



SAY

NO TO

GMO

Hungary destroys all Monsanto GMO corn fields!¹ ...

In March, Hungary introduced a new regulation that states seeds must be checked for GMO before they are introduced to the market. However, some GMO seeds made it to the farmers without their being aware of it.

As a result, almost 1,000 acres of maize found to have been grown with genetically modified seeds have been destroyed throughout Hungary. The deputy state secretary of the Ministry of Rural Development Lajos Bognar said that the GMO maize has been ploughed under, and pollen has not spread from the maize. Planetsave reports:



"Unlike several EU members, GMO seeds are banned in Hungary. The checks will continue despite the fact that seed traders are obliged to make sure that their products are GMO free, Bognar said."

The United States, meanwhile, is beginning to see the consequences of widely planted GMOs. In the mid-'90s, Monsanto introduced seeds genetically engineered to withstand its Roundup brand of herbicide. Today, these "Roundup Ready" crops are planted all across the U.S. -- 94 percent of soybeans and more than 70 percent of corn and cotton contain the Roundup-resistant gene.

But when the land is dosed with a single herbicide for years on end, the ecosystems adapt. Roundup-defying "superweeds" are getting out of control. And the problem is only accelerating, because the resistant weeds are driving out their non-resistant counterparts. According to Mother Jones:

"These weeds adapt faster and more vigorously than their weed cousins, choking fields and clogging irrigation ditches so badly water can't pass through."

Sources:

- [Planetsave July 21, 2011](#)
- [Mother Jones July 19, 2011](#)

The news that Hungary recently destroyed nearly 1,000 acres of corn crops because they were found to be mistakenly grown with genetically modified (GM) seeds should be a major wake-up call to anyone in the United States and elsewhere who believes GM (genetically modified) crops are harmless. The discovery that the farmland was planted with GM seeds came when the season was already underway, so the harvest has been completely lost for this year. What would prompt the Hungarian government to take such a drastic step?

¹ Articles taken from <http://www.mercola.com/>

Perhaps it is the fact that GM crops simply cannot be contained, and inevitably will contaminate the environment with GM DNA. Or it could be that they do not want superweeds, triggered by the overuse of Roundup herbicide on GM Roundup Ready crops, overtaking their farmland the way they are now doing in the United States. Then again, it could be the unknown threats to human health -- and the fact that new research shows toxins from GM crops are now appearing in human blood -- that made them think twice. Either way, they are clearly well educated about the dangers of GM foods ... which is a lesson the U.S. government still needs to learn.

Why Rogue Planting of GM Seeds is a Very Big Deal

GM corn, soybeans, canola, and sugar beets have made their way into approximately 80 percent of current U.S. processed grocery store items, now that *up to 90 percent* of several U.S.-grown crops are grown with genetically engineered seed. So if you live in the United States, you have most certainly already been exposed to GM foods -- most likely a lot of them. So it may make you angry, or at least curious, to know that in Hungary, the government just *destroyed* crops that were grown with GM seeds and plowed the corn under so the pollen could not spread.

You see, GM seeds are *banned* in Hungary, as they are in several other European countries, such as Germany and Ireland. These countries have chosen NOT to allow their people to be used as guinea pigs in a massive experiment on the food supply, which is essentially what the introduction of GM crops is. Although Monsanto, the world leader in GM seeds, insists that GM foods are no different from conventionally grown varieties, the research in existence begs to differ. Here is just a sampling of the unsavory findings associated with GM foods:

GM peas caused <u>lung damage in mice</u>	Offspring of rats fed GM soy showed a five-fold increase in <u>mortality, lower birth weights, and the inability to reproduce</u>
GM potatoes may <u>cause cancer in rats</u>	Male mice fed GM soy had <u>damaged young sperm cells</u>
Bacteria in your gut can take up DNA from GM food	The embryo offspring of GM soy-fed mice had altered DNA functioning
GM foods lead to <u>significant organ disruptions in rats and mice</u> , specifically the kidney, liver, heart and spleen	Several U.S. farmers reported sterility or fertility problems among pigs and cows fed on GM corn varieties
Bt corn caused a <u>wide variety of immune responses in mice</u> , commonly associated with diseases such as arthritis, Lou Gehrig's disease, osteoporosis, and inflammatory bowel disease	Investigators in India have documented fertility problems, abortions, premature births, and other serious health issues, including deaths, among buffaloes fed GM cottonseed products

GM Crops Have **Already Overtaken** U.S. Farmland

There are movements underway around the globe pressuring governments for a moratorium on untested GM seeds and foods, yet the United States is giving Monsanto free reign, aiding and abetting their agenda -- even though most Americans do not want GMOs.

But the U.S. government is plowing ahead, and allowing virtually all of Monsanto's GM crops and related chemicals to call the United States their home, despite minimal testing and widespread concern. Most recently, the USDA approved planting of GM alfalfa, the fourth-largest crop in the United States, without restriction, despite massive opposition and serious concerns that its potential to cross-pollinate and transfer genetic material is very high, if not guaranteed.

Because it's a natural forage for pastured (organically raised grass-fed) animals, contamination would be disastrous for organic dairy- and cattle farmers, as federal organic standards forbid them from using GM crops (not to mention Monsanto's history of suing both conventional and organic farmers for patent infringement should their crops be cross-contaminated). This could essentially make true "organic" food, which by definition should be GM-free, a virtual impossibility.

If you're wondering *why* the United States leads the world in GM crop acreage, it's because the United States Department of Agriculture (USDA) and the FDA are heavily influenced by Monsanto, which spends millions of dollars lobbying the U.S. government for favorable legislation that supports the spread of their toxic products every year. In the first quarter of 2011 alone, Monsanto spent \$1.4 million on lobbying the federal government -- and this was a *drop* from a year earlier, when they spent \$2.5 million during the same quarter.

The U.S. Food and Drug Administration (FDA), the USDA, and the U.S. Trade Representative all have a special set of revolving doors leading straight to Monsanto, which has allowed this transnational giant to gain phenomenal authority and influence.

Monsanto's '**Superweeds**' Gallop through the Midwest

One of the consequences of this cozy relationship is now surfacing as superweeds make their way across the Midwest. Massive acreage of soybeans, cotton, and corn grown in the United States contain the GM Roundup Ready gene -- and all of these crops receive numerous applications of Monsanto's Roundup each and every year.

But Roundup is proving to be no match for Mother Nature. It's estimated that more than 130 types of weeds spanning 40 U.S. states are now herbicide-resistant, and the superweeds are showing no signs of stopping. As Mother Jones reported:

" ... in what is surely the least surprising, most-anticipated major development in the history of US agriculture, farmers are discovering that when you spend years dousing land [with] a single herbicide, ecosystems adapt. Roundup Ready crops, meet Roundup-defying weeds ...

the USDA openly acknowledges the superweed problem and even delivered a pretty good explainer on it in its environmental impact statement on Roundup Ready alfalfa. Yet it keeps deregulating or choosing not to regulate at all new Roundup Ready crops, all of them quite widely planted. This year alone, the agency has green-lighted Roundup Ready versions of alfalfa (a major cow feed); sugar beets (source of half of US sugar), and most recently, Kentucky bluegrass (popular lawn turf). These dubious USDA decisions will likely bring millions more acres—including lawns, parks, and golf courses near you—under the Roundup Ready domain."

On a slightly brighter note, the U.S. Environmental Protection Agency (EPA) is finally looking into the damaging effects of glyphosate (the key ingredient in Roundup) on humans and the environment and plans to make a decision regarding its future by 2015. At that time, Roundup could either continue to be used as it is now, be required to have some modifications to its use or be banned from use entirely in the United States.

You Can **Fight Back** Against GM Foods

If you do not live in Hungary or another country that is operating the precautionary principle regarding GM foods, it doesn't mean you have to be a helpless guinea pig in this giant experiment. In fact, the time to take action against them is *now*, as there are signs that consumer advocates are making a difference and public disclosure and debate is urgently needed.

For instance, on May 20, the U.S. Court of Appeals for the Ninth Circuit Court of Appeals issued a summary order in favor of farmers and consumer advocates, requiring the USDA to prepare a rigorous environmental study of the impacts of GM sugar beets. Once that review is done, the Court will decide whether GM sugar beets may be grown for commercial use. The USDA has estimated it will complete the Environmental Impact Statement sometime in 2012. Organic farmers and food advocates are also fighting back with a lawsuit aimed at preventing GM alfalfa from being unleashed.

