

Assessment of chia seed (*Salvia hispanica*) Product by organ taste

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Abstract: In India, chia seed also known as Sabja seed, Tukmaria, or Sweet Basil. Chia (*Salvia hispanica*) is an annual plant in the mint family, which are rich in omega-3 fatty acids and antioxidants. They provide fiber, iron, and calcium. Omega-3 fatty acids help raise HDL cholesterol, the "good" cholesterol that protects against heart attack and stroke. According to the United States Department of Agriculture (USDA) National Nutrient Database, a 28-gram, or one-ounce serving of chia seeds contains: 131 calories, 8.4 grams of fat, 13.07 grams of carbohydrate, 11.2 grams of fiber, 5.6 grams of protein and No sugar. Organ taste assessment acceptability of the chia ginger cookies product revealed that 10% fortification of chia seed product was liked very much, 15% fortified chia seed products were also liked very much, while 20% fortified products were liked moderately.

Key Words: chia seed, ginger, organ senses.

1. INTRODUCTION:

It is grown commercially for its seeds, which are rich in omega-3 fatty acids. Chia seeds also provide an excellent source of soluble fiber and antioxidants. Until recently, chia seed production was only feasible in tropical and subtropical latitudes due to the long growing season required to complete seed development. While chia plants grow well in temperate climates, they require short days to flower. The seeds are hydrophilic, absorbing up to 7 times their weight in liquid when soaked, while soaking, the seeds develop a mucilaginous gel like coating that gives chia-based beverages a distinctive texture. *Salvia hispanica*, commonly known as chia, is a species of flowering plant in the mint family, *Lamiaceae*, native to central and southern Mexico and Guatemala. The 16th-century *Codex Mendoza* provides evidence that it was cultivate by the Aztec in pre-Columbian times; economic historians have suggested it was as important as maize as a food crop. Ground or whole chia seeds are still used in Paraguay, Bolivia, Argentina, Mexico and Guatemala for nutritious drinks and as a food source. This makes them one of the world's best sources of several important nutrients. chia seeds are a whole-grain food, usually grown organically. Plus, they're non-GMO and naturally free of gluten.

2. MATERIALS AND METHODS:

2.1. Procurement of Material: The material for the present investigation was procured from Kanpur India mart Rajeev traders.

2.2. Physical examination of chia seed products: A panel of judges on the basis of 9 point Hedonic scale judged the sensory evaluation or the organ taste qualities of the samples.

2.3. Preparation of products:

Preparation of chia ginger cookies:

Whipping butter and sugar together till it become foam



Fold it with refined flour and chia seed



Make different shapes from dough



Preheat oven 180°C for 10 minute



Baked biscuits at 130°C for 15-20 minutes



Cool it at room temperature



Serve it

3. RESULTS AND DISCUSSION:

Organ taste assessment of the developed products was done in terms of all sensory characteristics like color, appearance, flavor, texture, taste and overall acceptability on a 9-point hedonic scale.

Table no. 1 Mean score of organ taste acceptability of Chia ginger cookies.

Characters	Control	T1	T2	T3
Appearance	8.66	8.56	7.83	7.41
Taste	8.75	8.16	8.33	7.5
Flavor	8.56	8.25	8.00	7.33
Texture	8.58	8.0	7.75	7.08
Color	8.91	8.0	7.83	7.16
Overall acceptability	9.0	8.5	8.25	7.75

Table no.1 shows the mean score of organ taste acceptability of chia ginger cookies.

Appearance- The table shows that mean value of control sample was 8.66 while the mean value of T1 (10%), T2 (15%), T3 (20%) of chia ginger cookies were 8.56, 7.83, and 7.41 respectively. This table shows that T1 (10%) was better in appearance and T3 got lower score because of stickiness.

Taste- The table shows that mean value of control sample was 8.75 while the mean value of T1 (10%), T2 (15%), T3 (20%) of chia ginger cookies were 8.16, 8.33, and 7.50 respectively. In this table T2 was better in taste and T3 got lower score.

Flavor- The table shows that mean value of control sample was 8.56 while the mean value of T1 (10%), T2 (15%), T3 (20%) of chia ginger cookies were 8.25, 8.0, and 7.33 respectively. T1 got better score in flavor and T3 got lower score in this table.

Texture- The table shows that mean value of control sample was 8.58 while the mean value of T1 (10%), T2 (15%), T3 (20%) of chia ginger cookies were 8.0, 7.75, and 7.08 respectively. T1 got better score and T3 got lower score.

Color- The table shows that mean value of control sample was 8.91 while the mean value of T1 (10%), T2 (15%), T3 (20%) of chia ginger cookies were 8.0, 7.83, and 7.16 respectively. T1 got better score and T3 got lower score.

Overall acceptability- The table shows that mean value of control sample was 9.0 while the mean value of T1 (10%), T2 (15%), T3 (20%) of chia ginger cookies were 8.5, 8.25, and 7.75 respectively. T1 got better score in overall acceptability and T3 got lower score.

4. CONCLUSION:

Prepared products were evaluated by Organ taste assessment for flavor, texture, taste, colour, appearance, and overall acceptability. Organ taste assessment of chia ginger cookies revealed that 10 per cent fortification of chia seed in cookies were liked very much, 15 per cent fortified chia seed products were also liked very much, while 20 per cent fortified products were liked moderately. They provide fiber, iron, calcium and Omega-3 fatty acids help raise HDL cholesterol, the "good" cholesterol that protects against heart attack and stroke.

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