

FSSAI includes new chia oil stds in amended food additive regulations

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FSSAI, the country's apex food regulator, has further amended the food additive regulation, issuing new standards for chia oil and its fatty acid composition through a draft notification. These regulations will be known as Food Safety and Standards (Food Products Standards and Food Additives) Amendment Regulations, 2018.

As per the draft notification, in the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, under Regulation 2.2 Fats, Oil and Fat Emulsions, after Clause 29, new standards for chia oil have been added.

Chia oil has been defined as the oil expressed from the clean and sound seeds of chia (*Salvia hispanica*) without the application of heat. It shall be clear of rancidity, suspended or other foreign matter, separated water, added colouring or flavouring substances and mineral oil.

The limit for refractive index at 40°C has been set between 1.470 and 1.480, whereas the Saponification value is between 185 and 199. The iodine and acid value for chia oil should not be less than 180 and 2mg KOH/g, respectively. The test for Argemone oil shall be negative, with unsaponifiable matter not more than 1.5 per cent.

Meanwhile, under Regulation 2.2.7, Table 1 covers the fatty acid composition of various vegetable oil as determined by gas-liquid chromatography (expressed as a percentage of the total fatty acids). With this draft notification, the fatty acid composition of chia oil has been added.

Fatty Acid	Chia Oil
C6.0	—
C8.0	—
C10.0	—
C12:0	—
C14:0	0.1 max
C16:0	6–8
C16:1	0.5 max
C17.0	—
C17.1	—
C18.0	3–4.5
C18.1	6-9
C18.2	17–22

C18:3	58–65
C20:0	0.5 max
C20:1	–
C20:2	–
C22:0	0.2 max
C22:1	–
C22:2	–
C24:0	–
C24:1	–

Commenting on FSSAI’s move, Susmita Chandra, pool scientist and faculty, Maulana Abul Kalam Azad University of Technology, West Bengal, said, “Chia oil is rich in omega-3 fatty acids, which are known to be responsible for various beneficial and protective effects against different health issues. Vegans might include chia oil as one of the important components of their food habits, as they lack omega-3s from sources like fish.”

“A large number of study suggests that omega-3 fatty acids can provide protection against cardiovascular diseases. The use of chia oil should be in a restricted pattern, because excess may impart high calories and reverse the health effects,” she added.

“The new regulatory draft from FSSAI which gives industrial definition of chia oil. In its fatty acid composition, the trans-fat content also separately needs to be mentioned at its limit, as there is always a chance to get a little amount of trans-fat during its production,” Chandra said.

Chia oil is gradually becoming a favourite choice of industry for different types of food product applications. Recipes for cakes, muffins, smoothies, snacks, salads, desserts, etc. can be enriched with it.

FSSAI has also invited objections and suggestions from the concerned stakeholders within a month’s time.

In August 2011, the principal regulations were published as a Gazette notification and subsequently amended from time to time.