



SECTION 2: NUTRIENTS IN FOODS

LAB

INTRODUCTION

In this lab students will be experimenting with vegetables to discover which nutrients they contain. You can test foods for fat by rubbing foods on white Xerox paper or brown bags. Foods with fats leave a greasy, translucent mark on the paper. To find which foods have sugar, you place one small food sample in a sandwich bag and add a mixture of 1 part Benedict's solution to 4 parts water. Place the bag in a cup of very hot water and watch for a color change in the Benedict's solution. Green, yellow, or red shows the presence of natural sugar. If the solution remains blue there is not sugar. Test foods for starch with iodine. Iodine turns black on the starch.

Nutrients: Chemicals the body need nutrients for growth, repair, and development. For example, water, vitamins, carbohydrates (starch and sugar), fats, proteins, and minerals are all necessary.

Sugar: is the food produced by green plants during photosynthesis. This sugar is used for growth or stored by plants as starch.

Starch: is the stored food in plants.

Carbohydrates: are starches and sugars.

Fat: is stored energy in animals and in some plants (mainly seeds).

ASSESSMENT ANCHORS ADDRESSED

S4.B.1.1 Identify and describe similarities and differences between living things and their life processes.

PURPOSE

Students study nutrition while discovering which nutrients are in the vegetables they eat.

MATERIALS

For the class:

Hotpot with water	Fresh vegetables (broccoli and carrots)*
knife	Cup
Teaspoon	Benedict's solution
Ziploc sandwich bags	Iodine with dropper
Paper towels	Wax paper
worksheet	

*Teacher provides items marked with **