

Original Research Article

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## Study of Standardization and Fortification of Indian Traditional Sweet

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### ABSTRACT

#### Keywords

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The Indian Traditional Sweet (Instant Sheera Mix) is a blend of semolina, wheat flour and moong dal flour roasted with ghee & furnished with the Indian mango flavor which has significant amounts of proteins and carbs along with high energy content. The formulation and standardization of blended Instant Sheera Mix was conducted in order to develop innovative formulation of Sheera Mix and study the changes in Sheera quality during storage. The blending of semolina, foxnut, wheat flour, moong dal flour, sugar was done. Based on sensory evaluation by a panel of trained judges, the optimum quantity of Protein 7.49 %, Fat 84.49%, Carbohydrate 5.54%, Ash 0.96%, Moisture 1.54%, Iron 1.4mg, calcium 55.7 mg, Potassium 62.3 mg, Fibre 23% Energy Value 417.78 Kcal, pH 6 per 100gm sheera mix. The prepared healthy food was packed in HDPE pouches & sealed airtight & stored at room temperature at 29-34°C without direct content of sunlight satisfactorily for the period of 45 days. Since the instant sheera mix is rich in iron, calcium, protein, and carbs it is a healthy with high energy giving instant food product.

### Introduction

Sheera is one of the most famous and authentic food traditional dessert in India. It is prepared on auspicious occasions because of its lengthy and tedious method of preparation. This Instant Sheera Premix can be constituted into Sheera by more addition of boiling water. The Sheera premix is prepared in order to reduce the cooking time which also provides nutritional benefits. It is a blend of semolina, makhana powder, wheat flour, mong dal flour, milk powder, cardamom, cashew, mango flavour. The Sheera Premix is rich in

protein, calcium, iron, potassium and minerals. Shelf life related changes in the instant sheera premix powder packed in HDPE bags and sensory changes in reconstituted stored sheera were monitored at 30 up to 3 months and shelf life prediction model were developed. Long shelf life of this conventional dessert in powder form would offer the industry a value-added product with a scope for product diversification and export promotion. Instant Sheera Premix prepared is cheap source of food and is a nutritionally rich product. Instead of the waiting for a nice day of leisure to cook some delicious Sheera,

one can now simply cut & open an Instant Sheera Premix pouch and eat it whenever they like. The main objective of this product is to provide the potassium rich diet. It helps combat the different nutrient deficiencies faced by the children belonging to poor class. To prepare an easy to handle product with low cost and easy to make (RTC) with less time required for cooking.

The raw materials are processed such that the cooking time is reduced. Instant Sheera Premix are not so popular in the market, but growing need of RTC products has opened gates for Nutrient rich Instant Sheera Premix as it is not just easy to prepare but also extremely healthy. It can be said that the Sheera Premix is an innovative technology and saves time and fuel in Sheera preparation. Increased nutritional awareness challenges the food industries in developing new food product with special health enhancing characteristics. Nutrient rich Instant Sheera Premix may be used as a mid-day meal in mere future.

### **Materials and Methods**

The present research work was undertaken in the Department of Food Safety and Quality Nutrition in MIT College of Food Technology, during the year 2019-2020, entitled "Study of Standardization & fortification of Indian Traditional Sweet". The material used and methods adopted during the tenure of study are presented in this chapter.

### **Ingredient's**

#### **Semolina**

Semolina is the coarse, purified wheat middling's of durum wheat mainly used in making upma, pasta, and couscous. The word *semolina* can also refer to sweet dessert made from semolina and milk. The term semolina is

also used to designate coarse middlings from other varieties of wheat, and from other grains, such as rice and maize. *Semolina* is derived from the Italian word *semola*, meaning *granules*. This is derived from the ancient Latin *simila*, meaning 'flour', itself a borrowing from Greek (*semidalis*), "groats". The words *simila*, *semidalis*, *groat*, and *grain* may all have similar proto-Indo-European origins as two Sanskrit terms for wheat, *samita* and *godhuma*, or may be loan words from the Semitic root *smd*-to grind into groats.

