SUPERNATURAL HEALTH WATCH

Messing With Mother Nature

by Frederic Patenaude.

Through all generations of time, common plants, as humans have known them, have been the same. A soybean has been a soybean, and a potato has been a potato. But, because of the greed and abuse of power of certain agri-biotech corporations, a soybean may now be a pig, and a potato may now be a jellyfish.

Are you confused? Well, you haven't heard anything yet.

Walk inside your nearest supermarket. Do you notice much difference compared to ten years ago? Beside a modern touch in the design of the store and in the packaging of the merchandise, along with some new products, your supermarket probably doesn't seem much different than it was ten years ago. You probably can find the same types of foods and products that existed a decade ago. But, beyond the appearance of your local food store, something major has changed. Yet you don't know it is there because it is not mentioned anywhere. No labels will let you know that about two thirds of all the products in your supermarket may contain ingredients that have been genetically engineered. More specifically, two products out of every three in your supermarket may contain plant ingredients that are the result of scientists working for agri-biotech corporations.

If you live in North America, and buy your fruits and vegetables at the supermarket, and want to avoid genetically engineered foods, all we can say is: "good luck."

So far, 50 genetically engineered (GE) crops have been approved by the USDA, including potatoes, tomatoes, melons, and beets. GE rice, wheat, cucumbers, strawberries, apples, sugarcane, and walnuts are being grown on test sites. And genetically altered alfalfa, broccoli, cabbage, and lettuce may not be far behind. GE foods are everywhere, and are not allowed to be labeled by the government. This means that the companies making money from these foods have used their political influence to manipulate laws and the regulations of government agencies in a way so that you will not be able to easily find out the difference between a conventional tomato, and a genetically engineered tomato.

Why? Because they know that if consumers were informed, and had the choice between natural food and a GE food, the consumers would not purchase GE foods. To protect their profits, the companies making money from these foods want to pass GE foods under your nose without you even knowing it. In 1999, one-fourth of American crops were genetically engineered. This fidgeting with Nature is likely to become more rampant.

In December 1999, two scientific teams working in Europe and the U.S. announced that they successfully decoded a complete plant chromosome from an Arabidopsis thaliana, a member of the mustard family. This involved identifying millions of elements that are the brickwork of chromosomic structures. This has been hailed as a milestone in understanding the secrets of the plant kingdom. And will likely result in even more genetically engineered foods. (The journal Nature, December, 16, 1999) The American team of scientists worked out of the Institute of Genomic esearch in Rockville, Maryland, where they sequenced the Arabidopsis Chromosome 2. The European Union team worked out of the John Innes Center in Norwich, England, and sequenced Arabidopsis chromosome 4.

It is expected that scientists will sequence all five Arabidopsis chromosomes by the summer of 2000. "By sequencing Arabidopsis, you can use that information to infer the basic set of genes that make up any plant," said Michael Bevan, the coordinator of the European Union team.

The mustard plant used in the process of decoding a complete plant chromosome has been a favorite of scientists in the study of plant genetics because its genome (the complete collection of its DNA) is relatively small compared to other plants. It is also a good subject for the decoding process because it will likely give scientists a doorway into the genetic workings of other flowering plants, such as rice, corn, and wheat— plants that agri-biotech corporations are very interested in altering.

Once these elements of the plants have been identified, scientists then go about figuring out the functions of each gene. This involves identifying which gene governs each aspect of the plant, including the plant's size, weight, shape, texture, taste, and color, and how much water it uses; how long it takes to grow; how much product can be harvested from each plant; and the length of the plant's life.

What are GE Foods?

Genetically Engineered (GE) foods are foods containing grains, fruits, vegetables, and legumes that have been tampered with in laboratories at the genetic level. Genetic engineering creates new types of plants by altering the genetic "blueprint" of these crops. Cutting, joining, and transferring genes between unrelated organisms, creates plants with unique, man-designed qualities, and these are then known as genetically engineered plants. The produce of these plants (fruits, vegetables, etc.) is then known as genetically engineered food.

Every plant or animal is unique because of the different genes contained within the cells of that organism. As mentioned above, the genes determine everything from the color to the size of the plant. Genetic engineering is the process of modifying the genes of a plant to make it appear, grow, smell, feel, or taste differently than it would naturally be. Genetic engineering can also make the products of the plant hardier so that they are less likely to be damaged during shipping, and so that they will last longer on store shelves.

