4
Methods of Cooking Food

4.1 Introduction

You must be going to the market to buy a variety of foods. Some of the foods which you buy like tomatoes, cucumber and fruits are best eaten raw. But others like wheat, rice, dals, potatoes and some vegetables must be cooked before they are eaten.

Do you know why we must cook foods? Because these foods can not be eaten raw. If you eat them raw they will not be tasting well, you will not get all the nutrients present in them and they can also affect your digestive system. Hence you must know different methods of cooking different foods.

But do you know, if the food is not cooked the right ways you will loose many of the nutrients. Therefore, you should use the correct method of cooking to keep all the nutrients safe.

You must also learn to improve the quantity and quality of nutrients of your food. In this lesson you will learn about good cooking and the various methods of improving the nutrient content of food.

4.2 Objectives

After reading this lesson you will be able to:

- explain the need to cook food;
- describe the different methods of cooking;
- explain importance of conserving nutrients while cooking;
- suggest measures to minimize nutrient losses during preparation and cooking food;
describe the methods used to enhance the nutritive value of food;

suggest ways to use left over cooked foods.

4.3 Why do You Cook Food?

1. Cooking makes food easy to digest

When food is cooked it becomes soft so that it is easily chewed and swallowed. The juices that digest food are able to mix well with the softened food. Hence the food gets simplified for use by your body.

2. Cooking improves the appearance, texture, colour, flavour, and taste of the food

Cooking improves the taste and flavour of food, changes its colour and appearance. When you cook meat or potatoes etc. you will find that the food has better taste. Cooking meat improves its taste, flavour and colour. Addition of spices and condiments during cooking further improves the acceptability and palatability of foods. You must observe the changes that the foods undergo when you cook next.

3. When foods are cooked you can make a variety of dishes

Cooked foods provide variety in your meals. You must have eaten potatoes cooked in different ways - such as pakora, potato chat, potato paratha, potato vegetables and potato chips etc. Can you list a few food items that can be made with atta? Yes, parantha, puree, chapati, bread, mathi, etc. So, you see that you can make variety of dishes with the same food.

4. Cooking helps to keep the food longer

Do you know why we boil milk? Yes, if you do not boil milk it will get spoiled soon. Boiling milk helps in killing of spoilage organism and makes it last longer. Atta dough gets spoilt after some time. You must have noticed that chapaties can be kept longer than the dough.

Can you name a few more foods that will last longer after cooking?

5. Cooking makes the food safe and sterile

Raw foods get spoilt because of the harmful micro-organism present in them. These micro-organism get destroyed, when you cook food. Killing germs by cooking makes the food sterile and safe for eating. Milk often contains bacteria that cause tuberculosis. Do you know what happens when you boil milk? Yes, the bacteria get killed and milk becomes safe for drinking.
- Makes food digestible,
- Improves the colour, flavour, taste and appearance of food.
- It makes the food attractive so that we feel like eating it,
- Helps provide a variety in our meals.
- Makes food last longer,
- Makes food safe for eating.

INTEXT QUESTIONS 4.1

1. Observe and list changes in colour after the following vegetables have been cooked.

<table>
<thead>
<tr>
<th>Food item</th>
<th>Change in colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Spinach</td>
<td>Green</td>
</tr>
<tr>
<td>ii) Carrot</td>
<td>Red</td>
</tr>
<tr>
<td>iii) Brinjal</td>
<td>Purple</td>
</tr>
</tbody>
</table>

2. Name five dishes which can be prepared with milk.

(i) ............................................................................................................
(ii) ............................................................................................................
(iii) ............................................................................................................
(iv) ............................................................................................................
(v) ............................................................................................................

3. Prepare a list of five food items that–

(i) Can be eaten raw

(ii) Must be cooked before eating

<table>
<thead>
<tr>
<th>Raw</th>
<th>Cooked</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
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<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>

4. Name 4 foods that will last longer after cooking.
(i) ...................................................................................................................
(ii) ...................................................................................................................
(iii) ...................................................................................................................
(iv) ...................................................................................................................