I believe the sooner you get involved, the sooner we will persevere and eliminate these toxic threats in the United States and other parts of the world. We will require loads of education to be effective, however, as many are still completely clueless about GM foods and have no idea that they're eating them every day, and have been eating them for years!

If you're eating CAFO (confined animal feeding operation) meats and processed foods that are not 100% USDA organic, you're eating GMO's. It's that simple. The answer is to buy organic, and/or look for foods that are "non-GMO certified" by the Non-GMO Project. For your convenience, download this Non-GMO Shopping Guide, and share it with everyone you know.

Although GM foods still do not require labeling by law, the campaign for GMO labeling is making progress, thanks to the persistence of Jeffrey Smith and the Institute for Responsible Technology, an organization whose goal is to end the genetic engineering of our food supply and the outdoor release of GM crops. If you like, you can join the fight by signing the petition to President Obama in support of mandatory labeling of GM foods.

By educating the public about the risks of GM foods through a massive education campaign, and by circulating the Non-GMO Shopping Guide so consumers can make healthier non-GMO choices, the Institute's plan is to generate a tipping point of consumer rejection to make GMOs a thing of the past. To keep up with the latest actions and developments on this important issue, you can follow my Mercola.com GMO page, as well as our Non-GMOs page on Facebook.

Eight Foods You Should Almost Never, Ever Eat



Most soybean, corn, cotton and canola crops in the U.S. are genetically altered. Some experts argue that these crops could pose serious health and environmental risks, but the scientific picture is currently incomplete -- deliberately so.

Agricultural corporations such as Monsanto and Syngenta have restricted independent research on the crops. They have refused to provide independent scientists with seeds, or else have set restrictive conditions that severely limit research. This is legal because under U.S. law, genetically engineered crops are patentable. The Los Angeles Times reports:

"Agricultural companies defend their stonewalling by saying that unrestricted research could make them vulnerable to lawsuits if an experiment somehow leads to harm, or that it could give competitors unfair insight into their products. But it's likely that the companies fear something else as well: An experiment could reveal that a genetically engineered product is hazardous or doesn't perform as promised."

Even if you don't want to eat genetically engineered foods, you most likely already are doing so. Corn and soy are two of the most common food ingredients, especially in processed foods, and over 90 percent of both these crops in the US are now from GM seeds.

Organic food companies and consumer groups are stepping up their efforts to get the government to exercise more oversight of engineered foods. Critics of current policy argue that the genetically modified (GM) seeds are often contaminating the nearby non-GM crops. ABC News reports:

"The U.S. government has insisted there's not enough difference between the genetically modified seeds its agencies have approved and natural seeds to cause concern. But Agriculture Secretary Tom Vilsack, more so than his predecessors in previous administrations, has acknowledged the debate over the issue and a growing chorus of consumers concerned about what they are eating."

Sources:

- [Los Angeles Time February 13, 2011](#)
- [ABC News February 28, 2011](#)

George Siemon, CEO of Organic Valley, the nation's largest organic farming cooperative, which had more than \$600 million in sales last year, put it succinctly in the above [article from ABC news](#): "There is a growing awareness that our [food supply] system makes us all guinea pigs of sorts."

I couldn't have said it better myself, because that statement boils down the one fundamental truth about the current (non-organic) US food supply. You and your family are being treated as guinea pigs with food ingredients that have never been tested for long-term safety. And according to [the article above from the LA Times](#), there's a good reason these GM crops haven't been tested for safety. The companies producing the seeds won't let independent scientists test them, or if they do allow testing it is only for non-safety related studies!

Biotech Hides Behind Patent Laws to Quench Independent Safety Studies

Companies like Monsanto and Syngenta simply will not allow independent researchers access to their patented seeds, citing the legal protection these seeds have under patent laws. In other words, if their genetically altered seeds have something wrong with them that potentially could cause consumer illness, Monsanto and Syngenta would rather not have you find out about it. Why?

You might sue them for putting your health in danger! Or a farmer using their seeds might sue them [because their claims of increased crop yields is a myth](#). In fact, [lawsuits like these have already begun appearing in court](#).

Does this remind you of the public health debate that went on for decades over another multi-billion dollar industry -- cigarettes? For decades the companies producing this cancer-causing product denied they caused any harm, denied nicotine was addictive and even [ran advertisements featuring doctors claiming cigarettes were good for your cough](#).

They produced scientific study after study by **their funded** research scientists claiming there was no health threat whatsoever from cigarettes. [Executives from every major cigarette company even lied to Congress under oath](#), claiming they had no knowledge cigarettes were addictive, when in fact they did know—they even [manipulated the nicotine content of cigarettes to keep you hooked](#)!

Is it really necessary to go through the same experience again with GM crops that independent scientists are [now linking to frightening and dangerous pathogens](#)? Isn't it time to demand these crops be tested for long-term safety once and for all? If not now, when? After the population starts showing strange new health problems [that no one can seemingly explain, like spontaneous abortions and infertility](#)?

Can Large Corporations **Be Trusted** to Put You First?

One of the prime lessons that emerged from the recent home mortgage scandals, , or from our experience with the cigarette companies, just to name a few examples, is this: Major corporations operating with little or no regulation or real government oversight simply cannot be trusted to put anything above their quest for profits. Not your financial health, not your personal health, [not even the law](#).

A public corporation is a legal entity whose mandate is to produce profits for shareholders (with the exception of non-profits, which are not the same), while at the same time shielding the human beings who are running it from [legal claims for the actions taken by the corporation](#), it's:

"A body that is granted a charter recognizing it as a separate legal entity having its own rights, privileges, and liabilities distinct from those of its members."

So Monsanto primary purpose is to protect its profits at the expense of everything else, and the human beings running them essentially can't be held accountable for wrongdoings in the quest for profits.

In the case of Phillip Morris and other tobacco manufacturers this means [employing medical professionals to produce grossly misleading PR, lying to Congress under oath](#), and in the case of Big Pharma, [paying their researchers to produce studies that that support the idea that their product is safe](#). Would you really expect the corporate giants Monsanto or Syngenta to behave any differently?

While I am not against corporations seeking a profit, I am quite adamantly opposed to corporations manipulating government regulators ([who are nowadays simply former executives of the corporations themselves!](#)), [producing biased scientific studies that blatantly distort data](#) and [lying to the public to accomplish their goals](#). And until Monsanto and Syngenta submit their GM seeds to independent analysis by scientists not funded by these companies, I will remain skeptical about their safety claims. It is important to note that they are currently stonewalling ALL independent researchers from safety testing under the guise and legal excuse of "patent protection".

GM Seed Producers are **Already** up to the **Same Tricks** as Big Pharma and Big Tobacco

The evidence is already in against the GM seed producers, and it's quite clearly in line with what happens when the government doesn't independently evaluate, test or study a for-profit corporation's product that goes into your body and may produce some unintended consequences. [According to the LA Times article above](#):

"The dangers [of GM crops] ought to be clear. In 2001, the seed company Pioneer, owned by Dow Chemical, was developing a strain of genetically engineered corn that contained a toxin to help it resist corn rootworm, an insect pest."

A group of university scientists, working at Pioneer's request, found that the corn also appeared to kill a species of beneficial ladybug, which indicated that other helpful insects might also be harmed. But, according to a report in the journal Nature Biotechnology, Dow said its own research showed no ladybug problems, and it prohibited the scientists from making the research public. Nor was it submitted to the EPA. In 2003, the EPA approved a version of the corn, known as Herculex."

Also from the same article, more evidence that GM seed producers are trying to keep you from finding out some key claims they make about their products (increased yields in this case) are absolutely not true:

"Research restrictions [on GM seeds] also hamper scientists' ability to assess how genetically engineered crops perform against other modified crops, traditional crops, approaches such as organic farming and the seed companies' promises. There's reason to be suspicious. Using USDA and peer-reviewed data, the Union of Concerned Scientists analyzed corn and soybean yields in the U.S. after the new seeds were introduced. We found only marginal increases due to genetically engineered traits -- not a result promoted by the industry."

