



Dr. Bbosa Science

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The Science Foundation College
Uganda East Africa
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+256 778 633682 0753 143413

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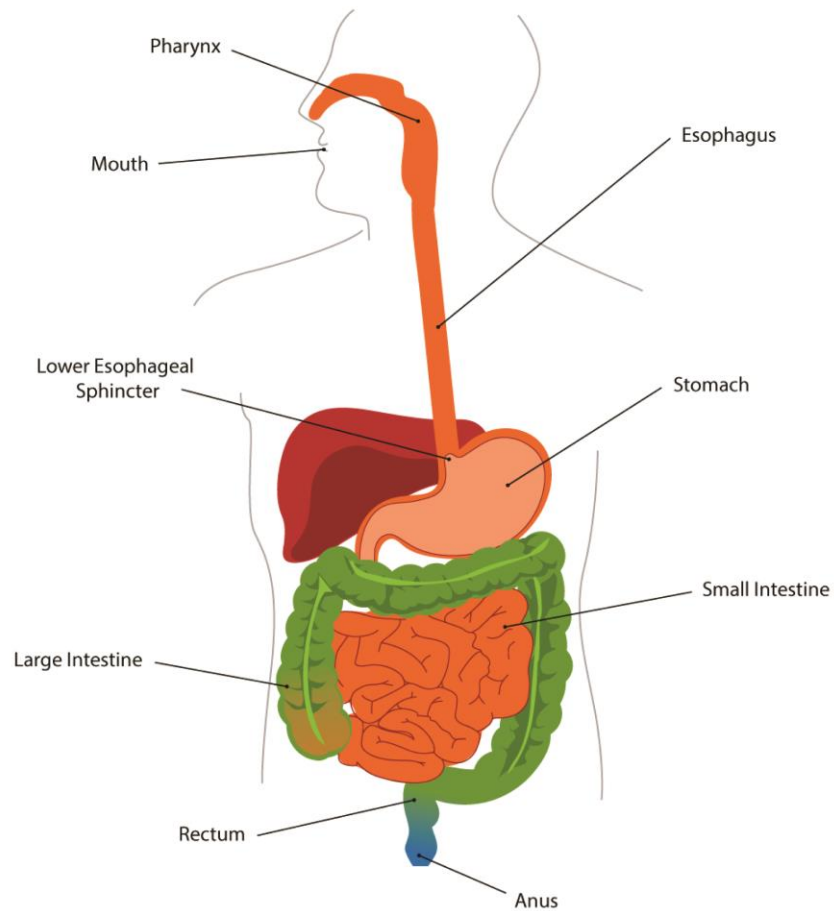
Nuture your dreams