4.4 Methods of Cooking

You often say boil the rice, fry pakoras or bake a cake. What are boiling, frying and baking? These are the methods of cooking. Food can be cooked:

i) By moist heat

ii) By dry heat.

iii) By frying in ghee or oil.

A. Cooking by Moist Heat

In this method water is heated or boiled. The food is put into this boiling water or cooked in the steam which comes out from the boiling water.

There are three ways by which you cook food by moist heat.

These are:

a) Boiling

b) Simmering or stewing

c) Steaming

Let us study about each of these three processes now.

(a) Boiling

In this method food is covered with an adequate quantity of water and heated to a boiling. For example we boil potatoes, eggs, a number of vegetables, rice etc.

Usually green leafy vegetables such as cabbage, methi, and spinach are cooked with no water. Whereas vegetables such as green peas, green beans, are cooked with little water. Cereals such as rice and pulses such as dals, legumes, grams are boiled in large amounts of water.

There are a few points which you should keep in mind while boiling foods.

i) Before boiling, wash the food stuffs thoroughly.

ii) Cover the food with an adequate quantity of water.

iii) First boil the water and then put the food.
iv) Cook in a pan which has a well fitting lid. This way the steam from boiling water will not go out from the pan and the water will not dry up. Food gets boiled faster when the cooking pan has a lid on.

v) Do not boil foods longer than needed. Once they are soft and tender, take them off the fire. If food is cooked for a very long time it looses its colour, shape and taste. Potatoes and other root vegetables should be boiled with their skins on.

vi) Water used for boiling should cover the food. Water soluble nutrients present in foods dissolve in water in which the food is being boiled. If you throw this water, nutrients will be lost.

What can you do to save these nutrients? You can use this nutrient rich water to make gravy for another vegetable.

b) Simmering or Stewing

Stewing is cooking for a long time in water, below the boiling point. In this method you cook food in a small quantity of water. Once the boiling starts the flame is lowered and the food is allowed to cook slowly.

Suitability: This method is suitable for cooking hard and tough foods like dals, meat and dried vegetables.

Advantages: While cooking by this method we do not have to constantly keep an eye on food. And there are lesser chances of food getting burnt.

c) Steaming

Do you know what happens when the water boils? Yes, it gives off steam. When food is cooked in water vapour with or without pressure it is said to be steamed and this method of cooking is called steaming. Can you name some steamed foods that you have eaten? Yes, Idli and Dhokla.

Steaming can be done for solid and semi-solid foods.

Water is heated in a pan on fire. The pan is covered with a clean muslin cloth. Food is placed on the cloth. The steam passes around the food and cooks the food placed above.

When you are making idlis, the batter is put in the idli mould, which is then lowered into a container with water at the bottom. Once again it is the steam going around the moulds that cooks the idlis.

Suitability: This method is suitable for making Dhokla, caramel custard etc.
Advantages: Steaming shortens the duration of cooking and helps to conserve nutritious value, colour, flavour and palatability of food. Steamed food is light nutritious and easy to digest. Such foods are good for old people and little children.

Pressure Cooking

Pressure cookers are generally made of an Aluminium alloy which is very strong. Now a days stainless steel cookers are also available in the market. But these are quite expensive. Raw food is put in the container along with water and cooked under pressure. Under pressure the temperature of water is increased up to 112°C. Fig. 4.3.

Advantages: Pressure cooking kills all bacteria and hence the food is safe and hygienic for you to eat. Rice, dal, meat, potatoes, roots, beans, and peas and peas are cooked in the pressure cooker. The food gets cooked faster than boiling. You can call pressure cooking high temperature short time cooking.

