

April 2004



Maryknoll Food and Faith *Study Guide*

Aim: Does it matter how food is grown?

Objectives:

Students will be able to:

- 1) Compare and contrast traditional and industrial farming methods.
- 2) Evaluate the impact of genetically modified (GM) seeds on farmers in Mexico.

Time frame: One class period plus homework.

Materials needed:

April MARYKNOLL magazine; overhead projector.

LESSON PLAN

Do-now: Ask students to name foods that contain corn or a corn derivative as an ingredient. After a few responses, if students have not mentioned soft drinks, hard candies or fruit juices, ask why they didn't mention them.

Inform students that many food products contain types of corn syrups that are used as sweeteners. Corn is in so many foods today that it is a big business to control the cultivation of corn. Most food in the United States is grown and sold not by family farms, but by large corporations.

Motivation: Allow students five minutes to answer the aim question in their notebooks.

Activity: Ask students, "If you are a farmer, what do you need to grow corn?" Encourage them to think of the basic necessities: seeds, land, soil, sun, water, workers. Define pesticides—any agent that

kills pests, such as insects, that feed on the crop. Encourage them to think of solutions to keeping pests and animals away from the crop. (See chart.)

Discuss the proposition that corporations offer to many farmers: the option to buy a kind of seed that resists pesticides very well, contains its own pesticide or grows especially fast and strong. Explain that while many U.S. farmers accept this offer, some do not. Farmers in Mexico also face the same choice, and some have a problem with GM seeds.

Make a chart like the one on the facing page and complete with the class on an overhead projector. Inform students that most foods made with corn in the United States are GM foods.

Ask students to draw conclusions about industrial and organic farming methods. Have they changed their mind about their response to the aim question? Why or why not?

Homework: Have students read "No corn, no country" on pages 32-35 of April MARYKNOLL magazine. Have them write a response to this question: "How do the Mexican farmers in the article reflect the way of the early Christians, who, according to Acts 2:44-45, "owned everything in common" and "distributed the proceeds among themselves according to what each one needed"?"

Extension activity: Have students go on a GM food scavenger hunt in their kitchen. They should look to see how many foods are labeled "organic" and how many foods contain corn syrup, fructose or corn oil, which are all GM corn ingredients.

Food Chart

INDUSTRIAL FARMING

ORGANIC FARMING

SEEDS	A multinational corporation controls seeds. Farmers must buy new seeds every year.	Farmers use traditional seed-saving techniques, passing down the best seeds from year to year.
CHARACTERISTICS	Farmers plant large amounts of one crop to make money, which degrades soil quality.	A variety of crops and natural fertilizers keeps soil healthy.
PESTICIDES	Corporations sell chemical pesticides to use with GM seeds.	Farmers use only natural pesticides, such as Bt bacteria and beneficial insects that prey on crop-eaters.
CROPS	Scientists insert genes into seeds—such as genes from a fish into a tomato—to make food resist disease or last longer on supermarket shelves.	Food is healthier and tastier; however, GM seeds may cross-pollinate with native varieties, changing them forever.

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