



International Journal of Home Science

ISSN: 2395-7476
IJHS 2020; 6(1): 100-101
© 2020 IJHS
www.homesciencejournal.com
Received: 19-11-2019
Accepted: 21-12-2019

Dr. Monu Singh
Assistant Professor, Department
of Food Science and Nutrition,
Budelkhand University Jhansi,
Uttar Pradesh, India

Supriya Pandey
Department of Food Science and
Nutrition, Chandra Sekhar Azad
University of Agriculture &
Technology, Kanpur, Uttar
Pradesh, India

Organoleptic evaluation of chia seed (*Salvia hispanica*) products

Dr. Monu Singh and Supriya Pandey

Abstract

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. In India, chia seed also known as Sabja seed, Tukmaria, or Sweet Basil. 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. Organoleptic acceptability of the chia pudding products with pomegranate, revealed that 10% fortification of chia seed products were liked very much, 15% fortified chia seed products were also liked very much, while 20% fortified products were liked moderately.

Keywords: Chia seed, organ senses

Introduction

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 cultivated 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.

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 and are normally killed by frost before seeds mature. 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.

Materials and Methods

Procurement of Material

The material for the present investigation was procured from Kanpur India mart Rajeev traders.

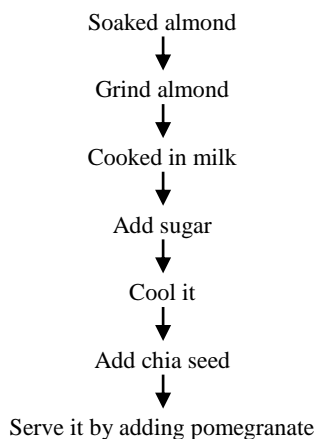
Physical examination of chia seed products

A panel of judges on the basis of 9 point Hedonic scale judged the sensory evaluation or the organoleptic qualities of the samples.

Corresponding Author:
Dr. Monu Singh
Assistant Professor, Department
of Food Science and Nutrition,
Budelkhand University Jhansi,
Uttar Pradesh, India

Preparation of products

Preparation of Chia pudding



Organoleptic evaluation of chia seed products-

A variety of products including chia pudding were developed from chia seed with three different ratio of chia seed i.e. T₁ (10%), T₂(15%), T₃(20%) respectively. Organoleptic evaluation of all 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 1: Mean score of organoleptic acceptability of Chia pudding with pomegranate.

Characters	Control	T1	T2	T3
Appearance	7.75	8.25	7.25	7.0
Taste	8.5	8.5	7.83	8.16
Flavor	8.08	7.66	8.0	7.0
Texture	8.5	8.3	8.0	7.58
Color	8.75	8.75	8.5	8.58
Overall acceptability	8.75	8.25	8.23	8.08

Table no.1 shows the mean score of organoleptic acceptability of chia pudding with pomegranate.

Appearance

The table shows that mean value of control sample was 7.75 while the mean value of T₁ (10%), T₂ (15%), T₃ (20%) of chia pudding with pomegranate 8.25, 7.25, and 7.0 respectively. T₁ got better score in appearance and T₃.

Taste

The table shows that mean value of control sample was 8.5 while the mean value of T₁ (10%), T₂ (15%), T₃ (20%) of chia pudding with pomegranate 8.5, 7.83, and 8.16 respectively. T₁ got better score and T₂ got lower score.

Flavor

The table shows that mean value of control sample was 8.08 while the mean value of T₁ (10%), T₂ (15%), T₃ (20%) of chia pudding with pomegranate 7.66, 8.0, and 7.0 respectively. T₂ got better score in flavor T₃ got lower score.

Texture

The table shows that mean value of control sample was 8.5 while the mean value of T₁ (10%), T₂ (15%), T₃ (20%) of chia pudding with pomegranate 8.3, 8.0, 7.58 respectively. Score of T₁ was better and T₃ got lower score in texture.

Color

The table shows that mean value of control sample was 8.5 while the mean value of T₁ (10%), T₂ (15%), T₃ (20%) of chia pudding with pomegranate were 8.5, 8.75 and 8.58 respectively. T₂ was better in color T₁ got lower score.

Overall acceptability

The table shows that mean value of control sample was 8.5 while the mean value of T₁ (10%), T₂ (15%), T₃ (20%) of chia pudding with pomegranate were 8.25, 8.23, and 8.08 respectively. T₁ got better score and T₃ got lower score.

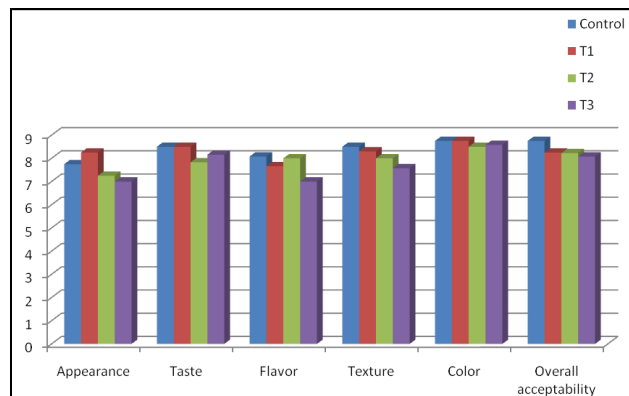


Fig 1: Comparison Mean of different characteristics of sensory evaluation of Chia pudding with pomegranate.

Conclusion

Prepared products were evaluated by organoleptic evaluation for flavor, texture, taste, colour, appearance, and overall acceptability. Organoleptic acceptability of chia pudding with pomegranate, revealed that 10 per cent fortification of chia seed in cookies, pudding, 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.

References

- Coorey Ranil, Tjoe Audrey, Jayasena Vijay. (Gelling properties of chia seed and flour. Journal of food science, 2014, 856-8667.
- Rendon-Villalobos R, Orlicz-Sanchez A, Solorza-Feria, Trujillo-Hernandez CA. Formulation, physiochemical, Nutritional and Sensorial Evaluation of Corn Tortillas supplemented with chia seed. International Journal of Food Science and technology. 2012; 30:118-125.
- Shah Mansi, Mishra Gayatri, Christion Nirali. Development of Nutritionally Superior and eggless vegetarian cookies by using chia seed flour. Journal of grain processing and storage. 2014; 1:54-58.
- Web : <https://www.medicalnewstoday.com/articles/291334.php#nutrition>