



Activity 5: Page 39

Anorexia nervosa

Causes:

An obsession with slimming develops.

Rejection of all food.

Symptoms:

Drastic weight loss; little energy; thin skin; constipation

Bulimia nervosa

Causes:

Binge eating of poor quality food.

Person feels guilty afterwards and vomits intentionally to get rid of food.

Symptoms:

Damage to teeth; infection of throat and oesophagus; bleeding of rectum

Ulcers

Causes:

Intake of too much strongly-flavoured food and strong liquor on an empty stomach.

Cigarette smoking and severe stress.

Symptoms:

Weak digestion; sharp pain after meals; weight loss, vomiting

Diarrhoea

Causes:

Intake of rotten food and polluted water.

Symptoms:

Repeated egestion of watery faeces; dehydration

Liver cirrhosis

Causes:

Obesity; misuse of alcohol; hepatitis; blocked bile duct

Symptoms:

Swollen ankles, legs and stomach; fever; skin and eyes turn yellow; bruises; sudden loss or gaining of weight; blood in faeces

Exercise 2: Page 41

- | | | | | |
|-----|----|-----------------|----|---------------------|
| 1.1 | 1 | Mouth | 2 | Gullet (oesophagus) |
| | 3 | Liver | 4 | Gall bladder |
| | 5 | Small intestine | 6 | Anus |
| | 7 | Salivary glands | 8 | Stomach |
| | 9 | Pancreas | 10 | Colon |
| | 11 | Rectum | | |



1.2 The digestive system

- 1.3 Lips and cheeks: prevents food from falling out of the mouth.
 Jaws and teeth: grind/bite/chew food.
 Tongue: forces food against teeth and palate/mixes food with saliva/rolls food into a bolus/pushes food to the back of the mouth/tasting organ.
 Soft palate: closes opening to the nasal cavity when one swallows.
 Salivary glands: produce saliva that helps to mix food/dissolves food/eases swallowing.
- 1.4 Bile: breaks up fats for easy digestion/stimulates peristalsis/neutralises chyme/it is an antiseptic and prevents food from rotting in the small intestine.
 Glycogen: increases blood sugar.
- 1.5 Water, bile salts, mineral salts, vitamins

2.1 Peristalsis

2.2 Peristalsis is the process of involuntary muscle contractions that move the bolus down the oesophagus.

2.3 Oesophagus; small intestine; colon

3.

Nutrient	Deficiency disease due to a shortage
Example: protein	Kwashiorkor
Vitamin A	Night blindness
Vitamin C	Scurvy
Vitamin B ₁	Beriberi
Vitamin D	Rickets
Iron	Anaemia
Iodine	Goitre
Calcium	Osteoporosis

- 4.1 Water is necessary for chemical and metabolic reactions.
 Body temperature regulation.
 Elimination of waste.
 Acts as a solvent for the transport of nutrients.
 Water is necessary for all cell life.
- 4.2 Dehydration; which could lead to death.
 Constipation



- 4.3 Carbohydrates: bread, pasta, rice
Fats: butter, milk, cheese, oil
Protein: meat, fish, chicken
Vitamins: fruits and vegetables
Minerals: vegetables, fruit, food made from grain
Fibre: whole grain foods, potato, apples (any three)
- 4.4 Fats, oils and sweet treats
- 4.5 Sunflower seeds; animal fat
- 4.6.1 6 – 11 portions
- 4.6.2 2 – 3 portions
- 4.6.3 2 – 3 portions
- 4.7 Stimulates chemical reactions in the body.
Offers protection against diseases.
Ensures normal growth and development.
- 5.1 Consuming too much food containing nutrients.
- 5.2 The lack of one nutrient, but the intake of too much of another nutrient.
- 5.3 Consuming too few nutrients.
- 5.4 It is the process during which organisms consume food and use it as a source of energy to enable life processes (e.g. growth, movement, reproduction, etc.) to take place.
- 6. Ingestion: The consumption of food
Mastication: Food is chewed.
Transport: Food is transported to specific body parts.
Digestion: Food is broken down into small particles so that it may be absorbed.
Absorption: Nutrients are taken up by the bloodstream.
Assimilation: Absorbed nutrients are used in the processes of growth, tissue repair and reproduction.
Egestion: Waste products that are not absorbed are egested.

Exercise 3: Page 49

- 1.1 Skeletal muscles
- 1.2 Ligament
- 1.3 Appendicular skeleton
- 1.4 Axial skeleton
- 1.5 Endoskeleton
- 1.6 Smooth muscles
- 1.7 Tendons