

NIOS lesson adaptation project

By EMBRACE Volunteers

(A community Initiative of Harchan Foundation Trust)

Chapter 4

METHOD OF COOKING FOOD

(Printable Version)

- **Simplified Lesson**
- **Previous Year Questions with Answers**
- **Terminal Questions**

This project is aimed at supporting children with different needs. Information provided is adapted to the best of knowledge by the volunteers. For complete information please refer to the NIOS resources in <https://www.nios.ac.in/online-course-material/secondary-courses.aspx>.

LESSON 4

METHOD OF COOKING FOOD

Importance of Cooking Food:

- Cooking makes food easy to digest.
- Improves appearance, texture, color, flavour, and taste of food.
- Adds variety to our meals.
- Helps to keep food longer.
- Cooking makes food safe.

Classification of Methods of Cooking Food:

Methods of Cooking Food

Cooking by Moist Heat

Boiling: Cooked with adequate quantity of water.

Ex: Potatoes, rice, eggs, vegetables, fenugreek, and spinach etc

Points to remember:

- Wash food thoroughly.
- Boil water and then put the vegetables or pulses.
- The water should cover the food completely.
- Boil the food in pan which is well fitted lid.
- Don't cook for longer time.
- Potatoes should be boiled with their skin.

Advantages:

- 1) Safe and simple.
- 2) Does not get charred.
- 3) Can be done at large scale cooking.
- 4) Digest easily.

Disadvantages:

Water soluble vitamins are lost.

Simmering or Stewing: Process of

- Cooking food in small quantity of water.
- It is kept at below boiling point for long time.
- Food and liquid is served together.

Ex: Pulses, vegetables and meat

Advantage: Where nutrients are conserved better.

Disadvantage: Food takes longer to cook.

Steaming: Food cooked with the heat from water vapour below.

Ex: Making Idly, Dhokla etc

Advantages:

- ❖ Shortens the duration of cooking.
- ❖ Conserves nutritive value, color and flavor.
- ❖ Highly nutritious.

❖ Easy to digest.

Pressure Cooking: Is a process, which allows cooking with a lot of steam under pressure.

Ex: Rice, Pulses, meat, Potatoes, beans etc.

Advantages:

- Kills all the bacteria.
- Food is safe and hygiene.
- Cooks faster.
- Save Fuel.
- Can cook several food using separators.

Disadvantages: If cooked for long loses its texture and may even get burnt.

COOKING BY DRY HEAT:

A) Baking: Process in which food is cooked by placing it inside a heated closed box called as oven.

Air inside the box gets hot due to fire lit/electricity/ coal used.

Ex: Baking rotis, naan, kulchas etc

Advantage: Using this method adds variety to the texture.

B) Roasting: Cooking food by dry heat directly on hot tava, girdle, sand or fire .

Ex: Brinjals, Potatoes, sweet potatoes, maize, chick peas, nuts, cashew, papad, Khakhra and meat.

Advantage: Tastier when cooked.

Disadvantage:

- Slow method of cooking.
- Dry.
- Served with chutney or sauce.

C) Grilling: Cooking over glowing fire and uses more indirect heat. Cooked on both sides to give distinctive flavor.

Ex: Paneer tikkas, Kababs etc.

Advantages: Nice Flavor to the food.

FRYING: Cooking food in hot ghee or oil

1) Deep frying: Dropping food in well heated oil/ghee. Ex: Pakoras, vada, samosa.

2) Shallow frying: Use little oil as possible.

Precautions while frying:

- Food cut into even size ensures cooking equally.
- Oil/ghee should be heated well.
- Few pieces of food should be put at a time.
- Food should be place on clean absorbent kitchen tissue.
- Used oil should be removed.

Advantages: Has longer life.

Disadvantages:

- ✓ Difficult to digest.
- ✓ Too much calories.
- ✓ Bad for health.

Other Methods Of Cooking Food:

- a) Microwave cooking
- b) Solar cooking.

a) Micro wave cooking: Food is cooked through microwave radiation.

Advantages: Quick and time is reduced significantly.

Disadvantage: Electrical energy.

b) Solar cooking: Sunlight at its source.

