



E-ISSN: 2278-4136
P-ISSN: 2349-8234
JPP 2018; 7(3): 759-761
Received: 10-03-2018
Accepted: 13-04-2018

Anand Gauraha
Department of Dairy Technology
College of Dairy and Food
Science, Chhattisgarh
Kamdhenu Vishwavidyalaya,
Durg, Chhattisgarh, India

BK Goel
Department of Dairy Technology
College of Dairy and Food
Science, Chhattisgarh
Kamdhenu Vishwavidyalaya,
Durg, Chhattisgarh, India

S Kartikeyan
Department of Dairy Technology
College of Dairy and Food
Science, Chhattisgarh
Kamdhenu Vishwavidyalaya,
Durg, Chhattisgarh, India

Correspondence
Anand Gauraha
Department of Dairy Technology
College of Dairy and Food
Science, Chhattisgarh
Kamdhenu Vishwavidyalaya,
Durg, Chhattisgarh, India

Economics of Chhattisgarhi Churma

Anand Gauraha, BK Goel and S Kartikeyan

Abstract

Traditional Indian dairy products can be defined as all milk products which are native of Indian and which were evolved over ages utilizing locally available fuels and cooking ware. The traditional dairy products have a great assortment of sweets with great social, cultural and economic importance. The production of traditional milk products provide unique opportunity to the organized dairy sector in India as they have huge mass appeal and the market for these products for exceeds that of western dairy products. Now a day for more convenience to cook and also to maintain nutrition in food a new development was developed such as extrusion cooking for ready to eat/cook foods. Chhattisgarh *Churma* is a traditional product of Chhattisgarh and is prepared by using *khoa*, chickpea flour, ghee, sugar, flavor and color. It is a chickpea based product with pleasant sensory characteristics and having long shelf life. On survey very few literature is available on *Churma* prepared in Chhattisgarh. The present work was carried out to develop Chhattisgarhi *Churma* by using twin screw extruder. The cost per kg of *khoa*, chickpea flour, ghee, sugar, cardamom and colour incorporated Chhattisgarhi *Churma* was calculated to be Rs 240.03. The major cost items were Khoa, Ghee, Chickpea flour and sugar. The Input-output ratio was found to be 1:1.67.

Keywords: churma, cost of churma and nutrition

Introduction

Human population in India is estimated to be 1.34 billion, of which nearly 70% lives in rural area. People living in rural areas are facing problem of poverty, malnutrition, lack of sanitation and diseases continue to exist in significant proportion of population with higher magnitude in rural areas as compared to urban areas. Report indicate that around 48% children of the country, under the age of five year, have stunted growth indicating that almost every second child is chronically malnourished in India. Similarly, the prevalence of wasting is 19.8% and under weight is 42.5% - these are the highest in the world. about 80% of the rural population is dependent on agriculture for their livelihood, development in agriculture and its allied activities thus becomes vital for rural prosperity. Milk and Milk based dairy products is a good source of protein, minerals, vitamins and micronutrients; which is beneficial for human health. Milk provides proteins with a wide range of amino acids that match human needs A traditional dairy product due its inherent properties is capable of combating the malnutrition. World milk production is forecasted to reach 816 million tons in 2016. The current growth rate in milk production is about 1.6% and with this the milk production is likely to grow to 827 million tons in 2020. India is the world's largest milk producing country contributing around 18.5% of the world's milk production. India's milk production in 2015-2016 is 160.35 million tones. (ref) India has a unique pattern of production, processing and marketing/ consumption of milk, which is not comparable with any large milk producing country. About 35% of milk produced in India is processed. The organized sector (large scale dairy plants) process about 22 million tons per annum. For increasing the production of value added dairy products, the infrastructure will be needed to further developed at the public, cooperatives as well as at private sector level.

