**Seeds of Death: Understanding the Deception Behind GMOs**

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*Today the vast majority of foods in supermarkets contain genetically modified substances whose effects on our health are unknown. As a medical doctor, I can assure you that no one in the medical profession would attempt to perform experiments on human subjects without their consent. Such conduct is illegal and unethical. Yet manufacturers of genetically altered foods are exposing us to one of the largest uncontrolled experiments in modern history.”* Martha Herbert, MD, Harvard University School of Medicine.

During the past decade, there has been a growing awareness about the limitations and dangers of genetically modified foods and chemical industrial agriculture now threatening the health, lives and environment across the planet. The pro-GMO community, including food companies and federal and state legislators, hearken bioengineering as the solution for maintaining the world’s food supply in the future. However, to date there has been no scientific evidence to substantiate this claim. Dr. John Fagan, a former genetic engineer at the National Institutes of Health, has stated,

“Crop genetic engineering as practiced today is a crude, imprecise and outmoded technology. It can create unexpected toxins or allergens in foods and affect their nutritional value. Recent advances point to better ways of using our knowledge of genomics to improve food crops that do not involve GM.”

Genetic engineering, as practiced by the agro-chemical companies, is based upon a very primitive and elementary understanding of genetics that is now a couple decades old. These companies argue their manipulation of genes is safe because, according to Peter Melchett at the Soil Association in the UK, their engineering is based upon a rudimentary understanding of genetic expression as “a straightforward process.” “They believe,” Melchett continues, “that each gene had a single, unique, independent function, and that moving a gene from one plant or animal to another would allow that gene to express that particular function wherever and however it was located.” Now that our understanding of genetic functions has advanced substantially, in fact is transformed from the unsophisticated linear thinking of the past, the corporate argument is completely false. Genes are also involved in other cellular regulatory processes and not just simply expressing traits. For this reason, the genetic engineering of plants is now being shown to disrupt the entire cellular mechanisms of an organism and we are only beginning to observe its detrimental effects.

The FDA and USDA, which regulate the national policies and laws for food and drugs, has concluded that genetically modified crops and their natural counterpart are “substantially equivalent.” This means that in the opinion of federal health and food agencies there is no substantial physical or genetic difference between a GM plant and an organic one. The result of this decision, which was rammed through regulatory agencies by the chemical manufacturers behind GM seeds and pesticides, is GM foods are not required to undergo mandatory toxicological testing and clinical trials to determine safety for human consumption. For example, since there is no need to test the safety of organic or natural corn picked from a home garden, because GM corn is ruled “substantially equivalent” it too need not undergo safety studies. However, genetics is far more complex than anyone involved in the GMO industry would want you to know.

Since the 1990s, when “substantial equivalence” was written into the rule books, there has been a growing body of scientific peer-reviewed and independent studies and literature showing that GM plants and animal products raised on GM feed pose a wide variety of serious health risks in the diet of Americans and peoples across the world.

In addition, there are many excellent studies and resources providing detailed information about GM foods. At the conclusion of this document, a list of organizations, food and health news sites, and resources for becoming active in the GM controversy has been provided to become better educated about this looming threat to the health of people and the environment.

Finally, after approximately 25 years of agricultural biotechnology and genetic manipulation, we should ask whether any GMO has proven itself to benefit humanity? Is there indisputable evidence that any GMO crop or plant has contributed to feeding ourselves and the planet? Are there sound facts that convincingly show that GMOs have strengthened food security? Have GMOs made our industrial agricultural practices more sustainable, meaning relying on less natural resources? Is any GMO proven to be more nutritious than its conventional counterpart? Are we harvesting larger yields because we are planting GMOs? And have we reduced our reliance on pesticides and chemical fertilizers by converting to GMO crops? Is the health of the population improved because the average American diet contains so much GMO ingredients?

The answer to each of these questions others is a resounding no. GMOs have contributed zero, nada, nothing whatsoever to improving humanity’s struggle to feed itself.

