

EXERCISE**OBJECTIVE TYPE**

1. An edible root is
(A) ginger (B) potato
(C) carrot (D) onion
2. The part of sugarcane plant from which sugar is obtained is its
(A) leaf (B) stem
(C) flower (D) fruit
3. The product obtained only from plants is
(A) chicken (B) ghee
(C) rice (D) milk
4. Vegetarian food is
(A) obtained from animal sources
(B) obtained from cow
(C) obtained from plants
(D) None of these
5. The useful part of tea plant is its
(A) seeds (B) stem
(C) roots (D) leaves
6. Human beings eat rice, chapatti as well as meat, so they are
(A) herbivores (B) carnivores
(C) insectivores (D) omnivores
7. Nutrient content of chapatti mainly includes
(A) fat (B) minerals
(C) carbohydrates (D) proteins
8. The part of a chilly plant that is used as a spice is
(A) seed (B) fruit
(C) leaves (D) flower

9. Examine the following statements.

(A) Iron, necessary for the human body, is abundantly found in green vegetables.

(B) Zinc is one of the essential trace elements required for human body.

(C) Fats and minerals are not the essential nutrients for a balanced diet of humans.
(D) The foods that generate energy in the body after complete oxidation are in the form of carbohydrates, fats and proteins.

Which one of the following alternatives is wrong?

(A) A (B) B
(C) C (D) D
10. Which of the following statements is wrong ?

(A) Quinine an antimalarial drug is obtained from the plant cinchona.

(B) Pulses are rich sources of starch and minerals.

(C) Sunflower is a good source of vegetable oil.

(D) Green vegetables are good sources of vitamins and minerals.
11. Which of the following food will provide more minerals and vitamins for the growth of tissue in human body-

(A) Cheese (B) Fruit
(C) Sweets (D) Egg
12. Anaemia disease is due to Deficiency of which substance ?

(A) Iron (B) Vitamin A
(C) Fat (D) Protein

13. Which of the following will provide maximum roughage in your diet ?

- (A) Egg (B) Tomato
(C) Cabbage (D) Rice

14. Calciferol is the name of

- (A) Vitamin A (B) Vitamin B
(C) Vitamin D (D) Vitamin E

15. Ascorbic acid is also called as :

- (A) Vitamin D (B) Vitamin K
(C) Vitamin E (D) Vitamin C

16. Percent of cytoplasm by weight is made up of compounds of four elements. These are :

- (A) C, H, O, N (B) C, Fe, O, H
(C) C, H, I, O (D) C, Fe, S, O

17. Which vitamin is obtained from an orange ?

- (A) Vitamin A (B) Vitamin B
(C) Vitamin C (D) Vitamin E

18. Which components of diet should be given more to children ?

- (A) Carbohydrates (B) Mineral-salt
(C) Fats (D) Protein

19. Low production of sperms or ova (infertility) is due to the deficiency of

- (A) Vitamin A (B) Vitamin C
(C) Vitamin E (D) Vitamin K

20. Maximum amount of vitamin C is found in

- (A) lemon (B) orange
(C) amla (D) none

SUBJECTIVE TYPE

1. Define BMR.
2. What do mean by food test ? Write protein test.
3. Write the biological significance of protein.
4. Define omnivores. Give two examples.
5. Following food items are made up of which nutrients ? Rice, flour, cheese, curd, dal.

ANSWER KEY

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|------------|---|------------|---|------------|---|------------|---|
| 1. | C | 2. | B | 3. | C | 4. | C |
| 5. | D | 6. | D | 7. | C | 8. | B |
| 9. | C | 10. | B | 11. | B | 12. | A |
| 13. | C | 14. | C | 15. | D | 16. | A |
| 17. | C | 18. | D | 19. | C | 20. | C |
| 21. | A | | | | | | |

