

Study on preparation of fig *Burfi*

S.P. MATKAR, S.G. NARWADE AND S.P. POUL

The present investigation was aimed to incorporate fig paste in *khoa* to formulate a novel type of *Burfi*. Fig *Burfi* was prepared from different proportions of buffalo milk and fig paste *i.e.* 97.50:2.50 (T_1), 96.25:3.75 (T_2), 95.0:5.00 (T_3) and it is compared to market fig *Burfi* (T_0). The combination T_2 was superior with a rating of 8.30 in respect of colour and appearance. The body and texture of T_2 combination was superior at 8.10 which was followed by T_1 at 7.75. The flavor rating for the combination T_2 was 8.10 whereas combination T_3 occurred at 7.85. The highest rating for taste of T_2 was 8.10 which were followed by T_3 at 8.01. The sensory score for overall acceptability of fig *Burfi* of treatments T_0 , T_1 , T_2 and T_3 were 6.95, 7.63, 8.12 and 7.55, respectively. It was observed that 3.75 per cent (T_2) level of fig paste was most acceptable and rated between like very much to like extremely for all sensory attributes.

Key Words : Buffalo milk, *Burfi*, Fig, *Khoa*, Sensory evaluation

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INTRODUCTION

Burfi is most popular *khoa* based sweet all over India. Several varieties of this product are available in the market depending on the special ingredient used in the preparation of the product. In Maharashtra, *Burfi* is also prepared by using fruits like mango, orange, fig and other fruit product. Fig *Burfi* is a product which is prepared like the traditional indigenous milk *Burfi* where *khoa* and fig paste are used in combination. *Khoa* is responsible for desired texture whereas fig paste being responsible for providing pleasant aroma to the final product (Dharmadhikari, 2002). *Khoa* contains all the milk solids in approximately four fold concentration, therefore, the food and nutritive value of *khoa* is very high. It contains fairly large quantities of muscle building

proteins, bone forming minerals and energy giving fat and lactose. It is also expected to retain most of the fat soluble vitamins A and D and also fairly large quantities of water soluble B-vitamins contained in the original milk (De, 1991).

For human nutrition point of view fig fruits are valued as they contain high sugar and low acid (Condit, 1995). Figs could bring a super dose of fibre. Figs were narrated as a good source of calcium and iron plus plentiful potassium and mineral sodium which could maintain healthy blood pressure. A good amount of vitamin B was described to help those who were on drugs that depleted this vitamin (Ferro, 2003).

The development of fig *Burfi* as an indigenous sweet product prepared from fruit pulp and *khoa* is an endeavor to popularize the Indian sweet meats which are now in demand for export to the Western countries, where a sizable Indian population resides. The present study was undertaken to assess the quality of fig *Burfi*.

METHODOLOGY

The present investigation was carried out at the

MEMBERS OF RESEARCH FORUM

Author for correspondence :

S.P. POUL, Department of Animal Science and Dairy Science, Vasantnaik Marathwada Krishi Vidyapeeth, PARBHANI (M.S.) INDIA
Email : poul_s@rediffmail.com

Associate Authors' :

S.P. MATKAR AND S.G. NARWADE, Department of Animal Science and Dairy Science, Vasantnaik Marathwada Krishi Vidyapeeth, PARBHANI (M.S.) INDIA

department of Animal science and Dairy Science, College of Agriculture, Vasant Rao Naik Marathwada Krishi Vidyapeeth, Parbhani (M.S.). The whole fresh clean buffalo milk was obtained from university buffalo herd. The fig fruit were brought from the market, cleaned and soaked in water for 12 hours and then converted into homogeneous fig paste with the help of mixer grinder.

For preparation of *Burfi*, following treatment combination of buffalo milk and fig paste was studied.

T₀ -Fig *Burfi* form market (control)

T₁ -2.50 % fig paste + 97.50 % buffalo milk + 30 % sugar

T₂ -3.75 % fig paste + 96.25 % buffalo milk + 30 % sugar

T₃ -5.00 % fig paste + 95.00 % buffalo milk + 30 % sugar

Fig *Burfi* was prepared in laboratory by adopting the standard procedure as described by Patil (1983) with

slight modification (Fig.A). Sensory evaluation of fig *Burfi* was carried out by a panel of trained judges so as to grade the product. It was judged for colour and appearance, flavour, taste, body and texture and overall acceptability attributes. The evaluation was done by '9 point Hedonic scale' developed by Gupta (1999). The data obtained were analyzed using Completely Randomized Block Design (CRD) as described by Panse and Sukhatme (1967).

OBSERVATIONS AND ASSESSMENT

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Sensory evaluation of fig *Burfi*:

The sensory evaluation of fig *Burfi* is presented in Table 1. The score for colour and appearance of fig *Burfi* for treatment T₀, T₁, T₂ and T₃ were 6.92, 6.92, 8.30 and 7.60, respectively. The highest score was observed for treatment T₂ (3.75 % fig paste). The combination T₃ was second to T₂. There were statically significant (P < 0.05) difference observed between treatment T₀ (6.92) and T₂ (8.30). It is encouraging to note from the observation that the values of T₀ and T₁ were at par to each other. The colour and appearance of final product was enhanced due to addition upto a certain level.