This question and answer sheet addresses several of the more urgent questions commonly asked by people who desire to learn more about GM foods, their health and environmental risks, and the agrochemical industry determined to control nation’s food supply.

**Are there any specific medical studies showing that genetically modified ingredients are directly related to health conditions and diseases in humans?**

The most authoritative reference text documenting scientific research that confirms the biological and health threats of genetic engineered products is *Genetic Roulette* by Jeffrey Smith, founding director of the Institute for Responsible Technology.

Conducting human clinical trials for GMO safety is plagued with obstacles, most notably the chemical corporations’ patent protection and licensure agreements preventing access to GMO seeds in order to perform independent research. The majority of research conducted on GMO safety is done solely with corporate blessings.

Although there has only been a single human clinical trial on the adverse effects of GMO foods, there have been many animal studies conducted clearly revealing a correlation between diseases observed in animals with what we are witnessing now in the rise of inflammatory and immunological diseases in humans, such as food allergies, asthma, gastro-intestinal disorders, infertility dysfunction, immunological disorders, kidney and liver anomalies, cancer and others.

The single clinical trial with human volunteers was funded by the British government to determine whether any potentially serious gene transference could occur between GM soy and the body’s natural gut bacteria. If a transference of the herbicide-resistant bacteria gene (CaMV) inserted in the GM soy occurs, it would mean that our own natural gut bacteria, essential for the body’s digestive and immunological health, would become mini factories manufacturing an herbicide toxin in our GI tract. Transgene transfer to human gut bacteria occurred in 43% of the volunteers after each person ingested a single GM soy burger and a GM soy milk shake. Many scientists opposing GMOs claim this transference is contributing to the rapid rise in food allergies in populations with high GM products in their diet. This study was focused on only one GM transgene, but there are many others found in a normal American diet. Among the potential disorders resulting from such genetic transference in the digestive tract is leaky gut syndrome, intestinal inflammation, the GI tract’s inability to absorb nutrients into the blood stream, and a weakened immune system because our small intestine is responsible for approximately 70% of our immunity.

Known health risks in animals are far greater. Very often, farmers raising livestock will report that animals immediately reject GM feed if a natural alternative is available. In India, buffalo avoid GM cottonseed cakes; and in one study of buffalo raised on natural cotton plants and later fed only Bt cotton, all died within three days. There are many studies of a variety of lab animals and livestock dying prematurely after being fed solely GM grains and feed. Farmers observe that migrating birds and local animals avoid feeding in GM planted fields. There are also numerous reports by farmers watching their livestock die prematurely, aborting or becoming infertile after consuming heavy GM feed diets

Below is a list of some of the more important medical findings involving animal trials. Many GMO health risks have been derived from the chemical companies own research

