

L5 Meal planning

Keywords

therapeutic	enumerate	reckoner	Adequacy	adolescent	adolescent
Inadequate	flavoured	erratic	constipation	qualitative	quantitative

In-text Questions

In-text Questions 5.1

1. How many ways can foods be classified?
 - a. on the basis of physiological function
 - b. on the basis of nutrients


2. List the five food groups.
 - a. Cereals and grains
 - b. Pulses and legumes
 - c. Milk and meat products
 - d. Fruits and vegetables
 - e. Fats and sugars

3. What is food exchange? Give one example.


Substitution of one food item with the other in such a way that the nutrients provided by them are the same is called food exchange. Example wheat and rice.

4. Tick mark (✓) the most appropriate answer:

- (i) A balanced diet should consist of

- a. both plant and animal foods 
- b. only plant foods
- c. only animal foods
- d. only cereals and pulses

(ii) A balanced diet is one which has

- a. some nutrient in referred amount
- b. food from one food group in correct amounts
- c. all the nutrients in correct amounts 
- d. all those foods that a person likes to eat in correct amounts

In-Text Questions 5.2

1. Answers the following questions.

- a. What are the qualities of a well-planned meal?
A well-planned meal should be Nutritious and include all food groups.
- b. Differentiate between seasonal foods and out of season foods.
 - a. Seasonal foods are cheap, nutritious and abundant.
 - b. Out of season foods are less nutritious and expensive.
- c. List at least two points you will keep in mind in order to prepare an attractive and appealing meal.
The two points to keep in mind in order to prepare attractive and appealing meals are Color and texture.
- d. List the different types of work. Which kind of work requires maximum energy?
 - The different types of work are:
 - Heavy,
 - Sedentary

- Light
 - Heavy work requires maximum energy.
 - e. Your brother does not like lauki but your sister is very fond of it. How will you solve this problem?
 - By making lauki (bottle gourd) kofta instead of lauki curry. This is planning meal according to likes and dislikes of family members.
2. Select nutritious snacks from following food items.
- (i) Poha (ii) French Fries (iii) Dokla (iv) Vegetable cutlets (v) Pizza (vi) Upma
- Ans: (i) Poha (iv) Vegetable cutlets (vi) Upma

In-Questions 5.3

1. Write short notes on

i. Qualitative modification

It refers to the change in nutrients, consistency, flavour, amount of spices and fibre content of the diet.

ii. Food exchange

Substitution of one food item with the other in such a way that the nutrients provided by them are the same is called Food Exchange.

iii. Quantitative modification

This refers to the increase or decrease in the number of times a meal is taken and/or the portion size.

2. List the factors you will keep in mind while making a tiffin for school going children.

Answer: The factors to keep in mind while making a tiffin for school going children are:

- Taste and Nutrition.
- It should include, plenty of vitamins, minerals, carbohydrates and proteins

In-Text Questions 5.4

1. Differentiate between the following:

(i) Normal diet and therapeutic diet.

Normal Diet	Therapeutic Diet
a. A normal diet is a healthy meal plan that includes a variety of healthy foods from all the food groups.	Therapeutic diet is the special diet given to a person suffering from a disease, to facilitate recovery. It is a modification of the normal diet.

(ii) Modification in diet consistency and modification in frequency of feeding.

In some diseases the thickness of the food has to be changed. The food can then be served in two consistencies: 1. Liquid 2. Semi solid

Normally you eat 3-4 meals a day, that is, breakfast, lunch, tea and dinner. During sickness or during special conditions like sports practice, the frequency is changed.

2. Write 'T' against true and 'F' against false statements. Justify your answer.

- i. Sick people need only medicines for improving health. F

Because sick people need nutritious food along with medicines to correct their nutritional deficiencies.

- ii. Diet plays no role in helping the patient to get well. F

Because diet helps the patient to get the required nutrients to heal the body along with medicines.

- iii. Liquid diet consists of foods like nimbu-pani, fruit juices, coconut water, etc. T

Because when body is sick, heavy solid food is difficult to digest. Liquids which contain nutrients help in recovery.