INTEXT QUESTIONS 4.2

1. Write two differences between boiling and stewing.

2. Tick mark (√) the correct answer
   (i) It is best to boil food in a
   a) flat pan
   b) deep pan
   c) lot of water
   d) pressure cooker
   (ii) If you throw away the water in which food has been boiled, the food loses
   i) colour
   ii) taste
   iii) nutrients
   iv) flavour
   (iii) Cooking food in a pressure cooker is fast
   i) and colour is lost
   ii) some germs are destroyed
   iii) makes food safe to eat
   iv) improves taste
B. Cooking by Dry Heat

What do we normally eat for breakfast? Sometimes we eat chapatis, paranthas, purees and sometimes bread. We also eat rusks and buns. Do you know how these are cooked? Yes, they are cooked by dry heat.

Cooking food by dry heat means using hot air to cook the food.

There are three methods of cooking food by dry heat using hot air.

a) Baking

Baking is the method in which food is placed inside a closed box called an oven. The air inside the oven is made hot by fire or electricity. The food gets cooked by hot air. Have you seen a bakery in your village or neighbourhood? You must have also seen the big ovens heated by fire in which biscuits, breads and pastries are made in these bakeries. These ovens are also known as ‘bhattis’. It is in these ovens that the food is cooked. In the very big bakeries, the air is heated by electricity. Fig. 4.4

You can easily make an oven at home to bake foods. Take an empty oil tin. Put a layer of sand in it and fit it with a lid. Heat this over coal, kerosene or a gas stove. Once it becomes hot, put the food inside and close the lid. Place the tin on a low fire. Bake food till it is light brown in colour. Do not open the lid very often because the hot air from inside will go out and make the food dry and hard.

b) Roasting

Another method of cooking food by dry heat is called roasting. Roasting is cooking on a glowing fire. While roasting, the food is put directly on the hot tava, hot stand or hot fire and cooked. For eg. channas, brinjals, potatoes, maize, ground nuts, cashew nuts, papad, meat etc. are cooked by this method. You must, have had chicken or paneer tikkas cooked in this way. Fig. 4.5

c) Grilling

Grilling is cooking over a glowing fire. The food is supported on a iron grid over the fire, or between electrically heated grill bars. The grill bars are brushed with oil to prevent food sticking and can be heated by charcoal, coke, gas or electricity. The food is cooked on both sides to give the distinctive flavour of grilling. Potato, sweet potato
and brinjal can be grilled for making various dishes. You must have eaten Brinjal Bharata, Bati chokha, etc. Fig. 4.6

INTEXT QUESTIONS 4.3

1. Fill in the blanks with appropriate words.
   
i) The method of cooking food with the help of dry heat in an oven is called ................................
   
ii) If an oven is opened very often the food will becomes .................... and ..................
   
iii) The process of cooking food directly on hot fire is called ........................

2. Differentiate between baking and roasting?

C. Frying

Frying is the process of cooking food in hot fat or oil. Food can be fried in two ways

a) Shallow frying
b) Deep frying

Advantages of frying are

- Fried food is very appetizing
- Quick method of cooking
- The keeping quality of food is increased.

Some precautions while frying food

(i) Food should be cut in suitable size and shape.
(ii) Do not put in too many pieces of food at the same time. It will lower the temperature.
(iii) Food should be fried to golden brown colour on both sides by turning over the food if necessary.

a) Shallow frying

When you make paranthas or an omelette, you need very little oil for frying. You can fry them on a tava or a frying pan. The food is turned over so that both sides may be browned and cooked. This method is called shallow frying.
b) Deep frying

Do you know how to fry foods? Yes, ghee/oil in a karahi is heated to the smoke point. Carefully put the food to be fired in the hot ghee/oil. The food should fully dip in ghee/oil. Put only a few pieces of food to be fried at a time. Avoid using large quantity of oil/ghee or overheating. If some ghee is left over after frying, drain and store in a closed container to be used again. Frying is a quick method of cooking as compared to boiling or stewing.

**Dr Microwave Cooking:** It is a new method of cooking, gradually becoming popular in large towns and cities. In this method food is cooked by microwave radiation. Heat is generated in the food by rapid vibrations of water molecules produced by microwave energy. It is the quickest method of cooking. Cooking time is reduced to ten times less than other methods of cooking.

