



Studies on cost of production for value added herbal nectar with different levels of bottle gourd, mint, lime and sugar syrup

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Abstract

The study was undertaken with the objective of estimating the cost of herbal nectar prepared by bottle gourd. A total four combinations of bottle gourd, mint, lime and sugar syrup were prepared in five replication one as a control and remaining four as experimental all the standard ingredient were purchased from local market. The result of the study revealed that the production of cost of controlled herbal nectar was lower Rs. (69.50/Lit), compared to bottle gourd herbal nectar Rs.(72.00/Lit) which may be attributed to higher nectar.

Keywords: herbal nectar, bottle gourd, mint, lime, sugar syrup, cost of production

Introduction

Nectar is a type of fruit beverage which contains at least 20% fruit juice or pulp and 15% total soluble solids and is preserved by heat processing. The acidity in fruit nectars shall not exceed 1.5% as citric acid. No class II preservative like SO₂ or benzoic acid is permitted in fruit nectar as per Indian Food Laws. It is not diluted before serving.

Fruit and vegetable nectars are beverages produced from purees, juices, or concentrates of either, blended with water and sugar, honey, syrups, or sweeteners. 83 Fruit-vegetable nectar blends are reported under their components (i.e. fruit nectar and vegetable nectar).

Fruit nectar is the unfermented but fermentable product obtained by adding water with or without the addition of sugar, honey, syrups or sweeteners to fruit juice, concentrated fruit juice, fruit purees or concentrated fruit purees or a mixture of those products. Aromatic substances, volatile flavor components, pulp and cells, all of which must have been recovered from the same kind of fruit and obtained by suitable physical means may be added. Products may be based on a single fruit or fruit blends. 83 Examples include: pear nectar and peach nectar.

Various old medicinal systems such as Ayurveda, have praised bottle gourd for nutrient rich contents and their magical effects in many health ailments including high blood cholesterol, diabetes, overweight, digestive problems. Approximate 96 percent of water content in bottle gourd makes it ideal for extracting juice. Consuming bottle gourd juice shows its effects in cooling, calming and fat it is also great for weight loss and protect the high cholesterol levels. Regular consumption of a cups of Bottle Gourd juice with a glass of water in empty stomach in early morning helps to reduce the high blood pressure and cholesterol levels and makes the heart healthy.

Bottle gourd is believed to help the liver function in a balanced fashion. It helps fight constipation, as it is fiber rich. Because of its fiber and low fat content. Bottle Gourd is also considered one of the best weight loss foods since it is 96 percent water and provides just 12 calories per 100 g of serving. It is rich in thiamin, vitamin-C, zinc, iron and

magnesium thus helping in improving overall health. In addition, the vegetable is also a moderate source of thiamin, niacin (vitamin B-3), pantothenic acid (vitamin B-5), pyridoxine (vitamin B-6) and minerals such as calcium, iron, zinc, potassium, manganese and magnesium.

Mint is packed with antioxidants and phytonutrients that can work wonders for our stomach. The menthol present in pudina helps the enzymes necessary for digestion. The herb parts contain many essential volatile oils like menthol, menthone, menthol acetate. Mint leaves are packed with anti-bacterial and anti-inflammatory properties. That is why they are so great for our oral health. It kills bacteria in the mouth preventing tooth decay, beats bad breath and keeps our tongue and teeth clean naturally. Mint has a very strong smell that open up nasal passages and airways to allow relaxed breathing. It is also an expectorant and helps the expulsion of phlegm, when we are suffering from productive cough. Mint contains rosmarinic acid that acts as a powerful antioxidant. Mint composes numerous plant derived chemical compounds that are known to anti-oxidant, disease-preventing and health promoting properties.

Material and Methods

The experiment was carried out in the Food Technology Lab of Warner college of Dairy Technology, Sam Higginbottom University of Agriculture, Technology and Sciences Allahabad, 211007, U.P. India. Details of experimental techniques to be employed during the course of investigation will be studied under the following heading:

Material: Commercial frozen pasteurized whole bottle gourd, passion fruit juice, and mint and lime juice plus mineral water and sugar were used in this work.

Statistical Analysis

The data was analyzed statistically by analysis of variance at 5% level of significance.

Number of treatments - 4

Number of replications - 5

Total number of samples - 20

Result and Discussion

The costs of the ingredients are very important factor besides other factors in determining the cost of production. It is considered as basis for price fixation and determines the profit. The price of the product is depend on the cost of the production. The cost of experimental Herbal Nectar was

calculated, which is shown in the table below. The data regarding cost (Rs) of blended nectar, Development of Herbal Nectar Prepared from a blend of Bottle gourd, Mint and Lime sample of different treatments are presented in table and following observations were made

Table 1

Treatment	Bottle gourd	Mint	Lime	Sugar syrup	Overhead exp. Rs/gm.	Total Cost of cottage cheese Rs./ kg
Rate in Rs/Lit	50	200	160	200		
T ₀	37.50		8	4	20	69.50
T ₁	35.00	10	8	4	20	77.00
T ₂	32.50	20	8	4	20	84.50
T ₃	30.00	30	8	4	20	92.00

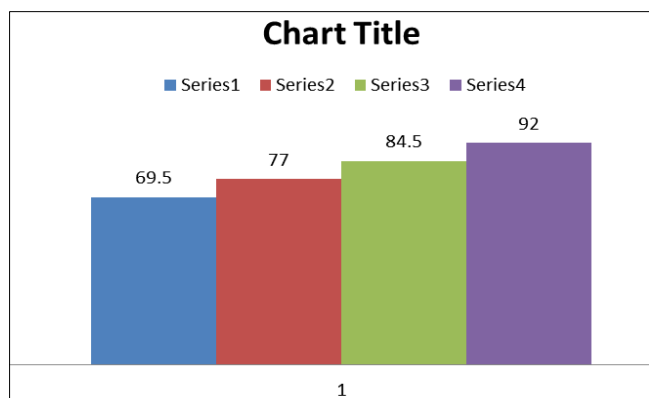


Fig 1

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Conclusion

It can be concluded from the above study that bottle gourd and mint, lime, sugar syrup added herbal nectar was shows its effects in cooling, calming and fat it is also great for weight loss and protect the high cholesterol levels. The cost of production is not very high compared to controlled herbal nectar prepared by bottle gourd and lime, mint, sugar syrup. So; it should be promoted for further production keeping in view of its nutritional and therapeutic use.

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