Exercise - II**OLYMPIAD PROBLEMS****RESOURCES**

- Which one of the following is not a food producer?
(A) Wheat Plants (B) Green Grass
(C) Grasshopper (D) Mango tree
- One of the following organisms is not a consumer. This organism is
(A) Giraffe (B) Grasshopper
(C) Goat (D) Grass
- Which of the following seeds are not used for making sprouts in our homes?
(A) Moong (B) Moth
(C) Makka (D) Chana
- One of the following foods is not obtained from animals. This food is
(A) Honey (B) Milk
(C) Maize (D) Mutton
- Which one of the following is not a stem of its parent plant?
(A) Ginger (B) Potato
(C) Sweet potato (D) Onion
- One of the following Plants has two parts which can be eaten as food. This plant is
(A) Wheat (B) Maize
(C) Mustard (D) Bengal gram
- One of the following animals takes only liquid food. This animal is
(A) Vulture (B) Squirrel
(C) Lizard (D) Butterfly
- Which one of the following foods is not a root of its parent plant?
(A) Carrot (B) Radish
(C) Onion (D) Turnip
- The leaves of one of the following plants are not eaten as food. This plant is
(A) Mustard (B) Mango
(C) Cabbage (D) Lettuce
- The flowers of which of the following plant are not eaten as food?
(A) Banana (B) Gladiolus
(C) Bougainvillea (D) Pumpkin
- Which one of the following is a herbivore?
(A) Kingfisher (B) Camel
(C) Cat (D) Hawk
- One of the following is a carnivore. This one is

- (A) Monkey (B) Bear
(C) Elephant (D) Lion

- Which one of the following is an omnivore?
(A) Hen (B) Frog
(C) Parrot (D) Rabbit
- Buffalo is
(A) A carnivore (B) A herbivore
(C) An omnivore (D) None of these
- Which part of its parent plant is potato which we eat as a vegetable?
(A) Stem (B) Root
(C) Branch (D) Bud
- Which part of its parent plant is sweet potato which we eat as a food?
(A) Flower (B) Bud
(C) Root (D) Stem

COMPONENTS

- The main carbohydrate which we eat in our food is
(A) Cane sugar (B) Glucose
(C) Cellulose (D) Starch
- Which of the following is considered to be body building food?
(A) Carbohydrates (B) Proteins
(C) Fats (D) Vitamins
- Which of the following is produced in our body when the skin is exposed to sunlight?
(A) Vitamin D (B) Vitamin B
(C) Vitamin A (D) Vitamin C
- The vitamin essential for good eyesight, healthy skin and hair is vitamin
(A) A (B) B₁
(C) C (D) D
- Which of the following foods is a good source of both calcium and Phosphorus?
(A) Fish (B) Carrots
(C) Milk (D) Oranges
- The mineral essential for the proper functioning of the thyroid gland is
(A) Calcium (B) Iodine
(C) Iron (D) Potassium
- Which of the following minerals is necessary to make haemoglobin present in the red blood cells?

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| <p>(A) Iodine (B) Red Phosphorus
(C) Iron (D) Sodium</p> <p>24. One of the following is necessary for keeping gum and teeth healthy. This is
(A) Vitamin B (B) Vitamin D
(C) Vitamin A (D) Vitamin C</p> <p>25. Which of the following is not a function of water in our body?
(A) To transport digested food
(B) To get rid of wastes
(C) To release energy
(D) To regulate body temperature</p> <p>26. The vitamin which prevents rickets disease in children is
(A) Vitamin A (B) Vitamin B
(C) Vitamin C (D) Vitamin D</p> | <p>27. Roughage in our food is mainly made of
(A) Starch (B) Cellulose
(C) Glucose (D) Canesugar</p> <p>28. One of the following is necessary for the normal growth of bones and teeth. this one is
(A) Vitamin B (B) Vitamin C
(C) Vitamin D (D) Vitamin A</p> <p>29. Fish is a rich source of
(A) Iodine (B) Iron
(C) Phosphorus (D) Potassium</p> <p>30. Which of the following foods can help in keeping the thyroid gland Healthy?
(A) Milk (B) Meat
(C) Fish (D) Eggs</p> |
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ANSWER KEY

- | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|
| 1. C | 2. D | 3. C | 4. C | 5. C | 6. C | 7. D |
| 8. C | 9. B | 10. C | 11. B | 12. D | 13. A | 14. B |
| 15. A | 16. C | 17. D | 18. B | 19. A | 20. A | 21. C |
| 22. B | 23. C | 24. D | 25. C | 26. D | 27. B | 28. C |
| 29. A | 30. C | | | | | |