### INTEXT QUESTIONS 4.4

1. Name three food items which are cooked by deep frying method.
   i)  
   ii)  
   iii)

2. Differentiate between deep frying and shallow frying.

### ACTIVITY

Observe dal, rice, potato curry and brinjal bhartha before and after they have been cooked. Record your observations in the table given below.

<table>
<thead>
<tr>
<th>Food</th>
<th>Colour Before Cooking</th>
<th>Colour After cooking</th>
<th>Texture</th>
<th>Flavour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palak Pakora</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potato curry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brinjal Bharta</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### 4.5 Nutrients Lost During Cooking

So far we have only read about the importance of cooking. Do you know that some nutrients are lost during cooking?
Even when we cut and wash the foods, some nutrients are destroyed. Let us understand how some of the nutrients are lost during cooking.

i) Vitamin A

Vitamin A is found in foods like spinach, methi, carrots etc. When we cook these vegetables not much of vitamin A is lost, but when we fry these foods, like when we make palak pakoras, vitamin A gets destroyed. Can you tell why? If you remember, vitamin A dissolves easily in fats and oils. So, when you fry such foods in oil, vitamin A comes out from the food and goes into oil.

ii) Vitamin B

How is rice cooked? First of all you clean rice and then wash it. Vitamin B being water soluble, goes out of the rice and washes away with the water. If you wash rice by rubbing you are letting more vitamin B wash away. After washing rice, it is soaked in water. Some more vitamin B goes out from the rice into the water during this process. Next, rice is boiled in water. If you use a lot of water to cook rice and throw away the extra water some dissolved vitamin B also goes out with this water. Sometimes, you add cooking soda to soften foods like rajmah and channas. Cooking soda also destroys vitamin B.

iii) Vitamin C

Vitamin C is an important nutrient which is easily destroyed by cooking. When you cut vegetables and fruits rich in vitamin C, some of it is lost. Vitamin C is also lost when you wash vegetables and fruits after cutting and exposing cut vegetables to air for long periods before cooking. When the foods are cooked for a long time or when you throw away water in which you cook them, you lose Vitamin C. You also lose vitamin C when you add cooking soda to the foods. Therefore, cooking procedures that minimize the loss of vitamin C result in conserving all other nutrients.

iv) Proteins

All proteins present in the foods coagulated by heat. Cooking results in softening of proteins in foods such as egg, fish, and meat, becomes water is bound in the process of coagulation. If the coagulated protein is further heated, it loses moisture and becomes dry and rubbery. They also become difficult to digest.

v) Oils and Fats

When food containing fat are heated, the fat has the tendency to separate from the food. You must have seen that heating milk results in the fat layer floating on top.

Oils and fats are used as a cooking medium. Some fat is absorbed during frying. Therefore fried foods such as pakoras, etc. gives us more energy than the boiled foods.
When fats, ghee and oil, are heated for long periods of time over and over again, to fry pakoras or purees etc. its quality becomes poor.

(vi) Minerals

Minerals like sodium, potassium, etc. dissolve in water. Minerals get lost when food is first cut, then washed and the extra water in which they are boiled, is thrown away.

**INTEXT QUESTIONS 4.5**

1. Write true (T) or false (F) against each statement.
   i) Vitamin B does not dissolve in the water in which you cook food.
   ii) It is not harmful to add a little soda to vegetables when cooking.
   iii) Minerals are lost when the water in which the foods are cooked is thrown away.
   iv) Less of vitamin A is lost when you deep fry the foods.
   v) Vitamin C gets easily destroyed during cooking.

2. You are served the following - i) boiled potato raita ii) potato, chips iii) potato pakora iv) potatoes baked in microwave oven  v) roasted potato
   Answer the following questions-
   i) Which dish would have less nutrients?
   ii) Which dish will be good for heart patients?
   iii) Which dish would be suitable for a nine months old baby?
   iv) Which dish took the least time to cook?

