

Name: _____

Date: _____

Answer Key: Nutrition Detective Mystery for 6th Grade Quiz

Challenge students to analyze nutrition labels and metabolic processes in this interactive assessment. Ideal for formative health units or science lab extensions.

1. If a snack contains 5 grams of fiber per serving, why is it considered a 'smart' energy choice for a student preparing for a long afternoon of classes?

Answer: B) It slows glucose absorption, preventing an energy crash

Fiber slows down the digestion of carbohydrates, leading to a more gradual release of energy into the bloodstream, which helps maintain focus.

2. True or False: Ingredients on a food label are listed in order from the smallest amount used to the largest amount used.

Answer: B) False

Ingredients are actually listed by weight in descending order, meaning the ingredient used in the largest amount is listed first.

3. When examining a nutrition label, ____ fats should be avoided as much as possible because they increase the risk of heart disease by raising 'bad' cholesterol.

Answer: C) Trans

Trans fats are artificial fats often found in processed foods that have no known health benefits and are linked to cardiovascular issues.

4. A middle school athlete is looking for a 'nutrient-dense' snack. Which of the following best fits the scientific definition of nutrient density?

Answer: B) A food that provides many vitamins and minerals for relatively few calories

Nutrient density refers to the ratio of beneficial nutrients (like iron or Vitamin A) to the total energy (calories) in the food.

5. The chemical process through which the body breaks down food and converts it into energy is known as ____.

Answer: B) Metabolism

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Metabolism encompasses all the chemical reactions in the body that transform nutrients into the energy needed for movement and growth.

6. True or False: Iron is a mineral that helps red blood cells carry oxygen from the lungs to the rest of the body.

Answer: A) True

Iron is a component of hemoglobin, the protein in red blood cells responsible for transporting oxygen.

7. Imagine you are analyzing a 'Whole Wheat' cracker box versus a 'Multigrain' cracker box. Why is the '100% Whole Wheat' label typically a better nutritional indicator?

Answer: B) Whole grain implies the germ and bran are intact, providing more B-vitamins

Whole grains include all parts of the grain seed, which contains more fiber and B-vitamins than refined grains often found in 'multigrain' products.

8. To maintain proper fluid balance and nerve function, the body requires _____, but consuming too much can lead to high blood pressure.

Answer: A) Sodium

Sodium is an essential electrolyte for nerve signals, but excessive intake is a major contributor to hypertension (high blood pressure).

9. True or False: 'Empty calories' refer to foods that provide energy but contain very little nutritional value like vitamins or minerals.

Answer: A) True

Empty calories come from solid fats and added sugars that give you energy without the 'building blocks' the body needs to stay healthy.

10. Which of these is a likely consequence of a long-term deficiency in Vitamin A, often found in leafy greens and orange vegetables?

Answer: B) Poor night vision and immune function

Vitamin A is critical for the health of the retina and the ability of the eyes to adjust to low light, as well as maintaining skin and mucus membranes.