#### **Foxnut (Makhana) Powder**

Foxnut (Makhana) or Euryale is a perennial plant native to eastern Asia and southern Asia and is found from India - Bihar in nine districts viz, Madhubani, Darbhanga, Katihar, Sitamarhi, Purnea, Kishanganj, Araria, Saharsa and Supaul (local name Makhana) and Loktak Lake Manipur (local name Thangzing) - to Korea and Japan, as well as parts of eastern Russia. Bihar produces 90% of the world production of fox nut. It grows in water, producing bright purple flowers. The leaves are large and round, often more than a meter (3 feet) across, with a leaf stalk attached in the centre of the lower surface. The underside of the leaf is purplish, while the upper surface is green. The leaves have a quilted texture, although the stems, flowers, and leaves which float on the surface are covered in sharp prickles. Other leaves are submerged. In India, Euryale normally grows in ponds, wetlands etc. Recently the Indian Council of Agricultural Research has developed a technique for the field cultivation of Euryale.

#### **Wheat flour**

Wheat flour is a powder made from the grinding of wheat used for human consumption. Wheat varieties are called "soft"

or "weak" if gluten content is low, and are called "hard" or "strong" if they have high gluten content. Hard flour, or *bread flour*, is high in gluten, with 12% to 14% gluten content, and its dough has elastic toughness that holds its shape well once baked. Soft flour is comparatively low in gluten and thus results in a loaf with a finer, crumbly texture. Soft flour is usually divided into cake flour, which is the lowest in gluten, and pastry flour, which has slightly more gluten than cake flour. In terms of the parts of the grain (the grass fruit) used in flour the endosperm or protein/starchy part, the germ or protein/fat/vitamin-rich part, and the bran or fibre part there are three general types of flour. White flour is made from the endosperm only. Brown flour includes some of the grain's germ and bran, while whole grain or *wholemeal flour* is made from the entire grain, including the bran, endosperm, and germ. Germ flour is made from the endosperm and germ, excluding the bran.

### **Moong dal flour**

Whole cooked moong beans are generally prepared from dried beans by boiling until they are soft. Moong beans are light yellow in colour when their skins are removed. Moong bean paste can be made by dehulling, cooking, and pulverizing the beans to a dry paste. It is used as an ingredient in both savoury and sweet dishes.

### **Sugar**

Scientifically, *sugar* loosely refers to a number of carbohydrates, such as monosaccharides, disaccharides, or oligosaccharides. Monosaccharides are also called "simple sugars," the most important being glucose. Most monosaccharides have a formula that conforms to  $C_nH_{2n}O_n$  with  $n$  between 3 and 7 (deoxyribose being an exception). Glucose has the molecular

formula  $C_6H_{12}O_6$ . The names of typical sugars end with *-ose*, as in "glucose" and "fructose". Sometimes such words may also refer to any types of carbohydrates soluble in water. The acyclic mono- and disaccharides contain either aldehyde groups or ketone groups. These carbon-oxygen double bonds ( $C=O$ ) are the reactive centres. All saccharides with more than one ring in their structure result from two or more monosaccharides joined by glycosidic bonds with the resultant loss of a molecule of water ( $H_2O$ ) per bond. Monosaccharides in a closed-chain form can form glycosidic bonds with other monosaccharides, creating disaccharides (such as sucrose) and polysaccharides (such as starch). Enzymes must hydrolyse or otherwise break these glycosidic bonds before such compounds become metabolized. After digestion and absorption, the principal monosaccharides present in the blood and internal tissues include glucose, fructose, and galactose. Many pentoses and hexoses can form ring structures. In these closed-chain forms, the aldehyde or ketone group remains non-free, so many of the reactions typical of these groups cannot occur. Glucose in solution exists mostly in the ring form at equilibrium, with less than 0.1% of the molecules in the open-chain form.

