

Preparation of Nutrient Rich Raisin candy by using Colostrum

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Abstract: - Candy is known as sweets and confectionery which has long history as a popular food treat. It is influenced by its size, shape, sugar concentration, colors and flavors. Certain research has shown that eating candy have a positive effect on mood and also reduce stress. Due to excessive sugar and synthetic additives in candy are considered as unhealthy. Hence indulgence in nutritious candies can control the risks as well as delight. So, addition of raisin increases the nutritional value of the product. Raisins have more polyphenol content and antioxidant ORAC levels compared to other traditional dried foods. These are the best source of dietary fibres. Bovine colostrum and Jaggery are used as a replacer for milk and sugar. They are the good source of protein and increase the nutritional value of candy. Therefore, it is hoped that this product would provide the consumers with its abundant nutritional benefits.

Key Words: - Candy, Mix, Raisin, Colostrum.

I. INTRODUCTION

Consumer interest in natural products is now a global trend. This tendency manifests itself in new concept of types "Vita food" and "Functional food" formally expressing the relationship between diet and health [1]. Candy is one of the confectionery product which has a long history on popular food treat. It is defined as preparation of sugar, honey or other natural or artificial sweeteners in combination with fruits, chocolates, nuts or other ingredients or flavorings [2]. Raisin (Dried grapes), which are the fruit from *Vitis vinifera* plant. They fall into the traditional dried fruit category as they typically contain no sugar. They have more polyphenol content and antioxidants [3]. Bovine colostrum is used as a milk replacer, because it has more nutritional content than milk and mainly used to develop immune system [4]. Numerous health professionals recommend replacing sugar with Jaggery to obtain more nutritional value from a sweetener. It improves digestive health, Anemia prevention and improve immune function. As jaggery is prepared by natural means without use of any chemicals and preservatives [5]. The main purpose of study is to prepare natural candy from Raisin. So, we justify that our product is useful for health beneficial.

A. Nutritional Benefits of Raisin (Dried Grapes)

- Consumption reduces low density lipoprotein (LDL) cholesterol, blood pressure and blood sugar.
- It produces sustained energy during long term athletic competitions [6].
- They contain 10% of FDA's daily recommended fiber and play a part in preventing Anemia.
- They contain good amount of iron, copper and vitamins that are essential for making Red blood

cells (RBC) and carrying Oxygen throughout the body.

- Even though, Raisins contains a more concentrated amount of sugars than fresh fruit, Raisin intake compared to processed snacks decreased hemoglobin a1c, which is a marker of blood sugar management.
- Antioxidants may help keep the skin cells young and prevent damage from aging cells [7].



Fig.1. Raisin

B. Nutritional Content

Table.1. Nutritional content of Raisin (per100g) [8].

Components	Energy
Carbohydrates (g)	26.78
Proteins (g)	21.35
Fat(g)	45.96
Sodium(mg)	405
Potassium (mg)	1042mg
Energy	567K Cal

II. MATERIALS AND METHODOLOGY

A. Preparation of Raisin mix

Dried grapes were purchased from the market. It is made into viscous consistency using mixer.



Fig.2. Raisin mix

B. Flow chart for making candy



Fig.3. Jaggery



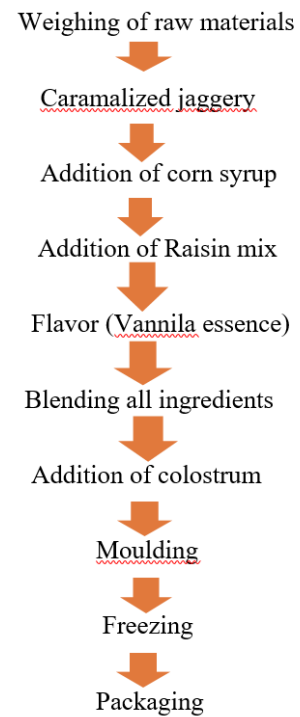
Fig.4. Colostrum



Fig.5. Honey



Fig.6. Corn syrup



The candy is prepared using Raisin mix, jaggery, corn syrup and Colostrum. Jaggery weighing 100g was added to 120ml of water and stirred well. 5 grams of corn syrup complemented to the slimmy nature of the solution. The prepared Raisin mix was added into the solution. Add few drops of honey for better taste and sensory qualities. Add 2-3 drops of vanilla essence was introduced to enhance the flavor. It was boiled until desired concentration was acquired. After completion of caramelization process, 30 ml of Bovin colostrum was added into it. It was cooled and poured into molds of different shapes. After, the prepared candy was cooled at room temperature and packed in polyethylene pouches [9].



Fig.7. Candy forming



Fig.8. Moulds



Fig.9. Prepared candy

III. CONCLUSION

Thus, the Raisin candy provides a lot of nutrient content to human health. All the ingredients were enriching the taste as well as nutritional value. The preparation of natural candy by using Colostrum and Raisin showed enhanced nutrient content, taste, appearance and color. It can be taken anywhere anytime to enhance our mood, stress as well as healthy.

REFERENCES

- [1]. Balaji, Vedha & Injodey, Joseph. (2017). Organic Food Products: A Study on Perceptions of Indian Consumers. *Indian Journal of Marketing*.47.26. 10.17010.
- [2]. Hartel, Richard & Elbe, Joachim & Hofberger, Randy. (2018). *Hard Candy*. 10.1007/978-3-319-61742-8_8.
- [3]. Schuster, Margaret & Wang, Xinyue & Hawkins, Tiffany & Painter, James. (2017). A Comprehensive review of Raisins and Raisin components and their relationship to human health. *Journal of Nutrition and Health*. 50. 203. 10.4163/jnh.2017.50.3.203.
- [4]. Uruakpa, Florence & Ismond, M.A.H & Akobundu, E.N.T. (2002). Colostrum and its benefits: A review. *Nutrition Research*. 22. 755–767. 10.1016/S0271-5317(02)00373-1.
- [5]. V K Jagannadha Rao, Polamarasetty & Das, Madhusweta & Das, S.K. (2007). Jaggery - A Traditional Indian sweetener. *Indian journal of traditional knowledge*. 95-102.
- [6]. Restani, Patrizia & Frigerio, Gianfranco & Colombo, Francesca & Sousa, Luis & Altindişli, Ahmet & Pastor, Raul & Di Lorenzo, Chiara. (2016). Raisins in human health: A review. *BIO Web of Conferences*. 7. 04005. 10.1051/bioconf/20160704005.
- [7]. ATC (1996). *Seismic Evaluation and retrofit of Concrete buildings*, Vol. 1, ATC-40 Report, Applied Technology Council, Redwood City, California.
- [8]. Khiari, Ramla & Zemni, Hassène & Mihoubi, Daoued. (2018). Raisin Processing: Physicochemical, Nutritional and Microbiological Quality Characteristics as Affected by Drying Process. *Food Reviews International*. 35. 1-53. 10.1080/87559129.2018.1517264.
- [9]. Lembke, Ronald. (2016). Process Variability and Capability in Candy Production and Packaging: Candy Production and Packaging. *Decision Sciences Journal of Innovative Education*. 14. 301-314. 10.1111/dsji.12105.