P5 Integrated Science

Term 1

THEME: Human Body

Topic 4/4: Digestive system



Exercise 1

Name any four parts of human digestive system

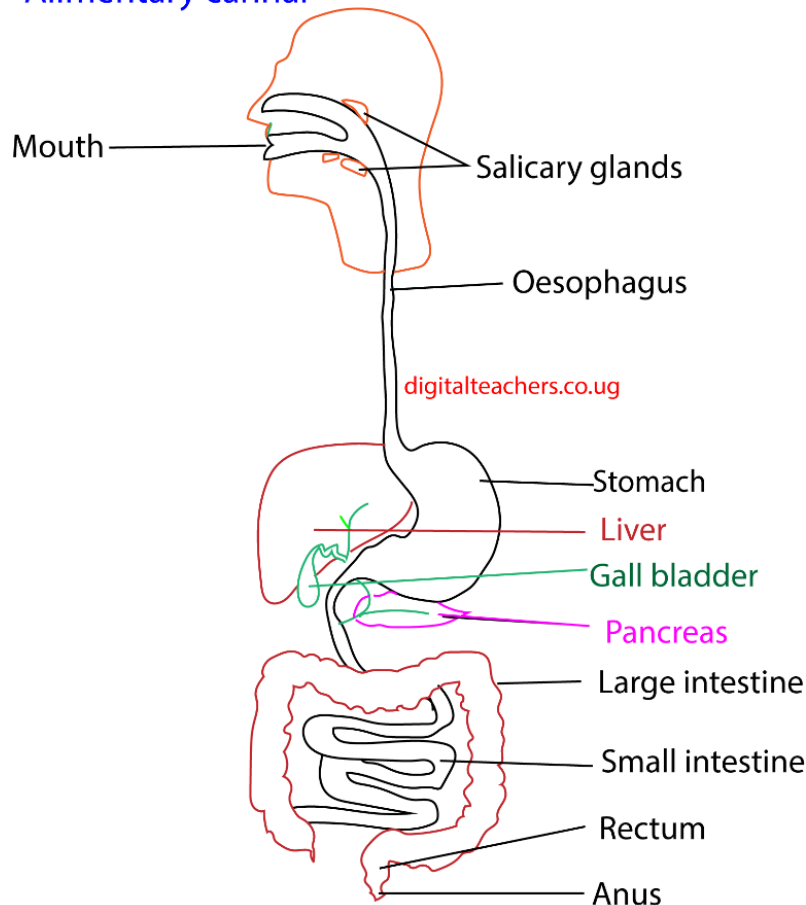
Digestion

This is the process of breaking down food into smaller particles that can be absorbed and used in the body.

Importance of Digestion

- (i) **Energy supply:** Converts food into glucose, fats, and proteins that fuel the body.
- (ii) **Growth and repair:** Provides amino acids and minerals needed to build and repair tissues.
- (iii) **Nutrient absorption:** Ensures vitamins, minerals, and water are absorbed into the bloodstream.
- (iv) **Waste removal:** Separates useful nutrients from waste, which is eliminated from the body.
- (v) **Immune support:** A healthy digestive system helps protect against harmful microbes.

Alimentary cannal



Exercise 2

State any two functions of digestion

Functions of parts of alimentary canal

Part	Function
Mouth	<ul style="list-style-type: none">- Chews food- mixes with saliva- begins digestion of starch.
Pharynx	<ul style="list-style-type: none">- Passageway that directs food from mouth to esophagus.
Esophagus	<ul style="list-style-type: none">- Transports food to stomach by peristalsis (muscle contractions).
Stomach	<ul style="list-style-type: none">- stores food- mixes with gastric juice that kills germs- digests proteins.
Small intestine	<ul style="list-style-type: none">- Completes digestion of food,- absorbs nutrients into blood.
Large intestine	<ul style="list-style-type: none">- Absorbs water and minerals, forms feces.
Rectum	<ul style="list-style-type: none">- Stores feces before elimination.
Anus	<ul style="list-style-type: none">- Expels waste (defecation).

NB. Liver and pancreas are not part of alimentary canal but play a role in digestion.

Other organs of digestion

Pancreas

- (i) **Produces digestive enzymes** (amylase, lipase, proteases) that break down carbohydrates, fats, and proteins.
- (ii) **Secretes bicarbonate** to neutralize stomach acid in the small intestine.
- (iii) **Releases hormones** (insulin and glucagon) to regulate blood sugar levels.

Liver

- (i) **Produces bile**, which helps break down and emulsify fats.
- (ii) **Stores nutrients** like glycogen, vitamins, and minerals for later use.
- (iii) **Detoxifies harmful substances** from food and blood.
- (iv) **Processes absorbed nutrients** from the small intestine before sending them into circulation.

Exercise 3

Give two role of the liver and two roles of the pancreas in digestion.

Disease that affect the alimentary canal

- (i) Cholera
- (ii) Dysentery
- (iii) Peptic ulcers
- (iv) Worms
- (v) Cancer

Caring for alimentary canal

- (a) Wash your hands before eating food
- (b) Do not move bare footed
- (c) Eat balanced diet at regular interval
- (d) Regularly deworm yourself
- (e) Drink enough fluids.
- (vi)

Exercise 4

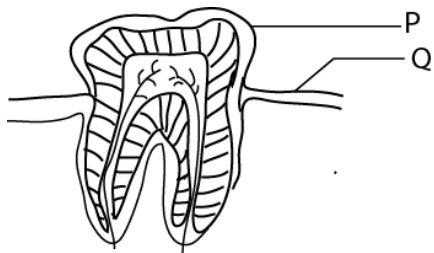
1. Why is iron important element in our diet?

