
UNIT 17 SELECTION, PREPARATION AND NUTRITIVE VALUE OF VEGETABLES

A variety of vegetables, e.g. leafy vegetables like amaranth, spinach, methi, roots and tubers like carrots, potatoes, and other vegetables like beans, peas, bhindi, etc. are available. These vegetables are inexpensive sources of many nutrients, which are essential for protection against infection and diseases and for growth and maintenance of an individual. They provide variety and colour to meals. In this unit you are going to learn about the nutritive value of vegetables and their selection and storage. You will also study different methods of cooking vegetables and how to retain their colour, texture and nutritive value. We focus your attention on daily usage of vegetable in our diets.

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17.0 OBJECTIVES

After studying this unit, you will be able to:

- list the importance of vegetables in the diet;
- state the nutritive value of various vegetables;
- select good vegetables from the market;
- select appropriate methods of preparing, cooking and storage for various vegetables;
- describe the way of minimising the nutrient losses while cooking vegetables; and
- state the different forms in which vegetables are cooked.

17.1 INTRODUCTION

Spinach, cauliflower, carrot, potato, tomato, bhindi, french beans and other vegetables are all known to us. Are you aware of the fact that vegetables are important for us, that they improve our eye-sight, make our skin soft and protect us from many diseases? They are the most inexpensive protective foods one can buy. Yet our tendency is to neglect to use them daily in our diet.

**EAT PLENTY OF VEGETABLES. THEY
PROTECT US FROM MANY DISEASES**

Vegetables give variety to our diet. They make our meals more colourful, tasty and easily digestible. In spite of these benefits we consume very few vegetables. This is probably because we are not aware of the many benefits we can get from these vegetables.

The knowledge about vegetables is very important for our health. We should know which ones are best suited for us. We must also know how best to buy, store and cook them.

Check Your Progress Exercise 1

- 1) What is the importance of vegetables in our daily diet?
 - a)
 - b)
 - c)
 - d)

17.2 CLASSIFICATION AND NUTRITIVE VALUE OF VEGETABLES

Let us now classify these vegetables and understand what nutrients we can get from various vegetables.

We can classify vegetables into three groups :

- i) Green leafy vegetables
 - ii) Roots and Tubers
 - iii) Other vegetables
- i) *Green Leafy Vegetables:* Vegetables like amaranth, spinach, cabbage, methi, mustard, etc., are known as green leafy vegetables. You know that these are, the cheapest vegetables. But they are very useful for our body. These are rich in calcium, iron and vitamins. As you have already studied in Unit 4, calcium is good for the bones and teeth. Iron helps in blood formation. Vitamins protect us from many diseases like blindness, bleeding gums, skin rash.

**EAT GREEN LEAFY VEGETABLES FOR HEALTHY
EYES, SKIN AND PROPER GROWTH**

Check Your Progress Exercise 2

- 1) Name five green leafy vegetables:
 - a)
 - b)
 - c)
- 2) Green leafy vegetables are rich in:
 - a)
 - b)
 - c)
- 3) Green leafy vegetables are good for:
 - a)
 - b)
 - c)

Practical Activity 1

Name the green leafy vegetables you ate during the last three days. It is possible that you may not have eaten any. If so, try to find the reasons for not eating green leafy vegetables frequently.

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- ii) *Roots and Tubers:* Potato, yam, tapioca, sweet potato, carrot, radish, etc. belong to the roots and the tubers group. These are all very cheap vegetables. Most of the tubers are starchy or energy giving foods. Tubers like potatoes, sweet potatoes can replace a part of cereals in our diet as they are equally rich in carbohydrates. Roots and tubers actually belong to Basic Group-I foods. But they are discussed here under vegetables for the convenience of classification. Apart from carbohydrates, potatoes provide some vitamin C. Yam is a good source of calcium which helps in keeping bones and teeth healthy. Carrot is a good source of vitamin A which is good for the eyes.

EAT CARROTS TO PREVENT BLINDNESS.

