

L8- Preparation of Food

Keywords

monotonous	pre-preparation	Sieving	Stewing	Shallow frying
sterile	Blanching	subjecting	Grilling	Dry frying
Mashing	Grating	Simmering	Puffing	palatability
Shredding	Steeping	Poaching	Sauteing	Bran
leach	oxidized	Fortification	Enrichment	

In-text Questions

In-text Questions 8.1

1. Give one similarity and one difference between

i. Stewing and Simmering

Similarity	Difference
Food is cooked at 98°C in little water.	stew is covered and simmering is without lid.

ii. Peeling and Blanching

Similarity	Difference
Removing the skin of the vegetable.	<ul style="list-style-type: none"> In peeling, vegetable skin is removed using a knife/peeler In blanching, the skin is removed by putting food in boiling water and then in cold water.

iii. Shredding and Grating

Similarity	Difference
Breaking the vegetable/food into small pieces.	<ul style="list-style-type: none"> Grating is breaking the food in very small pieces using a grater. Shredding is cutting food into very fine pieces either by hand or any other instrument.

iv. Grinding and Mashing

Similarity	Difference
Breaking the food into very small particles as in powder or paste.	<ul style="list-style-type: none"> Grinding - Breaking food into powder/paste using grinder. Mashing - Breaking a soft food into a paste

2. Give five reasons for cooking.

Answer: The five reasons for cooking are:

- Food becomes tender, soft and easier to chew and digest
- Heat destroys harmful micro-organisms making the food safe and sterile
- Cooking improves the appearance and enhances the flavour of many foods
- Digestibility of starchy foods is enhanced through release of starch from cereal grains
- Through cooking you can create variety in your meals.

In-text Questions 8.2

1. Name the method of cooking the following:
 - i. Seekh Kabab - Spit Roasting
 - ii. Biscuits and cakes - Baking
 - iii. Brown toast - Toasting
 - iv. Popcorns – Pan/Pot Roasting
2. State whether following statements are true and false.
 - i. Grilling is a method of cooking by dry heat. T✓/F (True)
 - ii. Steaming food is possible only by direct method. T/F✓ (False)
 - iii. While baking, food is cooked with the help of hot air. T✓/F (True)
 - iv. For boiling food, water must boil all the time. T✓/F (True)
 - v. Simmering is done at low temperature. T✓/F (True)
 - vi. Toasting means browning the food from all sides. T✓/F (True)
 - vii. When food is cooked on direct flame it is called roasting. T✓/F (True)

In-text Questions 8.3

1. Fill in the blanks in the following statements.
 - i. When food is cooked between two heated elements the procedure is called Toasting.
 - ii. When food is cooked in a hot chamber it is called Baking.
 - iii. When food is cooked by dipping it in hot water it is called Boiling.
 - iv. When food is cooked by dipping in hot oil it is called Deep Frying.

- v. When food is cooked by touching the hot greased pan the process is called Shallow Frying.
- vi. When food is cooked with hot vapour it is called Steaming.
- vii. When food is cooked on hot flame it is called Grilling.
- viii. When food is cooked by placing it in hot sand/ash it is called Roasting.
- ix. When food cooked by placing it in the hot sun it is called Solar cooking.
- x. When food is cooked in sealed container the process is called Pressure Cooking.

2. Differentiate between deep frying/shallow frying.

Deep Frying	Shallow Frying
<ul style="list-style-type: none"> Food is immersed in hot fat in 'Kadhai' or a deep fryer till it is golden brown. Special ladles are used to drain out excess fat once the food is cooked. Tasty samosas, fish, chips, cutlets, puris are all 'deep fried'. Deep frying is useful for bulk cooking. It saves time, effort and fuel. It also conserves more nutrients as compared to other frying techniques. 	<ul style="list-style-type: none"> The food is partially immersed or has only surface contact with oil or fat. In this method, food is cooked in a flat vessel like frying pan or 'Tava'. Dosa, paranthas, cheela, omelette and tikki, etc., are all shallow fried.