.....

2. Name one source of vitamin B

.....

The below id of a human tooth. Use it to answer questions 3 and 4.



3. Name part marked P

Enamel

4. What is the function of structure marked Q

.....

5. Bbosa usually brushes his teeth before eating a meal. Why is this not a good practice?

.....

6. Why must fruits and vegetables be included in our diet?

.....

7. In the space provided below, draw a simple diagram of a molar tooth.

8. What causes anemia?

.....

9. Common salt give flavor to our food. State on more use of slat in our diet.

.....

10. State one method of avoiding tooth decay.

.....

11. Mrs. Bbosa has anemia, which food from the list would you advise her to eat?

.....

12. Give reason for your answer in question 12.

.....

13. (a) State two causes of diarrhea.

.....

(b) State two functions of mammalian teeth?

.....

.....

(c) An elderly man has lost all his molar teeth. What feeding problems would be experience?

.....

.....

14. Scurvy is cause by lack of a vitamin. Name the vitamin.

.....

15. Name the main food you would eat to prevent scurvy?

.....
16. Bbosa lost all the molars. What problems is he likely to have while eating?

.....

17. State one reason why water is important in our diet.

.....

18. Food was given to very hungry children and they ate it very fast without chewing.

(a) State any two problems that are likely to affect their digestion system.

.....

(b) State two uses of saliva in in the digestive system.

.....

19. Name the tooth in the diagram below.



.....

Give one danger of poor disposal of human feces.

.....

20. Why do you wash your hands before eating?

.....

21. Mention one reason why drinking water should be boiled

.....
22. Give any one reason why you think that brushing of teeth prevents tooth decay.

.....
23. What is the importance of mineral salt in a child's diet.

.....
24. What advice would you give to a mother whose child is suffering from kwashiorkor?
.....

25. Why are canine teeth suitable for tearing food?
.....

26. Use the list of food stuffs given below and answer the following questions.

(a) Give two food stuffs that are a source of proteins.

(i)

(ii)

(b) How are cabbages useful in one's diet?
.....

(c) Why would you regard a list of the foods given above a balanced diet?
.....

27. Give the function of teeth in the process of digestion.
.....

28. What disease is likely to attack children whose diet lacks proteins?
.....

29. When it is said that Badru is anemic, what is lacking in his blood?
.....

30. Give any one reason why a child's diet should more proteins than that of an adult.

.....
31. How is the absence of iodine harmful to our health?

.....
32. Name any cereal which is used as food.

.....
33. What first aid would you give a person who is suffering from diarrhea?

.....
34. The table below shows food stuffs prepared in different families

Study it and answer questions that follow

Family A	Family B	Family C	Family D
Matooke	Cassava	Potatoes	Millets
Yams	Beans	Posho	Fish
Meat	Posho	Cassava	Goat milk
beans	yams	yams	Mangoes

(a) Which family will be able to have vitamin **C**?

.....
(b) Which family has proteins but lacks fats?

.....
(c) What food nutrients are lacking in family A?

.....
(d) Which family has almost a balanced diet?

.....
35. Give any one use of saliva in the digestive system.

.....
36. Give any one practice that can help to control the spreads of cholera in a school.

.....

37. Mention a disease which makes a person to pass out watery stool with blood.

.....

38. What causes kwashiorkor in children?

.....

39. Give any one way in which teeth are important in the digestion of food.

.....

40. How does boiling of water help in the control of typhoid.

.....

41. Give any one cause of cause of malnutrition in adults.

.....

42. The following diagram shows two types of teeth in human beings

.....

Use it to answer question that follow.