Genetic engineering is light years beyond typical crossbreeding. As you may already know, crossbreeding is a simple technique that has been used for thousands of years to alter crops and animals. Crossbreeding consists of breeding between two varieties of the same or similar species. On the other hand, genetic engineering is the Frankenstein version of this theme. In crossbreeding, farmers do not stray very far between species. Two vegetables of the same family may be crossbred together, but, until recently, no one would ever try to crossbreed a tomato and a fish together. Genetic engineering has destroyed this barrier, and it is now possible to tamper with crops in such a radical way as to mix animal genes with plant genes. Not only is it possible, but, it has been done.

The mutant potato is now a reality, and it is quite a freaky one at that. This is because Edinburgh scientists have mixed jellyfish genes with potatoes, resulting in spud plants that glow when they need watering. The idea was to plant a few of these per hectare for water monitoring purposes, and not for human consumption. We just wonder what will happen if the GE potatoes get mixed in with the regular batch.

Because genetic mistakes can never be recalled once they are planted outside for a season, GE poses one of the greatest dangers of any technology. Genetic defects are passed on to all subsequent generations, and their effect may spread without limit.

"We are living today in a very delicate time, one that is reminiscent of the birth of the nuclear era, when mankind stood at the threshold of a new technology" says Dr. John Fagan, a molecular biologist and former genetic engineer. "No one knew that nuclear power would bring us to the brink of annihilation, or fill our planet with highly toxic radioactive waste. We were so excited by the power of a new discovery that we leapt ahead blindly, and without caution. Today the situation with genetic engineering is perhaps even graver because this technology acts on the very blueprint of life."

Why are GE foods everywhere?

GE foods exist because of the agri-biotech companies desiring to enrich their pockets without limit. In defending their actions, these corporations have claimed that GE foods will be a solution to world hunger. They have claimed that more productive and resistant crops will be created, and this way more food will be available at lower cost and will use less labor. And they have claimed that genetic engineering will result in foods with a longer shelf life, more nutrition, and better appearance. But these claims should be looked at as nothing more than marketing ploys. The claims are made up of nice words and are pure hogwash babbled by the public relations firms of these companies. They are also claims made by overly aggressive scientists whose interests may exist more prominently in promoting themselves rather than in considering the potential dangers of what they may be creating in their labs.

Lies after Lies

Take one of the lies propagated by the agri-biotech companies: GE crops require fewer pesticides. What is the reality behind this claim? Agri-biotech companies are using GE technologies to help sell higher quantities of the pesticides they manufacture.

Here is the truth: Most companies behind agri-biotech (Monsanto, DuPont and Novartis, etc.) are the same ones that manufacture pesticides. Crops are created to be able to resist high amounts of pesticides, which are in turn sold by the same agri-biotech companies. Monsanto, for example, has created the Roundup Ready soybean, which is engineered to withstand higher doses of Monsanto's Roundup pesticide. Approximately 57 percent of soybeans grown in the U.S. in 1999 were of this GE variety. About 30 percent of the corn grown in the U.S. in 1999 was of a variety that was genetically engineered to be toxic to the European corn borer. The most recent research shows that farmers are using the same, and in some cases higher, quantities of pesticides on GE crops than they do on non-GE crops.

Take another lie: GE foods will feed the world's poorest countries. What is the reality? Agri-biotech companies will indeed feed the poor, and enslave them at the same time, by forcing them to purchase seeds through their giant corporations. How is this so? Through one of their technological creations they have named the "terminator seed." This creation has been pursued by Monsanto, one of the world's largest agri-biotech companies, and, according to the Organic Farmers Marketing Association, was developed with USDA resources.

The terminator seed is a GE technology that sterilizes seeds produced by crops. Crops then produce seeds that are sterile, and can only be used as food items, and not to grow the next crop. Why have these been created? Because that technology would force farmers to purchase seeds every year from the agri-biotech companies selling the seeds. Under the terminator technology, all the staples of the world, such as wheat, rice, and soybeans, would be under the control of the biggest scam known as International Agribusiness.