Note : There may be more than one answer for each question.

4.6 Conservation of Nutrients

Now you all know that some nutrients are lost when foods are cooked. Nutrients like vitamin B and C are lost when foods are boiled or soaked in water and the water is thrown away. Nutrients like vitamin A are lost when fats are used for cooking foods.

If all these nutrients will be destroyed, how will our body get energy to do work, repair body tissues and fight disease germs?

Therefore, you must think of ways of saving these nutrients.

Saving nutrients during the process of cooking is called conservation.
Let us see how you can conserve nutrients in foods.

1. Wash vegetables before cutting them so that minerals and vitamins are not destroyed. Do not wash the foods more than necessary.
2. Peel vegetables thinly as vitamins and minerals are found just under the skin.
3. Cut vegetables into large pieces just before cooking. Small pieces mean greater loss of nutrients.
4. If vegetables are to be cooked in water, put them into boiling water.
5. Scrape the peels very thin. Use dry tori or jute to remove peels from potatoes, etc.
6. Use just enough water for cooking. Do not throw away the extra water. Use this extra water to cook some other food.
7. Do not use cooking soda. Use of tamarind or lemon juice helps to conserve the vitamins.
8. Cook rice in just enough water which gets absorbed during cooking? Do you know how much water should be used for one katori rice? Yes, two katori water.
9. Cook in a pan which has a well fitting lid. When you cook in an uncovered pan most nutrients are lost.
10. Do not overcook the food as many nutrients will be destroyed.

INTEXT QUESTIONS 4.6

1. Arrange the following steps in the right order by putting 1, 2 …………… against each step.
   a) watch the time while cooking
   b) wash the vegetables
   c) cook in covered pan
   d) peel the vegetables thinly
   e) cut the vegetables into big pieces.

2. Write three ways of preventing nutrient loss, while cooking dal.

4.7 Enhancing Nutrients Content of Food

You are already familiar with the different ways that help you to conserve nutrients during cooking.
It would be so nice if we could increase the nutritive value of foods without increasing the cost.

Can you suggest some ways of doing so? Let us find out how to do it.

**Definition of Enrichment**

The process of improving the nutrients in foods by special methods is called Enrichment.

**Importance of enhancing nutritive value of food**

- To meet the nutritional requirements of the body.
- To make proper selection and preparation of foods.
- To consume food in a balanced manner.
- To improve the flavour and texture of the food.
- To get variety in food.
- To assist in planning the daily menu, keeping in view the nutrient content of the food.
- To prevent deficiency diseases in the body.
- To develop good food habits.

**Methods of Enrichment of Nutrients.**

There are three methods by which you can enhance or increase the nutrients present in your food.

a) Combination

b) Fermentation

c) Germination

Let us study about each one further.

(a) **Combination**

We all eat combination of variety of foods. For example, you eat a dal or channas etc. with vegetables, salad, curd and chapati or rice. Chapatis or rice will give you carbohydrates, dal and curd will give you proteins, vegetables and salad will give you vitamins and minerals. Combining of foods from different food groups is the easiest way of eating all nutrients.

You can also mix a number of foods in one dish and get all the nutrients from it. Such a combination of foods improves the quality of nutrients.

When you eat rice and dal together you get better nutrients. Do you know why? Cereals lack certain amino acids. And these are present in dals. On the other hand dals lack
some other amino acids that are present in cereals. Do you know when you eat dal and rice together, the quality of proteins becomes as good as that of milk.

Do you remember the food group to which the carrots belong to? What are carrots rich in? Vitamin A. What will happen to your khichri if you add carrots to it? And what will happen if you eat this khichri with curd?

The above khichri will also become rich in vitamin A, calcium and proteins (curd).

Can you name some other foods that can be added to your dal rice preparations? Yes, methi, peas, beans, ghee, etc.

