

# PACKAGING OF GREEN CHILLI SAUCES



**AATMANIRBHAR BHARAT**

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

## Shelf Life of Product:

- Chilli sauce products available that add flavor, moisture, and visual appeal to foods.
- Different kinds of hot sauce are going to spoil at very different rates.
- In general, any hot sauce will have a pretty decent shelf life.
- That's because most contain vinegar and chili peppers as essential ingredients.
- It's safe to say that an opened bottle of vinegar-based hot sauce could last three-to-five years if its refrigerated, and unopened could last even longer.



## Shelf Life of Product:

- The shelf life of natural chilli sauces can vary considerably among the type of processing due to the addition of different ingredients.
- As sauces are normally a formulated liquid or semisolid food product.
- their storage stability can be measured by their emulsion properties, color changes, flavor deterioration, chemical degradation, and/or microbial activity.
- Chili sauce that has been continuously refrigerated will generally stay at best quality for about 6-9 months.



# PACKAGING

## Need for Packaging:



It's not possible to imagine food without a packet!



Food packaging is everywhere. Being such a large industry, packaging has its own principles, technology, advantages and disadvantages, processes, toxic effects and cost.



Packaging which used to be a mere necessity few decades back has now turned into an art and a science.

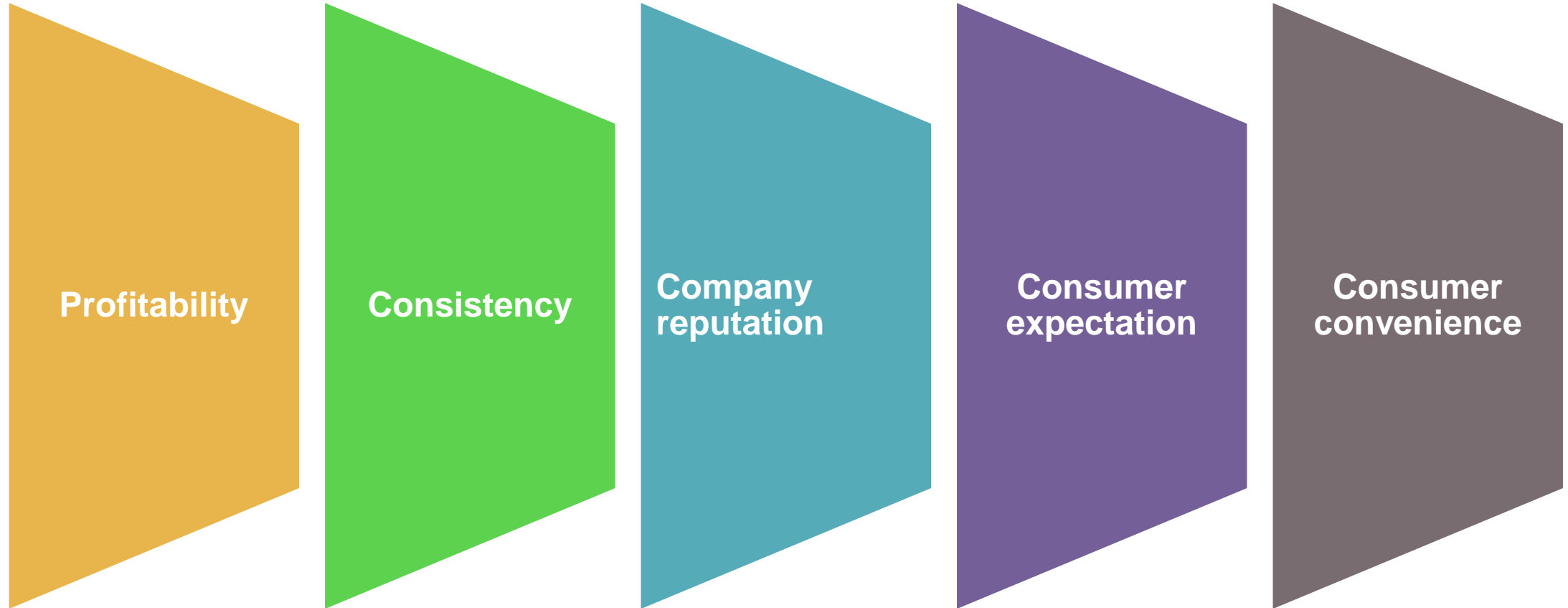
# PACKAGING

## Need for Packaging:

- It also refers to the process of design, evaluation, and production of packages.
- While appropriate packaging is important to maintain the basic attributes of food (temperature, color, taste, texture, etc.), maintaining food safety is an important function of packaging.