Exercise - III**LEARN WITH FUN**

- Which one of the following food item does not provide dietary fibre?
(A) Whole grains
(B) Whole pulses
(C) Fruits and vegetables
(D) Milk
- Which of the following sources of protein is different from other?
(A) Peas
(B) Gram
(C) Soybeans
(D) Cottage cheese(paneer)
- Which of the following nutrients is not present in milk?
(A) Protein (B) Vitamin C
(C) Calcium (D) Vitamin D
- Read the food items given below
(i) Wheat (ii) Ghee
(iii) Iodised Salt (iv) Spinach (Palak)
Which of the above food items are "energy giving foods"?
(A) (i) and (iv) (B) (ii) and (iv)
(C) (i) and (ii) (D) (iii) and (iv)
- Read the following statement about diseases.
(i) They are caused by germs.
(ii) They are caused due to lack of nutrients in our diet.
(iii) They can be passed on to another person through contact.
(iv) They can be prevented by taking a balanced diet.
Which pair of statement best describe a deficiency disease?
(A) (i) and (ii) (B) (ii) and (iii)
(C) (ii) and (iv) (D) (i) and (iii)
- Given below are the steps to test the presence of proteins in a food item:
(i) Take a small quantity of the food item in a test tube, add 10 drops of water to it and shake it.
(ii) Make a paste or powder of food to be tested.
(iii) Add 10 drops of caustic soda solution to the test tube and shake well.
(iv) Add 2 drops of copper sulphate solution to it.
Which of the following is the correct sequence of the steps ?
(A) i, ii, iv, iii (B) ii, i, iv, iii
(C) ii, i, iii, iv (D) iv, ii, i, iii

Very short Answer Questions

- Unscramble the following words related to components of food and write them in the space provided.
(i) Reinpot.....
(ii) menilars.....
(iii) Tivanmi.....
(iv) Bocatradhyer.....
(v) Nitesturn.....
(vi) Tfa.....

- Which of the following does not provide any nutrient?

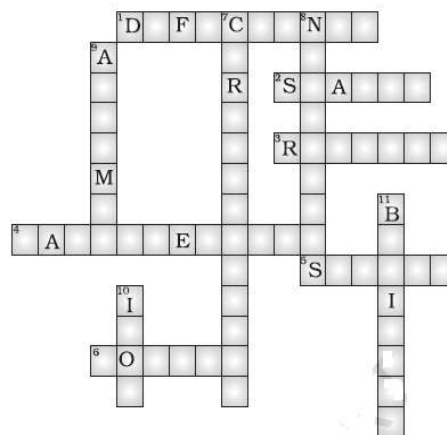
Milk, Water, Orange Juice, Tomato soup**Short Answer Question**

- Fill in the blanks from the list of words given below:
(Carbohydrate, fat, protein, starch, sugar, Vitamin A, Vitamin C, Roughage, balanced diet, obesity, goitre)
(i) Egg yolk is rich inand egg albumin is rich in
(ii) Deficiency diseases can be prevented by taking a
(iii) Eating too much of fat rich foods may lead to a condition called.....
(iv) The component of food that does not provide any nutrient to our body and yet is essential in our food is.....
(v) The Vitamin that gets easily destroyed by heating during cooking is.....
- Read the items of food listed below. Classify them into carbohydrate rich, protein rich and fat rich food and fill them in the given table.
Moong dal, fish, mustard oil, sweet potato, milk, rice, egg, beans, butter, butter milk (Chhachh), cottage cheese(paneer), peas, maize, white bread.

Carbohydrate Rich Food item(A)	Protein Rich Food Item(B)	Fat Rich food Item(C)

11. Tasty food is not always nutritious, and nutritious, food may not always be tasty to eat. Comment the examples.
12. While using Iodine in the laboratory, some drops of iodine fell on Paheli's socks and some fell of her teacher's saree. The drops of iodine on the saree turned blue black while their colour did not change on the socks. What can be the possible reason?
13. Pahelt and Boojho peeled some potatoes and cut them into small pieces. They washed and boiled them in water. They threw away the excess water and fried them in oil adding salt and spices. Although the potato dish tasted very good, its nutrient value was less. Suggest a method of cooking potatoes that will not lower the nutrients in them.
14. Pahelt avoids eating vegetables but likes to eat biscuits, noodles and white bread. She frequently complains of stomachache and constipation. What are the food items that she should include in her diet to get rid of the problem? Give reason for your answer.
15. (a) List all those components of food that provide nutrients.
(b) Mention two components of food that do not provide nutrients.
16. Minerals and vitamins are needed in very small quantities by our body as compared to other components. Yet, they are an important part of a balanced diet. Explain the statement.
17. Water does not provide nutrients, yet it is an important component of food. Explain?
18. Long answer Questions
Boojho was having difficulty in seeing things in dim light. The doctor tested his eyesight and prescribed a particular vitamin supplement. He also advised him to include a few food items in his diet.
(a) Which deficiency disease is he suffering from?
(b) Which food component may be lacking in his diet?
(c) Suggest some food items that he should include in his diet. (Any four)

