

GENETICALLY MODIFIED FOODS:

THE DEBATE CONTINUES

START UP

What would make you think that a food is unsafe to eat? Why?

MOST OF US HAVE BEEN EATING GENETICALLY MODIFIED (GM) FOODS FOR MANY YEARS NOW. Does that surprise you? In fact, the majority of the food sold in supermarkets today is either genetically modified in some way or made with GM ingredients. Genetic modification involves transferring DNA from one organism to another. The four main GM crops grown in Canada are corn, soy, canola, and sugar beets.

Some people think that GM crops are the solution to all the world's food problems. Others think that not only are GM crops far from the solution, but they are also the source of many new problems. Consider both views and then decide for yourself.

DNA: *deoxyribonucleic acid; carrier of genetic information*

Sugar beets are GM crops grown in Canada.

Hmmm

The first GM foods entered the world's food supply in the early 1990s. Canada is now the third-largest producer of GM crops.

WHEN IT COMES TO SMALL FARMERS ...

AGAINST: Agribusinesses get patents for the GM seeds they manufacture. Farmers who want to grow a GM crop must pay patent fees and buy new GM seeds every season. If they don't do this, they get sued. Small farmers, especially poor farmers in developing countries, often can't afford these high costs. But if they don't plant GM crops, they might not be able to compete. It's a lose-lose situation.

Patents are official documents granting an inventor the right to be the only one to make, use, or sell his or her invention.

FOR: GM crops can be modified to resist pests and diseases. They can also be modified to withstand certain pesticides, so the crops can be sprayed with herbicides to control weeds. They can increase a farmer's harvest, maximizing profits and minimizing losses. Agricultural scientists are also working on developing GM crops that can grow and thrive even in drought, heat, frost, or poor soil.

WHEN IT COMES TO THE ENVIRONMENT ...

AGAINST: Growing GM crops could harm plants and animals living in the surrounding habitats. Scientists warn that crops modified to resist pests will kill not only pests but also useful insects such as honeybees and monarch butterflies. New superweeds and superbugs can also emerge over time. So, farmers will eventually need to use more pesticides.

Superweeds and superbugs are plants and insects that have become resistant to pesticides and so are difficult to control.

FOR: Farmers raising GM crops that are resistant to pests and diseases can use fewer chemicals than they would while growing traditional crops. Scientists also say that it is possible to produce GM crops that need less water.

WHEN IT COMES TO THE MOTIVATION BEHIND GM TECHNOLOGY ...

AGAINST: Agribusinesses can greatly profit from selling GM seeds to farmers. So, they might be overpromoting the benefits of GM technology. At the same time, they might be understating the possible health and environmental risks.

FOR: GM technology is one of the greatest scientific innovations in history. It could be the best solution to the challenge of feeding the world's growing population. Farmers can raise crops where none could grow before, and annual yields are almost always higher.

Hmmm

There are no specific laws in Canada or the US requiring GM foods to be labelled as such.

innovations: new methods, ideas, or practices

WHEN IT COMES TO OUR HEALTH ...

AGAINST: Concerned doctors say that not enough studies have been done on GM foods — there might be health risks we don't even know about. Some doctors have said that GM foods can cause allergies; other doctors are worried about the possible long-term health effects.

FOR: GM foods can have many health benefits. Crops can be modified to lower their fat and sugar content or increase their nutritional value. Food scientists are working on adding vitamins, minerals, and even vaccines to GM crops.

DIVE DEEPER

Which side of the GM foods debate do you agree with? Why?



GM corn kernels

