March 1, 2021

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Chp-2 Nutrition in Animals

(1) Name the different steps in the process of nutrition?

Ans The different steps in the process of nutrition are:- Ingestion, digestion, absorption, assimilation and egestion

(2) What is ingestion?

Ans The process by which the food is taken inside the body of an organisim is called ingestion.

(3) What is digestion?

Ans The process of breakdown of complex, insoluble food substances with the help of digestive juices prepared by the body is called digestion.

(4) What is absorption?

Ans The process in which the simple, soluble digested food substances are absorbed into the blood is called absorption.

(5) What is Assimilation?

Ans The simple, soluble absorbed food substances are transported to the different parts of the body where they are utilised for energy, growth and repair. This process is called assimilation.

(6) What is Egestion?

Ans The process in which the undigested food is removed from the body is called egestion.

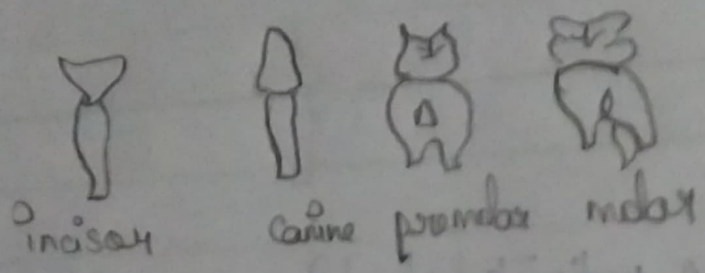
(7) What is peristalsis?

Ans The pushing down of food by the walls of the oesophagus in a wave-like action is called peristalsis.

(8) What does the human alimentary cannel consist of?

Ans The alimentary canal consists of:

i) Buccal cavity or oral cavity
ii) Oesophagus or food pipe
iii) Stomach.
iv) Small Intestine
v) Large Intestine ending at the anus
vi) Anus.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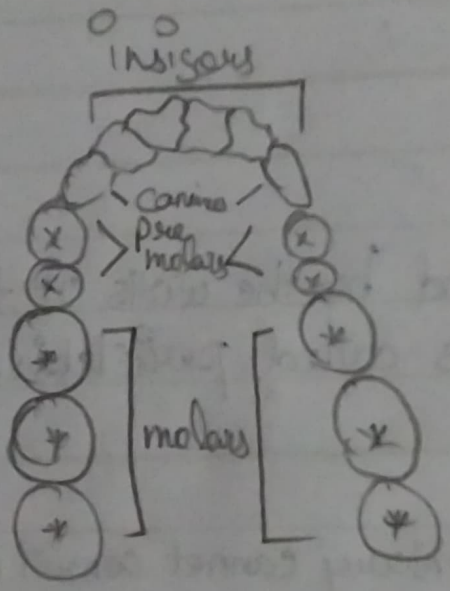
INCISORS
canine
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(9) What does Buccal Cavity consists of?

Ans The Buccal Cavity consists of teeth, tounge and salivary glands.

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(10) What is mastication?

Ans The process of breaking down of food into small pieces and mixing the food with saliva is called mastication.

(11) Discuss the different types of teeth along with their structure.

Ans Based on structure and functions, teeth are of four types:-

i) Incisors (cutting teeth): These are four flat and blade-like teeth present in front part of each jaw. These teeth are used to bite and cut the food into small pieces.

ii) Canines (Tearing teeth): These are present on the either side of the incisors. These are two in number in each jaw. These are sharp and pointed teeth which help in tearing the food.

iii) Premolars (grinding teeth): These are two premolars next to each canine (four in number in each jaw). These have broad and flat grinding surfaces. They grind food and

break it into small pieces.

iv) Molars (grinding teeth): The remaining teeth in the jaw are three molars on either side of the premolars (six in number in each jaw). These teeth also have broad and flat grinding surfaces. They are larger than the premolars. These teeth are also used to crush and grind the food.

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(12) • Differentiate between milk teeth and permanent teeth.

Ans ~~The~~

	Milk Teeth	Permanent Teeth
(1)	The temporary set of teeth that grow when the child is in the age group of 6 months to 8 years are called milk teeth.	(1) The second set of teeth which grow again after the milk teeth fall out are [redacted] called permanent teeth.
(2)	* [redacted] are 20 in number * Milk are small and weak and	(2) Permanent teeth are 32 in number.
(3)	When milk teeth fall they are replaced by permanent teeth.	(3) When permanent teeth they cannot be replaced by naturals.