* Dr Arpad Pusztai, a renowned biochemist and plant geneticist from the famous Rowlett Institute in Scotland noted that rats fed GM potatoes developed precancerous cells in the GI tract, had atrophied livers, enlarged pancreas, regressed brain, liver and testicle development, and damage to the immune system. Dr. Pusztai, a major scientist opposing all bioengineered crops and plants, argues that this damage is not caused by the insecticide but rather the genetic engineering process itself.
* Dr. Hussein Kaoud from Cairo University in Egypt confirmed Pusztai’s research with feeding GM soy, corn, wheat and canola to rats in a study published in the journal Neurotoxicology. The rats in the Egyptian study displayed “shrinkage of kidneys, change in the liver and spleen, appearance of malignant parts in the tissue, kidney failure and hemorrhages in the intestine.” The findings also included a loss in the rats’ “learning and memory abilities.”
* Dr. Pusztai’s work complements the 2012 study by Dr. Eric Gilles Seralini at the University of Caens in France. Using the same trial protocol used by Monsanto for its FDA approval of GM Roundup Ready corn, Dr. Seralini’s rats exhibited severe organ damage, most notably to the liver and kidney. Yet the shocking discovery was the enormous tumors, especially to the mammary gland, the rats developed after a steady diet of GM corn. Fifty percent of the males and 70% of the females died prematurely. The fundamental difference between the Seralini and Monsanto study was that Seralini’s trial continued for the rats’ entire life span (up to two years) instead of only 3 months as in the Monsanto study. The length of the trial is especially significant because Seralini and his team did not observe GM corn’s serious adverse effects until the fourth month.
* In an earlier study published by Dr. Seralini, his team discovered that Monsanto’s Roundup pesticide will damage or kill testicular cells in rats between 1 to 48 hours after exposure. Roundup is one of the most popular pesticides used today in America’s industrial agriculture industry and the chemical that most contaminates fresh produce.
* An even more frightening analysis of GMO hazards was published by Dr. Jack Heinemann, Director of the New Zealand Institute for Gene Ecology, while investigating the Australian government’s GM wheat. The Australian wheat was engineered to silence certain wheat genes of microRNA (SEI genes). Heinemann discovered these silent genes matched human genes and consumption of this GM wheat could halt an invaluable enzyme that would cause death. Children born without this enzyme usually die within 5 years. According to Heinemann, three things are important: 1) plant microRNAs have been detected in human blood meaning that they survive the human digestion tract, 2) these microRNAs survive cooking and processing of food, and 3) laboratory research confirmed that this wheat microDNA silenced the human gene in cultured cells.
* In 2011, A Canadian team from the University of Sherbrooke, detected the presence of the insecticidal protein Cry1Ab in the blood of pregnant women (all who were consuming GM foods in their diets) and even in the fetal blood, proving that this toxic insecticide was being passed to the fetus. This Bt toxin is known to kill human embryonic kidney cells. It also hinders our bodies’ immune mechanisms to advance apoptosis, or the death of cancer cells, thereby increasing the risk of cancer.
* Dr. Alexi Surov at Russia’s National Association for Gene Security tested fast reproducing Campbell hamsters fed on GM soy over a period of 2 years. By the third generation of mating hamster pairs, the offspring were infertile and hair was growing from their mouths.
* Corn and canola has been bioengineered to produce sterile pollen that manufactures a toxin called barnase. Barnase is toxic to human cells and has been shown to cause kidney damage in rats.
* In Monsanto’s own studies of Roundup Ready canola, rat livers became heavier from a GM canola diet
* York University in the UK wanted to determine why there was such a sharp escalation of soy allergies—10-15% in a single year. Their findings showed that the increase directly corresponded to the UK’s introduction of GM soy into the British food supply.
* The Neurophysiology division of the Russian Academy of Sciences discovered that most rat offspring of rats fed Monsanto’s Roundup ready soy died within three weeks.
* The company Calgene had to reveal that their own studies for their GM FlavrSavr tomato caused bleeding stomachs in rats during trials.
* In December 2012, a new study from Leipzig University noted that Monsanto’s Roundup herbicide negatively impacted the natural GI bacteria in poultry. What was most frightening was that the highly pathogenic bacteria resisted the Roundup while the beneficial bacteria were susceptible to it. This finding may account for the increase in food born pathogens and contaminated meats in the marketplace.

One of the important conclusions from the French study by Seralini, is that it challenges the propaganda by scientists in the GM industry that argues that millions of people have eaten GM food and they are fine. This is just corporate gossip since in every country where GMOs have become a regular ingredient or foods source in a country we are witnessing epidemic rises in diabetes, allergies, asthma, GI illnesses, reproductive problems, and weakened immune systems.

**I don’t eat much corn and soybeans, so I don’t feel I am consuming much GMO foods and ingredients. Do I still need to be concerned?**

The average American diet and the majority of foods purchased on the shelves of large supermarket chains and grocery stores are tainted with GMOs, chemical pesticides and toxins. Many food commentators state it is almost impossible today to have a completely GMO-free diet.