19. Solve the cross-word puzzle given as fig 1.1 from the clues given below.

**Across**

1. Lack of nutrients in our diet over a long period causes these diseases (10)
2. Rice and potato are rich in this type of carbohydrate (6)
3. Deficiency disease in bones makes it become soft and bent (7)
4. The diet that provides all the nutrients that our body needs, in right quantities, along with adequate amount of roughage and water (8, 4)
5. Deficiency disease with bleeding gums (6)
6. Disease caused due to gums. (6)

Down

7. Starch and sugar in our food are rich in this type of energy giving nutrient (13)
8. The term given to the useful components of food (9)
9. The disease caused by deficiency of iron in diet (7)
10. Green leafy vegetables, liver and apples are rich in this mineral (4)
11. Deficiency disease caused due to lack of Vitamin B₁ in the diet (8)

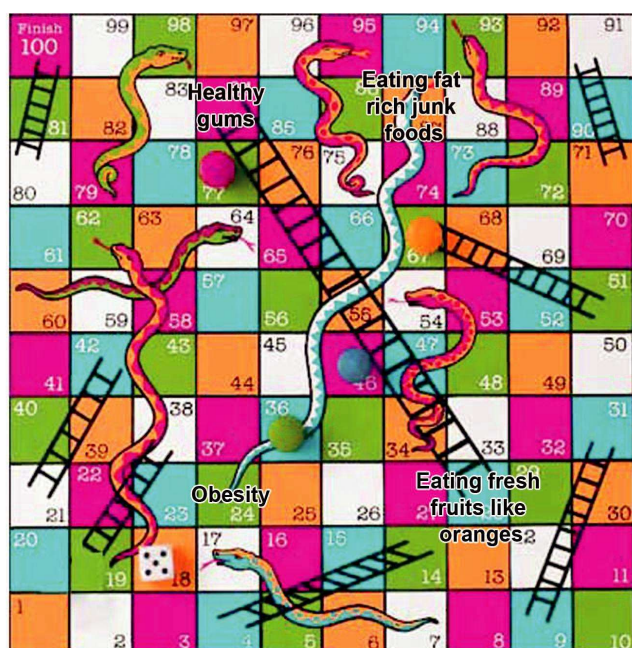
20. Observe the items given in fig 1.2 carefully and answer the questions that follow.



- (a) Food item rich in carbohydrates is
 (b) Egg is a rich source of protein, the mineral.....and vitamin
 (c)is a rich source of fat.
 (d) Milk providesvitamin D and(mineral)
 (e)(fruit) is a rich source of vitamin A.
 (f) Spinach is a good source of the mineral.....
 (g) Both eggs andare rich in

21. Snakes and Ladders

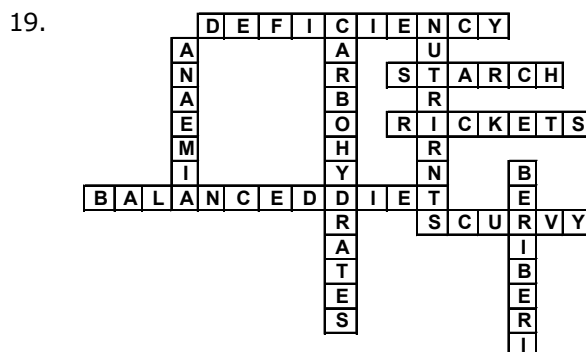
Make a board game just like "Snakes and ladders" with 10-10 grid boxes. The mouth of the snake will represent the faulty food habit or faulty method of cooking. Its tail will represent the deficiency disease caused or loss of any nutrient in food. Similarly, the box at the base of a ladder will represent healthy food habit or healthy method of cooking. Its upper end will represent the beneficial effect of that habit. An example is given as fig. 1.3 Complete the board and play with your friends.



ANSWER KEY

1. D 2. D 3. B 4. C
 5. C 6. B
 7. (a) Protein (b) minerals (c) vitamins
 (d) Carbohydrate (e) nutrients (f) fat
 8. Water
 9. (a) fat, protein (b) Balanced diet
 (c) Obesity (d) roughage
 (e) vitamin C

10. A-sweet potato, rice, maize, white bread
 B-moong dal, fish, milk, egg, beans, butters
 C-mustard oil, milk, egg, butter
 11. Potato chips are tasty but they are not very nutritious.
 Boiled vegetables are very nutritious but they may not be tasty.
 12. The saree of paheli's teacher might have been starched and starch turns blue black with iodine solution. Paheli's socks did not have starch on it thereby showing no change.
 13. Wash, peel cut and cook the potatoes, Cooking in a small amount of water and then frying in a small quantity of oil conserves the nutrients.
 14. Paheli must include whole grains, whole pulses, fresh fruits and vegetables in her diet as she seems to lack roughage.
 15. (a) components of food that provide nutrients are carbohydrates, proteins, fats, vitamins and minerals.
 16. Vitamins and minerals are very important because they help in
 (a) protecting our body against disease.
 (b) growth
 (c) maintaining good health.
 17. Water helps our body to absorb nutrients from food and also helps in removing wastes such as urine and sweat.
 18. (a) Night blindness (b) vitamins A
 (c) carrot, papaya, mango, milk and fish oil or any other (any four)