Can you name some other rice and dal dishes that your family eats? Yes, Paushtik roti, Kachauri, Idli, Dosa, Sambhar, mixed dal, etc.

The combination of a variety of foods ensures better availability of nutrients.

Combination is the process of combining cheaper and commonly available foods from different food groups to improve the quality of nutrients.

**Combination helps you to**

i) Eat a diet that has good quality nutrients.

ii) Use cheaper and easily available foods that enhance the nutrient content of food considerably.

iii) Provide balanced diet to your family.

(b) **Fermentation**

Have you ever made bhuturas? These are made by mixing a little curd in maida which is kneaded into a dough and kept covered for few hours. In these few hours the dough rises. Do you know why? When you add curd to maida you introduce micro-organisms which begin to grow at a very fast rate. They start a process called fermentation. Fermentation makes the dough rise and become almost double in quantity.

During fermentation the micro-organisms use up some of the nutrients present in the atta and change them into other better quality nutrients. They also make some new nutrients.

**Definition of Fermentation**

Fermentation is a process in which some micro-organisms are added to the food. They change nutrients already present in the foods into simpler and better forms and also make other new nutrients.

Can you name some fermented foods? Curd, bread, khaman-dhokla, idli, etc. are all examples of fermented foods.
ADVANTAGES OF FERMENTATION

a) Fermentation improves the digestibility of foods. The micro-organisms which cause fermentation break the proteins and carbohydrates into smaller parts, which are easier to digest.

b) During fermentation of cereals and foods like peas, beans etc. the minerals, calcium, phosphorus, and iron are changed into better quality ones. These are then easily absorbed by the body.

c) Fermented foods become spongy and soft and are liked by children and adults.

(c) Germination

Take some whole ‘moong’ or ‘channa’ and soak them overnight in a small quantity of water. What do you see the next day? Yes, they become big in size and soft to touch. Now if you tie the soaked dal in a wet cloth and keep for another 12 to 24 hours, you will notice that small, white shoots have started growing from these dals. This process is called germination or sprouting.

Definition of Germination

Germination is a process in which small shoots come out of the dal or cereal when these are kept with small amount of water.

The grains and pulses to be sprouted need to be soaked in just enough water so that all of it is absorbed. If the extra water in which they are soaked is thrown away, you will be loosing a lot of nutrients.

Grains like wheat, bajra, jawar, etc. can also be sprouted. These grains can then be dried in shade and roasted lightly on a tava. They can be ground and used in many dishes. Pulses like moong, peas, kala chana etc. are also sprouted first and then steamed and eaten after adding salt, chilli powder, lemon juice etc.

The time and water which each grain or pulse needs for soaking and sprouting is different. Normally 8-16 hours are needed for soaking and 12-24 hours for sprouting. The cloth in which the soaked dal is tied should be kept moist all the time. In the winter months sprouting can be done faster by using warm water.

If you sprout wheat you can grind it into a fine powder after sprouting. This can then be fermented and bathuras made from the dough. Such a dough will be rich in vitamins. Here the food is first sprouted then fermented.

When sprouting is followed by fermentation the vitamin content becomes much more.
Germination helps you to

i) Increase the digestibility of foods. Do you know why?
   a) Some carbohydrates and proteins are broken down into smaller and easily digestible forms.
   b) Grains and pulses become soft after sprouting, so they take less time for cooking and are easy for you to digest.

ii) Increase the nutritive value of food with no additional cost.

Some vitamins and minerals become more when foods are germinated Vitamin B becomes almost double in quantity while vitamin C increases almost 10 times.

When you soak pulses like rajmah, soyabeans etc. in water for a few hours before cooking, it helps to increase their vitamins content.

INTEXT QUESTSION 4.7

1. Fill in the blanks
   i) Combination of foods is important since no food supplies .................. the nutrients.
   ii) Combining foods is beneficial where ............... money is available.
   iii) Germination increases the nutritive value and ............... of foods.

