



GAJAK PROCESSING



AATMANIRBHAR BHARAT

**PM Formalisation of Micro Food Processing
Enterprises Scheme (PM FME Scheme)**



INTRODUCTION

- Gajak (also gachak) is a dry sweet dessert or confection made up of peanut or sesame and Jaggery.
- Originating in – North Central India (Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan).
- Gajak falls under the category of Confectionary product (5.2) under the Indian Food Code.
- Very popular in India and other Countries (USA, UK, Kuwait, New Zealand, Singapore, Canada, Japan etc).



INTRODUCTION

- Known with different Names in different area-

Bihar & Uttar Pradesh- Layiya patti

Madhy Pradesh, Rajsthan, Gujrat- Gajak

Maharashtra – Chikki

West Bengal - Gur badam

Kerala - Kappalandi muthai etc.

INTRODUCTION

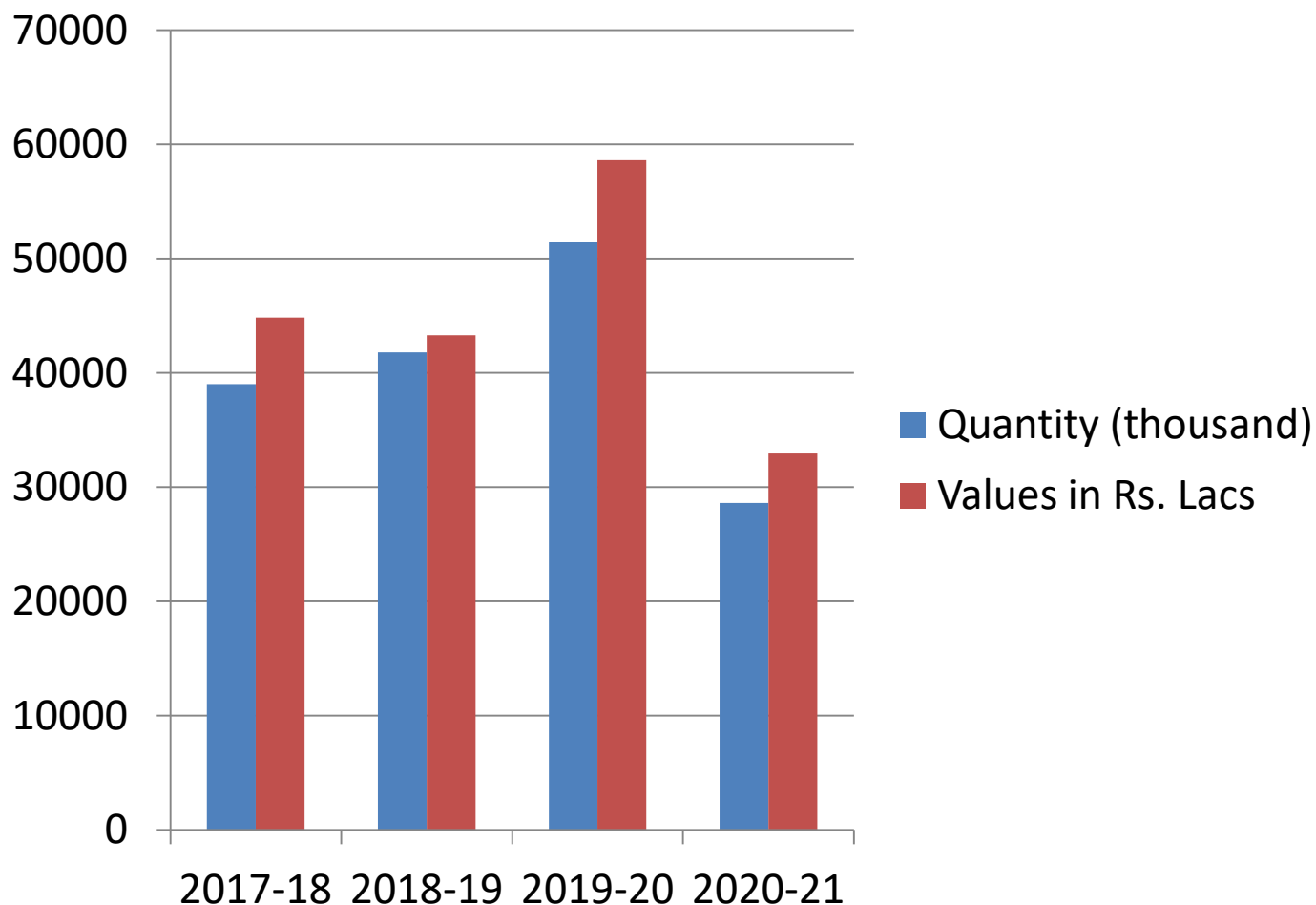
Conti..