Christian Krupke, a Purdue University entomologist who was quoted in [the above Los Angeles Times](#) articles sums up this problem very clearly: "[The GM food] industry is completely driving the bus."

GM Crops – More Widespread than you Think, and Linked to Potential Health Hazards

With the vast majority of planted corn crops in the US (over 90 percent) and soy crops (over 95 percent) now being GM varieties, the American public has a right to ask producers of these foods whether they are safe for long-term consumption. And the answer these GM seed companies have consistently giving us?

We don't know really know. And we aren't going to let you find out, because it might interfere with our bottom line.

Just to be clear, we are talking about a food product that has been genetically altered by blasting DNA from one species into the DNA of a food crop, typically so the food crop will either resist dying from pesticide (allowing the crops to be drenched in pesticides!) or to create a new strain of [food that produces its own pesticide, internally, while it grows](#).

And guess what, this increased pesticide load on these GM food crops ends up on your dinner plate, and [ends up in the feed given to feedlot animals](#). So your milk, eggs, chicken and beef are all likely tainted with a lifetime supply of foods either saturated in pesticides or genetically altered to internally produce pesticides.

There is also evidence suggesting that this pesticide-producing corn, soybean and canola continues to produce pesticide once it's **inside** you (or a feedlot animal), [colonizing your gut bacteria and genetically altering it to also produce pesticide within your own cells](#).

In essence, you become a pesticide producing organism. And do I even need to tell you [this pesticide is harmful to your health?](#)

This is both horrifying and perfectly legal, although it clearly violates the spirit if not that actual letter of the Delaney Clause of 1958, an amendment passed by the US Congress to protect a safe US food supply, which states:

"The Secretary of the Food and Drug Administration shall not approve for use in food any chemical additive found to induce cancer in man, or, after tests, found to induce cancer in animals."

Using the interpretation of "chemical additive" in the broadest sense to include living organisms whose DNA has been altered to produce pesticide (possibly inside your body) through man-made biological experimentation, then GM crops internally producing pesticides **simply must** fall under the purview of the Delaney Clause -- but to date GM crops [have not been tested beyond a few days time](#) and **currently present absolutely zero long-term evidence** that their altered DNA does not lead to cancer in either man or animals. When in fact pesticides have for years been linked to cancer, [along with a host of other diseases from Parkinson's to Alzheimer's to miscarriages](#).

Are GM Crops **Contaminating** Non-GM Crops?

In the US, over 90 [percent of all canola grown is genetically modified](#), compared to just over 20 percent in the rest of the world. According to Nature News, the research team discovered two varieties of transgenic canola in the wild, plus *a third* GM variety that is a cross of the two GM breeds. One of the transgenic varieties found was [Monsanto's Roundup Ready canola](#), which is engineered to be resistant to [glyphosate](#), and the other was [Bayer Crop Science's Liberty Link canola](#), which is resistant to gluphosinate. The third variety contained transgenes from each of these, and is resistant to both types of herbicide.

The truth is Monsanto and Syngenta have unleashed something into nature that will proliferate, cross-breed, and create new plants that we simply do not understand. This is particularly disturbing when it comes to food crops, such as canola, which is used in a vast number of processed food products consumed by millions of people.

The fact that GM crops can infiltrate conventional crops is a concern for any food where GM experimentation is taking place. For example, in 2004, [Hawaii reported widespread contamination of papaya crops](#) by GM varieties. Even seed stocks sold as conventional were found to be contaminated, which threatened the existence of organic papaya.

These types of transgene contaminations are *completely unavoidable* once you start growing them out in the open-- including the cross-mixing of GM breeds. Science has recently revealed that the genome (whether plant, animal or human) is *not* constant and static, which is *the scientific base* for genetic engineering of plants and animals. This means that you may not necessarily get the results you think you're going to get when you insert or remove genetic material.

Instead, geneticists have discovered that the genome is remarkably dynamic and changeable, and constantly 'conversing' and adapting to the environment. This interaction determines which genes are turned on, when, where, by what and how much, and for how long. They've also found that the genetic material itself has the ability to be changed according to experience, passing it on to subsequent generations.

How Genetic Engineering Really Works

Many people now have the flawed assumption that genetic engineering is a very precise, refined science. Not so, [explains Jeffrey Smith in a previous article](#):

"... in order to understand the risks associated with GMOs, I'm going to back up and talk about the process of creating a genetically modified organism because if we understand that, then a whole host of things that can go wrong all of a sudden become clear ... The biotech industry gives you this impression that it's a very clean process. We just take a gene from a species and carefully splice it into another, and the only thing that's different is it's producing some new beneficial protein to produces some trait. This is far from the truth. What they do is – let's say you want to create a corn plant that produces a pesticide. So you go to the soil bacterium called BT for "Bacillus thuringiensis" and you change it so it's more toxic, and you make millions of copies of the gene. You actually put a piece of a virus there which turns it on, it's called the promoter. It's the "on" switch that turns this gene on, 24/7, around the clock.

You make millions of copies and you put it in a gun and you shoot that gun into a plate of millions of cells, hoping that some of the genes make it into the DNA of some of those cells. Then you clone those cells into plants. Now the process of insertion and cloning causes massive collateral damage in the DNA that could have higher levels, and do have higher levels, of allergens and toxins ... Anti-nutrients of soybeans that are genetically engineered have as much as seven times higher the amount of a known allergen cold trypsin inhibitor when compared to non-GM soy, in their cooked state. There is a new allergen in genetically modified corn. There is a new anti-nutrient in the [GM] soy which blocks the absorption of nutrients. They don't look for these things. These are found after they're on the market by some few of the independent researchers that are doing their work."

Farmers have long used BT spray on crops, and because it's a natural bacterium, the Environmental Protection Agency (EPA) and the biotech companies claim it is safe for human consumption. However, this too is clearly misguided optimism. Jeffrey Smith continues:

"Based on peer reviewed published studies, animals like mice that were fed BT had damaged tissues and immune responses as powerful as if they've been fed cholera toxin, and then they became multiple-chemically sensitive to where they started to react to formally harmless compounds."

Can We Reverse the Trend in GM Crops?

According to [Jeffrey Smith, a leading opponent of GM crops who has written two books on the subject](#), from the ABC News article above:

"We're seeing a level of reaction that is unprecedented," says Jeffrey Smith, an activist who has fought the expansion of genetically engineered foods since they were first introduced 15 years ago and written two books on the subject. "I personally think we are going to hit the tipping point of consumer rejection very soon."

The silver lining in all of this is that we actually don't NEED policy changes to kick GM Foods out of the market! Like Jeffrey Smith suggests, the only requirement is getting enough people to consistently avoid buying **anything** containing GM ingredients, and the food manufacturers will do the rest. They WILL respond to market demands, because if they don't they go out of business.

This means avoiding and boycotting every product with corn or soy as an ingredient that does not carry the USDA Organic label. It may sound like a daunting task for you as an individual shopper, but there are resource guides available. For a helpful, straightforward guide to shopping Non-GMO, please see the [Non-GMO Shopping Guide](#), created by the [Institute for Responsible Technology](#). You can also avoid GM foods that are not found in processed foods, if you know what to look for. There are currently eight genetically modified food crops on the market:

Soy	Sugar from sugar beets
Corn	Hawaiian papaya
Cottonseed (used in vegetable cooking oils)	Some varieties of zucchini
Canola (canola oil)	Crookneck squash

This means you should avoid products with corn, soy, canola, and any of their derivatives listed as an ingredient, unless it's labeled USDA 100% Organic.

Doctors Warn: Avoid Genetically Modified Food

The American Academy of Environmental Medicine (AAEM) has called on all physicians to prescribe diets *without* genetically modified (GM) foods to *all* patients.¹ They called for a moratorium on genetically modified organisms (GMOs), long-term independent studies, and labeling, stating, *"Several animal studies indicate serious health risks associated with GM food, including infertility, immune problems, accelerated aging, insulin regulation, and changes in major organs and the gastrointestinal system ... there is more than a casual association between GM foods and adverse health effects. There is causation..."*

Former AAEM President Dr. Jennifer Armstrong says, *"Physicians are probably seeing the effects in their patients, but need to know how to ask the right questions."*

Renowned biologist Pushpa M. Bhargava also believes that GMOs are a *major* contributor to the deteriorating health in America.

