

Nova's Nutritious Plate Investigation

Learning objective: To identify that animals, including humans, need the right types and amounts of nutrition, and that they cannot make their own food; they get nutrition from what they eat.

Follow the drawing prompt below to build a balanced meal. Use the word bank to label your plate accurately. Think carefully about why each food group is essential for a healthy body.

Draw: Create a detailed, colorful diagram of a balanced meal. Use a clear, scientific style. Ensure the 'plate' clearly shows the proportions of nutrients (e.g., plenty of greens, a portion of wholegrain carbohydrates, and a lean source of protein). Add a glass of water next to the plate. Use neat lines to draw arrows pointing to the specific food items for your labels.



Label words: Carbohydrates · Protein · Fats · Vitamins · Minerals · Fiber · Water

Steps:

1. Step 1: Draw a large circle in the center of your page to represent a dinner plate. Divide it into three sections: one half for vegetables and fruit, one quarter for carbohydrates, and one quarter for protein.
2. Step 2: Inside the sections, draw examples of food. Label your drawing using the terms from the word bank.
3. Explain why it is vital for humans to consume a varied diet rather than eating the same type of food every

day.

4. Compare and contrast the nutritional needs of a growing child compared to a professional athlete. What might be different in their plates?
5. Justify your answer: Why is water considered a crucial part of a nutritious diet even though it contains no vitamins or minerals?
6. What might happen to the human body if it were deprived of a specific food group, such as protein, for a long period of time?