

## Because Genetically Engineered Foods May Cause Rising Food Allergies Buy Organic

The huge jump that has occurred over the past few years in food allergies among US children has been found in the news often, but the reports fail to investigate a link to a recent major change in America's diet. Starting in 1996, bacteria, virus, and other genes have been artificially inserted to the DNA of soy, corn, cottonseed, and canola plants. These extras are unlabeled genetically modified foods that carry a risk of triggering life-threatening allergic reactions. Evidence collected over the past decade suggests that they are part of the problem that is contributing to higher allergy rates.

Scientists have known for quite some time that GM crops cause allergies, but there are no tests to prove in advance that a GM crop is safe. This is because people aren't usually allergic to a food until they have eaten it several times. It is the ethical considerations of feeding unlabeled, high-risk GM crops to unknowing consumers that have many people upset. Critics of GM foods often say that the US population is being used as guinea pigs in an experiment.

The sad part is, experiments have the benefits of controls and measurements and, in this case, there is neither. GM food safety experts point out that even if someone were to try to collect data about allergic reactions to GM foods, they would probably not be successful as the potential allergen is rarely identified and the number of allergy-related medical visits is not tabulated.

The classical understanding of why a GM crop might create new allergies is that imported genes produce a new protein, which has never before been present. This new protein may trigger reactions. The GM variety that is planted in 89 percent of US soy acres gets its foreign gene from bacteria and we do not know in advance if the protein produced by bacteria will provoke a reaction. As a precaution, scientists compare these proteins with others in a database of proteins that are known to cause allergies. If the new GM crop contains an amino acid sequence that is found in the allergen database, the GM crop should either not be commercialized or additional testing should be done.

Although biotech advocates claim the process of genetic engineering is precise, this is false. The process of creating a GM crop can produce massive changes in the natural functioning of the plant's DNA. Native genes can be mutated, deleted, permanently turned on or off, and hundreds may change their levels of protein expression damage may result in increasing levels of an existing allergen, or even producing a completely new allergen within the crop.

The levels of one known soy allergen, trypsin inhibitor, were up to twenty-seven percent higher in raw GM soy. Additionally, cooking soybeans normally reduces the amount of this protein, the trypsin inhibitor seems to be more heat resistant, as the levels in cooked GM soy are nearly as high as those found in raw soy and seven times higher than cooked non-GM soy. This allergen in GM soy may be more likely to provoke reactions than when consumed in natural varieties. Another study concluded that GM soybeans contain a unique protein that is not found in non-GM soy controls.

By 2004, farmers used an estimate 86 percent more herbicide on GM soy fields than compared to non-GM. These higher levels of herbicide residue in GM soy have been shown to potentially cause health problems. Actually, many of the symptoms identified in the United Kingdom soy allergy study are amongst those symptoms related to glyphosate exposure.

If proteins survive longer in the digestive tract, then they have more time to cause an allergic reaction. Studies on mice showed dramatically reduced levels of pancreatic enzymes when fed GM soy. If there are less protein-digesting enzymes available, then food proteins may stay longer in the gut, which allows for more time to produce an allergic reaction. A reduction in protein digestion because of GM soy consumption can promote allergic reactions to a large range of proteins, not only just the soy. As of now, no human studies of protein digestion related to GM soy have been conducted.

There is at least one protein found in natural soybeans that is cross-reactive with peanut allergies. This means that consuming soybeans may trigger a reaction for some of those people who are allergic to peanuts. Although it is possible that side effects from genetic engineered soybeans may increase the occurrence of cross-reactivity, it is unlikely that any research has been done to investigate this. Genetically engineered soy was introduced into the United States food supply in late 1996. This leaves us only to wonder whether this had an influence on the doubling of peanut allergies that has occurred from the years 1997 to 2002.

The introduction of genetically engineered foods into our diet was done quietly and without the mandatory labeling that is required in most of the other industrialized countries. Without knowing that GM foods might increase the risk of allergies and without knowing which foods contain GM ingredients, the biotech industry is gambling with our health for their own profit. However, this risk is not lost on everyone as millions of shoppers are now seeking foods that are free from any GM ingredients.

Organic foods are not allowed to contain GM ingredients. By buying products that are certified organic or that say non-GMO are two ways to limit the risk of consuming GM foods. Another way to avoid those products containing ingredients from the seven food crops that have been genetically

engineered: soy, corn, cottonseed, canola, Hawaiian papaya, and a little bit of zucchini and squash. This also means avoiding soy lecithin in chocolate, corn syrup in candies, and cottonseed or canola oil in snack foods.

Thanks to the Campaign for Healthier Eating in America, your shopping will soon be made easier. This Consumer Non-GMO Education Campaign is making an effort to clean out GM ingredients from foods and the natural products industry. This campaign hopes to circulate helpful non-GMO shopping guides to organic and natural food stores nationwide, providing consumers with regular GM food safety updates that explain the discoveries about GMOs.

### About the Author

More information on [Organic Food Manufacture's](#) is available at VitaNet &reg;, LLC Health Food Store. <http://vitanetonline.com/>

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