3. Which method of cooking does a vendor use to prepare a plate of tasty noodles?

Answer: **Sauteing** is the method of cooking a vendor use to prepare a plate of tasty noodles. In Sauteing:

- A minimum fat is used to cover the base of the pan.
- The food is tossed occasionally to cook evenly.
- Very little amount of heat is applied to the pan and food gets cooked in its own steam.

4. List the precautions we need to take while frying food.

Answer: The precautions we need to take while frying food are:

- Do not fill the 'kadhai' more than two-third of its volume.
- Reduce the flame immediately if oil starts smoking
- Turn the food gently to prevent splashing of hot oil
- Drain all the excess oil from the food after frying
- Don't over-fry the food
- Repeated use of same oil is not good for health.

5. Tick the correct answer:

i. Microwave cooking uses high frequency

- a. Electromagnetic rays✓
- b. Electric rays
- c. Infrared rays
- d. Ultraviolet rays

ii. In solar cooking, food is kept in a box which is

- a. Red
- b. Black✓
- c. White
- d. Yellow

In-text Questions 8.4

Tick (✓) the correct answer:

- i. Green leafy vegetables lose (✓ **Vitamin** C/Iron) while cooking.
- ii. (Peel/ ✓ **wash**) the potatoes before boiling.
- iii. Cooking in (open pan/ ✓ **closed pan**) saves nutrients.
- iv. (✓ **Use**/throw) the water used for soaking the rice.
- v. Cut the vegetables into (✓ **big**/very small) pieces to save nutrients.

In-text Questions 8.5

1. Match the statements of Column A with those in Column B.

Column A	Column B
i. Cereal with milk	a. spinach khichri
ii. Cereal with dal	b. fruit custard
iii. Dal and vegetable	c. rice-kheer
iv. Cereal with vegetable	d. dosa
v. Dal, cereal, vegetable	e. paushtic namkeen dalia
vi. Milk with fruit	f. vegetable cheela

Answer: i – c, ii -d , iii -f, iv -e ,v -a ,vi - b

2. Name the method of food enrichment used for–

- i. A soft spongy dhokla - Fermentation
- ii. Iodised salt - Fortification
- iii. Green sprout chat - Germination

- iv. Vegetable khichdi - Combination
3. Name two changes brought by cooking in each of the following foods:
- Rice – i) Becomes soft ii) becomes swollen
 - Fish - soft, less smelly
 - Chappati (Wheat) -colour - darker, texture - crisper, taste - sweeter.
 - Apple -soft and darker
 - Split moong dal on boiling - soft and thick

Terminal Questions

1. Explain, giving examples, different methods of enhancing the nutritive value of food, both at home and at manufacturing level.

Answer: Different methods of enhancing the nutritive value of food:

At Home:

Method	Explanation	Example
Germination/Sprouting	<ul style="list-style-type: none"> Pulses are soaked in water and sprouted This helps to increase vitamin B, C and iron. Food becomes easy to cook and digest 	Moong, chana, peas, grains, wheat grains
Fermentation	<ul style="list-style-type: none"> Process by which microorganisms are added to food. Food becomes light and fluffy Increases vitamin B, 	Idli/dosa batter, curd

	C, iron and calcium <ul style="list-style-type: none"> Food becomes easy to digest 	
Supplementation/Combination	<ul style="list-style-type: none"> Combining foods from different food groups Increases total nutritive value of food 	Kheer, halwa, khichdi, sambar

At Manufacturing level:

Method	Explanation	Example
Fortification	Adding extra nutrients to food products	Vegetable oils with Vitamin A and D; salt with iodine.
Enrichment	A food that has nutrients added back that were lost during processing	Adding vitamin B to flour which was lost during polishing of grains.

