

NCERT SOLUTIONS- NUTRITION IN ANIMALS

NCERT Solutions for Class 7 Science Chapter 2 Nutrition In Animals is the essential study material to perfect Nutrition In Animals topics. The NCERT Class 7 Science solutions provided here correctly answer NCERT textbook questions. Solutions curated in a comprehensive manner will help students understand the subtopics in this chapter in a better way.

IMPORTANT SUB-TOPICS MENTIONED IN THE NCERT CLASS 7 SCIENCE CHAPTER 2 NUTRITION IN ANIMALS:

NCERT Solutions for Class 7 Science Chapter 2 Nutrition In Animals has the following sub-topics as given below:

Sr. no	Topics
1.	Ways of food intake
2.	Human digestion
3.	Digestion in herbivores
4.	Nutrition and digestion in Amoeba

NCERT SOLUTIONS CLASS 7 SCIENCE CHAPTER 2 NUTRITION IN ANIMALS:**1. Fill in the blanks:**

- The main steps of nutrition in humans are _____, _____, _____, _____ and _____.
- The largest gland in the human body is _____.
- The stomach releases hydrochloric acid and _____ juices which act on food.
- The inner wall of the small intestine has many finger-like outgrowths called _____.
- Amoeba digests its food in the _____.

ANS-

- The main steps of nutrition in humans are **ingestion, digestion, absorption, assimilation** and **egestion**.
- The largest gland in the human body is **liver**.
- The stomach releases hydrochloric acid and **digestive** juices which act on food.
- The inner wall of the small intestine has many finger-like outgrowths called **villi**.
- Amoeba digests its food in the **food vacuole**.

2. Mark 'T' if the statement is true and 'F' if it is false:

- Digestion of starch starts in the stomach. (T/F)**
- The tongue helps in mixing food with saliva. (T/F)**
- The gall bladder temporarily stores bile. (T/F)**
- The ruminants bring back swallowed grass into their mouth and chew it for some time. (T/F)**

ANS-

- a. F
- b. T
- c. T
- d. T

3. Tick (✓) mark the correct answer in each of the following:

- a. Fat is completely digested in the
(i) stomach (ii) mouth (iii) small intestine (iv) large intestine
- b. Water from the undigested food is absorbed mainly in the
(i) stomach (ii) food pipe (iii) small intestine (iv) large intestine

ANS-

- a. (iii) small intestine
- b. (iv) large intestine

4. Match the items of Column I with those given in Column II:

Column- I	Column- II
Food components	Product(s) of digestion
Carbohydrates	Fatty acids and glycerol
Proteins	Sugar
Fats	Amino acids

ANS-

Column- I	Column- II
Food components	Product(s) of digestion
Carbohydrates	Sugar
Proteins	Amino acids
Fats	Fatty acids and glycerol

5. What are villi? What is their location and function?

ANS- The inner walls of the small intestine have thousands of finger-like outgrowths. These are called villi (singular villus). The villi increase the surface area for absorption of the digested food.

6. Where is the bile produced? Which component of the food does it help to digest?

ANS- Bile is produced in the liver and it helps in the digestion of fats.

7. Name the type of carbohydrate that can be digested by ruminants but not by humans. Give the reason also.

ANS- The carbohydrate known as cellulose can be broken down by ruminants but not by humans because humans lack the cellulase enzyme needed to do so.

8. Why do we get instant energy from glucose?

ANS- While other carbohydrates must first be converted down into glucose before being absorbed, glucose is a simple sugar that is quickly taken into the the system, providing instant energy.

9. Which part of the digestive canal is involved in:

- (i) absorption of food _____.
- (ii) chewing of food _____.
- (iii) killing of bacteria _____.
- (iv) complete digestion of food _____.
- (v) formation of faeces _____.

ANS-

- (i) Small intestine
- ii) Buccal cavity
- iii) Stomach
- iv) Small intestine
- v) Large Intestine

10. Write one similarity and one difference between nutrition in amoeba and human beings.

ANS- Similarity: Holozoic type of nutrition is present in both amoeba and human beings.
Difference: Humans eat through their buccal cavity. Food is consumed by amoeba through pseudopodia.

11. Match the items of Column I with suitable items in Column II

Column-I	Column-II
a) Salivary gland	(i) Bile juice secretion
b) Stomach	(ii) Storage of undigested food
c) Liver	(iii) Saliva secretion
d) Rectum	(iv) Acid release
e) Small intestine	(v) Digestion is completed
f) Large intestine	(vi) Absorption of water

ANS-

	(vii) Release of faeces
Column-I	Column-II
a) Salivary gland	(iii) Saliva secretion
b) Stomach	(iv) Acid release
c) Liver	(i) Bile juice secretion
d) Rectum	(ii) Storage of undigested food
e) Small intestine	(v) Digestion is completed
f) Large intestine	(vi) Absorption of water

12. Label Fig. 2.11 of the digestive system.

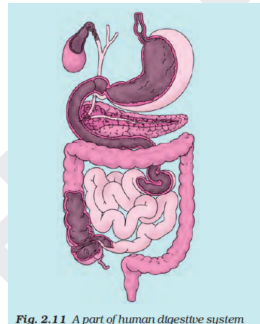


Fig. 2.11 A part of human digestive system

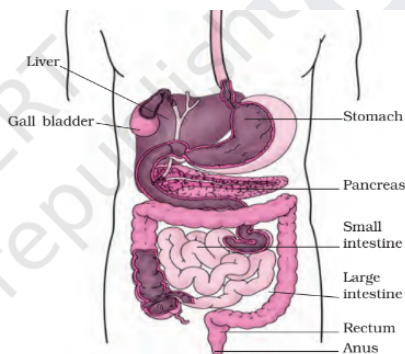


Fig. 2.2 Human digestive system

ANS-

13. Can we survive only on raw, leafy vegetables/grass? Discuss.

ANS- No, we cannot survive solely on raw, green vegetables since they mostly contain cellulose, which our bodies lack the enzyme necessary to digest.