In October 2012, The Environmental Working Group released a disturbing study that discovered the average American eats 193 lbs of GMOs annually, which is greater than the average American body weight of 179 lbs. However, EWG noted this is only a part of the picture because they only analyzed consumption of GMO sugars (sugar beets), corn based sweeteners, salad (soybean) oil and various products. The actual GMO weight consumption is much higher when other common GMO foods are factored in such as canola oil, cottonseed oil, other soy-based products and yellow squash. Then of course there are also dairy products from animals fed GMOs and likewise the majority of meats in the American diet

When we consider further that industry funded research by Monsanto, DuPont and other seed companies to determine health safety does not go beyond a three month trial, we should question what are the long term effects when GMO foods are eaten daily and over the course of many years. The US government does not require such studies prior to approval and registration of GMO seeds. However, in the US alone 93% of soy, 86% of all corn, 93% of canola, 93% of cottonseed and 95% of all sugar beets planted are genetically modified.

**I know that pesticides and herbicides used on farms and gardens are poisonous and highly toxic. However, I wash all of my vegetables and fruits. Doesn’t this remove the pesticides?**

No. Pesticides, herbicides and fungicides are absorbed through the skins of fruits and vegetables and became part of plant. For example, if you keep your hand in a bucket of embalming fluid long enough, the toxic ingredients of the carcinogenic formaldehyde and other solvents will be absorbed through your skin and can cause serious adverse health risks. The same is true for pesticides sprayed on plants. In time they are absorbed into the plant and increase the risk of any one or more of the many illnesses that have been associated with these highly toxic chemicals

Every year, the Environmental Working Group analyses the amount of pesticide intake into a large variety of fruits and vegetables and lists those posing the greatest health risk and those that are more safe. See EWG’s [Shoppers Guide to Pesticides](http://www.ewg.org/foodnews/).

**Our global population is growing rapidly and will surpass 9 billion people by 2050. Won’t bioengineered foods help to feed all of these people. We are told they will and that GM crops produce higher yields than traditional and organic farming methods.**

The idea that GM crops will produce higher yields sustainably is a propaganda myth invented by the Big Agricultural industry and their public relations firms. Many studies have been published through the United Nation’s agencies and other international agriculture and food organizations showing that traditional farming methods produce higher yields over the long-term. The evidence that GM agriculture, heavily reliant upon increasing amounts of fertilizer, pesticides and herbicides from year to year, showing higher yields has a small degree of truth. Early years of some GM crop farming had yields slightly or modestly higher; however, there is a peak and then a rapid descent in yield during subsequent years that is below the yields from natural farming.

According to the International Technical Conference on Plant Genetic Resources in Leipzig, industrial farming is responsible for:

* 75% of biodiversity erosion
* 75 % of water depletion
* 75% of land degradation
* 40% of greenhouse gases

The largest, comprehensive analysis of food and agriculture was released by the UN’s International Assessment of Agricultural Knowledge, Science and Technology for Development, comprised of 400 scientists from around the world to assess chemical/GM industrial farming vs. ecological/traditional farming. The report’s conclusion is that chemical agriculture is no longer an option for sustainable, productive agriculture. Only traditional, environmental friendly farming practices, including organic farming, are viable for our future.

The original mission of GM was to engineer seeds in such a way that they could withstand and survive heavy doses of pesticides and herbicides to kill off pests and weeds. There were two directions in this mission. First was to bioengineer the crop in such away that it was immune to chemical spraying. The second was to engineer the plant’s genome with the insertion of genes from the soil organism Bacillus thuringensis (commonly called Bt) that is known to express a toxic protein that kills pests when eaten. Bioengineering the plant genome with the Bt gene transforms the plant into its own pesticide factory. In effect, the bacteria’s DNA becomes part of the plant.

