

# **Formaldehyde in GMOs, Yet Another Unlisted Ingredient**

By policy, the FDA considers GMO foods to be substantially equivalent to their non-genetically modified counterparts, and to be generally recognized as safe. GMOs do after all, look very similar to their conventional counterparts and they are grown under somewhat similar conditions. Under FDA guidelines, this leaves foods that are newly invented to be poorly tested, and the FDA assumes them to be safe without sufficient evidence to reach such conclusions. Under the limitations of our current biotechnology, whenever genes are artificially manipulated, unintended consequences inevitably result.

## **Independent Scientists Are Finding That GMOs are Not Substantially Equivalent to Their Conventional Counterparts**

A new study from Cambridge University demonstrates that GMO soy is less nutritious and more toxic than conventional soy. Each GMO crop is unique, and this study focused solely on one type of genetically modified soy. Undoubtedly, more research is needed on other GMOs. So far the FDA's notions of substantial equivalence, are not holding up in independent research. As is often the case, independent science is yielding objective results, giving us the good news with the bad.

## **The Revolving Door Told Us GMOs**

## **Were Safe**

FDA assumptions of substantial equivalence were at best based upon wishful thinking, but much more likely to have been decisions made with the intention of prioritizing profit over health. The FDA is after all, staffed by a revolving door of management level biotech and pharmaceutical employees. FDA hierarchy move back and forth between the private and public sectors, reaping huge benefits along the way. Consumer advocates don't work at the FDA; it is the industry insiders who do. The independent scientists are doing the testing for safety that the FDA should have done.

## **System Biology is Yielding New Insight Into GMOs**

Using a systems biology approach, two researchers from Cambridge University have demonstrated how the genetic modifications made to CP4 EPSPS, better known as Roundup Ready soy, has resulted in significant systemic changes to the plant's nutritional value, rendering the GMO soy bean less nutritious and more toxic.

Dr. Ayyadurai and Dr. Deonikar's results show how instead of the plant producing normal levels of enzymes and antioxidants such as glutathione and super oxide dismutase, Round Up Ready soy is almost completely devoid of glutathione. This GMO soy produces significant amounts of formaldehyde, a substance that is widely known to be toxic and a carcinogen.

## **Formaldehyde Is Not The Kind of Chemical That You Would Want in**

# Your Food

Formaldehyde has a lot of uses in manufacturing. It is often used as an additive in glue, in wrinkle free shirts, as an additive in hair straighteners, and it has been used as an embalming agent for thousands of years. (It is believed that the Egyptians were the first to use formaldehyde). The chemical is falling out favor with many funeral directors. When used in embalming, great effort is made to avoid accidentally breathing in the fumes. Despite improved ventilation and modern protective gear, many funeral homes refuse to work with formaldehyde simply because it is too dangerous. Its ubiquitous use in manufacturing has come under scrutiny as well.

We can add formaldehyde as yet another one of the ingredients that is being hidden in our food. The struggle to label genetically modified soy can be thought of as the struggle to label formaldehyde laden, antioxidant deficient soy as well. There is no scientific justification to assume that GMOs are substantially equivalent to other foods. On the other hand, there is plenty of evidence that GMOs kill beneficial microbes in our gut and damage our digestive system (see *Leaky Gut Syndrome and Autoimmune Diseases*). After all, that's what they're designed to do.

## Recommended Reading:

- *Understanding and Detoxifying Genetically Modified Foods*
- *Scientists Against GMOs – Hear From Those Who Have Done The Research*
- *Doctors Against Vaccines – Hear From Those Who Have Done The Research*
- *Celebrities Against Circumcision*

## Sources:

- *Do GMOs Accumulate Formaldehyde and Disrupt Molecular*

*Systems Equilibria? Systems Biology May Provide Answers  
– Scientific Research*

- *Seeding Fear – Neal Young.com*
- *Artificial Versus Natural Genetic Modification & Perils Of GMOs – Permaculture Research Institute*
- *Despite Risk, Embalmers Still Embrace Preservative – New York Times*