43. (a) Name the type of tooth marked:

(i) A:

(ii) B:

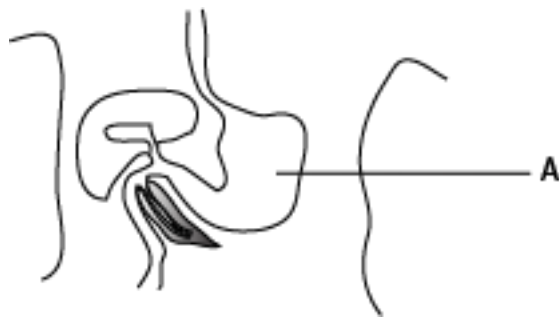
(b) Give the use of each of the teeth in the diagram above.

(i) A

(ii) B

The diagram below part of the human digestive system.

Use it to answer question 44



44. Name the class of food which is digested in the part marked A.

.....

45. Apart from carbohydrates, name one other class of food that gives the body energy.

.....

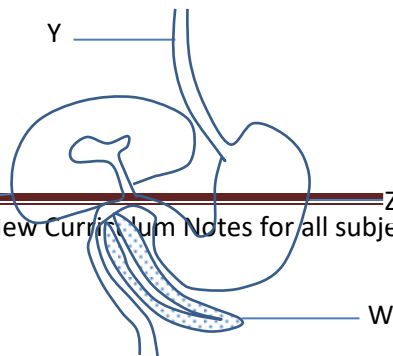
46. Which deficiency disease is caused by lack of vitamin d in children`s diet?

.....

47. Apart from brushing, how else can dental carries be prevented?

.....

48. The diagram below is part of the human digestive system. Use it to answer the questions that follows



(a) Name the parts marked Y and W

(i) Y -

(ii) W -

(b) State the functions of the parts marked Z

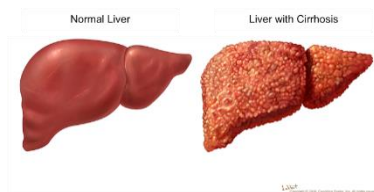
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(c) Give any one disease that affects the parts marked X

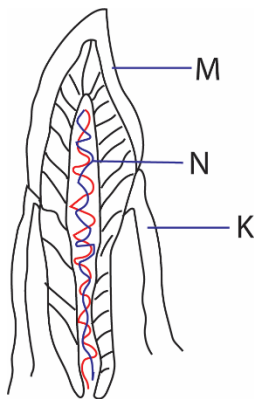
Liver cancer



cirrhosis



49. The diagram below shows a section through a human tooth
Study and use it to answer the questions that follow



- (a) Name the parts marked M and K
- (i) M
- (ii) K

(b) Which mineral salt helps to form part M?

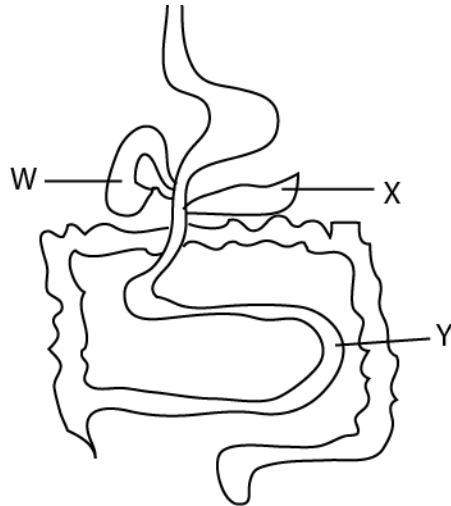
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(c) Give the function of the part labelled N

.....

50. The diagram below shows the alimentary canal of the human being

Use it to answer that question that follow.



- (a) Name the part marked:
- W:**
- X:**

(b) State any one process that takes place labelled Y

.....

(c) Give one function of the organ labeled X

.....

51. Food was given to very hungry children and they ate it very fast without chewing.

(a) State any two problems that are likely to affect their digestion system.

.....
.....
(b) State two uses of saliva in in the digestive system.

.....
.....

52. Give one danger of poor disposal of human feces.

.....

53. Explain one way of keeping food safe and clean.

.....

54. Why do you wash your hands before eating?

.....

55. Why is a person suffering from diarrhea given treatment for dehydration?

.....

56. Give any one sign of dehydrated person.

.....

57. Give any one use of saliva in the digestive system.

.....

58. What a structure enables the absorption of food to take place in small intestines?

.....