If we think of Bt crops as an organism that has been placed on a permanent dosage of antibiotics, we can better understand why today there is the emergence of superbugs that have evolved to become immune to the Bt pesticide. In order to fight these new superbugs, Big Agriculture dumps more and more pesticides onto farms, and this in turn creates a new class of superweeds immune to these toxic chemicals. Already we are witnessing a nightmare unfolding in agro-chemical farms with more pests and weeds becoming dominant and crops becoming far weaker, more poisonous and less nutritious when harvested.

**If it is true what our health and agriculture agencies tell us—that there is no substantial difference between a fruit, vegetable or grain grown organically and a GM variety of the same—then aren’t we getting the same levels of nutrition eating, for example, either organic corn or GM corn?**

Although there have been a few studies published making this claim, the originators of this research have been closely associated with the Big Agriculture corporations, like Monsanto and DuPont. The nutritional content and level of a fruit, vegetable or grain is directly related to the quality of nutrients in the soil the plant is grown. Chemical industrial farming relies on massive amounts of fertilizer to compensate for soil erosion and depletion due to the intensity of pesticide and herbicide use. Fertile soil used in traditional farming contains numerous bacteria and microorganisms feeding crops with a wide range of nutrients that chemical fertilizers cannot provide. Toxic chemicals destroy this essential soil flora. Although pesticides will eradicate pests that threaten crops, they are poisons nonetheless and weaken the plants’ defense systems. In short, food grown by chemical means is always weaker in nutritional content and health than its organic alternative.

In 2003, Dr. David Thomas published his research in the journal Nutrition and Health that mapped nutritional content in vegetables from 1940 to 1991. Across the board he discovered steady mineral depletion in magnesium, calcium, iron, and copper. Carrots alone had lost up to 75% of its original calcium and copper content.

Gradually, more research is being performed proving that organic produce is much higher in nutrition than their conventional and genetically modified counterparts. In a study published in the February 2013 issue of PLOS, scientists at the University Federal do Ceara in Brazil found that organic tomatoes have 55% higher vitamin C and 140% higher plant phenol (antioxidant) concentrations than conventional tomatoes. Although GMO tomatoes have been removed from our food supply there are still corporate research underway to engineer a GM disease-resistant tomato.

Jeffrey Smith notes that genetic manipulation of a plant’s genome alters the proteins these plants produce for their growth. Since plants produce thousands of phytochemicals and nutrients, we can barely comprehend the scope of bioengineering risks and dangers. These genetically altered proteins can be toxic; they interfere with the healthy phytonutrients in the plants and their level of minerals. For example, GMO soy produces less isoflavones, a proven anti-cancer phytochemical, compared to natural soy.

Dr. Don Huber, professor emeritus in agricultural science at Purdue University reported that Monsanto’s glyphosate, the primary chemical in its Roundup pesticide, infects plants in a manner similar to an AIDS-like syndrome, which destroys the plant’s immunity and hinders mineral and vitamin absorption. In effect, these pesticides are acting like viruses that destroy plants’ autoimmune systems.

**We are being told that it is possible for industrial agriculture with GM crops to coexist alongside organic farming. Is this possible.**

No. GM-pesticide intensive agriculture is completely incompatible with traditional and organic farming methods. GM chemical farming is unnatural and artificial by design and purpose and, therefore, poses multiple threats to the existence of organic farming, which is based on the natural processes of nature, soil replenishment, and the biodiversity of crop species and seed saving. It is impossible for GM pollen to be sequestered in order to prevent contamination of organic and non-industrial farms. In an article published in the Financial Express, one of the larger chemical seed and GM corporations, Bayer AG, admitted it is impossible to prevent uncontrolled spread of genetically modified crops. The US FDA and USDA suggestion that GM fields can be contained and therefore these two radically opposing farming methods can coexist is false and there sis sound scientific basis for supporting this myth.