### **Cardamom**

Cardamom has a strong, unique taste, with an intensely aromatic, resinous fragrance. Black cardamom has a distinctly more smoky, though not bitter, aroma, with a coolness some consider similar to mint. The content of essential oil in the seeds is strongly dependent on storage conditions, but may be as high as 8%. In the oil were found  $\alpha$ -terpineol 45%, myrcene 27%, limonene 8%, menthone 6%,  $\beta$ -phellandrene 3%, 8-cineol 2%, sabinene 2% and heptane 2%. Other sources report 1,8-cineol (20 to 50%),  $\alpha$ -terpenylacetate (30%),

sabinene, limonene (2 to 14%), and borneol. In the seeds of, cardamom from Java (*A. kepulaga*), the content of essential oil is lower (2 to 4%), and the oil contains mainly 1,8-cineol (up to 70%) plus  $\beta$ -pinene (16%); furthermore,  $\alpha$ -pinene,  $\alpha$ -terpineol and humulene were found.

### **Mango powder**

The flavour of mango fruits is constituted by several volatile organic chemicals mainly belonging to terpene, furanone, lactone, and ester classes. Different varieties or cultivars of mangoes can have flavor made up of different volatile chemicals or same volatile chemicals in different quantities. In general, New World mango cultivars are characterized by the dominance of  $\delta$ -3-carene, a monoterpene flavouring; whereas, high concentration of other monoterpenes such as (*Z*)-ocimene and myrcene, as well as the presence of lactones and furanones, is the unique feature of old-world cultivars. In India, 'Alphonso' is one of the most popular cultivars. In 'Alphonso' mango, the lactones and furanones are synthesized during ripening; whereas terpenes and the other flavouring are present in both the developing (immature) and ripening fruits.

Ethylene, a ripening-related hormone well known to be involved in ripening of mango fruits, causes changes in the flavor composition of mango fruits upon exogenous application, as well. In contrast to the huge amount of information available on the chemical handful of genes encoding the enzymes of flavor biosynthetic pathways have been characterized to date.

### **Saffron colour**

Saffron spice is derived from the flowers of the plant named *Crocus sativus* (saffron crocus).

### **Cashew**

Raw cashews are 5% water, 30% carbohydrates, 44% fat, and 18% protein (table). In a 100 gram reference amount, raw cashews provide 553 Calories, 67% of the Daily Value (DV) in total fats, 36% DV of protein, 13% DV of dietary fibre and 11% DV of carbohydrates.[23] Cashews are rich sources (20% or more of the DV) of dietary minerals, including particularly copper, manganese, phosphorus, and magnesium (79-110% DV), and of thiamine, vitamin B6 and vitamin K (32-37% DV). Iron, potassium, zinc, and selenium are present in significant content (14-61% DV) (table).[23] Cashews (100 grams, raw) contain 113 milligrams (1.74 gr) of beta-sitosterol.

### **Milk powder**

Powdered milk or dried milk is a manufactured dairy product made by evaporating milk to dryness. One purpose of drying milk is to preserve it; milk powder has a far longer shelf life than liquid milk and does not need to be refrigerated, due to its low moisture content.

Another purpose is to reduce its bulk for economy of transportation. Powdered milk and dairy products include such items as dry whole milk, non-fat (skimmed) dry milk, dry buttermilk, dry whey products and dry dairy blends. Many dairy products exported conform to standards laid out in Codex Alimentarius. Many forms of milk powder are traded on exchanges.

### **Ghee**

Ghee (Sanskrit: Ghr̥ta) is a class of clarified butter that originated in ancient India. It is commonly used in Middle Eastern cuisine, cuisine of the Indian subcontinent, Southeast Asian cuisine, traditional medicine, and

religious rituals. Ghee is typically prepared by simmering butter, which is churned from cream (traditionally made by churning dahi), skimming any impurities from the surface, then pouring and retaining the clear liquid fat while discarding the solid residue that has settled to the bottom. Spices can be added for flavor. The texture, colour and taste of ghee depends on the quality of the butter, the milk source used in the process and the duration of time spent boiling.

### **Preparation methodology & flow sheet**

#### **Selection of raw material**

Good & premium quality of raw ingredients are procured from the market for preparation of instant sheera mix

#### **Cleaning of raw material**

Cleaning of raw material required to remove the contaminants.

#### **Weighing of raw material**

Weighing of raw material according to formulation.

#### **Roasting of raw ingredients**

Roasting of raw ingredient separately with ghee on low flame in pan until the brownish golden colour appear.

#### **Grinding of raw ingredients**

Grind the raw ingredients separately in grinding machine.

