



Formulation, Standardization and Quality evaluation of instant fasting kheer

Pratiksha D. Kenjale and Priyanka R. Patil,*

Dept. of Food Processing and Packaging, Yashwantrao Chavan Institute of Science, Satara, Maharashtra 415001.

***Corresponding author E-mail:** alkapriyanka14@gmail.com

ABSTRACT

There is practice of fasting in India during most festivals, during which people prefer to consume sago. Sago is perfect fasting food in many ways. The present study is focused on formulation of instant fasting kheer, as instant food is best alternative to traditional cooking method. Instant fasting kheer was formulated using different ingredients such as sago, varai(sumorice) and puffed amaranth seeds. All the ingredients are roasted and ground in fine powder and mixed well for preparation of instant kheer mix. The instant fasting kheer thus obtained was analyzed for Physico-chemical properties such as moisture(2.52%), ash(1.39%), fat(6.73%), crude fibers(1.05%), protein(6.38%), and carbohydrates(81.94%). Organoleptic analysis was carried out including sensory attributes like color, flavor, taste, texture and appearance to check the overall acceptable of the products.

Keywords: Sago, fasting kheer premix, organoleptic analysis, proximate analysis.

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INTRODUCTION

Most Indian festivals are occasions for fasting, and those occasions are when sago, varai, and amaranth are most frequently consumed. In many respects, sago is the ideal food for a fast. Kheer is a popular Indian dessert that is traditionally made by cooking whole milk over a direct flame while also adding sugar and, most frequently, rice or semolina. A rapidly expanding trend among processed foods is the creation of ready-to-cook mixes for a variety of traditional snack foods that offer convenience to the fast food sector and housewives. Regardless matter whether they live in urban or rural settings, all segments of the Indian subcontinent's population enjoy the milk-based dessert[1]. India is a largest milk producing country, milk is converted into various products. In India, between 50 and 55 percent of the milk produced is used to make a variety of traditional milk products, including many dairy desserts. Many diverse sweet desserts are produced nationwide, primarily in the unorganised sector, to meet various celebratory events[2]. Kheer is a genuine milk based desserts, also called as a Payasam or kheer is a one of the most famous desserts in India prepared by used milk powder, rice, sago, and some other ingredients such as semolina, dry fruits [3].

Sabudana is a vegetarian food mostly eaten during fasting. Sabudana is a starch extracted from Tapioca root. Sabudana contains high carbohydrate. Sabudana also helpful for sick people's because it gives energy to the person[4]. In Indonesia sago has been consumed by staple food since ancient times. Sago used in many food industry and home level [5]. Amaranth seeds also called Ramdana or Rajgira. Rajgira seeds is a useful part of the plant. Amaranth flour is a good source of vitamin c, vitamin A and some minerals like calcium, iron, potassium [4]. Amaranth seeds contains high protein than cereals. Amaranth contains good antioxidant properties[6].

The goal of this project was to prepare the fasting pudding and investigate its nutritional composition. Making product manufacturing easier and more reliable is the basic premise of premix. This type of food is termed as a convenience food as it requires very little significant processing or cooking before consumption, thereby providing convenience to the consumer, with this objective in mind, instant fasting kheer premix was developed to make fasting food in minimum time. Varai and amaranth seeds are very useful because they provide a lot of nutrients.

MATERIAL AND METHODS

Procurement of raw material

Raw material required during present study were procured from local market of satara such as sago, varai, puffed amaranth seeds, milk powder, cardamom and dry fruits. The majority of chemicals and tools utilized in this study were analytical grade and obtained from the department of food processing and packaging, Satara

Formulation of instant fasting kheer

Instant fasting kheer was prepared with varying different proportions of sago, Rajgira and varai. The formulation presented in table-1. The S0 which contains 35 per cent of sago without adding Rajgira and varai. Whereas in S1, S2 and S3 the incorporation of rajgira and Vara varied in the proportion 25:12, 11:25 and 12:11. Fasting kheer was garnished with dry fruits and assessed for panel members.

Table 1- Formulation of instant fasting kheer premix

Ingredients	Formulation			
	S0	S1	S2	S3
Sago	35 g	25 g	11 g	12 g
Rajgira	-	12 g	25 g	11g
Varai	-	11 g	12 g	25 g
Milk Powder	38 g	28 g	28 g	28 g
Cardamom powder	1 g	4 g	4 g	4 g
Dry fruits	4 g	1 g	1 g	1 g
Sugar	25 g	19 g	19 g	19 g



