1. The main reason why the body needs protein is for growth, repair and maintenance. True/False

2. An example of a protein alternative is mycoprotein, e.g. Quorn. True/False

3. An example of a food that has a high biological value is nuts. True/False

4. Protein molecules are made up of small units known as amino acids. True/False

5. Children require a low intake of protein. True/False

6. Which of the following is an example of an animal protein?
   a) Soya beans
   b) Quinoa
   c) Meat
   d) Lentils

7. What is the protein in wheat known as?
   a) Collagen
   b) Elastin
   c) Enzyme
   d) Gluten

8. Match up the statements related to proteins.

| Example of protein complementation. | Soya bean. |
| Example of an animal protein that has a low biological value. | Pitta bread and hummus. |
| Example of vegetable protein that has a high biological value. | Children’s growth slows down and muscles become weak. |
| Symptoms of protein deficiency. | Gelatine. |
Quiz: Fats

1. Fat is an example of a micronutrient. True/False
2. One reason the body needs fat is to provide fat soluble vitamins A, D, E and K. True/False
3. Oily fish are a good source of essential fatty acids. True/False
4. Fat molecules are made up of three fatty acids and one unit of what?
   a) Glucose
   b) Gelatine
   c) Galactose
   d) Glycerol
5. What is the total amount of fat we should eat each day?
   a) No more than 15%.
   b) No more than 25%.
   c) No more than 35%.
   d) No more than 45%.
6. What condition is associated with eating too much fat?
   a) Tooth decay.
   b) Coronary heart disease.
   c) Osteoporosis.
   d) Weight loss.
7. How could the fat content of our diet be reduced?
   a) By eating chicken and fish instead of red meat.
   b) By drinking whole milk.
   c) Using oils instead of spreads.
   d) Using white fats instead of low spreads.
8. Match up the statements related to fats.

<table>
<thead>
<tr>
<th>Saturated fat</th>
<th>Fat in food that you cannot see, e.g. fat in pastry.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invisible fat</td>
<td>Fat that is liquid at room temperature.</td>
</tr>
<tr>
<td>Oil</td>
<td>Food that you can see, e.g. fat on meat.</td>
</tr>
<tr>
<td>Visible fat</td>
<td>Type of fat mainly found in butter, lard, red meat, ghee and coconut.</td>
</tr>
</tbody>
</table>
1. Tooth decay is associated with eating too much of one of the carbohydrate groups. True/False

2. The name of the process where green plants trap energy from the sun and form carbohydrates is known as pectin. True/False

3. Potato is an example of an empty calorie food. True/False

4. Why does the body need carbohydrate?
   a) To provide energy.
   b) To strengthen the bones and teeth.
   c) To help you see in dim light.
   d) To help maintain a healthy nervous system.

5. Which of the following are examples of foods that contain carbohydrate?
   a) Meat, eggs and cheese.
   b) Bread, potatoes and pasta.
   c) Milk, oranges and oily fish.
   d) Tofu, mycoprotein and rice.

6. What is the Dietary Reference Value for fibre for adults?
   a) 10g
   b) 30g
   c) 25g
   d) 20g

7. How can we reduce the sugar content of our diets?
   a) By using brown sugar instead of white.
   b) By using caster sugar instead of granulated.
   c) By using fruits canned in syrup.
   d) By using an artificial sweetener.

8. Match up the statements related to sugars.

   Examples of monosaccharides.
   Starch, dextrin and pectin.

   Examples of disaccharide.
   Sucrose, lactose and maltose.

   Examples of polysaccharides.
   Fructose, glucose, galactose.