Pregnant **Women** and **Babies** at Great Risk

GM foods are particularly dangerous for pregnant moms and children. After GM soy was fed to female rats, most of their babies died—compared to 10 percent deaths among controls fed natural soy. GM-fed babies were smaller, and possibly infertile.

Testicles of rats fed GM soy changed from the normal pink to dark blue. Mice fed GM soy also had altered young sperm. Embryos of GM soy-fed parent mice had changed DNA. And mice fed GM corn had fewer, and smaller, babies.

In Haryana, India, most buffalo that ate GM cottonseed had reproductive complications such as premature deliveries, abortions, and infertility; many calves died. About two dozen US farmers said thousands of pigs became sterile from certain GM corn varieties. Some had false pregnancies; others gave birth to bags of water. Cows and bulls also became infertile. In the US, incidence of low birth weight babies, infertility, and infant mortality are all escalating.



Food that **Produces Poison**

GM corn and cotton are engineered to produce a built-in pesticide called Bt-toxin—produced from soil bacteria *Bacillus thuringiensis*. When bugs bite the plant, poison splits open their stomach and kills them. Organic farmers and others use natural Bt bacteria spray for insect control, so biotech companies claim that Bt-toxin must be safe. The Bt-toxin produced in GM plants, however, is thousands of times more concentrated than natural Bt spray. It is designed to be *more* toxic,⁹ has properties of an allergen, and cannot be washed off the plant.

Moreover, studies confirm that even the less toxic *natural* spray can be harmful. When dispersed by planes to kill gypsy moths in Washington and Vancouver, about 500 people reported allergy or flu-like symptoms. The same symptoms are now reported by farm workers from handling Bt cotton throughout India.

GMOs Provoke **Immune Reactions**

GMO safety expert Arpad Pusztai says changes in immune status are "a consistent feature of all the [animal] studies." From Monsanto's own research to government funded trials, rodents fed Bt corn had significant immune reactions.

Soon after GM soy was introduced to the UK, soy allergies skyrocketed by 50 percent. Ohio allergist Dr. John Boyles says: *"I used to test for soy allergies all the time, but now that soy is genetically engineered, it is so dangerous that I tell people never to eat it."*

GM soy and corn contain new proteins with allergenic properties and GM soy has up to seven times more of a known soy allergen. Perhaps the US epidemic of food allergies and asthma is a casualty of genetic manipulation.

Animals Dying in Large Numbers

In India, animals graze on cotton plants after harvest. But when shepherds let sheep graze on Bt cotton plants, thousands died. Investigators said preliminary evidence "strongly suggests that the sheep mortality was due to a toxin. . . . most probably Bt-toxin." In one small study, all sheep fed Bt cotton plants died; those fed natural plants remained healthy.

In an Andhra Pradesh village, buffalo grazed on cotton plants for eight years without incident. On January 3rd, 2008, 13 buffalo grazed on Bt cotton plants for the first time. All died within three days. Bt corn is also implicated in the deaths of cows in Germany, and horses, water buffaloes, and chickens in the Philippines. In lab studies, twice the number of chickens fed Liberty Link corn died; 7 of 40 rats fed a GM tomato died within two weeks.

Worst Finding of All—GMOs Remain Inside You

The only published human feeding study revealed that even after you stop eating GMOs, harmful GM proteins may be produced continuously inside of you; genes inserted into GM soy transfer into bacteria inside your intestines *and continue to function*. If Bt genes also transfer, eating corn chips might transform your intestinal bacteria into a living pesticide factory.

Warnings by Government Scientists Ignored and Denied

According to documents released from a lawsuit, scientists at the FDA warned that GM foods might create allergies, poisons, new diseases, and nutritional problems.²³ But the White House ordered the agency to promote biotechnology, and Michael Taylor, Monsanto's former attorney, headed up the FDA's GMO policy.

That policy declares that no safety studies on GMOs are required. Monsanto and other producers determine if their foods are safe. Taylor later became Monsanto's vice president, and was reinstated at the FDA in 2009 by the Obama administration as the US Food Safety Czar.

19 Studies Link GMO Foods to Organ Disruption

A new paper demonstrates that consuming genetically modified (GM) food leads to significant organ disruptions in rats and mice. Researchers reviewed data from 19 studies and found that parameters including blood and urine biochemistry and organ weights were significantly disrupted in the GM-fed animals.

The kidneys of males were the most affected, experiencing 43.5 percent of all the changes. The livers of females followed at more than 30 percent. Other organs may have been affected too, including the heart and spleen, and blood cells. According to the Institute for Responsible Technology:

"The GM soybean and corn varieties used in the feeding trials 'constitute 83 percent of the commercialized GMOs' that are currently consumed by billions of people. While the findings may have serious ramifications for the human population, the authors demonstrate how a multitude of GMO-related health problems could easily pass undetected through the superficial and largely incompetent safety assessments that are used around the world."

Further, the biotechnology firm Monsanto is only an FDA approval away from its latest monstrosity -- soybeans that have been genetically modified to produce omega-3 fats. That FDA approval is expected this year. Monsanto plans to include GM soybean oil in every product it can -- baked goods, baking mixes, breakfast cereals, cheeses, frozen dairy desserts, pasta, gravies and sauces, fruit juices, snack foods, candy, soups, and more. According to Forbes:

"Monsanto is so despised by environmentalists that Google's first suggested search term for the St. Louis company is 'Monsanto evil.' Readers ... voted Monsanto the world's most evil corporation in a January poll, giving the corporation a whopping 51 percent of the vote."

Scientists have also introduced human genes into 300 dairy cows in a process that they say will cause the cows to produce milk with the same properties as human breast milk. They believe that this could provide an alternative to formula milk for babies. Critics of GM technology questioned the safety of milk from genetically modified animals, and also its potential effect on the cattle's health. According to the Telegraph:

"The researchers used cloning technology to introduce human genes into the DNA of Holstein dairy cows before the genetically modified embryos were implanted into surrogate cows ... [T]he researchers said they were able to create cows that produced milk containing a human protein called lysozyme."

Sources:

- [Environmental Sciences Europe March 1, 2011](#)
- [Institute for Responsible Technology April 7, 2011](#)
- [Forbes April 11, 2011](#)
- [The Telegraph April 2, 2011](#)
- [PLoS One March 16, 2011; 6\(3\):e17593](#)

In the latest review of genetically modified organisms (GMO) -- an analysis of 19 animal studies -- it was revealed that nearly 10 percent of blood, urine, organ and other parameters tested were significantly influenced by GMOs, with the liver and kidneys faring the worst. The studies involved animals fed GM soy and corn, which comprise more than 80 percent of all GMOs cultivated on a large scale, and exist in virtually every processed food sold in the United States.

Clearly the danger posed by GM crops is no longer theoretical, yet because GM foods are patented inventions that are protected under copyright and proprietary information laws, the corporations controlling the seeds only allow them to be studied under very limited conditions.

Rarely (if ever) do they permit them to be studied for safety by anyone but the USDA (who hasn't yet seen the need to conduct rigorous long-term studies), and rarely are they studied beyond 30 or 90 days.

The GM Foods You're Eating Have **Only** Been Studied for **90 Days** – at Most!

As Jeffrey Smith, founder of the [Institute for Responsible Technology](#) states: "Only two studies reviewed in this new publication were over 90 days—both were non-industry research."

In order to obtain the raw data from the 90-day studies, the researchers had to take court actions and make official requests, and the results suggested that the beginnings of chronic disease may have been starting in the animals' liver and kidneys. What would have occurred in six months, a year or five years down the line remains unknown, as the studies have never been done. [The researchers noted:](#)

"The 90-day-long tests are insufficient to evaluate chronic toxicity, and the signs highlighted in the kidneys and livers could be the onset of chronic diseases. However, no minimal length for the tests is yet obligatory for any of the GMOs cultivated on a large scale, and this is socially unacceptable in terms of consumer health protection."

Further, when the data was reviewed in its entirety, the researchers found serious cause for concern that appeared to be overlooked by regulatory authorities:

"Some of these tests used controversial protocols which are discussed and statistically significant results that were considered as not being biologically meaningful by regulatory authorities, thus raising the question of their interpretations."

