



Jeffrey M. Smith recently shared his GMO knowledge with Purium Members at the Purium ONE convention.

## JEFFREY M. SMITH

# SAY NO TO GMO

Why are thousands of physicians advising patients to avoid eating GMOs (Genetically Modified Organisms) and how did these high-risk foods get onto the market in the first place? The answers are disturbing, even shocking, but may help you get healthy and stay healthy.

**F**oods with added bacterial or viral genes were quietly slipped into your diet two decades ago. Using the excuse that GMOs weren't that much different, the FDA didn't require labels or even a single safety study from GMO makers like Monsanto. But a lawsuit forced the agency to release their files and the truth finally came out.

FDA scientists repeatedly warned that GMOs could create allergies, toxins, new diseases and nutritional problems and that rigorous safety testing was needed. But the White House had instructed the FDA to promote biotechnology, and Michael Taylor, Monsanto's former attorney, was put in charge

of FDA policy. (Taylor later became Monsanto's chief lobbyist, and has returned to FDA as US Food Czar.) Can you trust Monsanto with your family's health? That same company that told us that Agent Orange, DDT and PCBs were safe.

Now Monsanto's "Roundup Ready" (RR) crops are engineered to withstand their Roundup herbicide, which gets absorbed into the food and can't be washed off. A 2014 study found Roundup the most toxic of all herbicides and insecticides they tested. According to MIT scientist Stephanie Seneff, Roundup may be "the most important factor in the development of multiple chronic diseases and conditions." She co-authored a seminal paper linking it to including

obesity, heart disease, inflammatory bowel, IBS, autism, allergies, MS, Parkinson's, depression, infertility, Alzheimer's and cancer.

Some GMOs, e.g. corn, have built-in pesticides that break open holes in the stomach of insects. A 2012 laboratory study confirmed that the toxin, called Bt-toxin, opens holes in human cells. And a Canadian study found both Bt-toxin and Roundup in the blood of most pregnant women and their fetuses.

### CANCER AND GMOS

The link between consumption of genetically engineered foods and cancer came into sharp focus recently with the publication of a long-term feeding study by a team of French scientists. They fed Monsanto's RR corn to rats for two years. Starting just after 90 days – which is normally the cutoff time for feeding studies by Monsanto and the other GMO producers – the first rat developed a tumor. By the end of the experiment, up to 80 percent of the female rats had tumors of the mammary glands, and up to 50 percent of the male rats also had tumors. These numbers were far greater than the control group, which had been fed the equivalent non-genetically modified corn. The GMO-fed group also died at 2-3 times the rate, and had damaged livers, kidneys, and pituitary glands.

In addition to feeding rats RR corn that had been sprayed with Roundup, they also fed a group of rats the RR corn that had not been

sprayed. And other groups of rats were fed various levels of Roundup alone without the RR corn. They wanted to see whether any changes were due to the GMO corn or the Roundup. Ironically, all three experimental groups developed multiple massive tumors, early death, and organ damage. This means that both the GMO and the herbicide are implicated.

Other studies have linked Roundup with non-Hodgkin's lymphoma and the growth of breast cancer cells. Roundup is also linked to permeable gut, whereby the walls of the intestines develop gaps. This so-called "leaky gut" is also



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Did you know 93% of corn and soy produced in the U.S. are genetically modified?

IRT has launched [PetsandGMOs.com](http://PetsandGMOs.com) to provide information about non-GMO feed & pet food options.

We need your support to grow this campaign as we continue our efforts to drive the tipping point and educate consumers about non-GMO products & ingredients!

Visit [PetsandGMOs.com/donate](http://PetsandGMOs.com/donate) and help us to educate and support pet owners!

linked to cancer. Bt-toxin may also promote leaky gut since it can poke holes in intestinal cells. (The intestinal lining is only one cell thick).

### GENETIC ENGINEERING PROCESS MAY CAUSE DISEASES

While one or both of these two toxins, Roundup and Bt-toxin, are found in nearly

mia in the patient.

Unfortunately, the GMO crop producers don't pay much attention to potentially disastrous unintended consequences that result from the engineering process. One early study, however, commissioned by the UK government, did expose such consequences. Rats fed GMO potatoes developed potential-

We believe it is not a coincidence that the rise of these types of health issues in the US population parallels the use of GMOs and Roundup.