#### **Sieving of raw ingredients**

Sieving of raw ingredients done to get equal density material.

#### **Mixing of raw ingredient**

Mixing all the material along with colour and flavouring agent with ghee.

#### **Final product filling**

Filling of the final product the HDPE pouches @ 100g/Package.

#### **Sealing of product**

Sealing of the HDPE pouches with material filled inside done on sealing machine.

#### **Labelling of sample**

The labelling indicating all nutritional as well as other details Batch No., Best Before, Mfg. Date are applied on the finished goods.

#### **Storage**

The final sample are stored at dry place avoiding direct sunlight contact at ambient room temperature. The chemical and sensory evaluation of all the instant mix sample within the storage period of 45 days was conducted & recorded.

#### **Formulation of Product**

Three different sample accordingly sample A, sample B & sample C were prepared with the below given three different formulation. Each sample were containing 100 gm of sample product.

#### **Research methodology**

##### **Moisture content**

The moisture content was determined by the procedure given in Ranganna (1986) as given below:

## Procedure

The moisture content was determined using the hot air oven method. The sample was weighed (W1) approximately 10 g and kept in a petri plate and allow to dry at 1100C in the hot air oven with periodically weighing until constant. The dried sample was kept in desiccators for cooling. The weight (W2) of cooled sample was obtained. The moisture content was calculated as follow.

$$\text{Moisture Content (\%mc)} = \frac{W1 - W2}{W1} \times 100$$

Where,

W1 – Initial weight

W2 – Final Weight

## Protein content

The nitrogen was determined by Kjeldahl method and protein was then calculated by using the below given formula.

## Procedure

0.4 g of sample was weighed and transferred to Kjeldahl flask. Around 2.5 g of digestion mixture, and 10 ml of concentrated H<sub>2</sub>SO<sub>4</sub> was added to it. The Kjeldahl flask was kept in the digestion assembly. The assembly was heated to 420° C and the sample was digested till all the fumes of SO<sub>2</sub> were exhumed. The flask was cooled and transferred to the digestion assembly. 50 ml of 40% NaOH was added to it and distillation was started.

The ammonia gas was liberated during the distillation process and was absorbed in the 25 ml of 3 % Boric acid solution taken in a conical flask. 3-4 drops of mixed indicator were added to it and it was titrated against 0.116 N HCl till pink colour end point was obtained. The titre value was noted and %

nitrogen in sample was calculated using following formula:

$$\text{Nitrogen (\%)} = \frac{(\text{Sample titre} - \text{Blank titre}) \times \text{Normality of HCl} \times 100}{\text{Weight of sample} \times 1000} \times 14$$

## Fat content

The fat was estimated by the procedure given in Ranganna (1986) as given below:

## Procedure

A clean, dry Soxhlet flask was weighed (W1). Take 3 g of dried sample (W2) was transferred to a thimble and the top of the thimble was plugged with a cotton plug. The thimble was dropped into a Soxhlet apparatus. Approximately, 75 ml of Petroleum ether was poured through the sample into the flask. One end of the fat extraction tube was attached to the flask and other to condenser. The sample was extracted for 16 hr. After the extraction of fat from the sample into the solvent, the solvent was recovered. The solvent in the flask was evaporated in an oven at 100° C for 1 hr., further cooled and weighed (W3). The crude fat percent was calculated as follows:

$$\text{Fat (\%)} = \frac{W3 - W1}{W2} \times 100$$

Where,

W1 - Initial weight of empty flask

W2 - Sample weight

W3 - Final weight of flask + fat

## Carbohydrates

The carbohydrates are estimated by anthrone method.

## Procedure

Take clean and dry test tubes and mark all the tubes as per the protocol. Pipette out 0.1-0.5 ml of glucose standard solution in duplicate

test tubes. In one test tube take only 1 ml of distilled water and mark it as blank. Make up the volume to 1 ml in each test tube by adding distilled water. Then add 3 ml of anthrone reagent to each test tube and mix thoroughly. Heat the test tubes for 8 min in a boiling water bath. Cool rapidly and read the green to dark green colour at 630 nm. Draw a standard graph by plotting concentration of the standard on the X-axis and absorbance on the Y-axis. From the graph calculate the amount of carbohydrate present in the sample tube.