2. In the column on the left are listed the three ways of enhancing the nutrient content of foods and the column II on the right are the reasons for this improved quality. Match the method and the reason.

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Combining</td>
<td>i) increases in vitamin content due to activity of micro-organisms.</td>
</tr>
<tr>
<td>b) Fermenting</td>
<td>ii) increases the vitamins because the grain size increases.</td>
</tr>
<tr>
<td>c) Germinating</td>
<td>iii) improves quality due to different foods eaten together.</td>
</tr>
<tr>
<td></td>
<td>iv) increases the acidity of food.</td>
</tr>
</tbody>
</table>

3. Lata has made arhar dal and rice for the lunch, while Geeta has made mixed dal (arhar + moong + spinach) and rice for the lunch. Whose meal is more nutrition's? Why?
4.8 Economic Uses of Left Over Foods

The food for the family does not always finish. You have some food left over at times. What do you do with such foods? Do you throw it away? No, food is expensive these days and should not be wasted.

So, what do you do with the small quantities of the foods that are left? Use them to make new dishes that will be enjoyed by the family. Can you name some dishes that are prepared from the left over food in your family? Dal parantha, Dal puree, vegetables cutlets etc.

Let us learn to make a few snacks that can be made with left over foods.

1. **Snack Toast:** The left over vegetables can be put between two slices of bread and cooked in a snack toaster or on a tawa. Serve hot with mint chutney/ketchup.

2. **Bread Rolls**
   (i) Mash up left over potato, cauliflower, peas, vegetables etc.
   (ii) Add fresh coriander leaves, chopped green chillies, salt to taste.
   (iii) Soak a slice of bread in water, squeeze and enclose the vegetables in it. Shape like a roll.
   (iv) Deep fry to a golden brown colour.
   (v) Serve hot with chutney.

3. **Pao Bhaji**
   i) Heat a little butter in a karahi.
   ii) Mash up all left over vegetable and put in karahi.
   iii) Add pao bhaji masala in it or add lemon juice and spices to your taste. Cook for a little while more.
   iv) Heat the pao/bun on a buttered tawa.
   v) Top with the Bhaji
   vi) Sprinkle with freshly chopped onion, green chillies, tomatoes and serve.

4. **Mixed Vegetable Kofta Curry**
   i) Mash up left over vegetables.
   ii) Add besan or moong dal powder or even bread (soaked in water and squeezed) to bind.
   iii) Deep fry like kofta from the above mixture.
   iv) Make the curry the usual way and put the koftas.
   v) Serve hot with fresh chapatis.
5. Kadhi

This can be made from left over Dahi Pakori.

i) Heat ghee and saute methi seeds and heeng.

ii) Add besan batter to make the kadhi.

iii) Now, add the left over dahi pakori and a few whole green chillies, season to taste.

iv) Simmer till the required consistency is achieved.

v) Serve hot with boiled rice.

6. Papad Karara

Do you know what you can do with left over chapaties? Deep fry, drain and sprinkle some chaat masala on it. This is a very tasty papadi and can be used as a substitute for papad.

Advantages of using left over food

- Checks wastage of food.
- Saves money.
- Adds variety to food.

4.9 What You Have Learnt

* Loss of nutrients during Cooking

| Vitamin A, B, C | proteins | fat | minerals |

* Methods of cooking

Boiling, steaming, stewing, baking, roasting, grilling deep and shallow frying microwave cooking.

* Enhancing Nutrient quality by

Combination, Fermentation, Germination.

Reasons for cooking:

- Easy to digest
- Improves colour, texture, flavour
- Adds variety
- Keeps food longer
- Safe for eating
4.10 Terminal Exercise

1. Ramu took cabbage in the salad, whereas Mohan took cabbage sabji with along with his food. Who got more nutrients from the cabbage?