Another lie: GE crops produce larger yields. What is the reality to this claim? Research has demonstrated that genetically engineered seeds do not significantly increase crop yields. In one study, which involved more than 8,200 field trials, Roundup Ready soybeans produced fewer bushels of soybeans than non-GE soybeans. The study was conducted by Dr. Charles Benbrook, the former director of the Board of Agriculture at the National Academy of Scientists.

Even if GE technology would produce larger yields, one has to wonder what impact the genetically altered plants will have on other forms of life. Unfortunately, because these companies are so greedy for money and aggressive in their goals, we are likely to find out.

Problems with GE Foods

One result of GE foods is that the technology may lead to the deletion of important food elements. Genetic engineers may intentionally remove or inactivate a substance they consider undesirable in a food. The substance may have unknown but crucial qualities, such as cancer-inhibiting abilities. Not only may this affect the humans who eat the plants, but it will likely affect all of the wildlife that may also consume the plants.

GE foods that are tampered with to stay fresh longer may just appear desirable. But, it should be remembered, as with anything, appearance is not everything. Especially when you are considering foods that may not taste well, and may also have a weak life force. One has to consider what the life force would be of a plant that may only be manufactured to taste and look good, but which have weak enzymatic qualities, and also may be lacking in elements that the natural plant would have contained.

More abominations

Since the last world war, "chemical companies have been making huge amounts of money by selling toxic chemicals known as pesticides to spray on crops. Now the game is changing: Genetic engineers have created potatoes that actually can produce their own pesticides." These are the words of "The GE Tutorial" published by the people of the Internet campaign which may be accessed through www.thecampaign.org. They add that, "The New Leaf Superior (potato), marketed by Monsanto since 1995, is engineered to produce the insecticide Bt, or Bacillus thuringiensis, in each one of its cells. But kills the Colorado potato beetle, one of the biggest threats to potatoes. . . Unfortunately, the pesticidal potatoes are not labeled. So, unless you consume only organic potatoes, there is no way to be sure that you are not eating the pesticidal variety. And some scientists say that the long-term effects of eating these potatoes are unknown."

Would you trust having pesticides in each bite of your potato?

Genetically mutated trees

One of the most disgusting and frightening images that comes to my mind when I think of what the agri-biotech companies are trying to achieve with GE is the one of the genetically engineered forest. The idea here is to create trees that would never flower, but grow faster than traditional trees, while being lifeless in comparison.

These trees would be used to satisfy the world's hunger for all the dirty and useless newspapers, magazines, and other publications being printed everyday. As the demand for paper grows every year, these companies see themselves reaping increased profits from the sale of their GE forest lumber. If you were to walk in a GE forest, you would be surprised by its silence. Gone would be the bees, butterflies, moths, birds, and squirrels that depend on pollen, seed, and nectar of normally reproducing trees. Does this unnatural state sound like a future you would like to be part of?

"Edible vaccines" and other medical uses of GE foods

Going beyond the most evil ideas, agri-biotech companies now plan to be able to create what they call "edible vaccines." How is this so? By inserting vaccines in bananas, potatoes, and other fruits and vegetables. If you are like us, and think that vaccination is one of the greatest scams in existence, how will you avoid these edible vaccines? What will be the repercussions to your health? The same companies that developed toxic pesticides, such as DDT, which have proven to be incredibly destructive for both human life and the environment, now claim they are gathering the efforts to improve people's health. How? By creating fruits and vegetables that would offer higher levels of anti-oxidant vitamins and other nutrients. When considering all of the damage these companies have done to wildlife, are you really trusting of these companies to get it right this time?

The Threat to Human Health

At this very moment, millions of acres of GE crops have been planted, and nearly two-thirds of the products on our supermarket shelves may contain GE ingredients. These products not only include Kellogg's Corn Flakes, and vegetarian burgers, but fresh produce as well. Despite all of this production of and marketing of GE plant materials; very few studies have been conducted to determine whether genetically engineered foods are harmful to human health.

GE foods have been rushed to the market, and, without any labeling, the average person is not even aware of their existence. Critics of GE technology hold that there is not enough known about GE plants and the allergies that may arise from such mad science projects. It has been shown that GE foods may cause allergic reactions in many people. This is because of the transfer that takes place of new and unidentified proteins from one food into another. In 1996, scientists found that soybeans engineered to include genes from the Brazil nut also contained the allergenic properties of the Brazil nut. What will happen as other foods become tampered with in a similar way in laboratories, and are then released to the markets without proper labeling?