## FEATURES OF PACKAGING



# FEATURES OF PACKAGING



**Protect contamination**



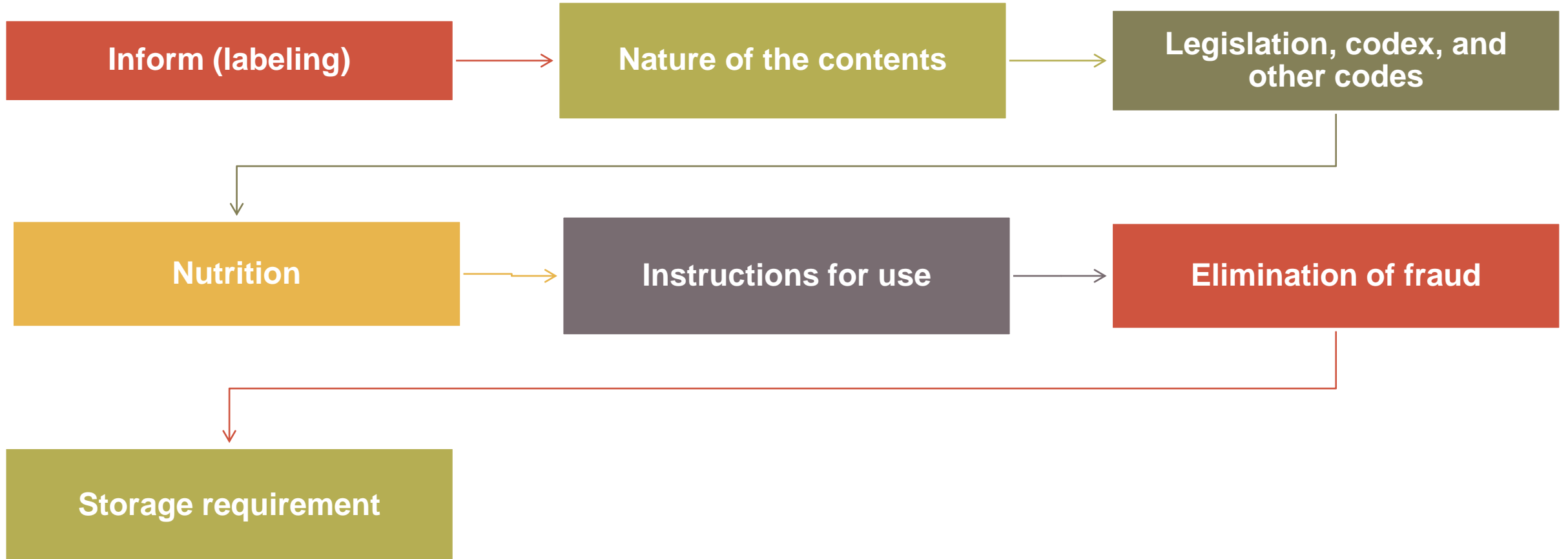
**Maintain quality**

**Legislation (codex, local legislation)**

**Product consistency**

**Company reputation**

# FEATURES OF PACKAGING





## TYPE OF PACKAGING

### Primary packaging

- It refers to the product's immediate container.
- It is the packaging that most closely protects the product.
- It can also be referred to as retail or consumer packaging.
- E.g. tin cans, glass jar



## Secondary Packaging

- Secondary packaging is the packaging that holds the individual units of package.
- Secondary packaging makes it easier for retailers to display and handle products.
- Secondary packaging may be removed from the item without changing the qualities or attributes of the good.
- Common examples include cardboard cartons, cardboard boxes, paperboard cartons, shrink-wrapped bundles Etc.



## TYPES OF PACKAGING

### Tertiary packaging

- It refers to the further packaging necessary for storage or transportation.
- It may contain a number of products within a cardboard box for easy transportation.
- Mostly curtain box are used for final packaging



## CHARACTERISTICS OF PACKAGING MATERIAL

**The material selected must have the following characteristics:**

- Must meet tamper-resistance requirements
- Must not reactive with the product
- They must protect the preparation from environmental conditions
- Must be non-toxic
- Must not impart odor/taste to the product
- Must be approved by government body.