Check Your Progress Exercise 3

- 1) Name five root tuber vegetables:
 - a)

- b)
- c)
- d)
- e)

2) Match the following food stuffs with appropriate nutrients:

Food	Nutrients
1) Carrot	a) Vitamin C
2) Yam	b) Vitamin A
3) Potato	c) Calcium

iii) *Other Vegetables:* Brinjals, peas, beans, different types of gourds, lady's finger, drumsticks, etc. belong to the other vegetable group. All these provide vitamins and minerals. Drumsticks for example are especially rich in calcium and vitamin C. Even the skins, seeds and fibres of these vegetables are important as they prevent constipation. These vegetables add variety to our diet.

EAT VARIETY OF VEGETABLES. THEY ARE NUTRITIOUS ADD VARIETY AND FLAVOUR TO THE DIET

In the interest of your health as well as for variety you should eat vegetables from all the three groups.

INCLUDE VEGETABLES FROM EACH OF THESE THREE GROUPS IN YOUR DAILY DIET

17.3 SELECTION OF VEGETABLES FROM THE MARKET

Grow vegetables in your kitchen garden if you can. They will be fresh and more nutritious and cheap. While buying vegetables, select vegetables from the market carefully.

BUY SEASONAL VEGETABLES.
BUY FRESH VEGETABLES.
BUY ONLY WHAT IS NEEDED.

Some Hints for Better Selection

- 1. Beans: Reject dry looking beans; choose those with small semideveloped seeds inside.
- 2. Cabbage: Choose those which are heavier compared to their size. Avoid heads with holes or

- discolouration. The greener the cabbage the better is the food value.
3. Cauliflower: Pick up the white and tight.
 4. Cucumber: Select shining, medium sized, long and green ones.
 5. Carrots, beets: and turnips: Leave out very large carrots, beets and turnips. They are likely to be hard inside.
 6. Onions: Buy onions with clean and dry skin. Reject soft and moist ones.
 7. Potatoes: Reject potatoes with deep eyes, green skin or with cuts. Choose firm, well-shaped and clean potatoes.
 8. Spinach, Mustard, Methi etc.: Buy dark green, fresh and crisp vegetables; avoid worm eaten vegetables.

Do you Know:

- Green tomatoes are cheaper but as nutritious as red ones
- White cabbage is less nutritious than green ones
- Use of fresh seasonal vegetables is better than stored vegetables.

Check Your Progress Exercise 4

- 1) What points will you consider in selecting the following vegetables from the market:
a) Spinach b) Potato c) Cauliflower d) Beans e) Cabbage

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17.4 STORAGE OF VEGETABLES

Let's see how well we can keep vegetables fresh. Store your vegetables carefully, to save their food value and protect them from spoilage. Remember the following tips for proper storage :

- 1) Sort out your vegetables. Use those with any sign of damage immediately. Don't store them with fresh ones.
- 2) Store dry vegetables like onion, potato, yam in a dry and ventilated place.
- 3) For vegetables like spinach, cauliflower, cabbage, etc., use moist bags, janta refrigerator or an ice box. If refrigerator facilities are available, vegetables can be stored for a longer period.



Figure 17.1: Janata Refrigerator

17.5 COOKING OF VEGETABLES

Cooking makes vegetables soft and easily digestible. It also improves flavour and taste. Green leafy vegetables contain certain acids which are released as you cook them. Cook these vegetables uncovered for the first few minutes to allow these acids to escape. Otherwise these acids will destroy the green colour.

You must know that cooking destroys some nutrients in vegetables. Cook your vegetables carefully to minimise these losses.

You can get the maximum out of vegetables by observing the following guidelines while cooking.

- Wash vegetables before cutting. Some vitamins and minerals are lost if vegetables are washed after cutting.
- Most of the nutrients are just beneath the skin of the vegetables. If possible, cook vegetables without peeling or peel them thinly. Peel potatoes after boiling.
- Cut vegetables just before cooking and serving. Cut them into medium size pieces.
- Avoid soaking of cut vegetables. Soaking destroys vitamins and minerals.
- Add vegetables to boiling water. Cook them in minimum water. Tender vegetables like spinach, cabbage need no additional water.
- Cook vegetables in a covered pan after initially keeping the pan open. This shortens cooking time. Vegetables cooked in this way look better and taste better and the nutrients are better retained.