**If all of this is true about GMOs—serious health risks, destruction of the environment, no nutritional or yield improvement in crops—then why does the US government back it unconditionally?**

The large chemical companies involved in genetically modified seeds and the manufacture of pesticides, herbicides and fertilizers that must accompany GM agriculture represent one of the most powerful lobbying forces in America. In 2011 alone, Monsanto spent more than any other agribusiness, $6.3 million, on lobbying except for the big tobacco firm Atria. There is even a group in Congress known as the Friends of Monsanto who promote legislation to boost GM agriculture and diminish small traditional farms.

After the rape and gutting of America’s manufacturing sector through free-trade agreements and off-shoring of jobs and factories to Asia, the US has little to export aside from military weaponry and technology, pharmaceutical drugs and medical devices, and food. Having already dominated almost all corn, soy, cotton and sugar beet agriculture in the US, and very shortly alfalfa, government legislators believe they are at a point of no return and GM is already branded permanently into our future. The ignorance of this position ignores the rising medical costs associated with the wide array of illnesses and serious health conditions from GM consumption..

The agro-chemical companies have among the worst corporate crime records of any large industrial complex. Among the major players are Monsanto, DuPont (Pioneer), Dow Chemical, Syngenta, BASF and Bayer. The many decades of lies, human rights violations, environmental pollution and degradation, negligence of chemical and factory safety standards, bribery of government officials and international crime to undermine different nation’s agricultural laws, and manipulation of regulatory procedures could fill volumes. What all agro-chemical corporations have in common is revenue generation and vicious profiteering by any means to achieve their financial goals. Several excellent corporate crime resources are available on the internet that give detailed information about Big Ag corporations’ lobbying activities, partners and affiliates, and criminal records

**Corporate Watch (UK)** <http://www.corpwatch.org/>

**Corporate Accountability Project** <http://www.corporations.org/>

As the ringleader of the agrochemical cartel, several organizations have recently been founded to target and expose Monsanto and its ongoing activities through nonviolent protest and community activism:

**Occupy Monsanto** <http://occupy-monsanto.com/>

**Millions Against Monsanto** (Organic Consumers Association) <http://organicconsumers.org/monsanto/>

**Occupy Monsanto 360** http://www.occupymonsanto360.org/

Finally, the recent controversy over the French research showing GMOs contributing to various cancers, and the attempts by regulatory government agencies to discredit this study, has revealed just how scientically negligent and weak our regulatory rules are for GMO crop approvals. Rather than put GMO applications through a rigorous review to assure that these modified foods are safe for consumption, the USDA and FDA have shown that health concerns are of minimal importance and GMO regulatory functions are simply bureaucratic necessities to benefit the economic health of these mega corporations, such as Monsanto and DuPont, who dominate the GMO industry.

**In November 2012, when California’s Proposition 37 to label genetically modified foods was on the election ballot, we were told that GMO labeling could cost the average family an additional $400 annually. Is there any truth to this claim?**

Monsanto, DuPont, and other chemical corporations opposing GMO labeling, the California state department and the California university system, relied upon the economic fears of Americans to defeat Proposition 37. The chemical industry funded a study at the University of California at Davis regarding food cost increase that could be used as propaganda to defeat the proposition.

Independent research conducted by Dr. Chris Viljoen, head of the GMO Testing Laboratory at the University of the Free State in South Africa, analyzed the costs for GMO labeling in South Africa and other nations where labeling is now mandatory (60 countries to date and increasing). His conclusion that GMO labeling results in rising food costs is patently false. In the European Union, which requires GMO labeling under more strict conditions than those proposed in California, found that food costs increased 0.17 percent at most. This would amount to 17 cents for a $100 food bill.

Dr. Joanna Shepherd Baily at Emory University School of Law testified before the US House Judiciary Committee and stated GMO labeling would not increase consumer costs. Food manufacturers are frequently changing labels. Baily estimated that GMO labeling would only set back an average American family $1.27 as a single, one-time expense.

