

FOOD DETECTIVE

UNIT: ENVIRONMENTAL AND AGRICULTURAL CONCEPTS

OVERVIEW

Students investigate prepared food products to determine what a food is made from, the source of its ingredients, and how the ingredients were grown. A follow up discussion focuses on the environmental impacts of using various food ingredients.

OBJECTIVES

1. Identify the ingredients in a food product by reading the label.
2. Determine the natural source of food ingredients.
3. Discuss the environmental impacts of using various food ingredients.

ACTIVITY

1. Read the background information below.
2. Fill out the [Food Detective Ingredient Chart](#) with a partner.

BACKGROUND READING

The food that is available in a supermarket comes from all over the world. Historically, food was produced and distributed locally. Now, food products in supermarkets could have been grown thousands of miles from where they are purchased and consumed.

Often when looking at a packaged food product, it is hard to determine where the ingredients came from. You have to be a food detective to determine the source of your food. There are several clues that may help you in your search.

Start with the food label. The label provides information on the ingredients of the food and should provide the name and location of the product manufacturer or distributor. If the food was produced in another country, for example Italy, the label may say "Product of Italy." This holds true for most countries. If the ingredients came from other countries and the food product was manufactured in the United States, the label may not tell the source of each ingredient. Fruits and vegetables are generally seasonal. Although some produce items are available all year, they may be more expensive and of lower quality when out-of-season. By changing the source of the fruit or vegetable, the season for the item at the supermarket can be extended. For example, Chile provides fresh grapes during the off-season in the United States. Chile is in the Southern Hemisphere and has seasons opposite ours: when it is winter here, it is summer there. Controlled environments are also used to extend the season of some fruits and vegetables. Apples, for example, can be stored in low oxygen, high carbon

dioxide environment and remain crisp and edible for the whole year. Also, some vegetables such as tomatoes, lettuce, and cucumbers are grown in greenhouses during the winter.

Examples of Fruits and Vegetables Available in Each Season in the United States

Winter	Spring	Summer	Fall
Avocados	Artichokes	Beans	Apples
Brussels sprouts	Asparagus	Apricots	Grapes
Cabbage	Broccoli	Beets	Melons
Cauliflower	Lettuce	Blueberries	Pears
Grapefruit	Mushrooms	Lemons	Pumpkins
Potatoes	Papayas	Limes	Squash
Parsnips	Peas	Corn	
Oranges	Pineapples	Cherries	
	Radishes	Peaches	
	Strawberries	Peppers	
	Sweet potatoes	Plums	
		Summer squash	
		Tomatoes	
		Zucchini squash	

In the produce department where food generally does not have labels, you can ask the produce manager about the source of particular items. With prepared foods, it is often hard to determine the sources of all the ingredients. For example, chocolate is in many products and it is produced from the seedpods of cacao trees grown in many tropical environments.

It is interesting to see how food is produced and what is involved in getting food from the point of production to the table.

Credit

This activity is from Agriculture in the Classroom: [Be a Food Detective](#).