Material and Methods

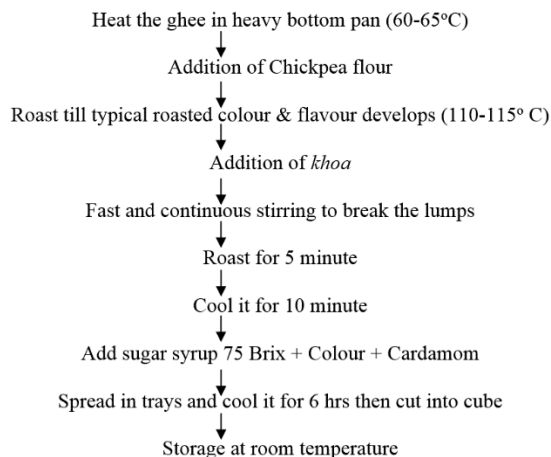
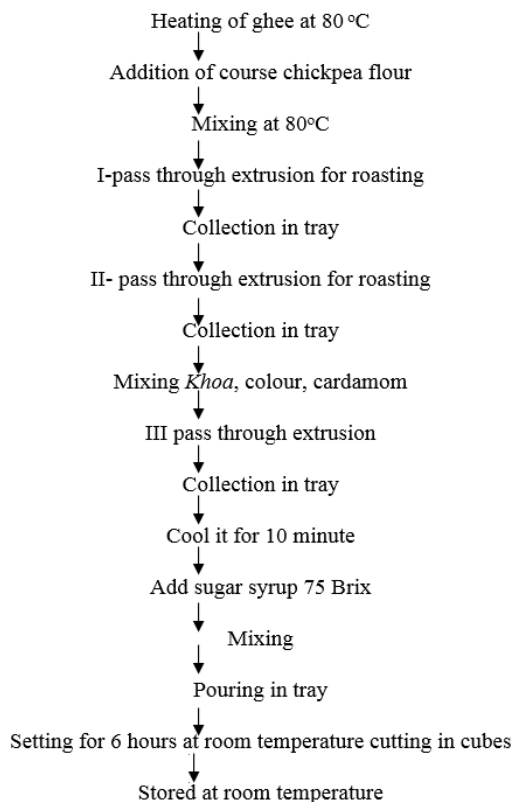
His research work on "Development of Chhattisgarhi *Churma* by Using Twin Screw Extruder" was carried out in the Department of Dairy Technology at college of Dairy Science & Food Technology, C.G.K.V., Raipur (C.G). Samples of Chhattisgarh *churma* will be obtained by taking same proportion of ingredients Chickpea flour, *Khoa*, Ghee, Sugar, Flavour and Colour. The cost analysis of the product was worked out by considering the variable cost of different commodities used in preparation Chhattisgarhi *Churma*, using raw materials, labour, processing, packaging and other variable input costs.

Preparation of Chhattisgarhi Churma

Chhattisgarh *Churma* is a cereal based traditional dairy product which is prepared by using chickpea flour, *khoa*, ghee and sugar as per the proportion given in table 1. The product is good source of protein, iron and fat etc.

Table 1: Composition of *Churma* / 100 gm

Ingredients	Quantity
Chickpea Flour	24.8
Ghee	15
<i>Khoa</i>	30
Sugar	30
Cardamom	0.1
Colour	0.1
Total	100

Preparation of Chhattisgarhi Churma by Traditional Method**Flow chart of Chhattisgarhi Churma****Preparation of Chhattisgarhi Churma by Extrusion process****Flow chart****Results and Discussion****Cost analysis of Khoa and Chickpea flour incorporated Chhattisgarhi Churma**

Cost of *khoa*, chickpea flour, ghee, sugar, cardamom and colour incorporated Chhattisgarhi *Churma* was estimated simply by considering the price of each ingredients. The cost estimated includes the raw materials, power and other cost incurred in the preparation of 1000 gm of final product is displayed in the Table 1.

The cost per kg of *khoa*, chickpea flour, ghee, sugar, cardamom and colour incorporated Chhattisgarhi *Churma* was calculated to be Rs 240.03. The major cost items were *Khoa*, Ghee, Chickpea flour and sugar. The Input-output ratio was found to be 1:1.67. 4.10 Cost analysis of *Khoa* and Chickpea flour incorporated Chhattisgarhi *Churma*

Table 1: Cost analysis of *khoa* and chickpea flour incorporated Chhattisgarhi *Churma*

Amount required for 1000 gm of <i>Churma</i> Ingredients	Rate Rs/gm	Cost in Rs
T0, T1, T2, T3		
Chickpea flour	248.00	0.12
<i>Khoa</i>	300.00	0.36
Ghee	150.00	0.50
Sugar	300.0	0.042
Cardamom powder	1.00	3.3
Colour	1.00	0.04
Power	1.83 unit	5.10/unit
Others	-	-
Total	-	240.03/-

Conclusions

Chhattisgarh *Churma* is a traditional product of Chhattisgarh and is prepared by using *khoa*, chickpea flour, ghee, sugar, flavor and color. It is a chickpea based product with pleasant sensory characteristics and having long shelf life. On survey very few literature is available on *Churma* prepared in Chhattisgarh. The present work was carried out to develop Chhattisgarhi *Churma* by using twin screw extruder. The cost per kg of *khoa*, chickpea flour, ghee, sugar, cardamom and colour incorporated Chhattisgarhi *Churma* was calculated to be Rs 240.03. The major cost items were *Khoa*, Ghee, Chickpea flour and sugar. The Input-output ratio was found to be 1:1.67.

References

1. Jha A, Kumar A, Jain P, Om H, Singh R, Bunkar DS. Physical chemical and sensory changes during storage of lal peda. J Food Sci. Technol. 2012; 63(5):17-19.
2. Kaur M, Kawatra BL. Nutritive value of some traditional cooked recipes of Punjab. Indian Food Pack 1996; 50:68-75
3. Khaleque A, Elias L, Gomez B, Braham J, Bressani R. Development a low-cost and high-quality infant food. Arch. Latinoam Nutr. 1985; 35(4):696-710.