Given the obvious organ disruption that occurred in animals fed GM corn and soy for just 30-90 days, it is downright terrifying to think about what might happen to humans who eat these foods for a lifetime. The researchers state outright what the regulatory agencies have failed to acknowledge:

"We can conclude, from the regulatory tests performed today, that it is unacceptable to submit 500 million Europeans and several billions of consumers worldwide to the new pesticide GM-derived foods or feed, this being done without more controls (if any) than the only 3-month-long toxicological tests and using only one mammalian species, especially since there is growing evidence of concern. This is why we propose to improve the protocol of the 90-day studies to 2-year studies with mature rats."

Why You Need to **Think Twice** Before Eating **GMOs**

There's very convincing evidence that genetically modified foods spell nothing but trouble for your health. As [Smith discusses in this interview](#), scientists have discovered a number of health problems related to genetically modified foods in general, however, these studies have been repeatedly ignored by both the European Food Safety Authority and the U.S. Food and Drug Administration (FDA).

In the only human feeding study ever published on genetically modified foods, seven volunteers ate Roundup-ready soybeans. These are soybeans that have herbicide-resistant genes inserted into them in order to survive being sprayed with otherwise deadly doses of Roundup herbicide.

In three of the seven volunteers, the gene inserted into the soy transferred into the DNA of their intestinal bacteria, and continued to function long after they stopped eating the GM soy!

There are serious medical implications to this finding. However, the GM-friendly UK government, who funded the study, chose not to fund any follow up research to see if GM corn -- which is [engineered to produce an insecticide called BT toxin](#) -- might also transfer and continue to create insecticide inside your intestines.

These kinds of studies are sorely needed, and fast, because as of right now, about 85 percent of the corn grown in the US is genetically engineered to either produce an insecticide, or to survive the application of herbicide. And about 91-93 percent of all soybeans are genetically engineered to survive massive doses of Roundup herbicide.

What this means is that nearly ALL foods you buy that contain either corn or soy, in any form, will contain GMO unless it's [certified organic by the USDA](#). In [this interview](#), [Smith also mentions an Italian study](#) where they fed BT corn to mice. As a result, the mice expressed a wide variety of immune responses commonly associated with diseases such as:

Rheumatoid arthritis	Inflammatory bowel disease	Osteoporosis
Atherosclerosis	Various types of cancer	Allergies
Lou Gehrig's disease		

In addition, Smith has documented at least 65 serious health risks from GM products of all kinds. Among them:

- Offspring of rats fed GM soy showed a five-fold increase in mortality, lower birth weights, and the inability to reproduce
- Male mice fed GM soy had damaged young sperm cells
- The embryo offspring of GM soy-fed mice had altered DNA functioning

- Several US farmers reported sterility or fertility problems among pigs and cows fed on GM corn varieties
- Investigators in India have documented fertility problems, abortions, premature births, and other serious health issues, including deaths, among buffaloes fed GM cottonseed products

Beware of New GMO Products: **Omega-3 Soybean Oil**

GM crops have already invaded our food supply, and more GM –foods are in the pipeline, but you'd never know it because GM foods are unlabeled. One of the latest creations from GM giant Monsanto is a genetically modified soybean that produces omega-3 fats." Stearidonic acid (SDA) soybean oil, as the new product is called, is only one FDA approval away from becoming a reality, but although omega-3 fats are clearly healthy, omega-3 from GM soybean oil most likely certainly is not.

Not only do you need to get [animal-based omega-3 fats](#) in your diet for the most benefits, but also [soybean oil](#) is not a food you want to consume, especially if it has been manipulated to contain omega-3 fats. [GM soy](#) has been linked to an increase in allergies, as well as has the potential to [cause infertility in future generations](#). It's also one of the polyunsaturated vegetable oils you need to cut *down* on in your diet [if you want better health](#).

Unfortunately, as [Forbes reported](#): "Monsanto plans to include SDA soybean oil in just about everything: "baked goods and baking mixes, breakfast cereals and grains, cheeses, dairy product analogs, fats and oils, fish products, frozen dairy desserts and mixes, grain products and pastas, gravies and sauces, meat products ... milk products, nuts and nut products, poultry products, processed fruit juices, processed vegetable products, puddings and fillings, snack foods, soft candy, and soups and soup mixes, at levels that will provide 375 milligrams (mg) of SDA per serving."

It's unclear whether the new SDA soybean oil will be listed on labels, but if you see "stearidonic acid (SDA) soybean oil" on a label, now you'll know what it is so you can avoid it.

The **Latest Creation**: GM "Breast Milk" From Cows

Researchers are also trying to produce "human" breast milk using genetically modified cows. Scientists used cloning technology to introduce human genes into dairy cows to produce milk they say has the same properties as human breast milk and could provide an alternative to formula or human breast milk for babies in about 10 years.

Producing GM food for babies is alarming, as the process of moving genes around carries unpredictable risks. One study that looked at the insertion of a single gene into a human cell found that up to 5 percent of the genes had significantly changed their level of output.

This means that hundreds or thousands of genes could change their levels of protein expression when a single gene is inserted -- and even one change can be dangerous.

As [The Telegraph](#) reported, already there were signs of trouble with the GM "human" cow milk studies: "... During two experiments by the Chinese researchers, which resulted in 42 transgenic calves being born, just 26 of the animals survived after ten died shortly after birth, most with gastrointestinal disease, and a further six died within six months of birth."

Do You Know ... You're Probably Eating GMOs?

I've gone on record saying that due to the amount of GM crops now grown in the United States (over 90 percent of all corn is GM corn and over 95 percent all soy is GM soy) *EVERY* processed food you encounter at your local supermarket that does not bear the "USDA Organic" label is filled with GM components.

So you're eating GM foods, and you have been for the last decade, whether you knew it or not. You can thank Congress for this, and the USDA and Monsanto. What ultimate impact these GM foods will have on your health is still unknown, but [increased disease, infertility and birth defects](#) appear to be on the top of the list of most likely side effects. As was recently [stated in the NY Times](#):

"A majority of our foods already contain GMOs and there's little reason to think more isn't on the way. It seems our "regulators" are using us and the environment as guinea pigs, rather than demanding conclusive tests. And without labeling, we have no say in the matter whatsoever."

"Healthy" Foods You Should Never, Ever Eat

There are two types of research regarding GM food -- independent science and corporate science. It's not hard to decide which one to trust. Jeffrey Smith, featured in the video above, is the executive director of the [Institute for Responsible Technology](#), whose [Campaign for Healthier Eating in America](#) is designed to create the tipping point of consumer rejection of GMOs to rid them from our food supply. In this short but important video, he points out some of the most glaring problems with scientific research, and that is the discrepancies you get depending on the source of the funding. In terms of reliability, there's a big difference between:

- Corporate science, which tends to primarily favor and support corporate interests, *and,*
- Independent science, performed without preconceived bias

As Smith points out, Monsanto, one of the primary players in the field of genetically modified (GM) foods, wants you to simply trust them because they're "experts" and their studies "prove" their GM foods are safe. But these same experts also told you PCB's, Agent Orange, and DDT was safe, and we now know those claims were far from accurate.

Why Profit-Motivated Research Cannot Be Trusted...

I've previously written several articles detailing the various methods employed to [create desired, but false or misleading, outcomes in scientific studies](#). Such tactics include using:

- Inappropriate control groups
- The wrong statistical methods
- Incorrect detection methods

In the video, Smith gives some excellent examples of how Monsanto twisted their science to fit their own needs. For example, to "prove" that pasteurization destroys the bovine growth hormone (rBGH) left in the milk from treated cows, their scientists pasteurized the milk *120 times longer* than normal. Clearly, the results from that experiment in no way relates to the pasteurized milk sold on the market ...

Simply withholding negative results is another common tactic. Last year, I [interviewed Shiv Chopra on this topic](#). Chopra is a former drug company insider and also worked for what is now Health Canada; the Canadian equivalent of the FDA. While producing a department ordered report on rBGH in 1997, called [the Gaps Analysis Report](#), his team discovered that the trial data he'd requested from Monsanto nine years earlier had in fact been produced, but he had for some reason never been granted access to it, even though he was tasked with approving rBGH for use in Canada.

