

Development of Antioxidant Rich Beetroot Candy Prepared Using Butterfly Pea Extract

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Abstract: - Consumer interest in natural product is now a global trend this tendency manifest itself in new consumption of functional food. Candy has defined as preparations of sugar, honey or other natural or artificial sweeteners in combination with chocolate, fruits, vegetables, nuts, or other ingredients or flavorings in the form of bars, among others. To make people free from diseases and to make them healthy a candy made from beetroot and butterfly pea extract is incorporated. Both this ingredients is bursting with nutrients. Both is highly rich in vitamins, minerals etc. Therefore it hoped that this product would gratify consumers with abundant health benefits.

Key Words: — *Blue pea, extract, Beetroot, candy, antioxidant.*

I. INTRODUCTION

The importance of vegetables in the human diet is universally recognized. Vegetables are not only readymade delicious food but they are also valued for their vitamins and mineral content. Without this human body cannot continue to be healthy or resistance to disease. Various types of candies include caramels, gummies, hard candies, lollipop etc. Due to excessive sugar and synthetic additives, they are unhealthy. Processing of beetroot candy along with butterfly pea extract is one way to provide benefit. Beetroots are an excellent source of folic acid as well as fiber, manganese, and potassium. The use of high fructose corn syrup inhibits the microbial spoilage by reducing water activity and extent shelf life through superior moisture control. Vanilla essence added to increase its flavor. Blue pea extract contains lot of antioxidants. The main purpose of study is to prepare a natural candy from beetroot. Therefore, we justify that our product is useful for health beneficial



A. Nutritional benefits of butterfly pea extract

- It contains many antioxidants.
- It help body fight free radicles which are toxic and cause premature ageing
- It reduce stress and anxiety
- It improves eyesight
- It contains anticancer and antitumor properties

Table.1. Nutritional content of blue pea extract

Nutrients	Amount
Total fat	0g
Sodium	0mg
Total carbohydrate	1.8g
Protein	0g

II. METHODS AND METHODOLOGY

A. Preparation of Blue Pea Extract

Blue pea is soaked in 250ml of hot water. After 10 mins the water is filtered to get clear dark blue color extract.



Fig.4. Vanilla essence



Fig.1. Grated beetroot



Fig.2. Unsweetened condensed milk (Homemade)



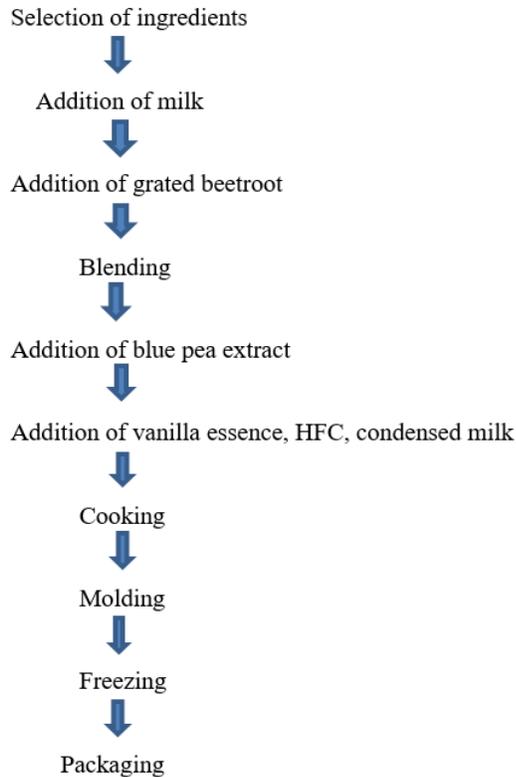
Fig.3. Milk



Fig.5. High fructose corn syrup



Fig.6. Butter



Candy prepared using grated beetroot, blue pea extract, vanilla essence, high fructose corn syrup, butter, milk unsweetened condensed milk. 2 tablespoons of butter added to a thick vessel in a medium flame. One cup of milk and grated beetroot also added to it. Then it was made to boil for 5 min, after that blue pea extract, one tablespoon of vanilla essence, 2 tablespoon of unsweetened condensed milk was also added to it. Then it boiled and cooked well for 20 to 25min. At the end of the process, high fructose corn syrup added. It boiled until desired consistency acquired. It then poured to a mold to get different shapes. The prepared candy cooled at room temperature and finally it was packed.



Fig.7. Candy under process



Fig.8. Prepared candy

III. CONCLUSION

This candy was made of health beneficial ingredients such as beetroot, blue pea extract, HFC, unsweetened condensed milk, butter, vanilla essence, milk. The combination of these ingredients makes it more healthy, tasty and even appetizing. This is equally good for people of all age groups. Use of blue pea extract enhances the antioxidant property to the body. Use of high fructose corn syrup gives a special flavor to the product. It also reduces the water activity and prevents from spoilage. Thus, this candy also tested for shelf life and it seem to a have a shelf life of about 3 weeks stored in refrigerator.

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