- Different recipes in different region.
- Different varieties are available w.r.t recipes
 1. Kaju Til Gajak,
 2. Pista Gajuak,
 3. Gunimal Gajak
 4. Kaju Pista Gajak
 5. Dry Fruit Gajak
 6. Gajak barfi





- Exports from India to USA, UK, Kuwait, New Zealand, Singapore, Canada, Japan etc
- Export data of confectionary and not containing Cocca (2017-Nov.. 2020)





CHARACTERISTICS OF GAJAK

- It shall have characteristic flavour and taste.
- It shall be free from off taste.
- It shall be free from foreign odour, mustiness and rancidity.
- It shall be free from
 - mould,
 - living and
 - dead insects,
 - insect fragments,
 - rodent contamination.



RAW MATERIAL AND SPECIFICATIONS

- Raw Material for Gur Til Gajak, Til Gur Revadi, Peanut Jaggery Gajak, Til Mawa Gajak
- Ingredients- Sesame, Jaggery, Peanut, Sugar, Mawa/khoya, Ghee
- Specifications-
 1. Sesame Seeds- Good Quality of Whole mature Sesame Seeds is received from the Supplier holding valid FSSAI license. It should be White clean and sounds seeds of Til (*Sesamum indicum*),. It shall be free from rancidity, other foreign matter.



RAW MATERIAL AND SPECIFICATIONS

Conti...

2. Jaggery- It shall be free from substances deleterious to health and shall conform to the following analytical standards, on dry weight basis :-

| | |
|--|---|
| Total sugars expressed as invert sugar | Not less than 90 percent and sucrose not less than 60 % |
| Extraneous matter insoluble in water | Not more than 2 % |
| Total ash | Not more than 6 % |
| Ash insoluble in hydrochloric acid (HCl) | Not more than 0.5 % |



RAW MATERIAL AND SPECIFICATIONS

Conti...

3. Peanuts/Ground Nuts

- Also known as moongphali are obtained from the plant *arachis hypogols*. the kernels shall be free from non edible seeds such as mahua, castor, neem or argemone etc.
- It shall be free from colouring matter and preservatives.
- It shall be practically free from extraneous matter, such as stones, dirt, clay etc.
- The kernels shall conform to the following standards, namely:

| | |
|--|--------------------------------------|
| Moisture | Not more than 7.0 per cent |
| Damaged kernel including slightly damaged kernel | Not more than 5.0 per cent by weight |
| Aflatoxin content | Not more than 30 parts per billion. |

RAW MATERIAL AND SPECIFICATIONS

Conti...

4. Sugar

- Sugar is the crystallised product obtained from sugarcane or sugar beet.
- It shall be free from dirt, filth, iron filings, and added colouring matter.
- Extraneous matter shall not exceed 0.1 per cent by weight.
- It shall also conform to the following standards, namely-

| | |
|---|---------------------------------------|
| Moisture (when heated at 105 degree $\pm 1^\circ$ degree C for 3 hours) | Not more than 0.5 per cent by weight. |
| Sucrose | Not less than 98 per cent by weight. |



5. Ghee

- Ghee is a pure clarified fat derived solely from milk or curd or from desi (cooking) butter or from cream to which no colouring matter or preservative has been added.