Advantages:

- ✓ Does not produce smoke.
- ✓ Low maintenance.
- ✓ Environment friendly method

Disadvantage: Has to be done in outdoor and need plenty of sunshine.

Losses of Nutrient during cooking:

- 1) Vitamin A: It gets oxidized, reacts with oxygen present in air.
It is one of fat soluble vitamin – deep frying destroys this vitamin.
Ex: Spinach, methi etc
- 2) Vitamin B complex: There are eight water soluble vitamins. When washed, soaked, or cooked in water and if water is discarded there will be loss of Vitamin B. Addition of cooking soda also aids to lose in vitamin B.
Ex: Rice, pulses, vegetables etc.
- 3) Vitamin C: Water soluble vitamin. Destroyed by heat and oxidation or exposed to air. Finely cut vegetable.
- 4) Proteins: Egg, fish and meat
Food absorbs water.
Protein gets coagulated.
Dry and rubbery
Difficult to digest

Addition of acidic ingredients like lemon juice, tomatoes makes protein tough and leathery so it should be added in last stage of cooking.

5) Oils and fats: Frying of food

6) Minerals: Sodium and Potassium dissolves in water when it is cut and washed.

Conservation of Nutrients:

Conservation of Nutrients means saving nutrients during the process of preparation and cooking of food.

If we follow as below we can do conservations of nutrients:

1. Washing vegetables before cutting them.
2. Scrape the peel as thin as possible.
3. Cut vegetables into large pieces.
4. Put vegetables in boiling water if want to be cooked.
5. Don't throw away extra water.
6. Don't use soda.
7. Use tamarind or lemon juice at the last stage of cooking.
8. Cook rice in just enough water.
9. Cook in a pan with well fitting lid
10. Don't overcook.
11. Use cooking method which cooks food to faster.

Enhancing The Nutritive Value Of Food Item:

The process of improving the nutrients in food by special method is called enrichment/Enhancement of nutrients.

Methods of Food Enrichment:

1. Combination.
2. Fermentation.
3. Germination.

Combination: Combining foods from different food groups. Ex: Use of pulses and rice will enhance the protein value.

Fermentation: Process of changing nutrients by micro organisms which is already present in the food to simpler and better form. Ex: Idly, bread, curd etc.

Germination:

Process in which grains are germinated and increased with the nutritive value of food at no additional cost.

Soaking----draining excess water -----tying in wet or moist cloth ---- sprouting.

Advantage:

- Increase nutritive value of food without no additional cost.
- Increases the digestibility of food
- Spongy, soft and good for children and elderly.

PREVIOUS YEARS QUESTIONS

1 Mark Question:

1. Cooking soda should not be added to soften foods like rajma and channa because it destroys

- a) Vitamin A
- b) Vitamin B

- c) Vitamin C
- d) Vitamin D

2. Blanching means putting vegetable in

- a) Hot water
- b) Cold water
- c) Tap water
- d) Luke warm water.

3. A method of cooking where food is cooked without coming in contact with water is called

- a) Steaming
- b) Boiling
- c) Stewing
- d) Pressure cooking.

4. In which method of cooking dry heat is not used?

- a) Baking
- b) Roasting
- c) Simmering
- d) Grilling

2 Mark Questions:

1. How does germination improves the nutritive value of food?

- It increases the digestibility of the food items because proteins and carbohydrates are broken down into smaller and easily digestible forms.
- It increases the nutritive value of food items with no additional cost.

2. Give any two important safety instructions you will keep in mind while using a pressure cooker?

- Clean the weight regularly.
- Check the rubber gasket

3. Explain any two advantages of eating steamed food to your grandparents?

- Steamed food will get digested easily.
- Steamed food will help in retaining its nutritive value

4. Differentiate between cooking by dry heat and cooking by moist heat. Give one example of each.

Dry Heat: Process where food is exposed to source of high heat either from above or below. Ex: Baking, Roasting, grilling.

Moist heat: Process where food is cooked by using water or steam. Ex: Idly, Dhokla etc.

5. Give two reasons why your grandparents prefer eating a steamed snack instead of a fried one?

Steamed snack is easily digestible and it has more nutritive value when compared to fried one.

6. Write two differences between deep frying and shallow frying.

Deep Frying: Lot of oil is used. Too much calories which is bad for health

Shallow Frying: Less oil is used. Helps in preservation of nutritive value of food.