That research, performed by Monsanto, confirmed his fears, showing rBGH increased insulin-like growth factor in rats, increased thyroid activity, and produced ill effects in the testes.

Similarly, when Monsanto wanted to prove that their GM soy was substantially equivalent to non-GM soy, they left key data out of their study that showed the GM soy contained more than seven times the normal amount of a known allergen.

And, when they wanted to introduce their genetically modified high lysine corn, Monsanto claimed that has a history of safe use in the food industry because it's a naturally occurring protein in soil, and that therefore it will not pose a threat to health. However, an independent scientist decided to double check these facts and what he discovered was rather shocking. Based on the amount of lysine the average American would get from eating this high lysine corn, you'd have to consume *22,000 pounds of soil, every second*, 24 hours a day, to get the same amount of lysine in your diet. Talk about misleading! Yet, they got away with it.

The Health Dangers of GM Soy and Corn

[Genetically modified soy](#) and corn are two of the most prevalent GM foods in the US food supply, and both have been linked to potentially serious health effects. For example, one 2009 [Brazilian study](#) discovered that female rats fed GM soy for 15 months showed significant changes in their uterus and reproductive cycle, compared to rats fed organic soy or those raised without soy. This finding adds to a mounting body of evidence suggesting that GM foods can contribute to a number of reproductive disorders, including:

- Changes in reproductive hormones, such as excessive production of estrogen, progesterone, follicle stimulating hormone, and luteinizing hormone,
- Damage to pituitary gland,

- Retrograde menstruation, in which menstrual discharge travels backwards into the body rather than through the uterus, which can cause a disease known as endometriosis, which may lead to infertility. The disorder can also produce pelvic and leg pain, gastrointestinal problems, chronic fatigue, and a wide variety of other symptoms,
- [Testicular changes](#), including damaged sperm cells,

Another disturbing study performed by Irina Ermakova with the Russian National Academy of Sciences, reported that more than half the [babies from mother rats fed GM soy died](#) within three weeks, while the death rate in the non-GM soy group was only 10 percent. Additionally, the babies in the GM group were smaller, and, worst of all, could not reproduce. In a telling coincidence, after Ermakova's feeding trials were completed, her laboratory started feeding *all* the rats in the facility a commercial rat chow using GM soy. Within two months, the infant mortality facility-wide reached 55 percent ...

Unfortunately, you have no way of knowing whether the soy you're eating is genetically modified or not, because GM foods do not have to be labeled as such in the US. However, when you consider that [94 percent all soy](#) grown in the United States is genetically modified in one way or another, you can be virtually guaranteed that if a food product contains soy, it's probably genetically modified, unless it's labeled "100% USDA Organic."

The identical problem exists with GM corn, which accounts for about [88 percent of all corn](#) grown in the United States. The safety of GM corn recently came under scrutiny again when a [study published earlier this year discovered that Bt toxin](#), which is present in many GM crops, is now showing up in human blood!

Bt toxin makes crops toxic to pests, but industry has claimed that the toxin poses no danger to the environment or human health because the protein breaks down in the human gut. Alas, the presence of the toxin in human blood is evidence that this is yet another false assertion that doesn't hold up under closer scrutiny...The GM insecticide toxin is also showing up in fetal blood, which means it could have an impact on future generations, which is exactly what safety advocates like Smith has been warning about.

Your Health Depends on Your Food Choices

Hopefully, this information will cause you to think a little deeper about the process of the scientific model in general, and how to evaluate scientific evidence in particular. It's quite clear that in order to get closer to the truth, you need to look at independent studies done by independent scientists that aren't trying to prove a predetermined point of view, and aren't financially motivated to uphold any particular corporate claim of safety or efficacy. Additionally, this information further highlights the need to carefully consider the foods you buy.

There's no doubt in my mind that if you want to maintain good health, you simply must educate yourself about how the foods you eat are produced. When you compare unadulterated, [organic foods](#) to conventional processed foods (many, if not most, of which contain GM ingredients), there's simply no question that one is *real* food, and the other is anything but!

Yes, you may spend more money on organic food today, but your payoff of good health should more than make up for it – and reduce your health care costs in the future.

I recently found a helpful aid, which shows that feeding your family organic food doesn't have to cost a fortune. The web site, [100 Days of Real food](#), offers a free 'real food meal plan' for summer, using typical in-season organic foods. The meal plan includes both shopping lists and recipes for three square meals a day for an entire week for a family of four. The estimated cost? About \$167 per week.

To help you find organically-grown, wholesome food in your area, check out these helpful resources:

1. **Alternative Farming Systems Information Center**, Community Supported Agriculture (CSA)
2. **Local Harvest**-- This Web site will help you find farmers' markets, family farms, and other sources of sustainably grown food in your area where you can buy produce, grass-fed meats, and many other goodies.
3. [USDA Farmer's Markets database](#)
4. **Eat Well Guide: Wholesome Food from Healthy Animals** -- The Eat Well Guide is a free online directory of sustainably raised meat, poultry, dairy, and eggs from farms, stores, restaurants, inns, and hotels, and online outlets in the United States and Canada.
5. **Community Involved in Sustaining Agriculture (CISA)** -- CISA is dedicated to sustaining agriculture and promoting the products of small farms.
6. **FoodRoutes** -- The FoodRoutes "Find Good Food" map can help you connect with local farmers to find the freshest, tastiest food possible. On their interactive map, you can find a listing for local farmers, CSA's, and markets near you.

How You Can **Help Others** to Avoid **GMO** Foods

Since the US government prevents the labeling of GM foods, it's imperative to educate yourself on what they are, and to help spread awareness. First and foremost, avoid most *processed foods*, unless it's labeled USDA 100% Organic. You can also avoid GM foods that are not found in processed foods, if you know what to look for. There are currently eight genetically modified food crops on the market:

Soy	Sugar from sugar beets
Corn	Hawaiian papaya
Cottonseed (used in vegetable cooking oils)	Some varieties of zucchini
Canola (canola oil)	Crookneck squash

The free [Non-GMO Shopping Guide](#) is a great resource to help you determine which food brands and processed food products are GM-free. Print it out for yourself, and share it with everyone you know. If you feel more ambitious you can [order the Non-GMO Shopping Tips brochure](#) in bulk, and bring them to the grocery stores in your area. Talk to the owner or manager and get permission to post them in their store.

Educational Resources

At this point, there's really no shortage of excellent information on the hazards of genetically modified foods. I highly recommend Jeffrey Smith's books, *Seeds of Deception*, and *Genetic Roulette: The Documented Health Risks of Genetically Engineered Foods*, which provide overwhelming evidence that GM foods are unsafe and should never have been introduced in the first place. Additionally, there are a number of films and videos available for viewing, including:

- [Hidden Dangers in Kid's Meals](#), which is a powerful way for parents to get an initiation into the health dangers of GM foods,
- [Your Milk on Drugs - Just Say No!](#), which exposes the dangers of GM bovine growth hormones. Any parent still feeding their child milk from cows injected with rBGH needs to see this film! They'll never make the same mistake again,
- Jeffrey Smith's lecture: [Everything You Have to Know About Dangerous Genetically Modified Foods](#)

The Drug **Shock** of the Year: FDA **Approved**, But **Beware**²

Story at-a-glance:

- The US FDA has approved the first genetically modified plant intended for the treatment of a human disease. The drug, designed to treat Gaucher disease, contains human enzymes grown in carrot cells.
- The approval opens the door for biotech companies such as Monsanto, which also has vested interests in the pharmaceutical industry, to design more drugs created from genetically engineered plants and/or animals.
- Connecticut is the second state in five weeks to drop a GMO labeling provision in proposed legislation after Monsanto threatened to sue if lawmakers passed the bill. Last month Vermont succumbed to the same strong-arm tactics.
- California is now the new battleground, where 90 percent of California voters favor labeling of genetically engineered foods, and where labeling advocates recently delivered one million signatures to place Right to Know Genetically Engineered Food Act on the Ballot for November 6. The Money Bomb Against Monsanto campaign aims to raise one million dollars to get the Act voted into law.

In a dramatic move that shows that the U.S. FDA is softening its stand on bio-pharmed treatments, the agency has approved the country's first genetically modified plant intended for the treatment of a human disease.