2. Distinguish between cooking by dry heat and cooking by moist heat.

3. Which method of cooking is better-Boiling or Pressure cooking? Give two reasons.

4. Match the following

<table>
<thead>
<tr>
<th>Cooked food</th>
<th>Method of Cooking</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Dhokla</td>
<td>a) Simmering</td>
</tr>
<tr>
<td>(ii) Dal</td>
<td>b) Deep-frying</td>
</tr>
<tr>
<td>(iii) Puri</td>
<td>c) Shallow frying</td>
</tr>
<tr>
<td>(iv) Parantha</td>
<td>d) Steaming</td>
</tr>
<tr>
<td></td>
<td>e) Boiling</td>
</tr>
</tbody>
</table>

5. How do fermentation and germination improve the nutritive value of foods?

6. Write food items that can be prepared from the following left over food.

<table>
<thead>
<tr>
<th>Left Over foods</th>
<th>food items</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Dal</td>
<td>Kheer, Koya, Curd, Paneer, Milk shake.</td>
</tr>
<tr>
<td>(ii) Rice</td>
<td></td>
</tr>
<tr>
<td>(iii) Roti</td>
<td></td>
</tr>
<tr>
<td>(iv) Vegetables</td>
<td></td>
</tr>
<tr>
<td>(v) Curd</td>
<td></td>
</tr>
</tbody>
</table>

4.11 Answers to Intext Questions

4.1 1. i) Dark green
     ii) Dark Red
     iii) Brown

2. Kheer, Koya, Curd, Paneer, Milk shake.

3. Raw
   cucumber, cabbage, apple
   banana, guava

Cooked
   rice, dal, chapati, potato sabji, palak sag

4. (i) Milk (ii) Mathi (iii) Potato chips (iv) Carrot halwa
### Methods of Cooking Food

#### 4.2 Boiling vs. Stewing

<table>
<thead>
<tr>
<th>Boiling</th>
<th>Stewing</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Large quantity of water is required.</td>
<td>Less water is required.</td>
</tr>
<tr>
<td>ii) Food is cooked at boiling temperature</td>
<td>Food is cooked below boiling temperature.</td>
</tr>
</tbody>
</table>

1. (D)
2. (C)
3. (C)

#### 4.3 Baking vs. Roasting

<table>
<thead>
<tr>
<th>Baking</th>
<th>Roasting</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Food is placed inside a closed box called ove.</td>
<td>(i) Food is put directly on the hot tava, hot sand or hot fire.</td>
</tr>
<tr>
<td>(ii) It is used for making bread biscuits, cakes, etc.</td>
<td>(ii) It is used for roasting channas, brinjal, maize etc.</td>
</tr>
</tbody>
</table>

#### 4.4 Palak Pakora vs. Bread rolls vs. Puree

<table>
<thead>
<tr>
<th>Shallow frying</th>
<th>Deep frying</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) very little oil is used</td>
<td>(i) more oil is used.</td>
</tr>
<tr>
<td>(ii) little oil is smeared on the food.</td>
<td>(ii) food should fully dip in ghee/oil</td>
</tr>
<tr>
<td>(iii) Tava oil frying pan is used for frying.</td>
<td>(iii) Karahi is used for frying</td>
</tr>
</tbody>
</table>

#### 4.5

1. (i) False
2. (ii) False
3. (iii) True
(iv) False
(v) True

2. (i) Potato chips, potato pakora
(ii) Potato raita, baked potato, roasted potato
(iii) Potato raita, baked potato, roasted potato
(iv) Potato baked in microwave oven.

4.6 1. 1. b)
2. d)
3. e)
4. c)
5. a)

2. (i) Pressure cook the dal or cook in a pan which has a well-fitting lid.
(ii) Avoid the use of cooking soda.
(iii) Use the water for soaking for cooking the dal.
(iv) Do not overcook (any three)

4.7 1) (i) All
(ii) Less
(iii) Digestibility

2) (a) (iii)
(b) (i)
(c) (ii)

3) Geeta’s meal is more nutrition’s because she has cooked two dals together and also added spinach which has enhanced the nutrient content of the dal.