3 Mark Questions:

1. Suggest six ways by which we can prevent loss of vitamins during cooking.

- Washing vegetables before cutting them.
- Scrape the peel as thin as possible.
- Cut vegetables into large pieces.
- Put vegetables in boiling water if you want to cook.
- Don't throw away extra water.
- Don't use soda.

2. Write any six advantages of enhancing the nutritive value of food items?

- Provides the opportunity for balanced food.
- Develops good food habits.
- Improves the flavor and texture of food.
- Prevents deficiency diseases in the body.
- Assists in planning the daily menu.
- Makes available a variety in food.

3. Mentions six precautions, we can take to conserve nutrients while cooking.

1. Put vegetables in boiling water if needs to be cooked.
2. Don't throw away extra water.
3. Don't use soda.
4. Use tamarind or lemon juice at the last stage of cooking.

5. Don't overcook.
6. Use cooking method which cooks food faster.

4. Name and explain any one method by which you can increase the nutritive content of food without increasing its cost.

Germination is one of the method by which we can increase the nutritive content of food without increasing its cost.

Ex: Channa dal.

Method of Germination:

- Soak dry channa dal for 8 hours.
- Drain the water.
- Put the soaked and drained channa dal in wet or moist cloth.
- Tie the cloth tightly and try to keep it moist.
- You can see sprouts growth in two days.

4 Mark Question:

1. Write four differences between boiling and pressure cooking methods.

Boiling	Pressure Cooking
1. Cooked with adequate quantity of water	1. Which allows cooking with lot of steam under pressure
2. Takes lot of time	2. Faster
3. Usage of fuel is more	3. Saves fuel
4. Only one dish at a time	4. Several food can be prepared using separators.

2. Describe methods of frying. Name one dish each prepared by this method. What four precautions you will adopt while frying?

Two methods of frying: Deep frying and shallow frying.

Deep frying: Cooking food is by dropping them in well heated ghee or oil.

Food has to cut into even sizes here to ensure cooking

Dish prepared by deep frying is samosa

Shallow frying: Cooking food on tava by using little or no oil. No need of evenly cut food here.

Dish prepared by shallow frying is sausages.

Precautions while frying:

- Food cut into even size ensures cooking equally.
- Oil/ghee should be heated well.
- Few pieces of food should be put at a time.
- Food should be placed on clean absorbent kitchen tissue.
- Used oil should be removed.

TERMINAL QUESTIONS

1. List five advantages of cooking food?

- Cooking makes food easy to digest.
- Improves appearance, texture, color, flavor, and taste of food.
- Add variety to our meals.
- Helps to keep food longer.
- Cooking makes food safe.

2. Name two methods of cooking food for the following:

- i). Long looking time.
 - a) Boiling
 - b) Simmering
- ii). Short cooking time
 - a).Roasting
 - b).Steaming

3. Dolma prepared cabbage salad for herself, whereas Mohan cooked cabbage for his meal. Who got more vitamin C from the cabbage?

Ans: Dolma got more Vitamin C from cabbage because Vitamin C gets destroyed by heat and oxidation.

4. Saraswati is cooking spinach in her kitchen. She chopped the spinach finely, washed it thoroughly and shallow fried it in an open pan. Do you think she cooked it the right way? Give reasons for your answer.

Ans: Saraswati didn't cook it in right way.

1. Spinach is cut finely and then washed thoroughly. When vegetables are cut finely its nutritive value is lost and washing thoroughly after cutting will make the spinach loose its minerals.

2. She has done shallow frying it open pan. She should have steam spinach in a pan with well fitted lid which would have reduced her cooking time and helped in preserving the nutrients of spinach.

5) How do the following improve the nutritive value of foods?

- a) Fermentation: This is a process where micro organisms which are present in the food will help to change its nutrients.
- b) Germination: Process in which grains are germinated and increased with

the nutritive value of food at no additional cost.

6) Match the food items given in column I with the method used in cooking it from the column II.

Column I	Column II
Cooked food	Method of Cooking
a. Dhokla	(a) Simmering (b)
b. Dal	(b) Deep-frying (c)
c. Puri	(c) Shallow frying (d)
d. Parantha	(d) Steaming (a)