An Israeli firm grew human disease enzymes in carrot cells, and produced a treatment for Gaucher disease that they say shows improvement comparable to a treatment derived from hamster cells. The drug goes by the name Elelyso.

As reported by Popsci, the ability to manipulate the genes of plant cells isn't new, but until now concerns about human biologics have kept them from gaining traction with the FDA. I don't even want to think about the potential ramifications of this decision. Many may not know this, but Monsanto, well-known as the leader in biotechnology and genetically engineered foods, is also invested in the medical industry.

Will Biotech Drugs Become the Next Big Battle?

In 1995, The Upjohn Company—a pharmaceutical company founded in Michigan—merged with the Swedish pharmaceutical and biotech company Pharmacia AB, to form Pharmacia & Upjohn. In 2000, Pharmacia & Upjohn merged with Monsanto Company, at which time the name was changed to Pharmacia. The drug divisions, including Monsanto's old Searle drug division, were retained in Pharmacia, while the agricultural divisions became a wholly owned subsidiary of Pharmacia.

² Dr. Mercola article, 22 May 2012, <http://articles.mercola.com/sites/articles/archive/2012/05/22/gmo-on-treatment-of-human-disease.aspx>

A short while later, Pharmacia spun off this agricultural/biotech subsidiary into a "new Monsanto" company, with the agreement that the "new" Monsanto would indemnify Pharmacia against certain liabilities that could be incurred from judgments against Solutia—yet another Monsanto-owned company that creates a variety of plastic materials, which was sued by Alabama residents over long-term PCB contamination.

Pfizer then bought Pharmacia 2002, and today also owns the remainder of Upjohn. Bayer has also acquired certain assets. As you can see, the past and present connections between all of these mega-corporations are dizzying in their complexity. Monsanto, as a whole, has such a long history of questionable behavior; I shudder to think what might occur once it gets into the game of genetically engineered drug-crops, which is now right around the corner. We already know that coexistence between conventional or organic and genetically engineered crops is impossible, due to the spread of pollen and seed.

And when it comes to the safety of these genetically engineered crops, Phil Angell, Monsanto's director of corporate communications back in 1998 probably expressed it best when he told Michael Pollan that:

"Monsanto should not have to vouch for the safety of biotech food. Our interest is in selling as much of it as possible. Assuring its safety is FDA's job."

Monsanto Continues to Intimidate and Bully State Legislators

That safety isn't very high on Monsanto's corporate agenda has been clear from the start, and we're now beginning to experience the ramifications of this attitude, in the form of degradation of the food supply, declining public health, and environmental destruction. Because while the FDA may in principle be charged with assuring safety, the way the approval process of drugs and genetically engineered food ingredients is set up, the system is basically designed to fail in this regard.

Furthermore, the fact that genetically engineered foods or drugs do not require labeling guarantees their expanded use and proliferation without anyone being the wiser. This is not the case in many other countries. In fact, dozens of countries around the world care enough about their citizens' health to either require labeling of genetically engineered foods, or to outright ban them.

Unfortunately, in America, where the people's voices should be heard above all others, all it takes to kill the right to know what you're eating is for Monsanto to threaten a lawsuit ... Connecticut is now the second state in five weeks to drop a GMO labeling provision in proposed legislation after the biotech giant threatened to sue if lawmakers passed the bill. Last month Vermont succumbed to the same strong-arm tactics. Apparently still stinging from a fight with Monsanto several years ago—when the state tried to stop dairy corporations from marketing milk from cows injected with Bovine Growth Hormone—Vermont legislators tabled voting on their "Right to Know Genetically Engineered Food Act." In Connecticut, the right-to-know bill's sponsor admitted that the reason the labeling provision was dropped was because the governor feared a lawsuit. In a recent article in the *Digital Journal*, Anne Sewell writesⁱⁱ:

"... Rep [Richard] Roy [CT] said, "I feel very strongly that someone or some state has to challenge the use of the Bill of Rights, designed to protect we individuals, from using it to thwart the sharing of information and the subjugation of a whole industry. Residents of more than 50 other countries get simple information saying that GMOs are present in a product. The freest society in the world cannot get that simple sentence."

"... Analiese Paik of Fairfield Green Food Guide asked Rep. Roy why the labeling provision was removed from his bill, the Act Concerning Genetically Engineered Foods. Roy replied that "The labeling provision was eliminated from the bill due to fears that it opened the state up to a lawsuit. The attorneys for the leadership and Governor's office felt that the Constitutional Rights of Monsanto gave them the power to successfully sue the state. Their main duty was to protect the welfare of the state."

Paik's partner in leader Right to Know CT, Tara Cook-Littman, stated, "The constitutional argument is absurd, and everyone knows it. As long as Connecticut law makers had a legitimate state interest that was reasonably related to the labeling of products produced from the process of genetic engineering, the GMO labeling bill would be considered constitutional by any court of law." She added, "It appears that the biotech industry's influence was in place all along, waiting for this tactic to be deployed at the last minute, with no time to argue before the vote."

U.S. Foods Widely Banned from Other Countries

The presence of undisclosed genetically altered ingredients is not the only problem with the US food supply, although it may be one of the most serious. Americans have a long history of trusting government and health officials, and many are now awakening to the disturbing truth that their trust has been sorely misplaced.

If you're wondering how safe your food really is in the U.S., and whether state and federal regulations truly protect you from consuming hazardous materials, you might want to take a look *outside* the U.S. to see what other countries think of our foodsⁱⁱⁱ. What you'll find is that more and more U.S. foods are being outright banned from other countries. Most recently, Indonesia became the first country to ban imports of U.S. beef after discovering an American dairy cow infected with mad cow disease. According to Rusman Heriawan, Indonesia's vice agriculture minister, the ban will remain in place until the case has been resolved.

Taiwan had already begun refusing various U.S. meat products, including pork and beef, because they contain a growth-promoting drug, ractopamine, which is banned in 160 countries. The drug comes with the warning "not for use in humans," and it's handled like hazardous waste, yet it's permitted for use in food in America. Other countries all over the world, from the European Union to Saudi Arabia to South America, have also banned foods or food ingredients that typically are allowed in the U.S., such as genetically engineered seeds and plants.

The Lies You've Been Told...

Exposure to genetically modified foods and companion pesticides has been linked to a number of health risks including infertility, neurological disorders, birth defects and cancer. Yet despite all the evidence, the collusion between industry and our political leadership and various regulatory agencies has created a system in which industry interests win at every turn. Until or unless enough Americans recognize this, and not only demand change, but also *actually change their own habits*, the system will continue unabated.

The first challenge is to realize that you've been lied to. The entire model of genetically engineered crops as a not only viable but preferable food source is based on a series of lies and misconceptions that have enriched a select few at the expense of everyone else. These myths include:

- **Genetically engineered foods are equivalent to conventional foods.** This is simply not true, as no conventional food in the history of mankind has ever been able to splice bacteria, viruses or genetic material from unrelated species into itself. For thousands of years, farmers have selected and saved the best seeds, which has led to improved varieties. But never have they been able to cross a plant with an animal, for example. Nature does not allow this sort of trans-genetic transfer. Gene splicing is an imprecise and unpredictable science, and the potential hazards are enormous. The primary motive behind genetically engineered crops is the ability to patent it and claim ownership of it in perpetuity. And the concept of patenting crops and other foods tells you the truth about whether or not they're really equivalent to conventional foods—you cannot *get* a patent on something that is too similar to something already in existence.
- **Genetically engineered crops were created for an altruistic purpose; to save a starving world from hunger by increasing yield.** Even the statistics from the US Department of Agriculture (USDA) demonstrate that this is a promise that cannot be fulfilled. Genetically engineered crops do not produce higher yields. In fact, numerous studies have shown that their yield is lower than that of conventional or organic yields. There are literally hundreds of studies in the developing world demonstrating that organic farming, specifically, **outproduces** chemical farming and genetically engineered crops by a factor of anywhere between **10-100 to 1**. Genetically engineering food crops is but a tactic to starve the world into submission. And, it guarantees outrageous profits for perpetuity as farmers world-wide must depend on giant transnational corporations in order to eat, and there's *nothing* altruistic about that.
- **Genetically engineered foods are more nutritious.** No patented GE crop has ever made the commercial claim to be more nutritious, so this idea was popularized without any factual support whatsoever. Agricultural scientist are, however, warning that [genetically engineered crops](#) are nutritionally inferior to both organics and conventionally-grown crops.

