



PACKAGING of FENUGREEK



AATMANIRBHAR BHARAT

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

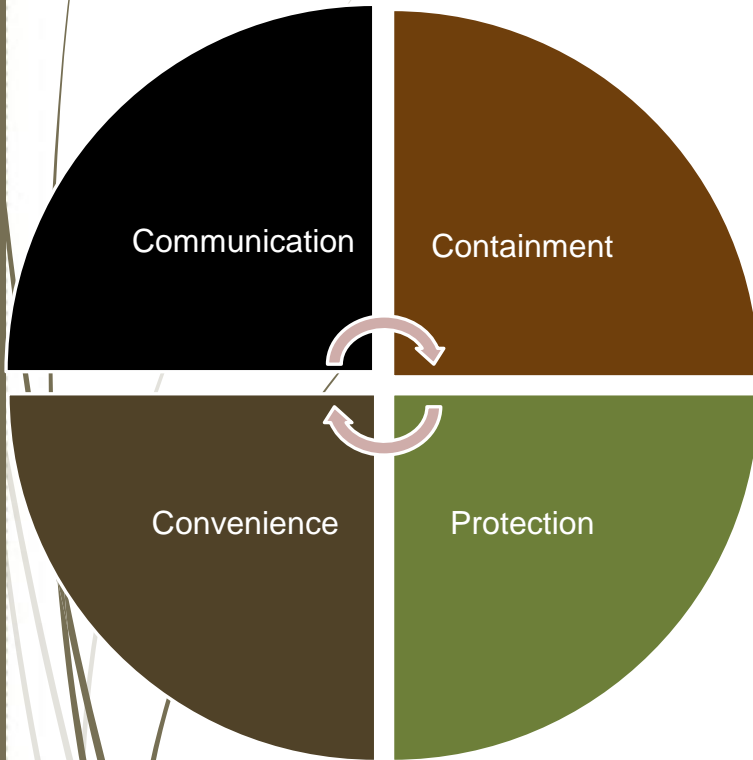
INTRODUCTION

- Fenugreek seed powder is hygroscopic in nature and has a tendency to absorb moisture resulting in mould attack and insect infestation.
- Fenugreek seed and leaf powder shall be packed in clean, sound, sealed packages, material which does not affect the product
- Value added products can be stored in different types of packaging materials to increase its shelf life.





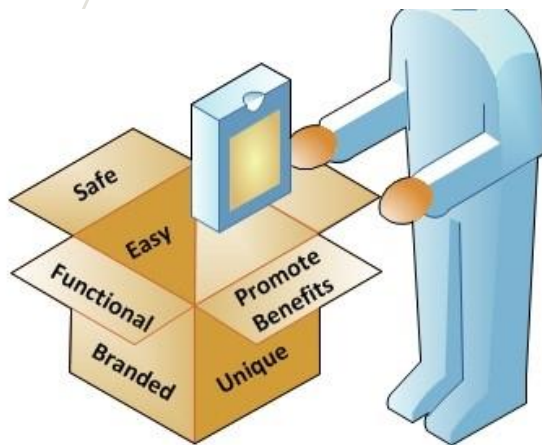
FUNCTIONS OF PACKAGING



- Ability to protect content from spoilage and Spillage
- Prevent insect infestation and insect damage
- Economical, easily available and easy disposal
- Confirm with food laws



FUNCTIONS OF PACKAGING



- Offer Protection against environmental conditions- moisture barrier
- Offer protection against microorganisms- oxygen barrier
- Strength properties to withstand mechanical hazard during transportation and storage
- Have a good printability

PACKAGING OF FENUGREEK

- Dried fenugreek leaf or leaf powder
- Dried fenugreek seed or seed powder



DETERIORATIVE FACTORS frsh OF FENUGREEK

High Moisture Content

- Moisture absorption from humid atmospheres promotes results in mould attack and insect infestation.
- This leads to loss in aroma, caking and rancidity

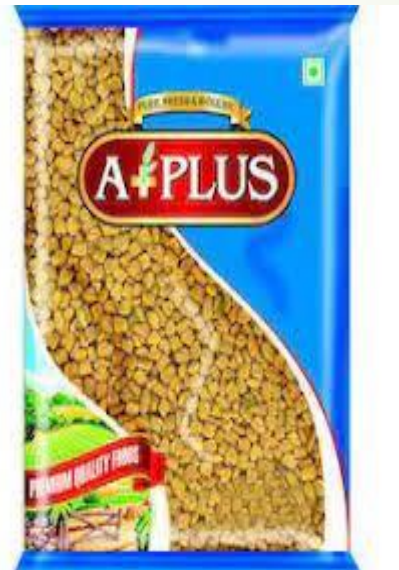
PACKAGING OF DRIED FENUGREEK LEAF

- Generally it is done paper box and Low density polyethylene (LDPE).
- High density polyethylene (HDPE) and Aluminum Laminated Pouch can also be used.
- Glass bottles and plastic bottles are also used for packaging of dried leaves or powder