(13) What is plaque?

(Ans) Plaque is a thin sticky layer formed on the surface of the teeth when bacteria present in our mouth react with the leftover food and the saliva.

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(14) What are the effects of tooth decay?

(Ans) Tooth decay causes the following problems:-

1. Holes or cavities in the teeth
2. Foul smell
3. Losing of teeth
4. Toothache
5. Stomach disorders

(15) How tooth decay can be avoided?

(Ans) Tooth decay can be avoided by the following ways:-

1. We should avoid eating too many sweets, ice creams and chocolates.
2. We must brush our teeth twice a day - in the morning and night before going bed.
3. We must floss our teeth every day.

(16) What are the functions of tounge?

(Ans) The tounge performs the following functions:

(i) It helps in mixing saliva with food.
(ii) It helps in pushing and thus, swallowing the food into the food pipe.
(iii) It helps in getting the different tastes of food. It has several taste buds that can distinguish four types of tastes in food — salty, sour, bitter and sweet.
(iv) It enables us to speak.

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(17) What are enzymes?
Ans Enzymes are biochemical catalysts which hasten certain metabolic reactions taking place in the body without undergoing any change. Enzymes are protein in nature.

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(18) What enzymes are present in saliva? What is the function of it?
Ans Enzymes present in saliva is amylase. Its function is to breakdown the starch present in the food into sugars.

Where
(19) ~~What~~ are gastric glands located? What does it secrete?
Ans Gastric glands are located in the inner wall of the stomach. These glands secrete gastric or digestive juices which contain three substances: hydrochloric acid, pepsin and mucus.

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(20) What is the function of hydrochloric acid, mucus and pepsin?

Ans Hydrochloric acid kills many harmful bacteria that enter with the food and it enhances the action of digestive acids.

The mucus protects the inner lining of the stomach from the action of enzymes and acid.

In the acid medium, pepsin digests the proteins in the food to form simple, soluble substances called peptones.

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(21) Write a short note on liver.

Ans The liver is a reddish-brown gland situated in the upper part of the abdomen on the right side. It is the largest gland in the body. It secretes bile juice, which is stored in a sac called the gall bladder. Bile juice helps in the digestion of fats.

(22) What is the action of intestinal juice on the following food components:

a) carbohydrates b) fats c) proteins.

Ans) The enzymes in the intestinal juices act upon:

a) carbohydrates → carbohydrates gets broken into glucose
b) fats → fats gets broken into fatty acids and glycerol.
c) proteins → proteins get broken into amino acids.

(23) What are vili? What is its function?

Ans Millions of finger-like projections or folds on the inner wall of small intestine are called villi.

Villi give the inner walls of the small intestine a very large surface area for the absorption of digested food.

(24) What happens to the digested food during assimilation?

Ans In the cells, glucose breaks down with the help of oxygen into carbon di oxide and water, and energy is released. Amino acids are used for building and repairing of body parts such as worn out cells and tissues. Fatty acids and glycerol act as energy reserves and are stored under the skin for further use.

(25) What happens to the undigested food?

Ans The food that remains undigested and unabsorbed passes

from the small intestine into the large intestine. Large intestine absorbs water and some salts from the undigested food. Due to this, the undigested food becomes dry and almost semi-solid (faeces)

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(26) What is pseudopodia? How does it help the organism?

Ans) Finger like projections present in a single celled organism, like Amoeba is called pseudopodia.

It helps Amoeba in locomotion and capturing of food.

(27) What are ruminants?

Ans) Grass eating animals chew the food rapidly and swallow it ~~hastily~~ hurriedly. Later they bring food back into the mouth and chew it. This process of chewing food is called rumination and these animals are called ruminants. Eg- Cow, Buffalo etc

(28) Name the four chambers in the stomach of ruminants.

Ans) The four chambers in the stomach of ruminants are:

i) rumen
ii) reticulum
iii) omasum
iv) abomasum

(29) What is cud?

Ans) Partially digested food in the largest chamber, the rumen of ruminants is called cud

(30) Name the smallest chamber of stomach in ruminants.

Ans) The smallest chamber of stomach in ruminants is omasum.