59. Explain how to prepare Oral Rehydration Solution (ORS).

.....
.....
.....

60. State any one piece of advice you would give to a person who suffers from indigestion.

.....
.....
.....

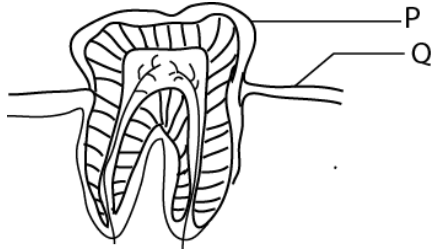
61. What name is given to a meal containing all food values in their right amount?



Suggested answers

1. Why is iron important element in our diet?
It is used in the formation of red blood cells or hemoglobin
2. Name one source of vitamin B
Liver, fish, fresh green vegetables, eggs, etc.

The below id of a human tooth. Use it to answer questions 3 and 4.



3. Name part marked P
Enamel
4. What is the function of structure marked Q
It holds the tooth firmly to the jaw.
5. Bbosa usually brushes his teeth before eating a meal. Why is this not a good practice?
Brushing the teeth before and then eat leaves food particle in the teeth attracting germs.
6. Why must fruits and vegetables be included in our diet?
To provide vitamins and roughages
7. In the space provided below, draw a simple diagram of a molar tooth.



8. What causes anemia?
Lack of enough iron in blood
9. Common salt give flavor to our food. State on more use of slat in our diet.
Preserve diet
For water balance in the body
10. State one method of avoiding tooth decay.
Regular brushing of teeth after every meals.
11. Mrs. Bbosa has anemia, which food from the list would you advise her to eat?
Green dodo and beans
12. Give reason for your answer in question 12.
They are both source of iron for formation of hemoglobin.

13. (a) State two causes of diarrhea.

Eating contaminated food

Eating food without washing hands

Drinking contaminated water

(b) How can diarrhea be prevented?

- **Washing hands before eating food**
- **Washing fruits before eating**
- **Covering food properly**
- **By giving a patient with diarrhea plenty of fluids.**

(c) State two functions of mammalian teeth?

Incisors cut food

Canine tear food.

Molar grind food.

(d) An elderly man has lost all his molar teeth. What feeding problems would he experience?

He would not be able to grind food easily

He would be able to swallow easily

14. Scurvy is caused by lack of a vitamin. Name the vitamin.

Vitamin C

15. Name the main food you would eat to prevent scurvy?

Fruits like oranges, lemon

16. Bbosa lost all the molars. What problems is he likely to have while eating?

Bbosa is likely to have a problem of chewing food

17. State one reason why water is important in our diet.

Soften food

Regulate body temperature

To replace water lost in sweating and urination

18. Food was given to very hungry children and they ate it very fast without chewing.

(e) State any two problems that are likely to affect their digestion system.

Indigestion

Vomiting

Constipation

(f) State two uses of saliva in the digestive system.

Softens food

Lubricates food for swallowing

Contains amylase enzyme that digests starch

19. Name the tooth in the diagram below.



Canine tooth

20. Give one danger of poor disposal of human feces.

Spreads diseases such as cholera

21. Why do you wash your hands before eating?

To remove germs

22. Mention one reason why drinking water should be boiled

To kill germs

23. Give any one reason why you think that brushing of teeth prevents tooth decay

Remove food particles that retain bacteria that cause tooth decay

24. What is the importance of mineral salt in a child's diet

Strengthen bones and tooth

25. What advice would you give to a mother whose child is suffering from kwashiorkor?

Feed the child on foods rich in proteins

26. Why are canine teeth suitable for tearing food?

They are sharp and pointed



Canine

35. The table below shows food stuffs prepared in different families

Study it and answer questions that follow

Family A	Family B	Family C	Family D
Matooke	Cassava	Potatoes	Millet
Yams	Beans	Posho	Fish
Meat	Posho	Cassava	Goat milk
beans	yams	yams	Mangoes

(a) Which family will be able to have vitamin **C**? **D**

(b) Which family has proteins but lacks fats? **B**

(c) What food nutrients are lacking in family A?