PACKAGING OF DRIED FENUGREEK SEED

- Generally it is done in Low density polyethylene (LDPE).
- High density polyethylene (HDPE) and Aluminum Laminated Pouch can also be used.
- Glass bottles and plastic bottles are also used for packaging of dried leaves or powder





BULK PACKAGING

- ▶ Whole seed of fenugreek is packed and transported in jute gunny bags and double polythene lined bags.
- ▶ The plastic based alternate packaging materials are used to overcome the contamination problems associated with jute.
- ▶ Eco friendly packaging materials like jute gunny bags, paper bags *etc* can be utilized and use of polythene bags can be minimized
- ▶ Dried fenugreek seeds having moisture content of 10-11% can be stored without any mould growth in jute bags with polythene lining of 0.003 inch or more thick or in laminated bags or similar containers



ADVANTAGES OF BULK PACKAGING

- Bags are flexible, collapsible and durable
- Can be used for packaging of, powder and any free-flowing material.
- Product wastage/spillage and tampering can be avoided.
- Since the handling is mechanized, less labour is required.
- Saving in time for loading and unloading.
- Bags are light in weight and, therefore, freight costs are reduced.
- Creates eco-friendly, pollution free working atmosphere.





INSTITUTIONAL PACKAGES

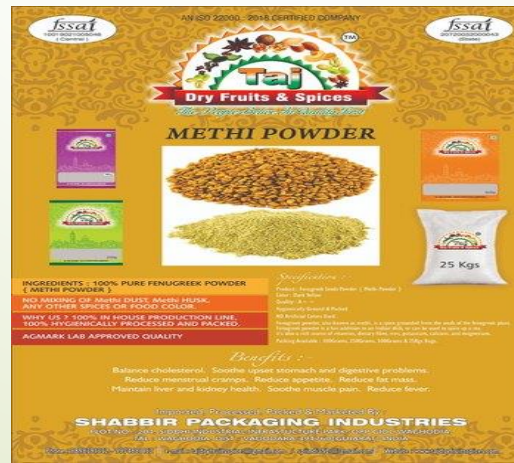
- Institutional packs of capacities ranging from 2kg to 10 kg are also used.
- Traditional materials used: tinfoil containers and jute bags.
- Currently used materials: Laminated flexible pouches and plastic woven sacks.
- BOPP multicolor Printed laminated PP Woven bags.





RETAIL PACKAGING-FENUGREEK

- The fenugreek dried leaf and seeds (in whole or ground) should be packed into polypropylene packaging (bags or flasks) or glass.
- All packaging must be hermetically sealed to avoid loss in the mass or modifications in the moisture content.
- Some care should be taken when removing the air from within the packaging before sealing.
- The vacuum packaging improves the conservation of the quality of the dried full leaf and powder





CONSUMER PACKAGES



- The options available to the traders/exporters in the selection of a consumer pack for domestic and export market are quite wide.
- The selection/choice of the packaging material/system depends upon a number of factors.
- Shelf-life period(the degree of protection required by the product against moisture pick-up, aroma retention and discoloration.
- Climatic conditions during storage, transportation and distribution.
- Type/sector of market.
- Consumer preferences.
- Printability and aesthetic appeal.

GLASS CONTAINERS

- Bottles/Jars are commonly used for dried products, brine, pickle etc
- Most bottles and jars are tailor-made specifically for one product or one manufacturer.
- Glass packaging materials are strong and corrosion resistant but costly
- Glass jar and steel jar were found to be better containers for storing ground dried fenugreek leaf and seed for longer storage period
- Eliminates the risk of potentially harmful chemicals found in some plastics that can leach into food.





GLASS CLOSURE AND SEALING LUG JARS

Lug Jars

- Also known as Twist Off(T/O) caps, lug caps are compatible with containers whose threads are non-continuous.
- Lugs on the interior of a lug cap, correspond with the non-continuous threads and close by a partial rotation.



LUG Cap Sealer
(Mechanical)



LUG Cap Sealer
(Pneumatic)



GLASS CLOSURE AND SEALING THREAD JARS

Continuous Tread

- Continuous thread caps can be metal or plastic and have various liner options.
- Categorized by threads which wrap continuously around a given finish, a few products that traditionally use continuous thread caps include peanut butter and mayonnaise.