Carbohydrate content in 100 mg of sample =  
 $\text{mg of glucose} / \text{Volume of test sample} \times 100$

### **Ash content**

The total ash of the sample (raw material and final product) was determined using the procedure explained by Ranganna (1986).

### **Procedure**

The silica crucible (W1) was weighed. Then, 5 g of sample was weighed (W2) in it. The contents in the crucibles were charred on a Bunsen burner and then were kept in muffle furnace at 525- 550° C for 6 hr. The crucibles were cooled overnight and weighed (W3) again. Percent total ash was calculated as follows:

Ash content (%) =  $W3 - W1 / W2$

Where,

W1 – Initial weight of crucible

W2 – Sample weight

W3 – Final weight of crucible

### **Determination of Energy value**

#### **Procedure**

Energy value = (Carbohydrate + Protein) x 4  
+ Fat x 9. Ranganna, S. (1986).

### **Fibre content**

Fibre was estimated using the protocol given by Ranganna (1986) using Fibroton apparatus.

### **Procedure**

2-3 g defatted sample was weighed (W) and transferred to the crucibles for fibre estimation. The crucible was placed in the hot extraction unit. For acid extraction, 150 ml 1.25 % H<sub>2</sub>SO<sub>4</sub> was poured in the crucible. The acid wash was done at 400° C for 45 min and then, wash with distilled water. The acid wash was followed by alkali wash with 1.25 % NaOH and after washing with distilled water, the crucibles were dried in hot air oven at 100° C till free from moisture. Then, the weights of crucible were taken (W1) and the crucible were placed in muffle furnace at 400° C for 5-6 h. After cooling the crucibles, weight of crucible with ash was taken (W2).

Fibre content (%) =  $W1 - W2 / W \times 100$

Where,

W – Sample weight

W1 – Initial weight of crucible before ashing

W2 – Final weight of crucible after ashing

### **Iron content**

The Iron content was estimated by using Methods of Analysis for Adulterants and Contaminants in Foods I.C.M. R 1990. Organic matter in the sample is destroyed by ashing and the resulting ash is dissolved in hydrochloric acid and diluted to a known volume with water. Whole of the iron present in the aliquot of ash solution is reduced with hydroxylamine hydrochloride and the Fe (II) is determined spectrophotometrically as its coloured complex with,  $\alpha$ -  $\alpha$ -dipyridyl, the solution being

buffered with acetate buffer solution. Absorption of the resulting complex is read at 510 nm.

**Procedure**

Weigh accurately, a suitable quantity of well homogenised sample, into a cleaned and tared silica dish. If sample contains more water, dry on a water bath. Char the sample (in the dish) on low flame of a burner till all the volatile matter escapes and smoking ceases. Transfer the dish to a cold muffle furnace and raise the temperature slowly to 450°C. Continue ashing at 450°C till practically carbon-free ash is obtained. (If carbon is present in ash even after 4 to 5 hour of ashing, remove the dish from furnace, cool and moisten the ash with 1 ml of magnesium nitrate solution (a), dry on water bath/hot place and ash in furnace at 450°C). After the ash is carbon-free remove the dish from furnace and cool. Add 5 ml of conc. HCl letting acid rinse the upper portion of the dish and evaporate to dryness on a water bath. Dissolve residue by adding exactly 2.0 ml of conc. HCl, heat for 5 min on steam bath with watch glass covering the dish. Rinse watch glass with water, filter into a 100 ml volumetric flask, cool and dilute to volume. Pipette 10 ml aliquot of ash solution into 25 ml volumetric flask, and add 1 ml hydroxylamine hydrochloride solution. After 5 min, add 5 ml buffer solution and 1 ml O - phenanthroline solution or 2 ml of dipyriddy solution and dilute to volume. Determine absorbance of solution at 510 nm. From absorbance reading, determine Fe content present in aliquot of ash solution taken by referring to standard curve.

