

PACKAGING OF CAKES



AATMANIRBHAR BHARAT

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

Shelf Life of Product:

- Many new baked goods have a shelf life of just a few days at room temperature.
- The most popular type of spoilage organism to be related to baked goods is molds.
- It can last up to 2-3 days when stored in the fridge, or else it lasts for a day or two.

- The quality of the product is also established with the type of process and technology further improves the quality of the product.
- The addition of anti-microbial packaging adds value to the product and thus the quality.



➤ **PROPER STORAGE**

- When food products are not properly stored, they are spoiled by other food products that are bad for health.
- As germs begin to grow on it, food products stored for a long time get spoiled.
- Spoilage is a phase in which food goods deteriorate to the point that human food is not edible.
- "In most cases it has been seen that these Maida-based instant noodles take a toll on the digestive process.
- Its remnants may reach the appendix area of the body and trigger infection."

PACKAGING

➤ The bad fats

- Sadly, most processed foods, including saturated fatty acids or trans fats, are filled with not-so-good fats.
- The fats that are safe for you are both monounsaturated fatty acids and polyunsaturated fatty acids.
- Instant noodles have saturated fats that can increase the amount of cholesterol in the blood if eaten excessively.



- Food and water can be germ-infected. Germs are borne by bees.
- They pass these germs on to our food while they are sitting on our food.
- There are various causes, such as bacteria, mould, yeast, moisture, light, temperature, and chemical reaction, that are responsible for food spoilage.

Cake Packaging:

- The packaging material- Both practical and marketing specifications.

- In order to ensure the consistency of the noodles shape and size during handling, transport, storage, and delivery.

- Packaging Specifications:
 - To protect the product from spillage and spoilage.
 - To provide protection against atmospheric factors such as light, heat, humidity, and oxygen.
 - The selected packaging materials should have high water vapour and oxygen barriers.

- The packaging material should have a high barrier property to prevent aroma/flavour losses and in gross of external odour.
- Therefore, the wrapping material should be resistant to grease and oil and be compliant with the commodity.
- The packaging content should, in addition to the above practical specifications, have good machinability, printability and be readily available and disposable.

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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 odour/taste to the product
- Must be FDA approved.



Fundament classification:

Packaging refers to the act of designing and producing the container or wrapper of a product. It is one of the most important parts of marketing.

➤ **Primary packaging:**

Primary packaging is packaging which is in close association with the product itself and is often referred to as a consumer unit. The main purpose of the primary packaging is to contain, protect and/or conserve the final product, in particular against contamination.



➤ Secondary Packaging:

Secondary packaging is the outer packaging of the main packaging, which connects packages and further covers or marks the prescription component.

- Paper and boards
- Cartons
- Corrugated fiberboard



➤ **Tertiary Packaging:**

Tertiary packaging is used for the handling, transportation, and delivery of bulk products.



TYPES OF PRIMARY PACKAGING

✓ Cardboard Cartons-

- Usually used in bakeries, solid board and folding carton cake boxes are available in one- and two-piece designs.
- An interesting, inventive cake box consisting of a tray and lid is named 'Torten Boy.'
- This box can be opened on two sides to cut the cake horizontally rather than upwards.
- This prevents any issues with removing the cake from the box and guarantees that there is no damage.

✓ **PILLOW BAGS**

- These boxes are made of hard plastic in round shape boxes created for cakes and cookies.

✓ **Cardboard cake box fully enclosed –**

- This is possibly the most common form of cake box.
- These boxes, often with a glossy outer finish and a matt interior finish, can be made of brown cardboard or white milk board.
- Some may have separate lids, while others are connected to the rest of the box with a flip lid.

- A window patisserie box is a box with a transparent 'window' of plastic on top of the lid so you can easily see what is inside the box.
- These boxes are great for cakes that you would like to feature a special message or decoration on top.
- They provide individuals with a mouth-watering taste of the tasty treat they are about to consume.
- They deliver great visibility, visual effect and presentation.