9. Match up the statements in the two columns.

   The natural sugar in milk.  Pectin
   The natural sugar in fruit.  Dietary fibre
   Another name for non-starch polysaccharide (NSP).  Sucrose
   This carbohydrate is used to set jam.  Fructose
   The carbohydrate we most commonly use when cooking.  Lactose
1.1.4 Vitamins

1. Vitamins that help to protect the body from developing heart disease and some types of cancer are called antibodies. True/False

2. Vitamins are chemical substances that are naturally found in a wide range of foods. True/False

3. Vegans who do not eat any animal food may lack vitamin B12 in their diet and may need to take supplements. True/False

4. None of the vitamins can be stored in the body and so a daily supply is needed. True/False

5. Name the two fat soluble vitamins.
   a) A and B
   b) B and C
   c) A and D
   d) C and D

6. Water soluble vitamins are easily damaged or lost during cooking. Which of the following would not help to minimise the loss of nutrients?
   a) Storing foods away from light and heat, and storing them for the minimum amount of time possible.
   b) Cutting, grating or squeezing fruits and vegetables as near to the time as possible that you want to cook, serve or eat them.
   c) Using only a small amount of water to cook them in and saving the vegetable water for gravy or soup.
   d) Using cold water, bringing it to the boil with the vegetables in and cooking them for a long time until soft.

7. Name two vitamins that are natural antioxidants.
   a) A and C
   b) A and B
   c) B and D
   d) C and D

8. Which of these is not a reason why antioxidants are added to foods?
   a) To make jams set.
   b) To prevent fats going rancid.
   c) To prevent the destruction of vitamins A and C.
   d) To prevent the browning of vegetables.

9. Match the ingredient with the amount of its vitamin C content for 50g of each ingredient.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Vitamin C Content for 50g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackcurrants</td>
<td>0mg</td>
</tr>
<tr>
<td>Minced beef</td>
<td>100mg</td>
</tr>
<tr>
<td>Raw green peppers</td>
<td>8.5mg</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>60mg</td>
</tr>
</tbody>
</table>
### Quiz: Vitamins

10. Match the vitamin with the correct chemical name.

<table>
<thead>
<tr>
<th>Vitamin A</th>
<th>Ascorbic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin B1</td>
<td>Thiamine</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Cholecalciferol</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Retinol</td>
</tr>
</tbody>
</table>

11. Match the vitamin deficiency with the correct disease.

<table>
<thead>
<tr>
<th>Deficiency disease associated with lack of vitamin A</th>
<th>Scurvy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficiency disease associated with lack of vitamin B12</td>
<td>Night blindness</td>
</tr>
<tr>
<td>Deficiency disease associated with lack of vitamin C</td>
<td>Pernicious anaemia</td>
</tr>
<tr>
<td>Deficiency disease associated with lack of vitamin D</td>
<td>Rickets in children and osteomalacia in adults</td>
</tr>
</tbody>
</table>
1. Riboflavin is needed to help with the absorption of iron. True/False
2. Vitamin D is needed to help the absorption of calcium. True/False
3. Minerals are needed in small quantities and so are known as micronutrients. True/False
4. Why is iron needed?
   a) To strengthen bones and teeth.
   b) To control the amount of water in the body.
   c) To make haemoglobin in red blood cells to carry oxygen around the body.
   d) To make the nerves and muscles work properly.
5. Which of these is a good source of calcium?
   a) Red meat
   b) Milk
   c) Baking powder
   d) Kiwi fruit
6. If you have liver disease or high blood pressure what mineral should you eat less of?
   a) Phosphorus
   b) Fluoride
   c) Iodine
   d) Sodium
7. Match the health condition with the mineral it is associated with.
   - Rickets: Iron
   - High blood pressure: Calcium
   - Anaemia: Sodium
8. Match the mineral with the function in the body.
   - Sodium: Combines with tooth enamel to protect the teeth.
   - Iodine: Aids the formation of bones and the development of teeth and helps metabolic processes.
   - Fluoride: Needed to produce thyroxin to control the metabolism.
   - Phosphorus: Maintains fluids in the body.
1. If the body does not have enough water, this is known as **hydrogenation**. True/False

2. Water is found naturally in foods such as fruit and vegetables. True/False

3. Fluoride is sometimes added to drinking water to help strengthen teeth. True/False

4. What is the recommended amount of water to drink each day?
   a) 1–2 medium-sized glasses.
   b) 3–4 medium-sized glasses.
   c) 5–6 medium-sized glasses.
   d) 6–8 medium-sized glasses.

5. Which of the following is **not** a function of water in the diet?
   a) To control body temperature.
   b) To keep the lining of the digestive system healthy and moist.
   c) To help sight in dim light.
   d) To remove waste from the body.