An Urgent Call to Action

California is now the new battleground, where extensive polling shows that 90 percent of California voters favor labeling of genetically engineered foods, and where labeling advocates recently delivered one million signatures to place *Right to Know Genetically Engineered Food Act* on the Ballot for November 6.

Environmental groups across the country are helping to make this happen, and have launched a "Drop the Money Bomb on Monsanto" campaign to fund the fight against the biotech industry, should they threaten another lawsuit, and to counteract the propaganda put out by Monsanto to dissuade voters from voting it into law. They have deep pockets, and will do everything they can to defeat our attempt to get genetically engineered foods labeled, so I urge you to make a donation to the [Money Bomb Against Monsanto](#) campaign, no matter what state you live in, because if California passes this law, its impact will reverberate across the entire nation.

[Donations](#) can be made online, via regular snail mail, and over the phone.

If Politicians Won't Do it, Will YOU Stand Up to Protect Your Child's Future?

People are finally waking up to the reality that the big corporations that control everything are NOT invincible. When consumers get together, organize, and use the tools of democracy that are still available to us, we can force the will of the people on the politicians. According to Ronnie Cummins, director of the Organic Consumers Association:

"It's not going to be easy. We can't afford to lose this strategic battle; we've got to win. We've got to raise millions of dollars. Even more importantly in California, we have to convince six or seven million Californians to go to the voting booth on November 06 and vote "Yes" for labeling of genetically engineered foods."

I hope you'll join us in this campaign, either by volunteering your time in California, or by making a [financial contribution](#). Dave Murphy, founder of Food Democracy Now, was instrumental in getting Barack Obama to make his promise to label genetically engineered foods while he was still a Senator and a hopeful Presidential candidate. He made this now-famous pledge at the Iowa Farmers Union Presidential Summit in 2007.

http://www.youtube.com/watch?v=zqaaB6NE1TI&feature=player_embedded

"We recognized it was a unique moment, and a unique opportunity to have... a Senator of his caliber... on video saying that they would label genetically engineered foods," Dave says. "He didn't say it in Berkeley. He didn't say it in Brooklyn. He came to Iowa, the heartland of genetically engineered food production, and made it in front of farmers. He got applause. ... We're certainly looking forward to the day that he does label genetically engineered foods."

"The most important change in American history has always come from the grassroots," he says. "It's always risen from the bottom up. It happens faster and it lasts longer when it happens that way. I think today, Americans are really awakening to the fact of how harmful the industrial food supply is to their health, to their environment, in all aspects in life, but even more important their democracy. If we don't stand up now, we'll lose it permanently."

The initiative also needs more volunteers. Pamm Larry, the California grandmother who started this initiative, is correct when she says we need to reach *every single California community*—large and small. So I urge you to get involved and help in any way you can. Be assured that what happens in California will affect the remainder of the U.S. states, so please support this important state initiative, even if you do not live there!

- If you live in California and want to get involved, please visit the California Right To Know website at carighttoknow.org and sign up for emails, received Facebook and Twitter news items. One of the most important things you can do is spread the word, and the easiest way of doing this is by sharing these messages.
- If you'd like to help volunteer for grass roots events, please join and read more at Pamm Larry's LabelGMOs.org's "[Spread the Word!](#)" page.
- Whether you live in California or not, please donate money to this historic effort through the [Organic Consumers Fund](#).
- Talk to organic producers, retailers, and stores and ask them to actively support the California Ballot. It may be the only chance we have to label genetically engineered foods. Businesses may contact campaign manager Gary Ruskin at gary@carighttoknow.org.
- For timely updates, please join the Organic Consumers Association on [Facebook](#), or follow them on [Twitter](#).

There's great hope. We know that the vast majority of people want labeling, and supporting the California ballot initiative will allow for the democratic process to occur to give all Americans a choice. The consequences of each individual person's actions are profound! So, please, share this message with others. Put it on your Facebook page. Put it on your blog. Give it to your friends or relatives. Then encourage them to likewise participate and volunteer. Because collectively, as a group, we can have a profound impact not only on our own lives, but on the lives of our children and future descendants.

Issue 176: From Jordan's Desk: **The Big Six**³

You know there's a huge problem when the major player of the "Big Six" seed companies, Monsanto, has an executive quoted in Farm Journal as saying, "What you're seeing is not just a consolidation of seed companies; it's really a consolidation of the entire food chain."

In short, Monsanto and the other seed companies are on a mission towards agricultural takeover—resulting in unsustainability, non-renewability, food insecurity and ill health.

I've known for some time that Monsanto and the rest of the major Big Six seed companies have a stranglehold on global agriculture. In fact, the last 40 years have changed the course of agriculture—and not for the better. In that time, the seed industry has gone from a competitive agri-business involving primarily small, family-owned farms to an industry dominated by only a few pharmaceutical/chemical corporations, namely Monsanto, DuPont, Syngenta, Bayer, Dow and BASF—the Big Six.

Even more dramatic changes have occurred since the commercialization of transgenic, or genetically modified (GM), seeds from the mid-1990s on. The truth is that the Big Six are increasingly taking over market share to eliminate competition and do as they choose. Economists say that when four firms control 40 percent of a market, then that market is no longer competitive. The top four seed firms now control at least 56 percent of the global proprietary seed market and continue to take over more territory.

Here's the Big Six at a glance:

- **Monsanto:**
 - As the world's largest seed company that is connected to the other five of the Big Six, Monsanto has gained its #1 ranking by research and development and acquisitions of biotech and seed companies, including gaining 50 seed companies during a 13-year period.
- **DuPont:**
 - DuPont has alliances with Monsanto, Syngenta and others and gains access to seed varieties it currently doesn't own by entering into customized agreements with some of the largest remaining independent seed companies.
- **Syngenta:**
 - Syngenta has a 50/50 joint venture with DuPont called GreenLeaf Genetics to sell foundation seed to other seed companies.
- **Bayer:**
 - Bayer has recently become more active in acquiring cottonseed companies, although it purchased Stoneville from Monsanto for \$310 million in 2007.

³ Article by Jordan Rubin, <http://www.extraordinaryhealth.com/ArticleLandingPage/tabid/2243/Default.aspx?ContentPubID=881>

- **Dow:**
 - Dow has become more active in making acquisitions and developing joint ventures—focusing on partnering and allying itself with other companies.
- **BASF:**
 - BASF holds patents on many transgenic seed traits having to do with climate change and has an agreement with Monsanto to spend up to \$1.5 billion on engineering stress-tolerant crops.

Additionally, there are tons of cross-licensing agreements among the Big Six—described as “non-merger mergers” because there’s aren’t changes of ownership, although they resemble what some call “cartel behavior.” Monsanto has a central position because it has agreements with each of the other five firms, but they are all inter-connected at some level. I call their connections unholy alliances.

Then there’s the Big Six and food insecurity. Monsanto and the other Big Six aggressively push genetically modified (GM) foods into mainstream America, and these biotech companies sell GM seeds and their GM-seed-tailored herbicides as package deals to farmers. The catch is that the seeds don’t regenerate from year to year, causing farmers’ continual dependency on GM seed and its corresponding, customized chemicals. What’s more is that GMO produce is more vulnerable to climate change, pests and disease.

To me, that’s a perfect storm for food insecurity, but food insecurity isn’t the only fallout from GM foods. They also provide less nutrition and may severely compromise your health—in areas such as the immune system, reproductive system, gastrointestinal system and endocrine system as well as major internal organs such as the liver, kidneys, spleen and much more.

Incidentally, GM foods are more prevalent than you might think. In fact, GM corn and soy make up more than 80 percent of all GMOs available and are found in nearly every processed food in the U.S., but GM food manufacturers don’t have to say on the label that a food contains GMOs. Bottom line: If you don’t purchase organic food, then you’re getting food filled with GMOs.

Don’t put up with Monsanto’s—and the other five of the Big Six’s—attempts at world dominion of our food chain. Choose organic and non-GMO certified to beat them at their own game.