The score for body and texture of fig *Burfi* ranged from 7.35 to 8.10, respectively as in case of T₀ (control) and T₂ (3.75 % fig paste). Treatment T₀ (7.35) and T₁ (7.75) was at par with each other. Within the treatments also all the three treatments were at par with each other. This indicate further addition of fig to the final product of *Burfi* did alter the body and texture to a significant level only at the combination level of T₂. The present findings are in close agreement with those reported by Wakchaure (1998).

The flavour parameter of fig *Burfi* exhibits a similar trend as observed under the parameter of body and texture. These values range significantly (P < 0.05) between 7.35 to 8.10, respectively for T₀ (control) and T₂ (3.75 % fig paste). Numerically highest value was recorded for T₂ (8.10) treatment. The character of flavour could be explained in terms that the process of *Khoa* making and further continuation to formulate *Burfi* could bring about a series of changes during the heat processing of milk and sugar. The flavour character desirably upto

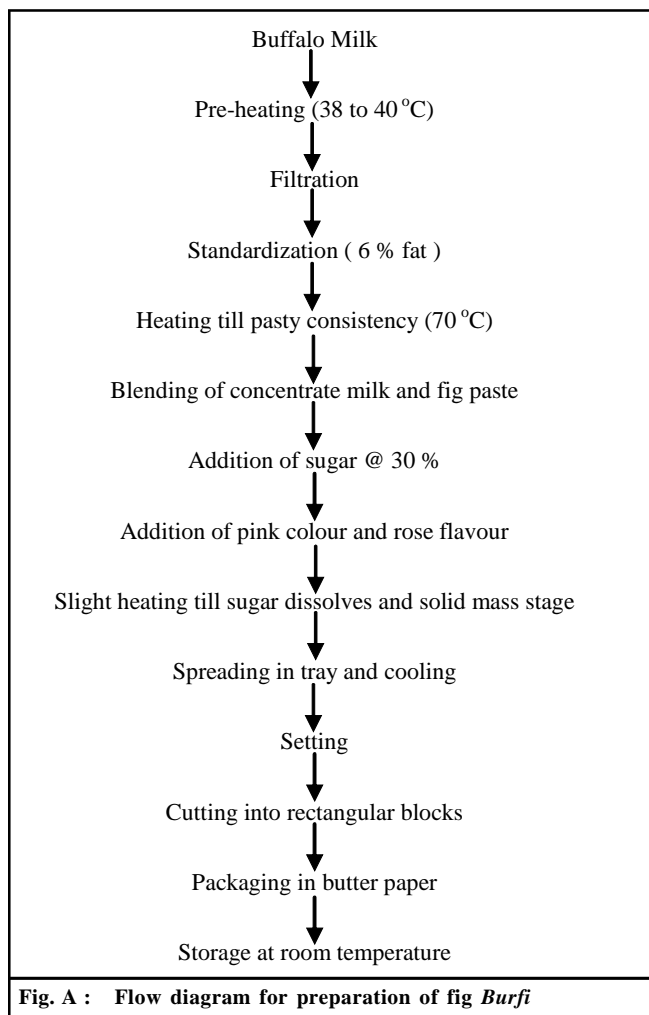


Table 1 : Sensory score for fig *Burfi*

Sr. No	Treatments	Colour and appearance	Body and texture	Flavour	Taste	Overall acceptability
1.	T ₀	6.92	7.35	7.35	7.27	6.95
2.	T ₁	6.92	7.75	7.80	7.75	7.63
3.	T ₂	8.30	8.10	8.10	8.10	8.12
4.	T ₃	7.60	7.70	7.85	8.01	7.65
	C.D. (P=0.05)	0.67	0.49	0.46	0.54	0.68

the level T₂ (3.75 % fig paste).

The taste character of fig *Burfi* range significantly ($P < 0.05$) between 7.27 to 8.10, respectively as in case of T₀ (control) and T₂ (3.75 % fig paste). These treatment combination were statically significantly ($P < 0.05$) superior over the treatment T₀ (7.27). However, within the treatments, the combinations were at par with each other. The numerically highest value was recorded for the combination T₂ (8.10). It is worthwhile to add further that the specific level of T₂ (3.75 % fig paste) was the most optimum and relished by the judges. Similar results were recorded by Kathalkar (1995) and Wakchaure (1998).

The overall acceptability of fig *Burfi* range significantly ($P < 0.05$) between 6.95 to 8.12, respectively as in case of T₀ (control) and T₂ (3.75 % fig paste). The treatment combinations T₁, T₂ and T₃ were significantly superior over that of control T₀ but at par with each other. Highest overall acceptability score was observed for treatment T₂, followed by treatment T₃, T₁ and T₀. The present findings are in close agreement with those reported by Kathalkar (1995).

Conclusion :

Fig *Burfi* with the combination T₂ (3.75 % fig paste) resulted into a product of better choice and with the highest rating of 8.30, 8.10, 8.10, 8.10 and 8.12, respectively, for colour and appearance, body and texture,

flavour, taste and overall acceptability. Hence, it was concluded that the level of fig paste addition could be done at the optimum level of 3.75 per cent at *Burfi*.

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