Estimation of sensory nutritive qualities of flaxseed cookies and it’s preparation

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ABSTRACT

Cookies so referred to as confectionary products which are consumed by al the age groups it is also a excel ent source and very convenient to get. According to human diet, nowadays there is a lack of proteins fibers and fat i.e. omega-3 fatty acid as per research, flaxseed contains omega -3 fatty acid (– linoleic acid (ALA)) lignans, fiber, protein. This provides with different health benefits such as reduction of heart disorders, cancer and mental health. Due to this consumption of flaxseed in human.

Keywords— Flaxseeds Omega -3, Fatty Acid, Lignan

1. INTRODUCTION

Flaxseed is now found in many different types of food products. Nowadays such as waffles, oat meal and crackers mainly is baked food products. Flax was very much valuable in ancient and early modern times with its use in food and medicine. According to research studies, flax, can be added to baked food with no reduction of ALA for several hours of baking nowadays, it is being observed lack of proteins and fiber in diet. Also, an important component i.e. Omega-3- fatty acid, ALA. This plays an important role in our diet, which provides us with proper eye function, important role in brain and lower cholesterol. This help in maintaining of health, cardiovascular disease and cancer.

2. FLAXSEEDS

Flaxseeds also known as flax or linseed. Flaxseed is a member of the genus Linum in family Linaceae. Flaxseed is cultivated in cooler regions of the world, it contains many types of healthy components like omega-3, essential fatty acid, which have healthy heart effect, lignans which help to protect. Against cancer, also regulates blood pressure. Also, there are two type of flaxseeds. But here golden and brown flaxseeds are used which has a nutty taste.

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<table>
<thead>
<tr>
<th>Flaxseed</th>
<th>Amount Per 100 grams</th>
<th>Calories 534</th>
<th>% Daily Value*</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Fat 42 g 64%</td>
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<td></td>
<td></td>
<td></td>
<td>Saturated fat 3.7 g 18%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Polyunsaturated fat 29 g</td>
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<td></td>
<td></td>
<td>Monounsaturated fat 8 g</td>
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<td></td>
<td></td>
<td></td>
<td>Cholesterol 0 mg 0%</td>
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<td></td>
<td></td>
<td></td>
<td>Sodium 30 mg 1%</td>
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<td></td>
<td></td>
<td></td>
<td>Potassium 313 mg 23%</td>
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<td></td>
<td></td>
<td></td>
<td>Total Carbohydrate 29 g 9%</td>
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<td></td>
<td></td>
<td></td>
<td>Dietary fiber 27 g 108%</td>
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<td></td>
<td></td>
<td></td>
<td>Sugar 1.6 g</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Protein 18 g 36%</td>
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<td></td>
<td></td>
<td></td>
<td>Vitamin A 0%</td>
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<td></td>
<td></td>
<td></td>
<td>Vitamin C 1%</td>
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<td></td>
<td></td>
<td></td>
<td>Calcium 25%</td>
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<td></td>
<td></td>
<td></td>
<td>Iron 31%</td>
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<td></td>
<td></td>
<td></td>
<td>Vitamin D 0%</td>
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<td></td>
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<td></td>
<td>Vitamin B-6 25%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Cobalamin 0%</td>
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<tr>
<td></td>
<td></td>
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<td>Magnesium 98%</td>
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</tbody>
</table>

*Per cent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.
3. SUGAR
Sugar is a carbohydrate that is converted to simpler form to glucose. Sugar is also added up not only for sweetness, but also for color (brownish) (by caramalization) also it makes it crispy. (absorbing moisture). Maida is all purpose flour. It is used in producing a high-volume and for softness. Maida when consumed starts. Releasing sugar into our blood stream quickly. Maida is referred as highly retained flour.

**Flowsheet:**

- Weight of ingredients used
- Creaming (mixing of sugar and butter)
- Roasting and grinding of flaxseeds
- Addition of flaxseeds powder and dry ingredients
- Preparation of Dough
- Shaping
- Baking cat preheated oven at 180° for 15-20 mins
- Cool
- Packaging
- Storage
- Product preparation

(a) Weight of ingredients: Weight the required ingredients like Maida, powdered, sugar, flaxseed, butter.
(b) Sieving: Sieve the Maida and powdered sugar distinctly.
(c) Creaming: Mixing of sugar and butter till it gets creamy.
(d) Roasting and grinding of flaxseeds clean the flaxseeds and roast it til it becomes little so that it is easy to grind.
(e) Preparation of dough: Adding of all the ingredients including baking powder and prepare a soft dough out of it.
(f) Shaping: Mould a dough in the shape of cookies
(g) Baking: Baked the cookies in baking pan at preheated oven at 180°C for 15-20 minutes
(h) Cool: Cool after baking, cool, the cookies at room temperature.
(i) Packaging: Pack the flaxseeds cookies in an our – tight container or bokes.
(j) Storage: Store the container or boxes at room temperature.

**Sensory Quality test** was done by student of Sau.Vasudhatai Dehmukh College of Food Techonology, marks were awarded out of 10.

![Sensory Quality Test Graph](image-url)
Chemical analysis was done and results were obtained per 150gm of sample. Total calories of product were 426.50 by calculation.

![Chemical Analysis Graph](image)

Fig. 2: Chemical Analysis Graph

4. CONCLUSION
This product was found to have light brown colour appearance which has taste of flaxseed and is sweet. This contain protein, fiber, carbohydrates, and good fat content in the form of omega-3 fatty acid which have healthy heart effect. It is also helpful in mental health and regulates blood pressure and helps to improve immune functions.

5. REFERENCES
[4] Everyday Health By Moira Lawler and Medically Reviewed by Lynn Griege, RDN, CDE