- Pressure cooking or steaming is better for solid vegetables.
- Do not use baking soda as it destroys vitamins.
- Serve vegetables hot after cooking, avoid reheating them.
- Cooking destroys some vitamins and minerals of vegetables, so you must eat some vegetables raw as salads.

Check Your Progress Exercises 5

List some practical tips which you most follow while cooking vegetables.

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17.6 PREPARATION OF VEGETABLES

There are a variety of ways in which you can prepare vegetables. You can have a variety of vegetable preparations like stuffed vegetables, dry vegetables, vegetable curries and kofta curries and you can use vegetables as a stuffing in paranthas also.

You can cook some vegetables with dhals. This will make the dish more nutritious besides making its taste better, for example chana dhal with gourd- (ghia). Vegetables like brinjals, drumsticks, potatoes are cooked with arhar dhal while making sambhar. Besides this, you can cook vegetables in the following ways :

- 1) *Vegetables as Soups and Juices:* They make the meal appetising and tasty. You can make a variety of soups with vegetables like spinach, carrots, peas, tomatoes, beans, etc. Juices can be prepared from tomatoes, carrots, etc. They add taste to the meal. Soups and juices are especially good for infants and sick persons.
- 2) *Vegetables as Snacks:* Snacks like pakoras, cutlets, samosas, kachories can be prepared using vegetables.
- 3) *Vegetables as Desserts:* You can prepare kheers, halwas, sweets with vegetables.
- 4) *Vegetables as Salads:* Tomato, cucumber, radish, onion, capsicum, lettuce, cabbage, cauliflower can be used in different combinations to make salads. Lemon juice, salt, vinegar and curd can be used as dressing to improve the taste of salads.
- 5) *Vegetables as Pickles and Chutneys:* Some vegetables can be preserved. You know vegetables in season are cheap. You can preserve them by making pickles, chutneys, murrabas, etc.

Practical Activity 2

- 1) We can prepare kheer with cauliflower. List two more vegetables for making kheer.
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- 2) Pumpkin can be used for making halwas. Name two other vegetables for making halwa.
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- 3) Spinach and pumpkin can be used for making burfi. List two more vegetables that can be used for making burfi.
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- 4) List some vegetables that you use at home for making :
 - a) Pickles.....
 - b) Chutneys.....
 - c) Murrabas.....

17.7 LET US SUM UP

Vegetables are important to us as a source of essential nutrients like minerals and Vitamins. These help to keep the body healthy. Vegetables contribute variety, colour, flavour and texture to the meal and thus make it attractive. Vegetables in season are cheap and can be included in a variety of preparations in our daily diet.

17.8 GLOSSARY

- Carrot Kheer** : A sweet preparation made by cooking grated carrots in milk till thick and creamy.
- Cutlets** : Boiled and mashed vegetables formed into various shapes, coated with bread crumbs and deep fried.
- Pakorras** : A fried preparation of vegetables coated with besan batter.

17.9 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) a) Vegetables provide variety
a) Make our food colourful and tasty

- b) Protect us from many diseases
- c) Improve our eye-sight.

Check Your Progress Exercise 2

- 1) Spinach, methi, amaranth, cabbage, mustard
- 2) a) Calcium b) Iron c) Vitamins
- 3) a) healthy skin
 - b) improving eye-sight
 - c) blood formation
 - d) strong bones and teeth.

Check Your Progress Exercise 3

- 1) Potato, Yam, Sweet Potato, Tapioca, Radish
- 2) 1-B, 2 - C, 3 - A

Check Your Progress Exercise 4

- 1) a) Spinach : should be darkgreen, fresh and crisp
- b) Potato : should be clean, wall shaped devoid of deep eyes, green skin and cuts
- c) Cauliflower : Head should be white and light.
- d) Beans : Should be small with semi-developed seeds inside.
- d) Cabbage : Should be green and devoid of holes.

Check Your Progress Exercise 5

- 1) Wash vegetables before cutting.
- 2) Cook vegetables with peel or peel them thinly
- 3) Cut vegetables first before cooking
- 4) Do not soak cut vegetables in water
- 5) Cook vegetables in minimum water
- 6) Cook vegetables in a covered pan. Pressure cooking or steaming is best.
- 7) Avoid the use of baking soda as it destroys the vitamins.