- iv. The normal diet meets nutritional needs of all sick individuals. F

Because the normal diet needs to be modified in quality and quantity to provide the nutrients specifically needed for certain ailments.

- v. The modified diet should be as similar to the normal diet as possible. T

Because a sick person suddenly cannot eat the food that he/she is not used to eating since childhood. A rice-eating south indian cannot eat jowar roti even if it is good for health.

3. In diet therapy modifications of a normal diet are in terms of:

- a. Consistency
- b. Nutrient content
- c. Interval and frequency of feeding.

4. Categories the following food stuffs into liquid and semi-solid foods: Sago kheer, soup, custard, khichdi, lassi, fruit juice

- Liquids - soup, lassi, fruit juice

- Semisolid foods - sago kheer, custard, khichdi

In-Text Questions 5.5

1. Match the diseases given in column A with the therapeutic diets given in Column B

Column A

Column B

(i) Diarrhea (a) Low sugar diet

(ii) Fever

(b) Low fiber diet

(iii) Diabetes

(c) Low salt diet

(iv) Hypertension

(d) High protein, high energy diet

(v) Jaundice

(e) High fibre diet

(vi) Constipation

(f) High carbohydrate low fat diet

ANS:

i. Diarrohea - (a) low fiber diet

ii. Fever - (d) high protein,high energy diet

iii. Diabetes – (a) low sugar diet

iv. Hypertension - (c) low salt diet

v. Jaundice - (f) high carbohydrate low fat diet

vi. Constipation - (e) High fibre diet

2. List five foods rich in each of the following nutrients

(a) Carbohydrates - Chapati, rice, bread, dalia, suji.

(b) Proteins- milk, paneer, curd, egg, dals.

(c) Fibre - salads, guava, wheat (choker) whole grains, whole dals

TERMINAL EXERCISE

1. Rama likes to eat three full meals a day. She is suffering from fever. Suggest modification in her diet.

Answer: As Rama is suffering from fever, her diet:

- must be semi solid in nature.
- It should have high calorie and high protein content.
- The suggested foods are: juices, fruits, soups, lassi, dalia, and fish
- The frequency of the meals is: 2-3 hrs
- The foods to avoid are: fried food, pastries, spices etc

A sample meal plan for Rama till her fever subsides is as follows:

Meal	Menu
Breakfast	Idli and vegetable soup
Lunch	Roti, dal, egg, soup
Dinner	Dalia, soup, vegetable
More water intake	

2. Ashok is a factory worker. Every evening he plays foot ball with his friends. He has fractured his leg. Suggest modification in his diet so that he does not gain weight.

- Ashok should avoid eating heavy carbohydrate food which he usually ate to do factory work and play foot ball. For example, he should avoid heavy meals including rice and sweets.

- Now, as he has fractured his leg and cannot move much, he should eat food which is rich in protein, vitamins and minerals for fast recovery. For example, sprouts, fruits, vegetables, nuts etc
- He needs extra calcium for bone recovery. For example, paneer, tofu, curd etc

3. What do you understand by the term 'Balanced Diet'?

A balanced diet contains both plant and animal foods and fulfills following requirements:

- meets the nutritional requirements of an individual
- includes foods from all the food groups
- contains a variety of foods
- consists of seasonal foods
- is economical
- suits the taste and meets the desires of the individual eating it

4. What is reference menu and how do you plan it?

Answer: Reference menu means:

- i. Planning a sample menu for one member of the family (usually a healthy adult man engaged in normal activity) .
- ii. Then,doing modifications to that menu as per the nutritional requirements of different family members.

A sample menu for an healthy South Indian male:Meal	Menu
Breakfast	Idly/Dosa/Pongal
Lunch	Rice, Sambar, Veg
Dinner	Chapati, Dal
7 to 8 glasses of water throughout the day	

Previous-Year Questions

1. Define balanced diet. What are the requirements of a balanced diet?

A balanced diet is one which contains different types of foods in such quantities that the individual's need for the various nutrients is adequately met, and some amounts of nutrients are stored in the body to withstand short periods of low dietary intake.

