that the daily intake of chia seed should not exceed 15 g per day.