In addition to the health dangers, independent studies also show that GMOs don't increase yields, don't solve world hunger, and massively increase herbicide use.

**"BEFORE WE LET MONSANTO REPLACE NATURE, LET'S DEMAND INDEPENDENT, COMPREHENSIVE LONG-TERM SAFETY STUDIES. UNTIL THEN, STOP FEEDING US THE PRODUCTS PRODUCED BY THIS IMMATURE SCIENCE."**

all GMOs, even the process of creating a genetically engineered crop might promote cancer or other diseases. When producing a GMO, scientists insert a foreign gene into a plant cell using either a gene gun or via bacterial infection. They then clone that cell into a plant. The insertion and cloning process cause massive collateral damage in the normal functioning plant DNA. Genes can be switched on, shut off, deleted, or damaged.

New carcinogens, toxins, or allergens can be created in the plant, or levels of existing carcinogens, etc. might be accidentally elevated. In Monsanto's most popular Bt corn, for example, a normally silent gene found in the corn genome was switched on and now produces an allergen not previously produced by corn. Similarly, their GMO soy inadvertently has levels of a known soy allergen that is as much as seven times higher than natural soy.

This same type of side effect had a tragic outcome in human genetic engineering. While the inserted gene was supposed to cure a genetic defect, the process switched on a gene that caused leuke-

ly precancerous cell growth in their digestive tracts in just 10 days. They also had damaged immune systems, smaller brains, livers, and testicles, and partially atrophied livers. The study's design implicated the process of GMOs, not the particular gene that was inserted into the potatoes.

### NON-GMO EATERS REPORT HEALTH IMPROVEMENTS

If you don't trust GMOs, you're not alone. According to a 2013 survey by Hartman Group, over 120 million Americans say they try to avoid them. That number has more than doubled since 2007.

When people eliminate GMOs, they (and their physicians) often report more energy, weight loss, better digestion, reduced allergies and skin conditions, and relief from numerous chronic conditions. Veterinarians, farmers and pet owners describe similar improvements with animals taken off GMOs. According to a research review by the American Academy of Environmental Medicine, many of these disorders also afflict lab animals fed GMOs.

GMO advocates aggressively deny any evidence against them. According to Nature, a "large block of scientists [...] denigrate research by other legitimate scientists in a knee-jerk, partisan, emotional way." Tactics include threats, gag orders and termination. The author of the potato study cited above, for example, was fired from his institute and gagged with threats of a lawsuit. It took an order from the UK Parliament to un gag him, which eventually led to the publication of the results.

And the French team that conducted the two year rat study on RR corn came under intense attack; pressure on the journal forced them to retract it after 15 months, but it was soon republished a few months later by a more "independent" journal. (That study has successfully passed three separate peer reviews, and is far more comprehensive than any research by the GMO companies.)

The industry's research, on the other hand, is widely criticized as "tobacco science," carefully designed to cover up problems. And just as a Monsanto man guided FDA policy, GMO review

## ABOUT JEFFREY SMITH

Jeffrey Smith is the leading consumer advocate promoting healthier non-GMO choices. His feature-length documentary *Genetic Roulette, The Gamble of Our Lives* was awarded the 2012 *Movie of the Year*.

His books include: *Seeds of Deception: Exposing Industry and Government Lies about the Safety of the Genetically Engineered Foods You're Eating*, which is the world's bestseller on GMOs; and *Genetic Roulette: The Documented Health Risks of Genetically Engineered Foods*, which is the authoritative work on GMO health dangers.

He is the founding executive director of *The Institute for Responsible Technology (IRT)*, a leading source of GMO health risk information for consumers, policy makers, and healthcare professionals.

committees worldwide are often stacked with industry representatives who rubber stamp approvals or declare GMOs safe by ignoring data to the contrary.

Now FDA is considering approval of GMO salmon, as well as allowing GMO mosquitoes loose in the Florida Keys. In fact, countless GMO plants, animals, fish, insects and bacteria are being developed in labs around the world. Each could irreversibly contaminate the gene pool. There are also new varieties of corn and soybeans being considered for approval, which tolerate a new range of herbicides that are linked to cancer, birth defects, and other disorders.

Before we let Monsanto replace nature, let's demand independent, comprehensive long-term safety studies. Until then, stop feeding us the products produced by this immature science.