Iron content of sample (Mg Fe / 100gm sample) =

$$\frac{\text{Quantity of Fe in aliquot of ash solution} \times \text{Total volume of ash solution}}{\text{Aliquot of ash solution taken for determination} \times \text{Wt. of the sample taken for ashing}} \times 100$$

**Calcium content**

Calcium is precipitated as calcium oxalate. The precipitate is dissolved in hot dilute H2SO4 and titrated with standard potassium permanganate.

**Procedure**

Pipette an aliquot (20 ml to 100ml) of the ash solution obtained by dry ashing to 250 ml beaker. Add 25 to 50 ml of water, if necessary. Add 10 ml of saturated ammonium oxalate solution and 2 drops of methyl red indicator. Make the solution slightly alkaline by addition of dilute ammonia and then slightly acid with few drops of acetic acid until colour is faint pink (pH 5.0). Heat the solution to boiling point. Allow to stand at room temperature for at least 4 hrs. or preferably overnight. Filter through Whatman No. 42 paper and wash with water, till the filtrate is oxalate free. Break the point of filter paper with platinum wire or pointed glass rod. Wash the precipitate first using hot dilute H2SO4 from Wash bottle into the beaker in which the calcium was precipitated. Then wash with hot water and titrate while still hot (temp 70 to 80°C) with 0.01 N KMnO4 to the first permanent pink color. Finally, add filter paper to solution and complete the titration.

$$\text{Calcium (mg/100g)} = \frac{\text{Time} \times 0.2 \times \text{total volume of ash solution}}{\text{Vol. taken for estimation} \times \text{Wt. of sample taken for ashing}} \times 100$$

**Proximate analysis of instant sheera mix**

The data of proximate analysis of instant sheera mix is presented in the below given table 3.1. among which the chemical composition of instant sheera mix blended mango flavour, values are as follows Protein 7.49 %, Fat 84.49%, Carbohydrate 5.54%, Ash 0.96%, Moisture 1.54%, Iron 1.4mg, calcium 55.7 mg, Potassium 62.3 mg, Fibre 23% Energy Value 417.78 Kcal,pH 6 per 100gm product.

**Results and Discussion**

**Sensory evaluation of instant sheera mix**

Sensory evaluation of Instant Sheera Mix for color, taste, flavor, texture, appearance, and

overall acceptability were carried out using 9-point hedonic scale with semi-trained panelists. Sensory attributes were rated on a scale of 1 (dislike extremely) – 9 (like extremely) Amerine et. al., (2013).

**Table.2.1** Formulation for Instant Sheera Mix

Ingredients	Sample A	Sample B	Sample C
Semolina	23	23	23
Foxnut (Makhana) Powder	8	6	8
Wheat Flour	5	10	5
Moong Dal Flour	5	3	3
Sugar	40	42	47
Cardamom Powder	2	2	2
Cashew	3.8	3.8	3.8
Milk Powder	7	12	7

**Table.3.1** Proximately analysis of selected Instant Sheera Mix

Test	Values (per 100 gm)
Protein	7.49 %
Fat	5.54 %
Carbohydrate	84.49 %
Ash	0.96 %
Moisture	1.54 %
Iron	1.4 mg
Calcium	55.7mg
Potassium	62.3 mg
Fibre	23 %
Energy Value	417.78 Kcal
pH	6

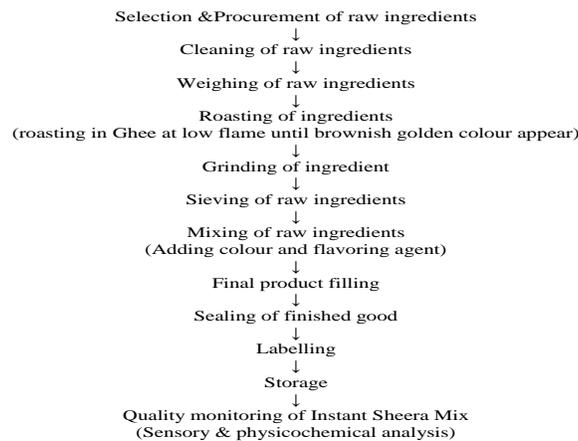
**Table.4.1** Sensory Evaluation of Instant Sheera Mix