GE foods may produce new toxins, with potentially devastating results for all life. In at least one case, disaster has already happened. In 1989, a genetically engineered version of tryptophan, a dietary supplement, produced toxic contaminants. Before the Food and Drug Administration recalled it, the mutated tryptophan wreaked havoc. Thirty-seven Americans are said to have died because of the tryptophan, 1,500 users were considered to be permanently disabled, and 5,000 became ill with a blood disorder, eosinophila myalgia syndrome.

Tampering with the DNA of plants is rife with potentially serious consequences. And the problem does not stop with a threat to human health. As an example of what GE plants may do to wildlife, one has only to look at the monarch butterfly. Lab tests have shown that pollen from GE corn can kill the butterfly's caterpillars. This should give anyone pause. Without caterpillars, there will be no butterflies.

Threat to the Environment

"Many of the new GE crops, such as Roundup Ready soybeans, have beendesigned to allow farmers to spray heavier doses of pesticides on their land.These pesticides inevitably will find their way into our water and food supply, endangering humans and wildlife. New Scientist magazine reports that many farmers who have converted to GE production use as many pesticides as their conventional counterparts, while some GE farmers now use more pesticides. And one of Britain's leading safety experts, Malcolm Kane (former head of food safety of the supermarket chain Sainsbury's), has revealed that the limits on pesticide residues in soy had been increased 200-fold to help the GE industry."

The Campaign.

In another quite macabre application of GE technology, scientists are seeking to develop "terminator" tree farms. The trees would be engineered not to reproduce, and they would be designed to secrete toxic chemicals through their leaves that would kill leaf-eating insects. The trees also would be engineered to include pesticide resistance, meaning that ground flora could be wiped out easily.

The threat posed by this abomination is one to biodiversity. Scientists estimated that by the year 2000, the world will have lost 95 percent of the genetic diversity in agriculture that was present 100 years earlier. GE crops are developed from the same mono-culture varieties that giant agribusinesses have planted in the latter half of this century, and the actions of these greedy companies will only exacerbate the problem.

Further, pesticide-resistant crops will allow the application of increasing amounts of powerful pesticides. These pesticides often kill more than the targets. As has been the case with all forms of pesticides, they do more harm than good.

The Threat to Organic Foods

Because it is very obvious to any sensible and intelligent person that tampering with foods in laboratories will NEVER lead to any good, the labeling of GE foods is still not in effect. At this point, the only way to be sure to avoid GE foods is to buy certified organic foods exclusively, or to grow your own food using organic seeds and soils.

But even if you are eating 100% organic, are you totally protected from the threat of GE crops? Not quite, because of the fact that it is impossible to avoid seed and pollen pollution from genetically engineered crops. The wind carries seeds, and the wind and insects, such as bees, and also even animals, may carry contaminated pollen to fields miles away. For example, in early 1999 a Wisconsin organic chip exporter was forced to destroy thousands of bags of chips because a European importer discovered that they were contaminated with genetically engineered corn.

Organic food is also compromised because of the agri-biotech companies' desire to tap into organic markets. Some of you may remember how in 1998 the government tried to include in the definition of "organic" such abominations as genetically engineered foods, irradiated foods, and foods grown in ground containing toxic sewage. The organic food industry is a burgeoning market that has been growing at a 20 percent annual increase. Agri-biotech companies are trying to tap into this market so they may grab part of the financial cake.

But, if you want to know what farmers think of genetic engineering, read what the Organic Farmers Marketing Association has to say about GE foods: Genetic engineering in agriculture has significantly increased the economic uncertainty of family farmers throughout the U.S. and the world. American farmers have lost critical markets which are closed to genetically engineered products. Corporate control of the seed supply threatens farmers' independence. The risk of genetic drift has made it difficult and expensive for farmers to market a pure product.