20. (a) Chapati (b) Calcium; Vitamin D
 (c) Butter (d) Protein, Calcium
 (e) Papaya (f) Iron
 (g) Peas, Proteins
 21. A snakes and ladders board game prepared by children

Exercise - III**LEARN WITH FUN**

1. Given below are names of some animals
 (i) Goat (ii) Human beings
 (iii) Cockroach (vi) Eagle
 Which of the above animals form a pair of omnivores?
 (A) (i) and (ii) (B) (ii) and (iii)
 (C) (iii) and (iv) (D) (ii) and (iv)

2. Honeybee makes honey from
 (A) Pollen (B) Petals
 (C) Nectar (D) Bud

3. Below are names of some animals:
 (i) Cow (ii) Sheep
 (iii) Horse (iv) Ox
 Which of the above are sources of milk for human beings?
 (A) (i) and (iii) (B) (i) and (ii)
 (C) (ii) and (iii) (D) (iii) and (iv)

4. Given below is a list of edible plants:
 (i) Banana (ii) Pumpkin
 (iii) Lady's finger (iv) Brinjal
 Which pair of plants have two or more edible parts
 (A) (i) and (ii) (B) (ii) and (iii)
 (C) (iii) and (iv) (D) (i) and (iv)

5. The part of a banana plant not used as food as
 (A) Flower (B) Fruit
 (C) Stem (D) Root

6. Read each set of terms and identify the odd set
 (A) Cow, milk, butter
 (B) Hen, meat, Egg
 (C) Goat, milk, meat
 (D) Plant, vegetable, butter milk,

Very short Answer Questions

7. Read the clues and fill up the blanks given below each of them.
 (a) Honeybees suck from flower
 N T.....R
 (b) Animals which eat other animals
A.....N.....V.....R.....S
 (c) Animals which eat only plants and plant products.
 HE.....B.....E.....
 (d) Animals which eat both plants and animals.
MNI.....O.....

8. Why do build seeds fail to sprout?

9. Where do bees store honey?

10. Name two ingredients in our food that are not obtained fro plants or animals. Mention one source for each ingredient.

11. Given below are jumbled words which are names of parts of a plants. Rearrange them to get the correct words.
 (a) L I L C H I
 (b) I T R U F
 (c) S E A N B O Y A
 (d) G U R S A
 (e) R O U N D G U N T

12. Identify the animals in the grid given below as fig. 1.1 and categorise them into herbivore, carnivore and omnivore.

T	A	C	O	W	I	L	F
T	A	R	W	X	G	O	R
N	N	O	L	I	O	N	O
E	T	W	Q	L	A	N	G
H	U	M	A	N	T	W	O

13. Why should we avoid wastage of food?

14. Why do organisms need food? Write two reasons.

15. Match the organisms given in Column I with their part/ product in Column II that is used by human beings as food.

Column-I
 (a) Mustard Plant
 (b) Goat

(c) Hen
 (d) Smoke
 (e) wind

Column-II
 (i) Meat
 (ii) fruits and vegetable
 (iii) seed
 (iv) direction of air flow
 (v) Prevent dust particles

ANSWER KEY

1. B 2. C 3. B 4. A 5. D 6. D
7. (a) NECTAR (b) ARNIVORES (c) HERBIVORES (d) OMNIVORES
8. Boiling kills the seeds
9. In beehives
10. (i) Salt from sea water/rocks
(ii) Water from river/well/tap/pond/tubewell/rain
11. (a) CHILLI (b) FRUIT (C) SOYAVEAN (d) SUGAR (e) GROUNDNUT
- 12.

T	A	C	O	W	O	L	F
T	A	R	W	X	G	O	R
N	N	O	L	I	O	N	O
E	T	W	Q	L	A	N	G
H	U	M	A	N	T	W	O

Herbivore : COW, GOAT, HEN

Carnivore : WOLF, LION, FROG

Omnivore : CAT, RAT, CROW, HUMAN, ANT, OWL

13. a- Flower, b-Bud, c- Leaf, d- Stem
14. Enough food is not available for all of us/ food is very costly and poor people cannot afford to buy