FLEXIBLE PACKAGING



The printed flexible pouches are generally laminates of various compositions.

- Polymers are commonly used for packaging due to their transparency, softness, heat sealing capacity, low cost, good mechanical property and they also have good barrier to heat and oxygen

1. Polyester/metallised polyester/ LDPE
2. BOPP/LDPE
3. BOPP/metallised polyester/LDPE.
4. Polyester/AL foil?LDPE





FLEXIBLE PACKAGING

- Polyester and BOPP materials used for lamination is generally 10 or 12 μ thick.
- PVDC, EVOH and EVAL based material have high barrier properties.



TYPES OF POUCHES



- Centre seal formation
- Three sides seal formation
- Four sides seal formation



Centre seal formation



Three sides seal formation



Four sides seal formation

KRAFT PACKAGING

- Has good strength, printability and appearance.
- Other advantages are its low cost, wide availability and low weight.



- Currently very popular material in food packaging
- Made by sulphate pulping process.
- Poly amide or polyamine resin is used to coat or laminate to improve barrier properties.

PET bottles

- Clear, Shiny and transparent.
- Unbreakable.
- Good barrier properties.
- 100 % recyclable.
- Low permeability of moisture and air.



OTHER PACKAGING MATERIAL

- Liner carton filling and packing machine also known as duplex box packing machine
- Provides good protection and barrier properties.



PACKAGING MACHINERY



Bag filling machine



Automatic FFS
machine



Automatic double head
power filling machine

- Name, trade name or description
- Name of ingredients used in the product in descending order of their composition by weight or volume
- Name and complete address of manufacturer/packer, importer, country of origin of the imported food (if the food article is manufactured outside India, but packed in India)
- Nutritional Information
- Information Relating to Food Additives, Colors and Flavors
- Instructions for Use



FSSAI LABELLING REQUIREMENTS

- Veg or Non-Veg Symbol
- Net weight, number or volume of contents
- Distinctive batch, lot or code number
- Month and year of manufacture and packaging
- Month and year by which the product is best consumed
- Maximum retail price

LABELLING OF FENUGREEK

Ingredients

Name and complete address of the manufacturer

Customer care information

Information of the product

FSSAI License number

Best Before

Vegetarian Sign

Net Weight

Repacked & Marketed by: iStoreDirect Trading LLP
C7, Basement, Kamanwala Chambers, New Udyog Mandir 2,
Mogul Lane, Mahim (W), Mumbai - 400016, Maharashtra; India.
Customer Care: +91-7208083639 / +91-22-24463639.
Email: support@urbanplatter.in. Website: www.urbanplatter.in

**Urban Platter Dried Fenugreek
Seeds, 1Kg**
Ingredient : Methi Seeds.

Packaging Date:
Best Before Date:

Store in a cool & dry place,
away from Sunlight. Keep
airtight all the time.

fssai

License Number:
10017022007024

M. R. P.:
₹/-
inclusive of all taxes.





HERBAL HILLS®



Methi

Seed Powder

Trigonella foenum-graecum



1kg मेशी बीज पावडर

• Methi (Fenugreek) seeds have been used since ancient times in management of Joint Health. It may help reduce symptoms related to stress / pain. Being a good source of dietary fiber, it supports management of blood sugar levels in the normal range.

- May help to detoxify the body.
- Rich in fiber, considered as a mild laxative.
- May support digestion.
- May support uterine health.
- Considered as a galactagogue, helps support weight management.

Dosage: Take 3 gms powder, 1 to 2 times a day or as advised by the physician.

Caution: Pregnant or lactating women are advised to consume herbal products under the advice of the physician.

• These statements have not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

Store in a cool dry place away from direct sunlight.
Keep out of reach of children. Do not use if pouch is broken.

Mfg. Lic. No.: PD/AYU/002/10

Batch No. :

Packed Dt. :

Expiry Dt. :



Manufactured & Marketed by:
ISHA AGRO DEVELOPERS PVT. LTD.
(An ISO 22000:2005 Certified Company)
36A/55AB, Lonavala Co.op. Indl. Est. Ltd.
Village - Nangargaon, Lonavala, Pune,
Maharashtra, India.
e-mail : enquiry@herbalhills.in
www.herbalhills.in

Customer Care : 91 22 28686868
(10 a.m to 6 p.m on weekdays)



Ayurvedic Product



National Institute of Food Technology and Entrepreneurship and Management

Ministry of Food Processing Industries

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