Genetic engineering has created social and economic disruption that threatens traditional agricultural practices for farmers around the world. Farmers, who have maintained the consumer's trust by producing safe, reasonably priced, and nutritious food, now fear losing that trust as a result of consumer rejection of genetically engineered foods. Many scientists believe genetically engineered organisms have been released into the environment and the food supply without adequate testing. Farmers who have used this new technology may be facing massive liability from damage caused by genetic drift, increased weed and pest resistance, and the destruction of wildlife and beneficial insects. (From the "Farmers' Declaration on Genetic Engineering in Agriculture." (http://web.iquest.net/ofma/nffc.htm)

What you can do about GE foods

Right now the situation is that the U.S. government is acting on the behalf of the wealthy and powerful agri-biotech corporations rather than for the concerned population of consumers, which, when considering past actions of the U.S. government, is not surprising. Do not expect the U.S. (or Canadian) government to do everything in its power to ensure that your health is protected more than the interests of the agri-biotech companies. The offices of the U.S. government are so connected with the agri-biotech companies that they may be considered to be run by the same people, and they often are. Agri-biotech companies employ former government employees, and vice versa. Because of this, one should not expect those who run these companies to make the best decisions for the public.
If you want GE foods to be out of the markets as soon as possible, you will have to take some action yourself.

First understand that, whenever you buy something, you vote with your dollars. So, if you spend your money on GE foods, you are voting in favor of the agri-biotech companies. Because there is no labeling of GE foods, to ensure that what you buy has not been genetically engineered, you will have to purchase organic foods exclusively. Organic foods are not only more nutritious, and free of the chemical fertilizers and pesticides that conventional foods contain, they are also most likely to be non genetically-ngineered.

Organic foods may cost more than conventional foods, and may require a little effort to get, but in the end, understand that you pay now, or you pay later. There is just no other alternative.

European and Asian consumers have already put up great resistance to GE foods. U.S. consumers are just now getting on the bandwagon. To take action against GE foods, write to your elected officials, government agencies, and the media, and let them know that you do not support GE foods, and that you demand their labeling. The following web site may guide you in the process: www.thecampaign.org
You may also learn more about organic gardening from a company called “Seeds of Change.” This company sells seeds that are 100% organic, open pollenated, non-hybrid, and GE free. The company has a great web site, and also sells books about organic gardening. They may be contacted at P.O. Box 15700, Santa Fe, NM 87506; 1-888-762-7333

What others are doing to protest GE foods

You may be happy to know that Greenpeace activists have taken a stand against GE foods. They staged a protest at Kellogg’s headquarters in Battle Creek, Michigan, where they referred to the use of GE foods as a “monstrous experiment.” One protester dressed in the image of Kellogg’s trademark Tony the Tiger, but renamed the character “Franken-Tony.” FrankenTony also appeared at a Food and Drug Administration forum with a group of children dressed as monarch butterflies who pretended to be dead at the base of a mock cornstalk. Greenpeace also played a part in getting Gerber to stop using GE corn and soybeans in that company’s baby food products.

On Tuesday, December 14, 1999, a class-action lawsuit was filed in U.S. District Court on behalf of six farmers. These farmers are accusing Monsanto of conspiring to control the world’s seed trade, and other seed companies of rushing GE crops to market without adequately studying their effects on health and the environment. The suit alleges that the corporations have abused their biotechnology patents, coordinated with each other to fix prices, and are forcing farmers to use GE seeds.

Jeremy Rifkin, who is the author of the insightful book “Beyond Beef,” and a prominent anti-biotech activist, recruited nine law firms to handle the suit. Five farmers in Iowa and Indiana, and one in France, are listed as plaintiffs, but the suit was filed on behalf of all farmers who have purchased GE seeds. The National Farm Coalition, which is opposed to GE foods, assisted in developing the suit. Michael Hausfeld, the lead attorney in the case, has said that companion suits are being considered in several countries, including India and Britain.

Also, two major health food chain stores in America, Whole Foods Markets and Wild Oats Markets, have planned to eliminate all genetically engineered ingredients from their private label brands.

Follow the Money

The agri-biotech firms, some of which brought about the most toxic chemicalsknown to man, have said through their attorneys that they would not put a product on the market that they are not absolutely confident is safe and effective. The only thing GE foods appear to be safe and effective in is that of getting more money into the hands of agri-biotech stockholders.

To help create a market for their products, the agri-biotech companies are planning a major public relations campaign to lobby politicians and try to get the public to believe that GE foods are a good thing. And, by the way, in December, 99, scientists announced the successful sequencing of a human chromosome. Get ready to say hello to Frankenstein.