Requirements:

- meets the nutritional requirements of an individual
- includes foods from all the food groups
- contains a variety of foods
- consists of seasonal foods
- is economical
- suits the taste and meets the desires of the individual eating it.

2. State the importance of meal planning.

Meal planning is important for meeting the nutritional requirements of the family members. It helps us to decide what to eat each day and in each meal.

3. Define diet modification. Explain, with example, qualitative and quantitative modification.

Diet modification means serving the meal cooked for the family to any member after varying it in quantity, quality and frequency of eating.

i. Qualitative Modification:

It refers to the change in nutrients, consistency, flavour, amount of spices and fibre content of the diet.

For example, the increased protein requirement of a pregnant woman can be met by increasing the quantity of protein rich foods in her diet.

ii. Quantitative Modification:

This refers to the increase or decrease in the number of times a meal is taken and/or the portion size.

For example, pregnant women, sick people or older persons need to eat smaller meals but at shorter intervals, that is, they may need 6-8 meals instead of four meals a day.

4. Plan a balanced lunch for an adolescent girl.

An adolescent girl requires more Iron and protein-rich food. Hence, a sample balanced lunch would be:

- 2 Chapatis with aloo methi curry
- 2 cups of rice
- 2 cups of dal
- 1 cup curd
- Sesame jaggery laddu

5. Suggest a suitable lunch for a lactating mother. Give reasons for your selection of the menu.

Answer: A lactating mother:

- Should be given more of foods rich in energy.
- Should be given more of foods like milk, curd, pulse, which are rich in protein, calcium, and vitamin A.
- Further, to compensate for her requirements, an additional serving of egg and vitamin A rich food like mangoes must be given.
- The frequency of meals too should be increased to fulfill her extra needs

sample balanced lunch for lactating mother would be:

- 2 Chapatis with aloo methi curry
- 2 cups of rice
- 2 cups of dal
- 1 boiled egg
- 1 cup curd
- Mango custard

6. Give one major difference between the following

Normal diet and Therapeutic diet

Normal diet	Therapeutic diet
A normal diet is a healthy meal plan that includes a variety of healthy foods from all the food groups.	Therapeutic diet is the special diet given to a person suffering from a disease, to help in recovery

7. Define food group and its classification

A food group, quite simply, consists of a number of food items sharing some common characteristics.

- Classification Based on Physiological Functions
- Classification Based on Nutrients

8. Define a balanced diet. Enlist *five* main characteristics of a balanced diet.
(Apr 2013)

A balanced diet is one which contains different types of foods in such quantities that the individual's need for the various nutrients is adequately met, and some amounts of nutrients are stored in the body to withstand short periods of low dietary intake.

Characteristics of a balanced diet:

- a. meets the nutritional requirements of an individual
- b. includes foods from all the food groups
- c. contains a variety of foods
- d. consists of seasonal foods
- e. it is economical
- f. suits the taste and meets the desires of the individual eating it

9. Why is it important to provide additional proteins and calcium to a pregnant woman? 4 (Apr 2017)

Answer: Additional proteins and calcium are required to a pregnant woman because:

- Protein is critical for ensuring the proper growth of baby's tissues and organs, including the brain.
- Protein plays a role in increasing blood supply, allowing more blood to be sent to baby.
- Developing baby needs calcium **to build strong bones and teeth.**
- Calcium also helps the baby grow a healthy heart, nerves, and muscles.

- Also calcium helps to develop a normal heart rhythm and blood-clotting abilities.