Giving the chemical industry the benefit of the doubt for a moment, and assume that the chemical industry’s funded study for California is correct—that annual food costs could increase $400—there is a far more critical issue being ignored: that is, the expensive healthcare costs a family faces when a child or family member develops an immunological or inflammatory illness due to a GMO diet. This is the information Monsanto, DuPont and their lobbyists try to keep hidden from American consumers. However the statistics for the epidemic rise in diseases shows this to be the case

Lets take one example. Many studies now show a correlation between GMO food consumption and asthma and food allergies. The American Academy of Environmental Medicine includes asthma as a growing threat from diets heavily laden with GMO ingredients. According to the Pediatric Asthma institute, a quarter of American children and young adults between 5 and 17 years are afflicted with a condition of asthma. Equally alarming is that the rise in asthmatic conditions parallels accurately the increase of GMOs in the average American diet. So what is the average cost to a family with an asthmatic child, including out of pocket costs for medicine, days lost at school and work, and possible hospitalization? The American Academy of Allergies, Asthma and Immunity estimates direct and indirect costs to a family with a asthmatic member upwards to $3,000 annually. This example is only for asthma. There are many other health risks associated with consuming GMOs over an extended period of time including food allergies, immune dysfunction, gastrointestinal disorders and cancer, which can financially affect a family enormously.

**Where can a person find more information about GMO risks, organic and health news, pending legislature and how to become more active in food democracy and assuring our right to healthy organic produce?**

There are many small local food organizations in the individual states. However, the following list are those that have been at the forefront to protect organic and traditional agriculture and have been fighting on behalf of American consumers and food health against the big agricultural and chemical giants Most of these organizations have e-lists you can subscribe to and receive daily or periodic information and updates about the battle against GMOs.

[**Institute for Responsible Technology**](http://responsibletechnology.org/) is founded by Jeffrey Smith and is a world leader in educating policy makers and the public about genetically modified foods and crops. The organization publishes frequent reports on GMO risks and impact on health, the environment, the economy, corporate practices and agriculture.

[**Food Democracy Now**](http://www.fooddemocracynow.org/about/) was founded by David Murphy who has built a national grassroots community dedicated to a sustainable food system that protects the environment and supports traditional farmers and their families. The organization has been at the forefront in advocating for the labeling of GMO foods and products.

[**Organic Consumers Association**](http://www.organicconsumers.org/aboutus.cfm) being directed by food activist Ronnie Cummins is a grassroots public interest organization campaigning for food sustainability, children’s health, and corporate accountability. OCA is the primary organization fighting on behalf of the nation’s estimated 50 million organic food consumers with a gaol to convert American agriculture to at least 30% organic by the year 2015.

[**GM Watch**](http://gmwatch.org/) is a UK-based information organization monitoring everything related to bioengineered foods and big agriculture gathered from around the world. You can sign up at GM Watch’s site to receive daily news and reports as they arrive.

[**The Center for Food Safety**](http://www.centerforfoodsafety.org) is directed by national legal and consumer interest advocate [Andrew Kimbrell](http://andrewkimbrell.org/andrewkimbrell/template/index.cfm). The organization is a non profit environmental advocacy initiative challenging harmful food production technologies, including genetically modification, and a leader in promoting sustainable agriculture.

[**Food and Water Watch**](http://www.foodandwaterwatch.org/) is a health safety advocacy organization dedicated to assuring our food, water and fish are safe and sustainably produced. The organization pressures legislators to promote wholesome food (including the labeling of GMO foods) and clean water accessibility to all for their basic needs. The organization has 15 offices in the US and a staff in Europe and Latin America

[**Natural News**](http://naturalnews.com/)was founded by its chief editor and national health activist Mike Adams. It is among one of the best daily news resources for information on issues all related to health including alternative medicine, genetically modified foods, vaccines science, and corporate corruption.

