



The Death of Food

The shocking truth about genetically engineered foods

Soylent Green is people! Soylent Green is people!

This is the classic line from the 1973 science fiction classic *Soylent Green*. The story takes place in a future in which food is so scarce that society lives off processed foods, one being a high-energy wafer called Soylent Green. But rather than being made from plankton as claimed, it is actually made from people – which the lead character, a police detective played by Charlton Heston, eventually learns. Yes, this is certainly fiction, but there is one scary type of food that is certainly not science fiction. It's called *genetically engineered organism*, or GMO.

A genetically modified food is made by taking the genes of one species and inserting them into the DNA of a food, or animal, to introduce a new trait. For example, inserting a soil bacterium called *Bacillus thuringiensis* into plants makes these plants toxic to insects – an insect will die if it eats these genetically modified plants. Another trait that can be engineered in plants is resistance to toxic herbicides. Both of these traits increase profits for farmers by increasing crop yields.

What, you might ask, does the government have to say about biotechnology and GMOs? The answer is that the government sanctions them. This is an official statement of policy published on

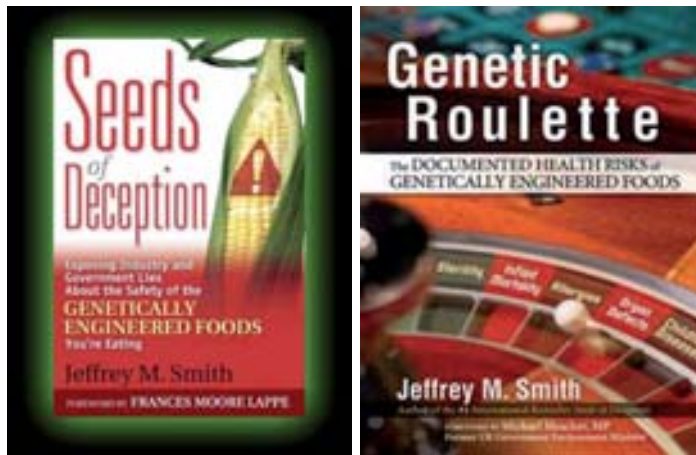
May 29, 1992, by the Food and Drug Administration (FDA): “The agency is not aware of any information showing that foods derived by these new methods differ from other foods in any meaningful or uniform way.” However, it's interesting to consider that the individual who approved this policy had previously worked as an attorney for a company that produced GMOs, and soon after he left the FDA he became a vice president for that same company.

Because the government considers GMOs safe, the US doesn't require informing consumers if their foods contain GMOs. How common are GMOs? An estimated 70 percent of the foods on supermarket shelves contain GMOs. Among the products containing GMOs are soy, corn, canola and cottonseed oil, sugar beets, Hawaiian papaya, zucchini and crookneck squash.

What the Research Says

In the 1990s Dr. Arpad Pusztai of the United Kingdom received a \$3 million grant from his government to study GMOs. Pusztai found that when genetically modified potatoes were fed to rats, the rats developed problems in the liver, brain, testicles and immune system and





Jeffrey Smith is the author of two excellent books about genetically engineered foods: *Seeds of Deception* and *Genetic Roulette*.

also showed precancerous cell growth. When Dr. Pusztai shared his unpublished research on a television program, he was fired from his job of 35 years, a consequence that smacks of dirty politics. Eventually, however, his research was published in the respected, peer-reviewed journal *Lancet*. And Pusztai is not the only scientist interested in the possible effects of GMOs on health.

One study on GMOs fed to rats was published in the *International Journal of Biological Sciences*, and the researchers found that the group of rats fed genetically modified corn had disorders of the liver, kidney, heart, adrenal glands and spleen. Likewise, a Russian study was performed on female rats that were fed genetically engineered soy flour before, during and after gestating their young. Nine percent of the rats that were fed non-genetically modified soy flour died compared to the 55.6 percent of the rats that died after eating the GMO-engineered modified soy. And of the GMO-fed rats that survived, 36 percent were underweight, compared to 6.7 percent of rats that were underweight in the control group. As for larger animals, in 2008 a farm allowed 13 buffalo to graze on

genetically engineered cotton plants – all 13 died within three days.

Another possible consequence of consuming GMOs is allergic reactions. In 1996 there was widespread use of genetically engineered crops. From 1997 to 2002, emergency room visits for allergies doubled. This increase may have been completely coincidental or it may have been due to the influence of environmental toxins, but there are many reasons to suspect GMOs are responsible because their modified proteins possess properties of known allergens and because genetically modified crops have residues of toxic herbicides that can cause allergic reactions. It has been found that genetically modified soy products can decrease the amount of digestive enzymes in the body. These enzymes affect the body's ability to break down proteins, and this can increase our allergic reactions to foods. Further, it's been found that, across the board, foods that are genetically modified have less nutritional quality than non-GMO foods.

There are many other health issues associated with GMOs. One of the most worrisome has been explored by Jeffrey Smith in two books: *Seeds of*

Deception and *Genetic Roulette*. Smith says that the genes placed in crops can transfer to humans by means of the DNA of the “friendly” bacteria and as such will continue to function after the food is ingested. Smith says this turns the human gut into a “pesticide factory” that essentially produces toxins that attack the body. Scared yet? You should be.

To help you identify GMOs in foods, you can download a free guidebook from www.responsibletechnology.org. However, there are some things you can do to get around the problem of hidden GMOs, such as buying organic foods, looking for products that say they are non-GMO, consulting a non-GMO shopping guide and avoiding foods that are likely to contain GMOs.

Feeding the world is a problem that needs to be addressed by all the world leaders. There are many solutions proposed, but one thing is for certain: Genetically modified foods should not be the future of food.

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