Vitamin C

(d) Which family has almost a balanced diet?

D

36. Give any one use of saliva in the digestive system.

Softens food

Contains enzymes amylase that digests starch

37. Give any one practice that can help to control the spreads of cholera in a school.

Eating hot food

Proper disposal of wastes

Washing hands after visiting the toilets

Early treatment

38. Mention a disease which makes a person to pass out watery stool with blood.

Dysentery

39. What causes kwashiorkor in children?

Deficiency of protein

40. Give any one way in which teeth are important in the digestion of food.

The breakdown food to ease swallowing

They breakdown food to increase surface area for enzyme action

41. How does boiling of water help in the control of typhoid.

It kills typhoid germs

42. Give any one cause of cause of malnutrition in adults.

Poverty-some people cannot afford food or land to cultivate it

Drought-which causes of death

Pests and disease

Floods lead to foot shortage food.

43. The following diagram shows two types of teeth in human beings

Use it to answer question that follow.



(a) Name the type of tooth marked:

(i) A: **Canine**

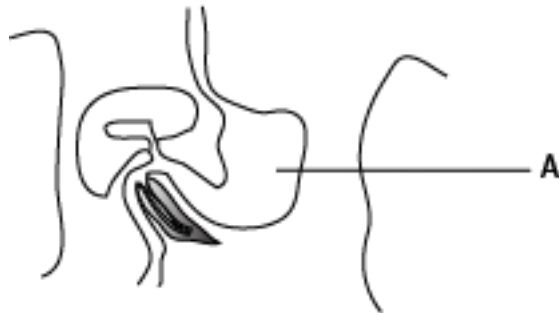
(ii) B: **incisor**

(b) Give the use of each of the teeth in the diagram above.

- (i) A for tearing food
- (ii) B for cutting food

The diagram below part of the human digestive system.

Use it to answer question 44



44. Name the class of food which is digested in the part marked A.

Protein

45. Apart from carbohydrates, name one other class of food that gives the body energy.

Fats, oil, lipids

46. Which deficiency disease is caused by lack of vitamin d in children`s diet?

Rickets



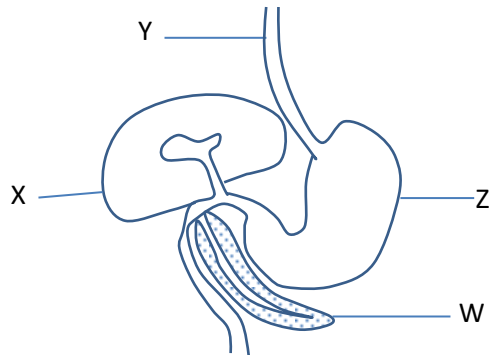
47. Apart from brushing, how else can dental carries be prevented?

By rising mouth after eating

By going for regular medical check up

By avoiding sugary food

48. *The diagram below is part of the human digestive system. Use it to answer the questions that follows*



(a) Name the parts marked Y and W

- (i) Y - esophagus
- (ii) W - pancreas

(b) State the functions of the parts marked Z

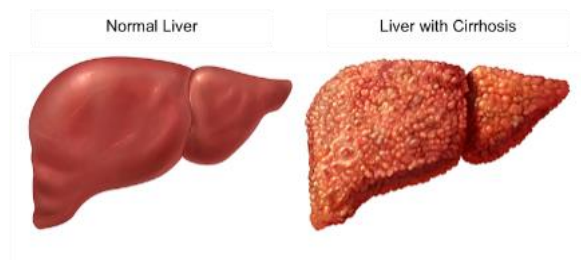
- pounds food
- produces enzymes for digestion of proteins
- store food
- produces hydrochloric acid that kill germs