Sample	Colour & Appearance	Taste	Flavour	Consistency	Mouthfeel	Overall Acceptability
Sample A	7.65	7.45	6.00	7.00	6.40	6.90
Sample B	7.89	8.00	8.65	7.10	6.98	7.72
Sample C	8.90	8.43	9.55	7.70	8.30	8.57
Mean	8.14	7.96	8.06	7.26	7.22	7.73

**Table.4.2** Standardization of instant sheera mix final sample formulation

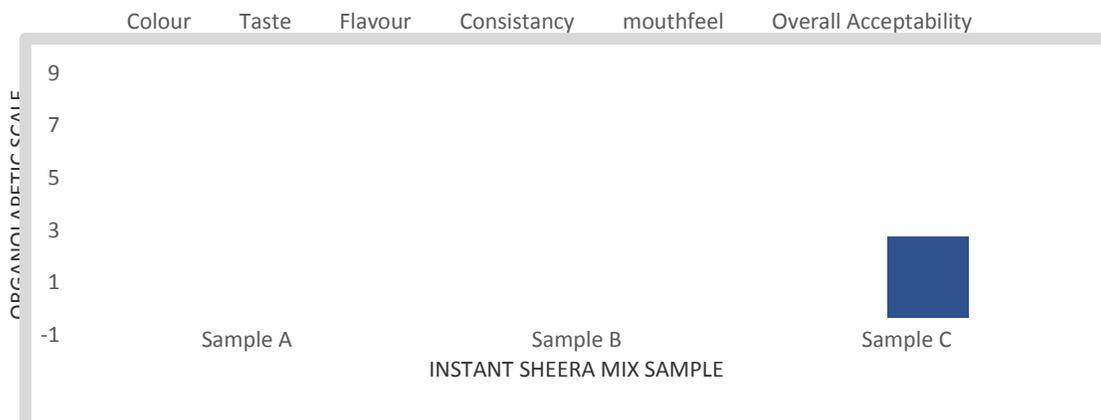
Ingredients	Sample C
Semolina	23
Foxnut (Makhana) Powder	8
Wheat Flour	5
Moong Dal Flour	3
Sugar	47
Cardamom Powder	2
Cashew	3.8
Milk Powder	7
Mango Flavour Powder	0.7
Saffron Colour	0.5

**Fig.2.1** Flow Sheet for the preparation of Instant Sheera Mix



**Figure 2.1:** Flow Sheet for the preparation of Instant Sheera Mix

**Fig.4.1** Sensory Evaluation of Instant Sheera Mix graphical column representation



### **Formulation and Standardization of kiwi-guava mint lemonade**

Several trials (Table 3.1) were conducted to select premium quantity of Semolina, Foxnut (makhana), Wheat flour, Moong dal flour, Sugar, Cardamom powder, Cashew, Milk powder, Mango flavour powder, Saffron colour. Based on sensory evaluation by a panel of trained judges, the premium quantity of raw ingredient i.e.Semolina, Foxnut (makhana), Wheat flour, Moong dal flour, Sugar, Cardamom powder, Cashew, Milk powder, Mango flavour powder, Saffron colour were reported to be 23g, 8g, 5g, 3g, 47g, 2g, 3.8g, 7g, 0.7g & 0.5g respectively for 100 ml beverage.

Summary and conclusion this research work was conducted in order to make a new Mango flavoured healthy Instant Sheera Mix by blending of Semolina, Foxnut (makhana), Wheat flour, Moong dal flour, Sugar, Cardamom powder, Cashew, Milk powder, Mango flavour powder, Saffron colour. To increase the shelf life chemical preservatives potassium meta-bisulfited and sugar were used. From the results obtained after proximate analysis of prepared Instant Sheera Mix the amount of Protein 7.49 %, Fat 84.49%, Carbohydrate 5.54%, Ash 0.96%, Moisture 1.54%, Iron 1.4mg, calcium 55.7 mg, Potassium 62.3 mg, Fibre 23% Energy Value 417.78 Kcal, pH 6 per 100gm product. It is obvious from the findings of this research work that certainly it can improve the nutritional status of the population because it is rich source of Iron, Potassium, Calcium similar research work should be carried out with different ingredients individually as well as with combination.

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