# MATERIAL OF PACKAGING

## Glass jar

- More premier means for packaging of sauces
- More aesthetic appeal than most other packaging
- More stable chemical structure than other packaging
- Easily recyclable
- One major drawback is fragile nature of packaging



# MATERIAL OF PACKAGING

## PET Jars:

- More flexible & durable than glass jars
- Provides more economic means of packaging
- Used for wide range of liquid & semi-liquid product
- Less aesthetic appeal
- Provide more freedom for use



# MATERIAL OF PACKAGING

## Laminates Pouches:

- Usually used as refill for bottles
- May also include cap to make compatible for regular use
- Relatively less friendly to use
- Material usually includes a laminate of metal & plastic



# MATERIAL OF PACKAGING

## Plastic material for packaging

The printed flexible packets are generally laminates of various compositions.

Some of the commonly used laminates are:

- Polyester/metallised polyester/LDPE
- BOPP/LDPE
- BOPP/metallised polyester/LDPE
- Polyester/Al foil/LDPE





## Quality considerations during packing

Quality control of packed products is the last time the product is checked before reaching the customer.

Documented checking of the packages entails:

- Weight of the package
- Arrangement of the packages
- Uniformity
- Damage to the product
- Defects; and Moisture content.



## Aseptic Bottle Filling & Capping Machine:

- It's basically a filling & capping machine to fill sauce in bottles
- Aseptic environment prevents biological contamination



# FSSAI LABELLING REQUIREMENTS

1. Name of the Food
2. List of Ingredients
3. Nutritional information
4. Declaration Non-Vegetarian or Vegetarian
5. Information regarding food additives
6. Addition of colors and flavors
7. Net quantity
8. Name and complete address of the manufacturer
9. A lot no., Code no., and Batch number details
10. Date of manufacture or packing
11. Best before
12. Country of origin for imported food
13. Instructions for use shall be included in the label if necessary.

## **FOOD SAFETY AND STANDARDS (PACKAGING AND LABELLING) REGULATIONS, 2011**

- Every container in which any fruit product is packed shall be so sealed that it cannot be opened without destroying the licensing number and the special identification mark of the manufacture to be displayed on the top or neck of the bottle.
- For Canned fruits, juices and vegetables, sanitary top cans made up of suitable kind of tin plates shall be used.



## **FOOD SAFETY AND STANDARDS (PACKAGING AND LABELLING) REGULATIONS, 2011**

- For Bottled fruits, juices and vegetables, only bottles/ jars capable of giving hermetic seal shall be used.
- Juices, squashes, crush, cordials, syrups, barley waters and other beverages shall be packed in clean bottles securely sealed.
- These products when frozen and sold in the form of ice shall be packed in suitable cartons. Juices and Pulps may be packed in wooden barrels when sulphated.



## **FOOD SAFETY AND STANDARDS (PACKAGING AND LABELLING) REGULATIONS, 2011**



- For packing Preserves, Jams, Jellies, and Marmalades, new cans, clean jars, new canisters, bottles, chinaware jars, and Aluminium containers may be used and it shall be securely sealed.
- For Pickles, clean bottles, jars, wooden casks, tin containers covered from inside with polythene lining of 250 gauge or suitable lacquered cans shall be used.

# FOOD SAFETY AND STANDARDS (PACKAGING AND LABELLING) REGULATIONS, 2011



- For Tomato Ketchups and Sauces, clean bottles shall be used. If acidity does not exceed 0.5% as acetic acid, open top sanitary cans may also be used.
- Candied fruits and peels and dried fruits and vegetables can be packed in paper bags, cardboard or wooden boxes, new tins, bottles, jars, aluminium and other suitable approved containers.
- Fruits and Vegetable products can also be packed in aseptic and flexible packaging material having good grade quality conforming to the standards laid down by BIS.

## **The objectives of the scheme are:**

- Support for capital investment for up-gradation and formalization with registration for GST, FSSAI hygiene standards and Udyog Aadhar;
- Capacity building through skill training, imparting technical knowledge on food safety, standards & hygiene and quality improvement;
- Hand holding support for preparation of DPR, availing bank loan and up-gradation;
- Support to Farmer Producer Organizations (FPOs), Self Help Groups (SHGs), producers cooperatives for capital investment, common infrastructure and support branding and marketing.
- <https://mofpi.nic.in/pmfme/docs/SchemeBrochure1.pdf>





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