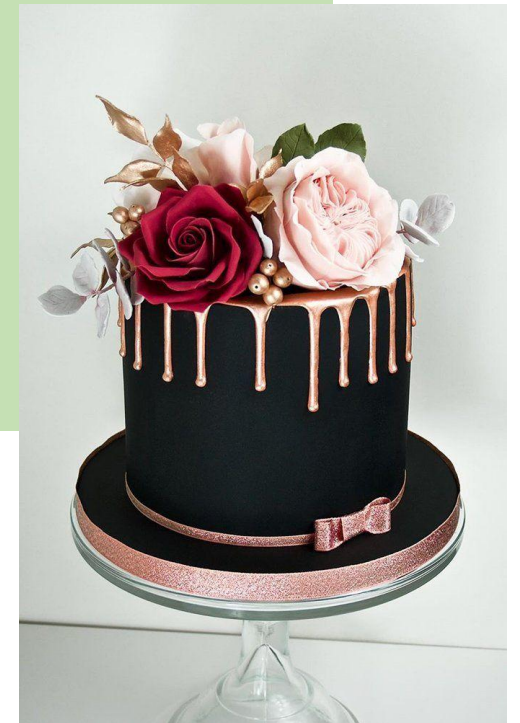
✓ CUPCAKE WINDOW BOX



- The cupcake window box has a 'window' on its lid, much like the window patisserie box, from which you can see the box's contents.
- However, this package has an insert that is specifically designed for cupcakes.
- The inserts make sure that while loading or unloading the cupcakes from the package, the delicate cupcake icing is not harmed and also holds the cupcakes in place throughout transport.
- These boxes are mainly intended for cupcakes, but they can also be used for muffins.

ESSENTIALS

- ✓ Shelf-life duration, i.e. the degree of protection required by the commodity against pick-up of moisture, preservation of aroma retention, decolouration, etc (in case taste maker is added)
- ✓ During packaging, transportation, and delivery, environmental conditions.
- ✓ Business type/sector
- ✓ Preferences for users
- ✓ Printability and appeal of aesthetics



The package types generally used as consumer packs are:

- ✓ Plastic cups of various sizes and shapes with labels and provided with metal or plastic caps.
- ✓ The plastic lids have added inbuilt features of tamper evidence, dispensing, grinding, etc.
- ✓ Printed tinplate container with/without dispensing systems.

- ✓ Printed tinfoil container with/without dispensing systems.
- ✓ Plastic containers with plugs and caps with dispensing and tamper evidence features.
- ✓ Printed flexible pouches – pillow pouch, gusseted pouch, stand-up pouch.
- ✓ Lined cartons

MATERIAL OF PACKAGING

- The most common choice of packaging medium is plastic (generally flexible).
- It provides the required protection and preservation, grease resistance, physical strength, machinability, and printability.
- Polythene, polypropylene, laminated pouches, PVC wrapped trays and plastic jars were the various packaging materials used.
- In terms of preserving consistency during the storage era, the suitability and adoptability of these packaging materials have been examined.

Plastic-based packaging materials that can be used for noodles are listed below.

➤ **Polyethylene (PE)**

- It is considered to be the backbone of packaging films.
- Polyethylene with its low water vapor transmission is of definite interest.
- Polyethylene films are fairly free of plasticizers and other additives and are quite extensively used as a part of lamination.
- Its ability to heat seal increases its value.
- A copolymer of polyethylene and polyvinyl alcohol and EVOH has outstanding gas barrier properties especially when dry.

➤ **Polypropylene-**

- Polypropylene films have better clarity than polyethylene and enjoy superior machinability due to stiffness.
- Lack of good saleability has been a problem; however, PVDC and vinyl coating have been used to overcome this problem.
- Some varieties of PP have been specially developed for twist-wrap applications as they have the ability to lock in position after twisting.

➤ **Polyesters (PET) and Polyamide (PA)**

- Polyethylene terephthalate film has high tensile strength, gloss, and stiffness as well as puncture resistance.
- It has moderate WVTR but is a good barrier to volatiles and gases.
- To provide heat seal property, PET is normally laminated to other substrates.
- Nylons or polyamides are similar to PET but have high WVTR.

➤ **Metallised Films**

- When polymeric films are metalized there is an improvement in their barrier properties.
- Metallization is also used for decorative purposes and aesthetics.
- The films, which are used for metallization, are PVC, PET, PP, and polyamides.

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