

## Max's Kitchen Science: Nutrition Challenge

*Learning objective: To understand the principles of a healthy, balanced diet and the function of different food groups according to the Eatwell Guide.*

Join Max the monkey in the kitchen! He's using his maths skills to calculate the perfect, balanced meal. Read each question carefully and select or write the best answer to prove you are a nutrition expert.

Answer Key: 1.C, 2.True, 3.False, 4.Protein, 5.B, 6.A, 7.True, 8.Carbohydrates, 9.B, 10.Calcium. Remember: A balanced diet includes a variety of foods to ensure the body receives all necessary vitamins and minerals.

*Word bank: Carbohydrates · Protein · Fibre · Nutrients · Balanced · Calcium · Saturated · Hydration*

**1. Which food group should make up the largest portion of our daily intake according to the Eatwell Guide? A) Dairy B) Sugary snacks C) Fruit and vegetables D) Meat \* (1 mark)**

**2. True or False: Protein is essential for repairing muscles and helping the body grow. (1 mark)**

**3. True or False: Eating the same type of food for every meal is a great way to stay healthy. (1 mark)**

**4. Which nutrient, found in foods like beans, fish, and eggs, is vital for building and repairing body tissues? (1 mark)**

**5. Why do we need fibre in our diet? A) To make us sleep B) To help our digestive system work correctly \* C) To increase our height D) To strengthen our teeth (1 mark)**

**6. Which of these provides the body with its primary source of energy? A) Carbohydrates \* B) Water C) Salt D) Vitamins (1 mark)**

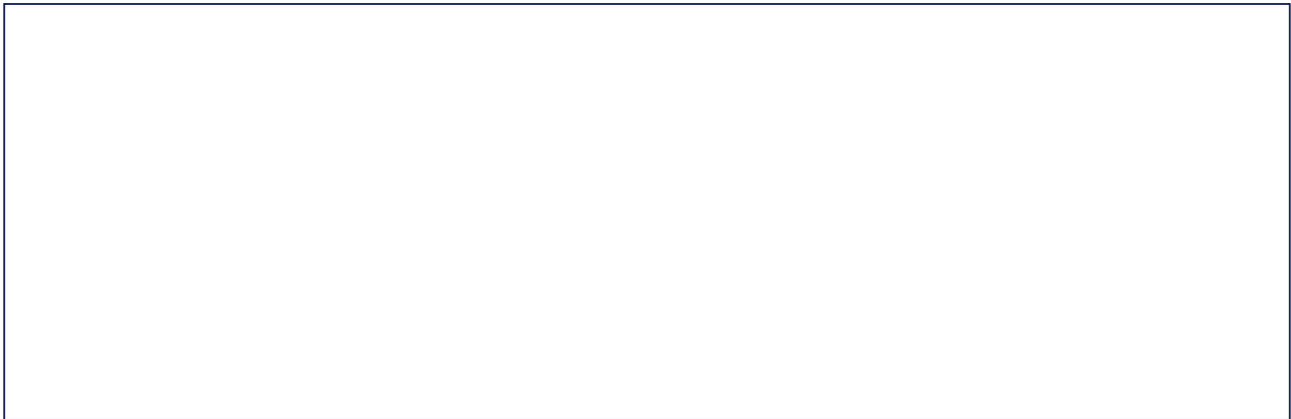
**7. True or False: Drinking water is important for maintaining hydration and helping the brain function. (1 mark)**

**8. Pasta, rice, and potatoes are excellent examples of which food group? (1 mark)**

9. If a snack costs £1.20 and contains 5g of sugar, which statement is most accurate regarding nutrition? A) Price determines nutrition B) We should limit foods high in free sugars \* C) All snacks are healthy D) Sugar is the most important nutrient (1 mark)

10. Which mineral, found in milk and yoghurt, is essential for strong bones and teeth? (1 mark)

**Draw:** Draw a 'Balanced Plate' featuring at least four different food groups. Label each section and include a small side of water to represent healthy hydration.



*Extension challenge: 1. Explain why a professional athlete might require a different nutritional intake than an office worker. 2. Compare and contrast the benefits of a whole-grain carbohydrate versus a refined carbohydrate. 3. Justify your answer: Is it possible for a vegetarian to have a fully balanced diet? Explain why. 4. What might happen to a person's energy levels if they completely removed carbohydrates from their diet? 5. Design a two-course school lunch menu costing under £2.50 per person that meets nutritional guidelines. 6. Critically evaluate the 'traffic light' labelling system found on food packaging—why is this helpful for consumers making healthy choices?*