

SUBSTANTIAL EQUIVALENCE OPINION

Chia Seed (*Salvia hispanica*)

The Food Safety Authority of Ireland (FSAI) received an application in February of 2017 from Beanworks Seeds & Grains of Belgium for an opinion on the substantial equivalence of their chia seed (*Salvia hispanica* L.) to chia seed already authorised for the EU market. The novel chia seed is grown in South America and Africa without the use of chemical pesticides, and for the purpose of this substantial equivalence opinion is compared to chia seed authorised for the EU market by Commission Decision 2009/827/EC and Commission Implementing Decision 2013/50/EU.

Composition

The results of batch testing demonstrate that the composition of the novel chia seed is substantially equivalent to the authorised comparator in terms of dry matter, protein, fat, carbohydrate, dietary fibre and ash. Any differences observed in these parameters are relatively minor and consistent with natural variation. In addition, the mineral content, fatty acid profiles and vitamin content of the novel ingredient have been compared to the authorised comparator and any differences recorded are again due to natural variation and will not have an impact on the nutritional value of the seeds.

Nutrient (%)	Authorised chia seed	Beanworks chia seed
Dry matter	91-96%	94.20 %
Protein	20-22%	16.54 %
Fat	30-35%	30.74 %
Carbohydrate	25-41%	42.12 %
Dietary Fibre	18-30%	34.40 %
Ash	4-6%	4.80%

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 that are set out in Commission Decision 2009/827/EC and Annex II of Commission Implementing Decision 2013/50/EU which includes bread ($\leq 5\%$), baked products ($\leq 10\%$), breakfast cereals ($\leq 10\%$), fruit, nut and seed mixes ($\leq 10\%$) and pre-packaged seed ($\leq 15\text{g/day}$).

Level of Undesirable Substances

The novel chia seed is grown in Uganda without the use of chemical pesticides and only rainwater for moisture. Satisfactory results are provided for seed batches tested for the presence of the heavy metals (arsenic, cadmium, mercury and lead). Results are also provided in relation to sample analysis for microbial contaminants (osmotolerant yeasts & moulds, *Staphylococcus aureus*, Coliforms, *Salmonella* and *Bacillus cereus*) and mycotoxins, with no concerns identified.

Conclusions

The FSAI is satisfied from the information provided by the applicant that chia seed to be marketed by Beanworks Seed and Grains of Belgium is substantially equivalent to chia seed authorised for the EU market by Commission Decision 2009/827/EC and Commission Implementing Decision 2013/50/EU. The designation of this novel ingredient in foodstuffs will be “Chia (*Salvia hispanica*) seeds” in accordance with Article 2 of Commission Implementing Decision 2013/50/EU. When 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.