(c) Give any one disease that affects the parts marked X

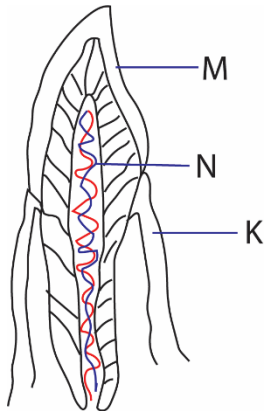
Liver cancer



cirrhosis



49. The diagram below shows a section through a human tooth
Study and use it to answer the questions that follow

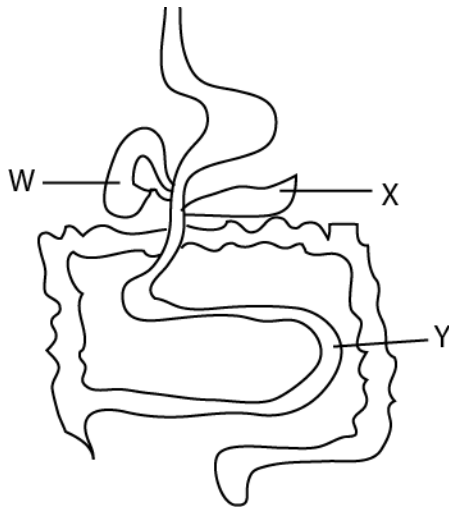


- (d) Name the parts marked M and K
(iii) M - enamel
(iv) K - gum
(e) Which mineral salt helps to form part M?

Calcium

- (f) Give the function of the part labelled N
- Supplies food and oxygen to the tooth

50. The diagram below shows the alimentary canal of the human being
Use it to answer that question that follow.



(a) Name the part marked: **W: liver**

X: pancreas

(b) State any one process that takes place labelled **Y**

Absorption of digest food

(c) Give one function of the organ labelled **X**

Produces pancreatic juice that contain enzymes for digestion of food

51. Food was given to very hungry children and they ate it very fast without chewing.

(a) State any two problems that are likely to affect their digestion system.

Indigestion

Vomiting

constipation

(b) State two uses of saliva in in the digestive system.

Softens food

Lubricates food for swallowing

Contains amylase enzyme that digests starch

52. Give one danger of poor disposal of human feces.

Spreads diseases such as cholera

53. Explain one way of keeping food safe and clean.

By covering it

By keeping in refrigerator.

54. Why do you wash your hands before eating?

To remove germs

55. Why is a person suffering from diarrhea given treatment for dehydration?

To replace lost water

56. Give any one sign of dehydrated person.

Pale skin

Sunken eyes

Low pulse

Dry lips

57. Give any one use of saliva in the digestive system.

Softens food

Contains enzymes amylase that digests starch

58. What a structure enables the absorption of food to take place in small intestines?

- thin lining

- villi increase surface area for absorption

59. Explain how to prepare Oral Rehydration Solution (ORS).

- a. wash your hands clean
- b. prepare a clean dry container about 2l
- c. add 1l (two 1/2l cups) of cold boiled water
- d. add a sachet of ORS and mix thoroughly.
- e. Use in 24hrs

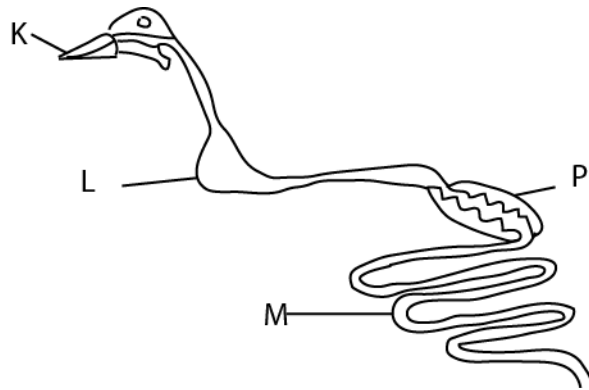
60. State any one piece of advice you would give to a person who suffers from indigestion.

- To chew food properly
- Eat food rich in roughages
- Eat a lot of fruits and vegetables

61. What name is given to a meal containing all food values in their right amount?

Balanced diet

62. The diagram below shows the alimentary canal of a bird. Use it to answer the questions that follow.



(a) What does the bird use part K for?

For picking food

For defense

(b) What is the function of part L?

Softens food

Pounds food

(c) What takes place in part marked P?

Grinding food

(d) How is part marked M useful to the bird?

It is where absorption of food takes place.

Thank You

Dr. Bbosa Science