

Why We Must Say NO to GMO

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GMO is shorthand for Genetically Modified Organisms. This involves a complicated and inexact science of transferring and inserting genes with desirable traits via bacterial, viral, or other means into food crops or animals with the hope of improving the genetic traits. The controversy and debate is worldwide. Billions of dollars, and potentially billions of lives, are at stake.

Crops most likely to be GM are: soy (80%), cotton (70%), canola (60%), corn (40%), and Hawaiian papaya (>50%). We indirectly ingest these through meat, eggs, and dairy products from animals that have eaten GM feed. In addition we are unknowingly consuming GM foods in the forms of vegetable oil (soy, canola, cottonseed, or corn), margarines, soy flour, soy protein, cornmeal, maltodextrin, as well as bread, cereal, hamburgers, hot dogs, mayonnaise, crackers, chocolate, fried food, protein powders, peanut butter, cosmetics, detergents, shampoos, and soaps.

“Genetic Engineering presents probably the largest ethical problem that science has ever had to face. Going ahead in this direction may not only be unwise, but dangerous. Potentially, it could breed new animal and plant diseases, new sources of cancer, novel epidemics.”

--George Wald, Nobel laureate in Medicine and former Prof. of Biology, Harvard University

Jeffrey Smith, author of Seeds of Deception, on why he wrote this international best-seller:

“How could the government approve dangerous foods? A close examination reveals that industry manipulation and political collusion-not sound science-was the driving force. In addition to having the inside scoop on many of the dangers of GM foods, I was also aware of several scandalous stories about the biotech industry that would make good reading. Scientists were offered bribes or threatened. Evidence was stolen. Data was omitted or distorted. Government employees who complained were harassed, stripped of responsibilities, or fired. Laboratory rats fed a GM crop developed stomach lesions and seven of the 40 died within two weeks. The crop was approved. When a top scientist tried to alert the public about other alarming discoveries, he lost his job and was silenced with threats of a lawsuit.

The warnings of US government scientists were ignored and denied by the Food and Drug Administration, whose policy chief was a former Monsanto attorney, and later vice president, for Monsanto.... Monsanto has a long history of wrongdoings. They had claimed PCBs were safe, DDT was safe, Agent Orange was safe. They were wrong.”

“The current technology used in GM crops on the market is based on science that is 40 years old. Many of the key assumptions used as the basis for safety claims have been overturned.”

“These results demonstrate that genetic modification is a clumsy process, not precise as is often claimed. There is no control over how many genes, in what order, or where they are inserted.

--- Sue Mayer, director of Genewatch, an independent research group.

“There are many ways in which a GM food could create toxins, allergens, carcinogens, or nutritional problems. Turning genes on or off is another form of Russian roulette. The process of inserting a gene into DNA can dramatically disrupt the normal genes. One study showed that as many as 5% of the natural genes changed their levels of expression when a single gene was

inserted. Genes can get turned off or deleted, switched on permanently, scrambled, duplicated, or relocated. Gene insertion coupled with growing cells from tissue culture, creates hundreds or thousands of mutations throughout the genome. On top of all this, the inserted gene can get mutated, truncated, or blended with the crop's natural gene code. And it appears that the inserted genes get rearranged over time as well. Any of these changes can create serious problems in themselves, or set in motion a chain of reactions that can lead to problems."

"Tragically, the studies conducted on GM crops are not designed to identify the vast majority of possible problems. When scientists understand the dangers involved with GM technology and then discover what studies are actually conducted, they're shocked. They realize the extent to which consumers are being used as guinea pigs, just so the biotech industry doesn't have to spend the money doing the proper research. There are fewer than 20 peer-reviewed animal-feeding safety studies. And many of these are industry-funded and clearly rigged to avoid finding problems. No, GM crops are not adequately tested for safety. Part of my work is to bring that to the public's attention."

"Mice exposed to Bt-toxin (a GM plant insecticide) developed an immune response equal to that of cholera toxin, developed a greater susceptibility to allergies, and developed abnormal and excessive cell growth in their small intestines."