6. Khoya/Mawa

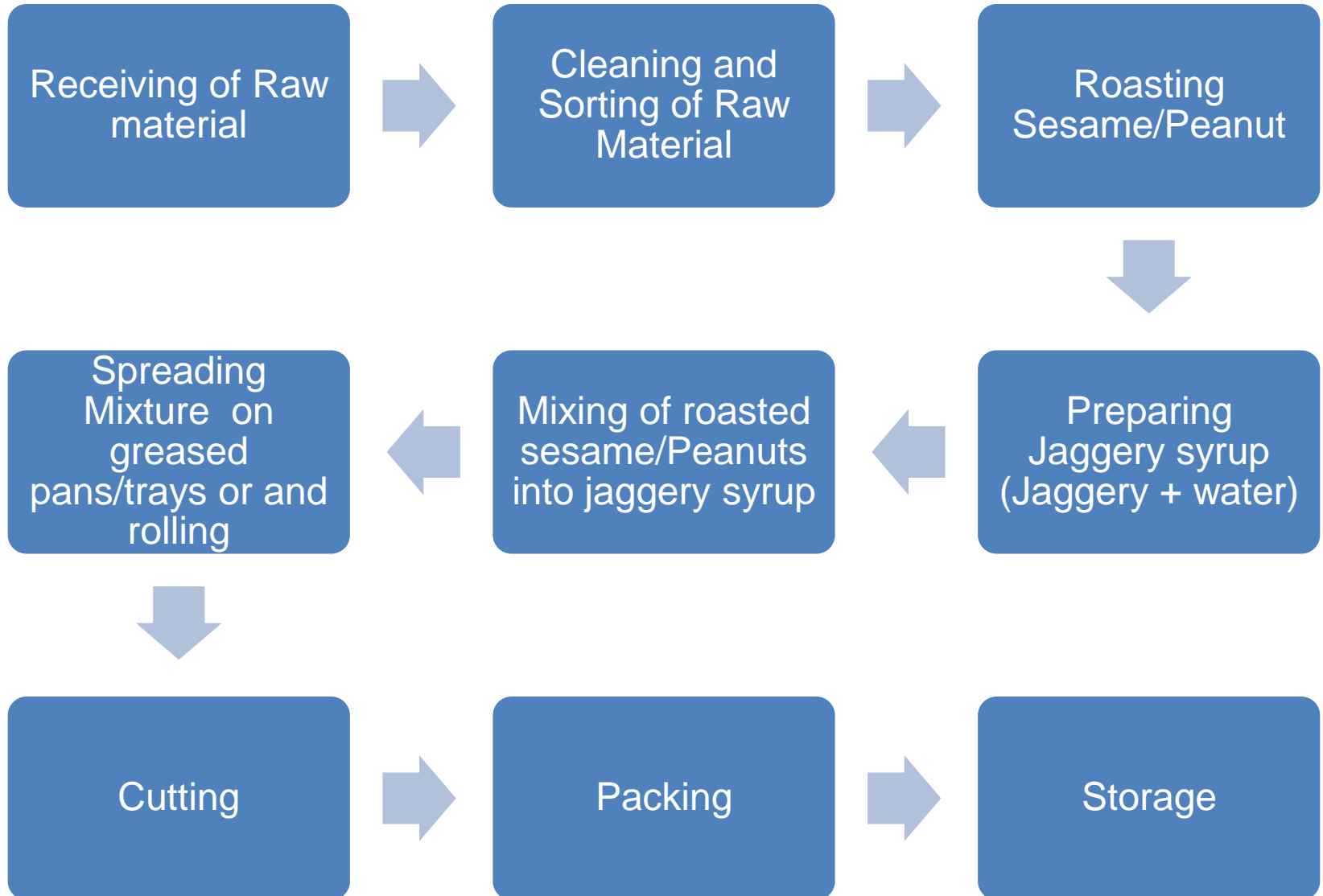
- Khoya by whatever variety of names it is sold such as Pindi, Danedar, Dhap, Mawa or Kava means the product obtained from cow or buffalo or goat or sheep milk or milk solids or a combination thereof by rapid drying.
- The milk fat content shall not be less than 30 percent on dry weight basis of finished product.
- It may contain citric acid not more than 0.1 per cent by weight.
- It shall be free from added starch, added sugar and added colouring matter.



BASIC TYPES/VARIETIES OF GAJAK

| Types/Variety | Characteristic |
|----------------------|--|
| Gud-Til Gajak | Mainly prepared with jaggery-Sesame seeds. |
| Til-Revadi Gajak | Mainly prepared with Jaggery with Sesame seeds. |
| Peanut-Jaggery Gajak | Mainly prepared with Jaggery-Peanut. |
| Til Mawa Gajak | Mainly prepared with Sugar, Mawa and Sesame seeds. |

GENERAL FLOW CHART-GAJAK PROCESSING



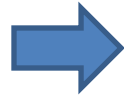
GUR TIL GAJAK PROCESSING STEPS



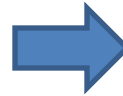
Sesame Seeds



Jaggery/Gur



Cleaning & Sorting



Roasting of sesame



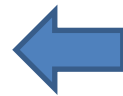
Preparation of Jaggery syrup



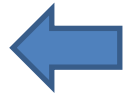
Pulling and Stretching .