10. Plan a low-cost balanced lunch for a pregnant woman. What *four* factors would you keep in mind while planning this meal? 6 (Apr 2017)

The four factors to keep in mind while planning balanced lunch for a pregnant woman are:

- Requirement of Calories, proteins, calcium, iron, vitamin A and vitamin C are more for the healthy growth and development of fetus.
- More of water and fibre are required to prevent constipation.
- Should give her small frequent meals.

sample balanced lunch for a pregnant women would be:

- Salad
- 2 Chapatis with aloo methi curry
- 2 cups of rice
- 2 cups of dal
- 1 cup curd
- Mixed fruit bowl

11. Dal is a nutritious food item. Keeping suitability in mind, how would you serve it to the following? 6 (Apr 2018)

1. Pregnant lady	Mixed vegetable Dal (Sambar), 2 cups
2. Four months old baby	Mashed plain dal, small serving
3. Adolescent	Thick dal mixed with some vegetable like mango, bottle gourd etc
4. Old man	Thin soup like dal rasam
5. Jaundice patient	Thin soup like dal rasam
6. Two years old child	Medium consistency dal mixed with

	vegetable
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12. Rahim is a laborer. He lives in Goa with his two children. Explain any four factors which would influence the meal planning of his family? (Apr 2019)

The four factors which would influence the meal planning of his family are:

Si No.	Factor	Explanation
1	Economic Considerations	As he is a labourer and income levels are low, <ul style="list-style-type: none"> less expensive alternatives must be chosen. For example seasonal fruits and vegetables use of left-over food should be done properly.
2	Physical Activity	A labourer needs more energy because he is engaged in hard work. Hence, need to include more energy giving foods in the diet. For example, Rice
3	Region	Being in Goa, more sea food and coconut is available at cheaper rates
4	Satiety Value	Food that gives satisfaction to all members of the family for a long time must be chosen as many no of meals are not affordable.

12.Suggest two dietary tips each for the following diseases. (feb 2021)

- Diabetes
- Constipation
- Diarrhea

d. Jaundice

Si No.	Disease	Dietary Tips
a	Diabetes	1. Normal meals with less carbohydrates 2. Eating on fixed timings
b	Constipation	1. High fibre diet 2. Lots of water 3. Avoid refined foods like suji
c	Diarrhea	1. Liquid/semi solid food 2. Low fibre diet
d	Jaundice	1. Low fat diet - Avoid Fried food-puri, pakoda 2. Small frequent meals

13. What is a food group? Name any *two* food groups based on nutritional content. 2 (Oct 2014)

A food group, quite simply, consists of a number of food items sharing some common characteristics.

- physiological, on the basis of function
- on the basis of nutrients.

14. What is a food group? In how many ways foods be classified? (Oct 2015)

A food group, quite simply, consists of a number of food items sharing some common characteristics.

Classified into two types

- physiological, on the basis of function
- on the basis of nutrients

15. A person recovers from the disease when some changes are made in his diet. What do you understand by such a diet? What points should be kept in mind while modifying a normal diet? (Oct 2015)

Answer: Such type of diet is called therapeutic diet.

Therapeutic diet is the special diet given to a person suffering from a disease, to facilitate recovery. It is a modification of the normal diet.

Some points to remember

While modifying the diet of a patient, keep the following points in mind:

1. Do not plan a completely different diet because:

- Diets based on a person's daily diet have better acceptance.
- Such diet do not make a patient feel that he/she is eating something completely different from the family members.
- it is difficult to prepare.

2. Try to include only those foods which are liked by the patient, otherwise food may not be eaten at all.

3. Serve the meal in an attractive way to make them feel like eating.

13. Other than milk, suggest two foods which can be served to a five-month-old infant? (Oct 2017)

Porridge, kheer, mashed banana or potatoes

14. Describe the four changes you would introduce in a normal diet, when modifying it qualitatively for an old man. (Oct 2017)

Answer: The four changes to make when modifying the normal diet qualitatively for an old man are:

- i. Less energy giving foods and fats need to be included
- ii. Water intake as per doctors recommendation to prevent constipation

iii. Lots of fibre to prevent constipation

iv. Soft and well cooked food is needed as teeth become weak

15. What do you understand by therapeutic diet? Why is it made? (Oct 2019)

Therapeutic diet is the special diet given to a person suffering from a disease, to facilitate recovery. It is a modification of the normal diet.

Because the change in diet helps the person to recover from disease.