

# Make a healthy snack & package it



## Subjects

Earth Science

## Topics

Product Packaging Design Cooking

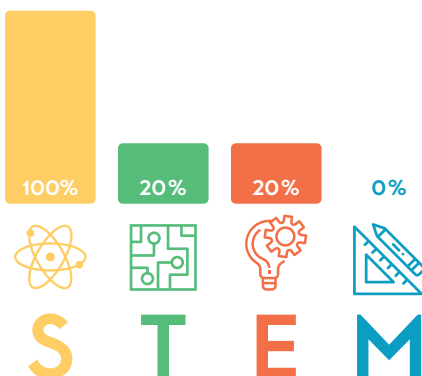
## Key Words

Nutrition Plastic Eco-Friendly Packaging Composting Local Produce Decomposition time

## Connection to SDG



## STEM Chart



## Time for Activity

## 45–60 minutes

## Introduction

The food we eat plays a major role in maintaining good health, protecting us from diseases and for our overall well-being.

Food brings people and communities together. Every region has their own local produce which has to be valued and celebrated. This is of great importance since it creates vital economic opportunities as well as helps to reduce the environmental impact. It strengthens communities, sustains local jobs and boosts the farmers' income.

The food industry and the packaging industry go hand in hand. Responsible, environmentally efficient packaging has gained a lot of importance in recent times. This is crucial in addressing the ever increasing plastic waste problem on our planet.

## Key Objectives

- 1 Children will understand the importance of nutrition by cooking a fireless healthy snack.
- 2 Children will take look at packaging options and understand the importance of eco- friendly packaging.
- 3 Through a hands-on experiment and observation, the children will understand the difference in decomposition time between eco-friendly packaging and plastic packaging.
- 4 The children will be able to appreciate locally available ingredients and understand the concept of food miles.

This activity will look at making a simple healthy snack and how local produce helps our economy. It will also give children an insight into the importance of bio-degradable packaging, which can be composted and why it plays an essential part of protecting our planet.

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## Guiding Questions

- 1 What is nutrition and why is it important?
- 2 What kind of food do you like? Regional or international cuisine?
- 3 How can our local shops/ farmers' market help our country grow?

## Materials for the cooking activity

- 1 1 Apple
- 2 Any spread of your choice: Peanut butter/Greek style or thick yogurt/Hazelnut spread.
- 3 Toppings: Any toppings that are healthy and local will be suitable - Handful of any dry fruits and nuts, chopped into small pieces.
- 4 Chocolate chips (optional)
- 5 Shredded coconut (optional)
- 6 1 table knife
- 7 A plate
- 8 A chopping board
- 9 An apple corer or a small cookie cutter or a small spoon to scoop out the seed core
- 10 A tea towel/ rag/old newspaper (to spread on the work surface).

## Safety

- 1 Advise children on being careful while using knives.
- 2 Make sure that children are not allergic to any of the ingredients used in preparing the snack.
- 3 Laying an old rag/newspaper on the surface before starting work will help in tidying up afterwards.



## Tasks/Procedure

### Cooking Activity

- 1 Lay the tea towel/newspaper on the work surface and place the chopping board on it.
- 2 Carefully slice the apple horizontally into circular disks about 5mm thick.
- 3 Using the corer/the small cookie cutter or a small spoon, cut out the seed portion in the centre. Now it will look like a donut.
- 4 Lay the apple donuts flat on a plate. Spread the top surface of donut with peanut butter or Greek yogurt or Hazelnut spread.
- 5 Take the suitable toppings of your choice and sprinkle over the coated donuts.

Healthy Apple Donuts are ready. These can be eaten fresh or stored in an air-tight container in the refrigerator. Keep the donuts aside and let's make its packaging.

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Fig 1



## Materials for the packaging activity

- 1 A rectangular banana leaf (roughly the size of an A4 sheet), gently toasted on low heat until it becomes glossy. This step should be done by an adult.
- 2 A few toothpicks
- 3 A pair of scissors
- 4 A cloth for cleaning and drying the leaves

## Guiding Questions

- 1 What are the food packaging materials we see these days? (Give examples of biscuit wrappers, plastic food bags/ boxes.)
- 2 What were the materials that our grandparents used, to wrap food? (Give examples of locally used materials like Banana leaves, bowls made from Sal leaves, paper, cotton/ jute lunch bags etc.)

- 3 Are the packaging materials that are widely used in the world today compostable?

## Safety

- 1 Advise children on handling the toothpicks and scissors carefully.
- 2 Seek the help of an adult to gently toast the banana leaf and handle the warm leaf with care.

## Tasks/Procedure

### Packaging Activity

- 1 Lay the toasted banana leaf flat on the work surface with the wrong side facing up.
- 2 Carefully place your apple donuts one above the other in the center of the leaf to form a small tower. (Refer the drawing)  
**Optional:** You could cut small circular shapes (diameter that is a little bigger than the apple slices) and place it between each donut. This prevents the toppings from getting all mashed up)
- 3 Fold the shorter ends towards each other until they come together. Use a toothpick to join it and hold it in place.
- 4 Fold the longer edges towards each other and make them meet over the pinned shorter edge. Secure this end also with a tooth pick.

Your eco-friendly packaging is ready.



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Fig 2



## Fostering Discussions

Do you think that these natural packaging are efficient?  
Why do you think we had to toast the leaves before starting our activity?

What is food miles and how does it affect our planet?  
Can expensive internationally sourced foods be replaced by locally available ones? (Give a few examples- Ragi/ Finger millets instead of Quinoa) Would you pause and think before buying an imported food item the next time you go shopping?

## Possible Extensions

Bury a biscuit wrapper and the leaf packaging that was just made by the student in soil. Observe after a few days, a week, a month. What happens to both these packaging materials? Decomposition time for different materials can be discussed.