

Design Technology: The Balanced Plate Challenge

Learning objective: To understand the principles of a healthy, balanced diet and apply nutritional knowledge to meal design in accordance with the Eatwell Guide.

Use these flashcards to test your knowledge of nutrition. Read the front of the card, attempt to answer, and then reveal the definition to check your understanding.

What is the primary purpose of the UK Eatwell Guide?

The Eatwell Guide is a policy tool used to define government recommendations on eating healthily and achieving a balanced diet by showing the proportions of different food groups needed.

Explain the role of carbohydrates in a healthy diet.

Carbohydrates are the body's main source of energy. Complex carbohydrates, such as wholegrain bread or brown rice, provide a slower, sustained release of energy compared to simple sugars.

Why is dietary fibre essential for our digestive system?

Fibre helps to keep our digestive system healthy by adding bulk to food, which aids the movement of waste through the gut and can help prevent constipation.

Compare and contrast 'saturated' and 'unsaturated' fats.

Saturated fats (often solid at room temperature, like butter) should be limited, whereas unsaturated fats (often liquid, like olive oil) are considered a healthier choice for heart health.

What are micronutrients and why do we need them?

Micronutrients are vitamins and minerals needed by the body in small amounts to function properly, support the immune system, and assist with growth.

Justify why Max (our maths-loving monkey) should choose seasonal produce.

Seasonal produce is often fresher, more nutritious, and has a lower carbon footprint because it does not require long-distance transportation or intensive energy for out-of-season growing.

What does 'energy density' mean when planning a meal?

Energy density refers to the number of calories in a specific weight of food. Foods with high energy density provide many calories in a small portion, which may not be necessary for someone with low activity levels.

Explain why Nova the owl suggests drinking water over fizzy drinks.

Water provides essential hydration without the 'free sugars' or artificial additives found in many fizzy drinks, which can lead to tooth decay and energy crashes.

What might happen to the body if a diet lacks adequate protein?

Protein is essential for growth and the repair of body tissues (like muscle and skin). A lack of protein can lead to muscle weakness, slow wound healing, and fatigue.

How can we modify a traditional recipe to make it healthier?

You can reduce salt and sugar, grill instead of fry, increase the portion size of vegetables, or swap white refined grains for wholegrain alternatives.