Coating of sesame on pulled jaggery dough



Preparing Sheet with roller and cutting



Packing & Storage

Receiving of Raw Material



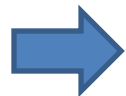
REVADI GAJAK PROCESSING STEPS



Sesame Seeds



Jaggery/Gur



Cleaning & Sorting



Roasting of sesame



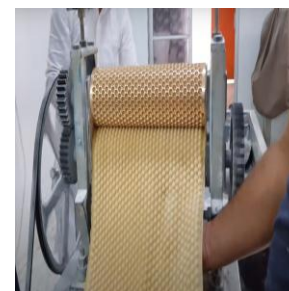
Preparation of Jaggery syrup



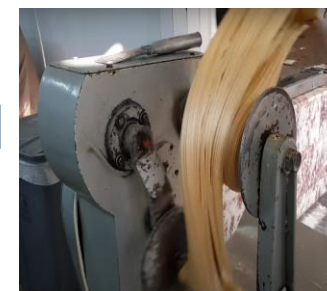
Packing & Storage



Coating Sesame seed on candies

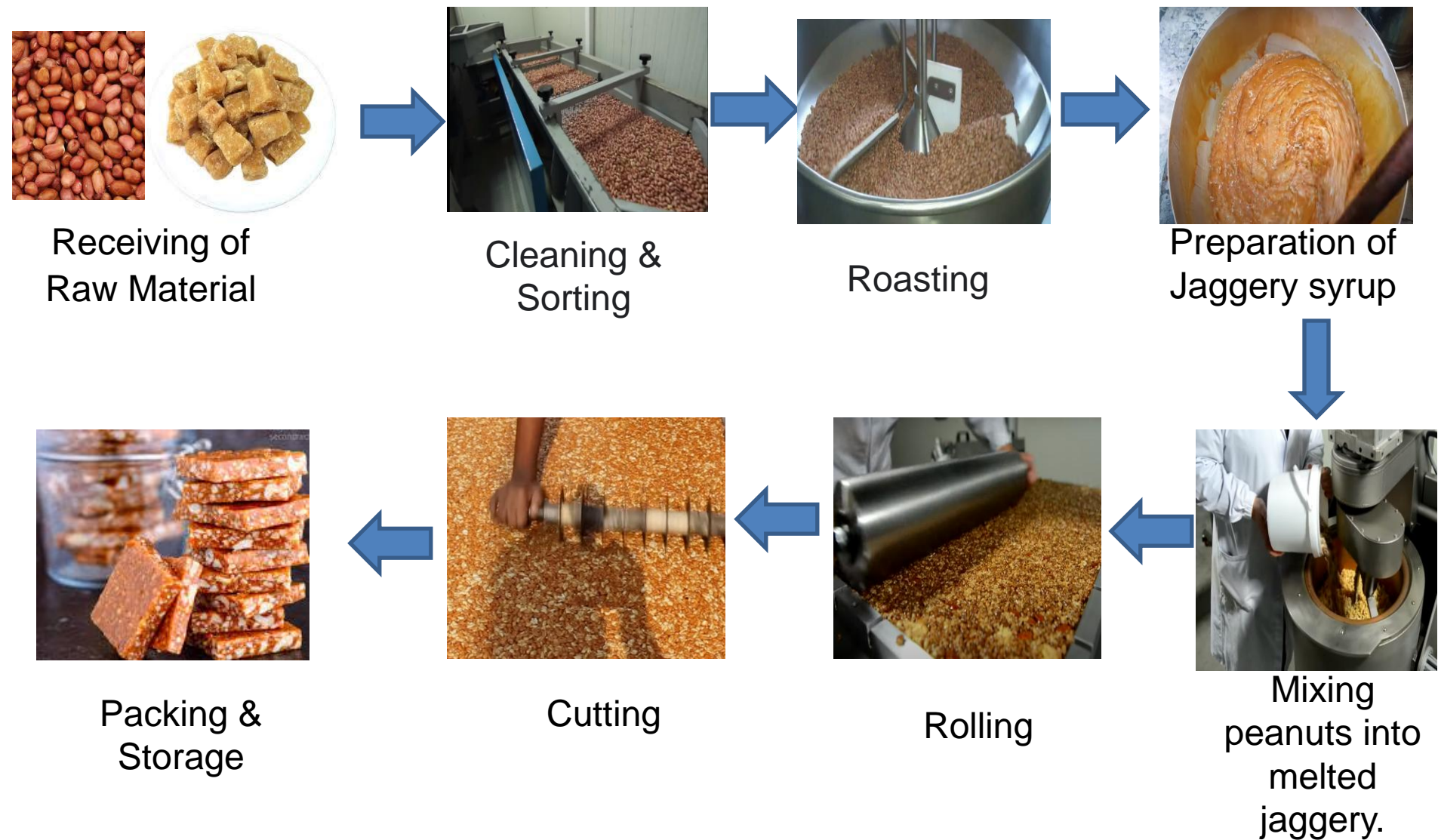


Preparing jaggery Candy



Pulling and Stretching .

PEANUT JAGGERY GAJAK/CHIKKI PROCESSING STEPS



TIL MAWA GAJAK PROCESSING STEPS



Receiving of Raw Material



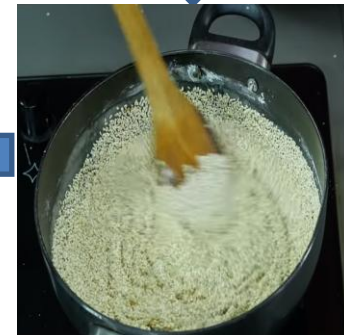
Cleaning (Removing foreign matter)



Roasting of sesame seed



Melting Mawa and sugar with Ghee



Mixing Sesame seed to Mawa-Sugar



Rolling



Cutting & setting



Packing & Storage



EQUIPMENTS & MACHINERIES

Conti.....

- General Requirements

Equipments & Machineries

- shall be made of corrosion free material.
- should be in Good condition, repair.
- Should not be chipped out.
- Design- Easy to clean, Sharp bends should be Minimum
- Preferably Food Grade (SS 304, SS 316).

EQUIPMENTS & MACHINERIES

Conti.....

- List Of Equipments & Machineries



Storage containers



Cooking Kettles



Roaster



EQUIPMENTS & MACHINERIES

Conti.....



Sorting Table



Taffy Puller machine



Cooking Kettles



Heat Sealer

EQUIPMENTS & MACHINERIES



SS Trayer, Cutter, Roller



Packing Machine



Ink Jet Printer



NUTRITIONAL IMPORTANC OF GAJAK

