



TERM 1: LIFE AND LIVING

UNIT 2 SYSTEMS IN THE HUMAN BODY

Practical task 2: Page 28

Draw the outline of the human body on a piece of A3 paper.

Once you have discussed a system in class, draw it onto a piece of different coloured paper and cut it out. Stick it in the right position on your model.

Activity 3: Page 37

Study diets of different South African cultures.

Activity 4: Page 37

Discuss all the negative effects of an unhealthy diet on your body. Look in particular at the influence of additives in food, the exposure to too many fast foods and the various diets that are developed for weight loss.

Practical investigation 1: Page 37

Aim: To determine whether potatoes, pasta and cheese contain starch.

Hypothesis:

Potatoes, pasta and cheese will test positive for the presence of starch.

Results:

The potato mixture turns blue-black after the iodine solution is added.

The pasta mixture turns blue-black after the iodine solution is added.

The cheese mixture does not turn blue-black after the iodine solution is added.

Conclusions:

Potatoes and pasta contain starch, but cheese does not contain starch.

Discussion:

Starch colours blue-black in the presence of iodine. Since the potato and pasta mixture changed colour, it proves that these two types of food contain starch.



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 | | |

