## METHODS OF COOKING FOOD

<table>
<thead>
<tr>
<th>L.No</th>
<th>Title of Lesson</th>
<th>SKILLS</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Methods of Cooking Food</td>
<td>Interpersonal Communication and Effective Communication, Critical Thinking and Creative Thinking, Problem Solving and Decision Making, Coping with Stress</td>
<td>Importance and methods of cooking food</td>
</tr>
</tbody>
</table>

### Summary

Cooking makes food easy to digest. It improves the appearance, texture, colour, flavour and taste of food. It adds variety to meals. It helps making food safe and helps to keep it longer.

Food can be cooked by various methods:
- **Moist heat**: boiling, simmering/ stewing, steaming and pressure cooking
- **Dry heat**: baking, roasting and grilling
- **Frying in oil/ghee**: deep frying and shallow frying

In **boiling** food is cooked in adequate quantity of water. It is safe and simple and the food also does not get charred. But while boiling water soluble nutrients are lost from food if the water in which the food is boiled is discarded. **Stewing** is cooking food in small quantity of water kept below boiling point for a long time. By this method, the juices of the food are retained and nutrients are conserved. **Steaming** is cooking food with the heat from water vapours. Steaming helps the food to cook in a short time and helps to conserve the nutritive value, colour, flavour and palatability of food. **Pressure cooking** is a process of cooking in a special aluminium/steel utensil which allows cooking with a lot of steam under pressure. This method helps to kill all bacteria in food; reduce loss of water soluble vitamins and minerals; the food gets cooked faster and thus consumes less fuel. **Baking** is a method where the food is cooked inside an oven. The air inside the oven gets hot due to fire lit at its base or with electricity. **Roasting** is a process in which the food is put directly on a hot tava/ girdle/ sand/ fire and cooked. **Grilling** is cooking over a glowing fire. It uses more indirect heat and is slower than roasting. **Frying** is the process of cooking food in hot ghee or oil. Shallow frying means frying in little oil and deep frying means immersing food fully in hot ghee or oil.

### Principal Points

**Solar cooking—a BRIGHT idea!**
A solar oven or solar cooker uses sunlight as its source of energy.

**Advantages:**
- A solar cooker does not produce smoke.
- It has low maintenance and practically no running cost.
- It is an environment friendly method of cooking food.
- Solar cooking can be successfully implemented in many parts of India.

**Disadvantage:**
A solar cooker can only be used outdoors and it works only when there is plenty of sunshine.

### Build Your Understanding

1. While boiling, which do you think needs more water to cook—rajmah or vegetables?
   Ans. Rajmah needs more water because it is drier and harder than vegetables.

2. Do you know why a pressure cooker cooks food fast?
   Ans. In an ordinary cooking pan, steam escapes from the sides. But in a pressure cooker steam gets trapped thereby the food gets cooked faster i.e. almost in 1/3rd time than boiling.
What’s Important to Know?

SAVE NUTRIENTS!
- Foods having water soluble nutrients should be cut and chopped after washing. The water, in which they are cooked, should not be discarded.
- Foods having fat soluble nutrients should be served along with the oil in which they are cooked.
- Leaving foods exposed could result in nutrient loss due to oxidation.
- Over-cooking always results in losses.
- For hard foods, it is better to soak them for a few hours before cooking than to use cooking soda.

METHODS OF FOOD ENRICHMENT
- **Combination:** Lack of a certain nutrient in one food can be compensated for by cooking it with a food that has the absent nutrient e.g. dal and rice in khichri.
- **Fermentation:** Micro-organisms present in food or added in the form of curd or yeast change nutrients into simpler form. Sometimes new nutrients are created e.g. dhokla.
- **Germination:** Soaked pulses are left tied in wet muslin to sprout. This way the nutritional quality is increased and the food becomes easier to digest.

Did You Know?

NUTRIENTS ARE LOST DURING COOKING!

**Vitamin A**
- It gets oxidized when it reacts with the oxygen present in air e.g. carrots cooked in open pan.
- It gets dissolved in fat e.g. when spinach is deep fried.

**Vitamin B complex**
- It gets dissolved in water when the foods consisting vitamin B complex are washed, soaked or cooked in water e.g. boiled vegetables, rice and pulses.
- It is destroyed when cooking soda is added to foods e.g. rajmah.
- Vitamin B$_2$ is destroyed from milk if exposed to sunlight.

**Vitamin C**
- It gets destroyed by heat and oxidation e.g. when food is kept cut for long or cut too fine.
- If the food is over-cooked or cooked with soda or cooked in water (the water is later discarded).

**Protein**
- Proteins absorb water and get coagulated with heat. Overcooking makes protein foods dry, rubbery and difficult to digest.

**Oils and fats**
- Repeated heating lowers the quality of food.

**Minerals**
- Minerals such as sodium and potassium dissolve in water.
- Cut foods lose minerals during washing.

Evaluate Yourself

1. Choose a method of cooking suitable for your sick grandmother and give two reasons for your answer.
2. If your pressure cooker is not working effectively, what could be wrong with it?
3. Name two dishes cooked by each of the following methods: a) baking; b) steaming; and c) deep frying.

Extend Your Horizon

**Pasteurization:** Milk is heated to a high temperature and then quickly cooled. The microorganisms in milk are not able to withstand the sudden change in temperature and are destroyed.

Maximize your marks

- Do the in-text questions and activities in the chapter.
- Learn about the various methods of cooking.