Gajak is very nutritious product and mostly consumed in the winter season

- keeps the body warm in winter and help to combat side-effects of winter and cold wave.
- great for digestion and ensure regular bowel movements due to fibrous content present in them.
- it a great energizer.



NUTRITIONAL IMPORTANC OF GAJAK **Cont..**

- have anti-inflammatory properties that are good for the skin.
- Calcium present in til and jaggery makes the muscles strong.
- Til and jaggery present in gajak is a good source of iron,
- it is helpful for anemic persons, also Good source of potassium and magnesium keeps the liver healthy.



QUALITATIVE ASSESSMENTS OF THE FINISHED PRODUCTS

- As per the Food safety and Standards (Food Product Standards and Food Additives) Regulation, 2011

Gajak falls under Proprietary food.

(Proprietary food means a food that has not been standardized under these regulations).

- The product shall be free from added colouring matter and any harmful substance. All the Food additive used should be as per the Appendix A of Food Products Standards & Food Additives regulations, 2011.
- It shall conform to Microbiological criteria as per the Appendix B of Food Products Standards & Food Additives regulations, 2011.

| | |
|-------------|----------------------|
| Mould count | Absent in 25 gm / ml |
|-------------|----------------------|

CONTACT DETAILS



**Plot No.97, Sector-56, HSIIDC, Industrial Estate, Kundli,
Sonipat, Haryana-131028**

Website: <http://www.niftem.ac.in>

Email: pmfmecell@niftem.ac.in

Call: 0130-2281089