"Farm workers exposed to even the low dose Bt spray showed evidence of allergic sensitivity, and blood tests showed an immune response. Preliminary evidence found that thirty-nine Philipinos living next to a Bt maize field developed skin, intestinal, and respiratory reactions.

The only human feeding study ever conducted showed that genes inserted into GM soy actually transferred into gut bacteria. Imagine if the gene that produces the Bt-toxin were to transfer from the maize we eat into our gut bacteria. It could theoretically transform our intestinal flora into living pesticide factories."

"In the US, we eat only 3-5% of our caloric intake as maize. I dread to think what might happen to those eating GM maize as the majority of their diet. Some farmers who fed 100% GM corn to their livestock had catastrophes. Twelve cows died on a German farm. And about 25 farmers in North America say their pigs became sterile or had false pregnancies, or gave birth to bags of water."

Shrouded in secrecy, biotech companies are genetically engineering crops to produce pharmaceutical drugs in numerous test plots around the country. The possible health and environmental risks of these pharm crops remain very poorly understood. There have been no peer reviewed scientific studies published on their safety. Pharm crops soon may be approved for commercial use. If the U.S.D.A. allows this, it is inevitable that pharmaceutical drugs will end up contaminating the food supply. What impact will pharm crops have on humans, birds and animals that consume them?

For more news on genetically engineered foods and crops: www.gmwatch.org, and www.thecampaign.org, www.seedsofdeception.com Also get the book, Seeds of Deception.

How do You Know if Your Food is Genetically Modified?

By Dr. Joseph Mercola with Rachael Droege

When polled, only about one-quarter of Americans report having eaten genetically modified food. However, if you randomly pick an item off your grocery store's shelves, you have a 70 percent chance of picking a food with genetically modified (GM) ingredients. This is because at least seven out of every 10 items have been genetically modified.

If more Americans were aware of this fact, the polls would certainly turn out differently, but Americans are kept largely in the dark about GM products, and most are not aware they are eating these foods because there are no labeling requirements for GM foods. This, despite the fact that there have been no studies done with humans to show what happens when [genetically modified foods](#) are consumed, and an [ABC News poll \(PDF\)](#) found that 92 percent of Americans want mandatory labels on GM foods.

Even more concerning is the fact that genetically modified organisms are not easily contained. [The Washington Post reported](#) "techniques for confining genetically engineered ... organisms are still in their infancy, and far more work needs to be done to make sure the new products do not taint the food supply or wipe out important species." As a consumer, one way you can voice your resistance to these widely untested, experimental organisms is by not purchasing GM products, a task that is not easy to achieve when you consider the extent to which GM products have already saturated the American market.

There are, however, several ways to reduce your chances of eating GM foods:

- Reduce or Eliminate Processed Foods. There are many reasons why processed foods are not optimal for your health -- for instance they often contain trans fat, and little nutritional value -- so avoiding them will not only help you to cut back on the amount of GM foods, but will also boost your health.
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- Read produce and food labels. GM soybeans and corn make up the largest portion of genetically modified crops. When looking at a product label, if any ingredients such as corn flour and meal, dextrin, starch, soy sauce, margarine, and tofu (to name a few) are listed, there's a good chance it has come from GM corn or soy, unless it's listed as organic.
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- Buy organic produce. Buying organic is currently the best way to ensure that your food has not been genetically modified. By definition, food that is certified organic must be free from all GM organisms, produced without artificial pesticides and fertilizers and from an animal reared without the routine use of antibiotics, growth promoters or other drugs.
- Look at Produce Stickers. Those little stickers on fruit and vegetables contain different PLU codes depending on whether the fruit was conventionally grown, organically grown or genetically modified. The PLU code for conventionally grown fruit consists of four numbers, organically grown fruit has five numbers prefaced by the number nine, and **GM fruit has five numbers prefaced by the number eight**.