2. Giving suitable examples, write short notes on the following methods of cooking.

- i. Boiling
- ii. Stewing
- iii. Simmering
- iv. Steaming

Answer:

SI No.	Method of Cooking	Short Notes	Example
i	Boiling	<ul style="list-style-type: none"> Food is cooked in sufficient amount of water at boiling temperature (100°C or 212°F). 	hard/tough food like potato, rice are boiled to make them soft
ii	Stewing	<ul style="list-style-type: none"> Food is simmered (98°C) in small amount of liquid. Steam generated in the pan helps in cooking and softening the food. 	It is used in cooking less tender cuts of meat, vegetables, fruits, eg., - apple, peach.
		<ul style="list-style-type: none"> Pan is always covered with a lid. 	
iii	Simmering	<ul style="list-style-type: none"> Food is cooked in water at below boiling temperature (95° - 98°C). 	Kadhi and kheer are prepared by this method
iv	Steaming	<ul style="list-style-type: none"> The steam generated by water is used for cooking. Food does not come in direct contact with water. 	Idli/Dhokla

3. List all the pre-preparation activities required for cooking the following food items.

- i. Palak Pakora
- ii. Mooli Paratha
- iii. Peas - Pulao.

SI No.	Food Item	Pre-preparation activities
i	Palak Pakora	<ul style="list-style-type: none"> • Washing Palak • Cutting Palak • Seiving Besan (gram flour), if required • Mixing Palak, Besan and Spices
ii	Mooli Paratha	<ul style="list-style-type: none"> • Washing Mooli • Grating Mooli • Mixing Mooli, Wheat flour, and spices
iii	Peas - Pulao	<ul style="list-style-type: none"> • Shelling peas • Washing peas and rice

4. List the ingredients of Samosa, explain different types of changes that occurs in each ingredient during the process of cooking.

Answer: Ingredients of Samosa are: Maida, Peas, Potato, Spices, Onion, and green chili.

SI No.	Ingredient	Changes
i	Maida	<ul style="list-style-type: none"> • Turns brown and crispy
ii	Peas	<ul style="list-style-type: none"> • Become soft
iii	Potato	<ul style="list-style-type: none"> • Become soft and paste
iv	Spices	<ul style="list-style-type: none"> • Become brown and release aroma and falovour
v	Onion	<ul style="list-style-type: none"> • Becomes brown and releases aroma and falovour
vi	Green chilli	<ul style="list-style-type: none"> • Shrivell and release aroma and flavour

5. What precautions will you take while making mixed vegetable pulao to avoid loss of nutrients?

Answer: To avoid loss of nutrients:

- i. Vegetables are washed before cutting.
 - ii. Vegetables are peeled and cut just before cooking.
 - iii. Vegetables are cut into big pieces
 - iv. Vegetables are not overcooked
 - v. Soda is not added to rice.
 - vi. Rice is not washed repeatedly.
6. Give at least five dishes that can be made from leftover food, other than the ones listed in the lesson.

Answer: The five dishes that can be made from leftover food are:

- i. Make tempered curdrice with leftover rice.
- ii. Leftover rice can be ground, steamed and made into rice idli.
- iii. Fry leftover idlis and add onion, mustard, peanut seasoning.
- iv. Make Upma from leftover chapatis – break chapatis into pieces and add onion, mustard, peanut seasoning.
- v. Make Dahi chat with leftover bread pieces.

Previous Year Questions

1. List any *four* precautions to be taken to prevent the loss of nutrients during preparation of vegetables. 4

Answer: The *four* precautions to be taken to prevent the loss of nutrients during preparation of vegetables are:

- i. Wash **before** peeling and cutting. Water soluble vitamins and minerals will not be lost.
 - ii. Do not peel and cut the vegetables long before cooking
 - iii. Cut vegetables into large pieces, to save nutrients.
 - iv. Cook the vegetables in minimum amount of water or utilize the excess water in soups, dals and curries.
2. Differentiate between direct and indirect steaming. Enlist *four* advantages of pressure cooking. 6

Direct Steaming	In Direct Steaming
Food is kept in the sieve or muslin cloth on top of the pan containing hot boiling water.	Food is placed in smaller closed container in the pan containing boiling water.
The steam generated from water in the pan cooks the food.	The heat of steam surrounding the smaller container cooks the food.
Used for peas, idli, fish and soft vegetables	Used for coconut-based dishes

3. What is simmering of food? Write any *two* points that you should remember while simmering. Give *one* example of simmered food. 2

Answer: Food is cooked in water at below boiling temperature (95° - 98° C). For example, Kadhi and kheer are prepared by this method. Since the heat is low you do not need too much water.