[**Joseph Mercola**](http://www.mercola.com/) publishes one of the nation’s most read health sites dedicated to natural health and everything related to the corporate pharmaceutical, medical, chemical and agricultural industry that threatens the health and safety to people.

**Coalition of States for GMO Labeling** is a grassroots effort now with 30 states to persuade state legislatures to bring up a vote on GMO labeling. For information on becoming involved in your state to educate and promote GMO labeling, inquire with an email to gmolabelingstatecoalition@gmail.com

[**The Alliance for Natural Health**](http://www.anh-usa.org) is an international organization promoting sustainable health practices, freedom of choice in healthcare, and accessibility to non-toxic healthy food, vitamins and supplements at the federal and local state levels. The Alliance is perhaps the most active organization lobbying Congress and state legislatures, and serves as a government watchdog to file complaints on actions taking by the FDA, USDA and other federal health agencies.

[**Just Label It**](http://justlabelit.org) is a grassroots organization started in California to fight state legislators to mandate GMO labeling. The organization in partnership with many of the more notable organic food companies is taking the petition for mandatory labeling to the FDA.

[**Center for Environmental Health**](http://www.ceh.org/) is a non profit organization taking on the industrial chemical industry to eliminate the threats chemicals pose to children, families and communities.

[**Consumers Union**](http://www.consumersunion.org/) is a large national organization with lobbyists fighting for a fair, just and safer marketplace for consumers. Their website provides consumer information on a wide variety of topics including genetically modified foods.

[**Environmental Working Group**](http://www.ewg.org/) is a public health and environmental organization that advocates for health protection on Capitol Hill. Among their primary goals is to **conduct** scientific research to expose chemicals and products dangerous to health, the environment and the natural resources we rely upon, and to replace federal policies favoring big corporations with policies that invest in conservation and sustainable development.

[**Organic Seed Alliance**](http://www.seedalliance.org/) advances the ethical development and stewardship of the genetic resources of agricultural seed. Their mission is to work through collaborative education, advisory services, and research programs with organic farmers and other seed professionals to advance a more sustainable agriculture.

[**Seeds of Change**](http://www.seedsofchange.com/) is an organic seed company founded in 1989 with a mission to preserve biodiversity and promote organic agriculture. It is an excellent source to purchase organic seeds and learn tips about rural, personal and urban organic farming.

[Navdanya](http://www.navdanya.org) was founded by Dr. Vandana Shiva in India to lead the way food and seed sovereignty, sustainable agriculture, and fair trade organic networking. The organization’s learning centers, School of the Seed and Earth University, bring people together from all over the world to build a food network that will be sustainable in the future.

[**The National Organic Coalition**](http://www.nationalorganiccoalition.org) is a national alliance of organizations working to provide a "Washington voice" for farmers, ranchers, environmentalists, consumers and progressive industry members involved in organic agriculture.

[**National Sustainable Agriculture Coalition**](http://sustainableagriculture.net/)is an alliance of grassroots organizations that advocates for federal policy reform to advance the sustainability of agriculture, food systems, natural resources, and rural communities. Its vision of agriculture is one where a safe, nutritious, ample, and affordable food supply is produced by a legion of family farmers who make a decent living pursuing their trade

[**The Oakland Institute**](http://www.oaklandinstitute.org) is an independent policy think tank, founded by renowned agricultural and trade activist Anuradha Mittal, that brings fresh ideas and bold action to the most pressing economic, social and environmental issues directed towards a more sustainable, just future.

[**Foodconsumer**](http://www.foodconsumer.org)is an online health, diet and food site taking a lead in promoting GMO labeling.

[**Food Freedom News**](http://foodfreedomgroup.com) is an education site addressing food safety, food freedom and sovereignty, and local food production. It is a popular site for those who wish to begin growing their own produce.

[**Moms for Safe Food**](http://momsforsafefood.net) is a national community blog website offering a lot of advice about transitioning to eating a safe, healthy, GMO-free diet