Fig. 1- Instant fasting kheer premix

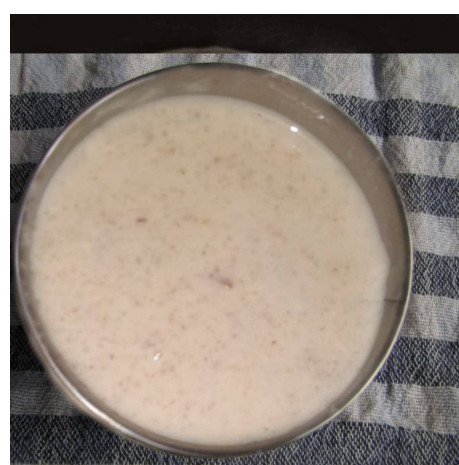
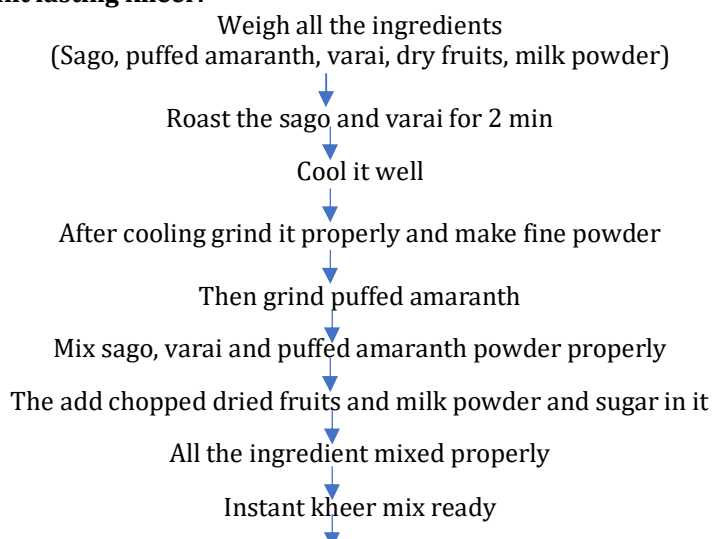


Fig. 2- Fasting kheer

Preparation of instant fasting kheer:



Packaging in polypropylene bags and storage.

Sensory analysis

A semi-trained panel of an academic staff members evaluated the prepared product using a 9 point hedonic scale for sensory qualities such as taste, appearance, color, flavor, texture and overall acceptability. The product was rated on 9 point hedonic scale with the descriptive term '9' meaning like extremely to '1' meaning dislike extremely [2].

Proximate analysis

According to the AOAC method the appropriate composition of all the ingredients including moisture, Ash, Fat, protein, Fiber was determined [8].

RESULTS AND DISCUSSION

Sensory evaluation

Parameters	Results per 100gm
Carbohydrates	81.94 g
Protein	6.38 g
Fat	6.73 g
Moisture	2.52 g
Ash	1.39 g
Crude fiber	1.05 g

Table 2- Sensory evaluation of instant fasting kheer

Table 3-Proximate analysis of Instant Fasting kheer

Samples	Appearance	Colour	Taste	Flavour	Consistency	Overall Acceptability
S0	7	7	6	6	6	6.4
S1	7	7	7	6	7	6.8
S2	8	8	7	7	7	7.4
S3	8	8	9	9	9	8.6

Using a 9-point hedonic scale, sensory analysis was performed. Whole instant fasting kheer's sensory quality is evaluated based on its colour, flavour, texture, and overall acceptability. Code numbers were given with samples (S0, S1, S2, S3). Using a 9-point hedonic scale, the evaluation was conducted while taking appearance, colour, taste, flavour, consistency, and general acceptability into account. Data as mentioned above Table. 2. The sensory score of color for S3 obtained highest (8.6).S3 sample obtained highest score (8.6), while S1 obtained lowest score (6.8). The instant fasting kheer sample S2 obtained highest score (7.4) while S0 obtained lowest score (6.4).

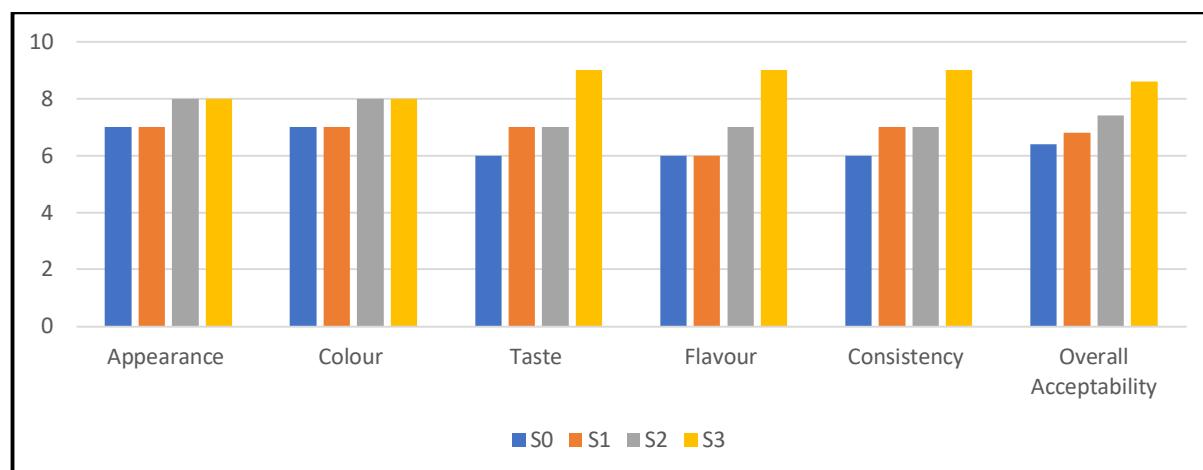


Fig 3 - Sensory evaluation of Instant fasting kheer

Proximate analysis

S3 was selected for proximate analysis out of all of the formulations. The proximate properties of instant fasting kheer premix, such as moisture content, protein, fat, carbohydrate, crude fiber and ash content were investigated and the results are shown in Table 4.

CONCLUSION

The instant fasting kheer was formulated and analyzed. The product was like all the participants during taken sensory analysis. Instant fasting kheer mix is easily prepared and taken as a delicious kheer during fast. Rajgira, sago and varai were the key ingredients in kheer mix. The kheer mix source of carbohydrates, protein, fat. The majority of participants in popularization liked the product.

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