Points to remember are

- Do not bring the food to boiling temperature
- Do not cover the food while cooking, so that the temperature does not rise.

4. Food can be cooked in a solar cooker using solar energy. Describe a box-type solar cooker. 2

Answer: Solar cooking is based on the principle that black surface and background absorb solar rays and get heated. Food kept in the black boxes are cooked with this heat.

- It is used for making dals, boiled rice and vegetables, breads and biscuits.
- The maximum temperature it attains is around 100°F (65 ° C) and hence cannot be used to make chapattis and for roasting.

5. Mention *four* advantages of germination. 2

Answer: The four advantages of germination are:

- i. Increase in vitamin C and B-complex.
- ii. Iron becomes available to the body.
- iii. Easy to digest
- iv. Easy to cook.

6. Compare the following methods of cooking food. [6]

- a. Boiling and poaching
- b. Steaming and stewing
- c. Baking and grilling

Answer:

- a. Boiling and Poaching

Boiling	Poaching
<ul style="list-style-type: none"> • Food is cooked in sufficient quantity of water at boiling point of water (100°C or 	<ul style="list-style-type: none"> • Food is cooked in minimum amount of liquid at temperature just below the

Boiling	Poaching
<p>212°F).</p> <ul style="list-style-type: none"> The temperature is maintained till the food is cooked. Any food which is hard/tough is boiled to make it soft. Examples: Potato and rice 	<p>boiling point.</p> <ul style="list-style-type: none"> It is used for cooking fish, eggs and fruits because these food do not require long cooking.

b. Steaming and Stewing

Steaming	Stewing
<ul style="list-style-type: none"> The steam generated by water is used as a medium of cooking. Food does not come in direct contact with water. Examples are idli, pressure cooking 	<ul style="list-style-type: none"> Food is simmered (98°C) in small amount of liquid. Steam generated in the pan helps in cooking and softening the food. It is used in cooking less tender cuts of meat, vegetables, fruits, eg., - apple, peach

c. Baking and Grilling

Baking	Grilling
<ul style="list-style-type: none"> Food is cooked in dry heat and steam. It involves the use of oven or tandoor. Baked foods are crisp, brown on top, soft and porous inside. Cakes, breads, biscuits, puddings some vegetables and meat dishes are cooked using this method. 	<ul style="list-style-type: none"> The food is placed on a metal grid directly above the source of heat or a tray placed under the source of heat. Electric grills and hot plates are available. You can prepare pizzas, cheese toasts, chips, grilled tomato, capsicum, sandwich, etc.

7. After your party, you have some rice, methi-alloo, curd and dal left over. Briefly explain how you will use each of them differently. 4

Answer:

Food item	Reuse idea
Rice	Make lemon rice
methi-alloo	Mix with bread and make bread cutlet
curd	Mix with Rava powder and make rava dosa
dal	Mix with chapathi dough and make dal chapathi

8. Your mother has asked you to help her make idli and samosa. Briefly describe both the cooking methods to be used. Describe advantages each of using these methods. [4]

Answer: The procedure to make idli and samosa are:

Food Product	Cooking Method	Advantage
Idli	Steaming 1. Idli batter is made using urad dal and rice. 2. This batter is put in a sieve or muslin cloth on top of the pan containing hot boiling water. 3. The steam generated from water in the pan cooks the food. 4. Special steamers are also available for peas, idli, fish and soft vegetables.	<ul style="list-style-type: none"> • Easy to digest • Nutritious
Samosa	Deep Frying	Deep frying is useful for:

Food Product	Cooking Method	Advantage
	<ol style="list-style-type: none"> 1. Dough is made with maida (refined flour). 2. Vegetable curry, usually potatoes and peas is made. 3. The vegetables are kept in maida mould. 4. The maida dumpling is immersed in hot boiling oil till golden brown. 	<ul style="list-style-type: none"> • bulk cooking, saves time, effort and fuel. • It also conserves more nutrients as compared to other frying techniques