

44 Reasons to Ban or Label GMOs

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For twenty years the federal government, through the USDA and FDA, has stated unequivocally that genetically-modified organisms (GMOs) are safe and can help feed the world and save lives. However, over the last two decades independent scientists have brought forth challenges to the prevailing dogma on this important issue. The response of the GMO industry to any critic—irrespective of their credentials or the scientific evidence they provide—is that they are wrong. To determine where the truth lies, we have set about reviewing all available scientific literature on the safety and efficacy of GMOs. The results of our independent investigation are stated in the following 44 reasons to ban or label GMOs. All of the information is footnoted and fully referenced.

Because 91% of Americans want GMO labeling.[1]

Because 64 countries around the world including Japan, Australia, China and the entire European Union require GMO labeling.

Because in September 2015, Russia completely banned the production of food using GMOs. This came after the country undertook independent scientific research of the GMO issue.[2]

Because GMO giant Monsanto has a history of producing highly dangerous chemical compounds including DDT, Agent Orange, saccharin, and recombinant bovine growth hormone, all of which are known to cause significant health issues. [3]

Because Monsanto has launched smear campaigns against GMO labeling advocates, organic farmers, anti-GMO organizations, and made threats of lawsuits against state governments and media outlets for even suggesting mandatory labeling. For example, supporters of GMOs recently pressured Reuters to fire veteran journalist Carey Gillam for reporting fairly on GMOs.[4]

Because the pro-GMO lobby pushes its own research that contradicts the conclusions of independent studies on GMO safety. The Hindustani Times remarked that “There are over 500 research publications by scientists of indisputable integrity, who have no conflict of interest, that establish harmful effects of GMO crops to human, animal and plant health, and on the environment and biodiversity... On the other hand, virtually every paper supporting GM crops is by scientists who have a declared conflict of interest or whose credibility and integrity can be doubted.”[5]

Because according a meta-analysis carried out by researchers at Caen University in France, a GMO feed diet contributes to kidney and liver toxicity in rats.[6]

Because a study published in the Turkish Journal of Biology in December 2014, associates GM corn and soy consumption with several health complications in rats including DNA damage, abnormal sperm, blood changes, and damage to liver, kidney, and testes.[7]

Because pregnant goats fed a diet of GM soybeans were found to produce less nutritious milk and give birth to offspring that grew slower and were shorter.[8]

Because GM tomatoes were discovered to cause stomach lesions in research mammals.[9]

Because the genetic engineering of foods can trigger allergic reactions to GM substances. For example, one study carried out by researchers at the University of Nebraska showed that an allergen commonly found in brazil nuts that is used in the creation of GM soybeans caused an allergic reaction in individuals who consumed soybeans.[10]

Because research demonstrates that DNA fragments from GM foods can enter the human bloodstream. Considering that the health risks posed by GM foods are still not well understood, this finding is especially troubling.[11]

Because an increase in GMO consumption in the United States has coincided with a rise in health issues among the US population. According to Jeffrey Smith's Institute for Responsible Technology, "numerous health problems increased after GMOs were introduced in 1996. The percentage of Americans with three or more chronic illnesses jumped from 7% to 13% in just 9 years; food allergies skyrocketed, and disorders such as autism, reproductive disorders, digestive problems, and others are on the rise." While this connection has not been confirmed through science, it's important that we investigate the potential associations between human health issues and GMOs.[12]

Because GMO crops are prone to failure. Bt insecticidal brinjal eggplant in Bangladesh is facing widespread collapse, with a failure rate of four out of five farms. In Brazil, after only three years of GM Bt cultivation, pest resistance has been observed. Similar observations are being reported in Bt maize in Puerto Rico, Brazil, Philippines, South Africa and US, and in Bt cotton in Australia, China, India and the US. American scientists confirmed that rootworms destroying corn fields are no longer resistant to GM corn.[13][14]

Because GM crops contaminate non-GM agriculture through cross pollination, polluting the genetic integrity of crops for many years to come.

Because South Korea, despite having a nationwide ban on the cultivation of GM crops, is currently contending with wild GM crops sprouting across the country. Officials fear that these wild GM strains will disrupt local ecosystems.[15]

Because GMO cross pollination has resulted in financial hardship and difficulty for farmers who wish to grow crops that are non-GMO and organic.

Because GMO research can be costly and ineffective. In 2015, a trial testing out the viability of GM wheat in the UK failed miserably when aphids destroyed an entire crop, costing the taxpaying public about \$5 million.[16]

Because permaculture and organic farming practices are being refined to create sustainable agricultural models in the long term. For example, scientists have found that crops can actually sense pests approaching and attract pest predators in order to survive. Kenyan farmers have used this knowledge to successfully eliminate an insidious pest affecting their corn crops at no cost.[17]

Because rats fed a diet of GM Roundup Ready crops were observed to have structural and functional alterations to liver cells.[18]

Because it was revealed in 2015 that GM salmon is more susceptible to disease and slower growing than their non-GM counterparts.[19]

Because the FDA approved GMOs to be introduced into the American food supply despite some FDA scientists raising questions about the safety of GMO consumption in the long term.[20]

Because some GM crops are sprayed with chemicals that have been found to decrease their nutritional value. A recent meta-analysis published in the British Journal of Nutrition which reviewed 373 studies concluded that organically grown fruits and vegetables contain up to 69% greater amounts of important antioxidant compounds when compared to their conventionally grown counterparts.[21]

Because GM corn has been found to be nutritionally inferior to non-GM corn in terms of vital nutrient content. One assay found that non-GM corn is 437% richer in calcium, 56% times richer in magnesium and 16% richer in potassium.[22]

Because the Grocery Manufacturer's Association (GMA), representing food giants including PepsiCo, ConAgra, Nestle and Kellogg has spent tens of millions of dollars in lobbying efforts to keep Americans from knowing if their food contains GMOs. In an apparent attempt to undermine the democratic process, this group has sued the state of Vermont in 2014 after it became the first state to require GMO labeling.[23]

Because Big Ag companies contribute to an unsustainable and environmentally unhealthy monoculture form of agriculture, in which only one type of crop is farmed. The UN Commission on Trade and Development issued a report in 2014 warning against corporate dominated monoculture farming methods and promoted farm diversity and small scale organic farming as the most sustainable way to feed to the world's population.[24]

Because the domestic production of GM corn, which accounts for about 90% of all corn grown in the United States, is forcing the US to import organic and non-GM corn from other countries. This dynamic hurts farmers in the United States who could otherwise capitalize from the growing demand for non-GM corn.[25]

Because new research suggests that some biotech firms are engaging in highly questionable scientific practices while conducting trials assessing GMO safety in animal feed. Data gathered by researchers at Caen University in France indicates that the feed given to animals in the control group during various trials conducted by GM firms such as DuPont actually contained high quantities of pesticides and GMOs, which may have heavily skewed the test results.[26]

Because glyphosate (Roundup), the widely used pesticide that Monsanto's GM seeds (Roundup Ready Crops) are created to withstand, has been shown to be a probable carcinogen. [27]

Because glyphosate has been found to disrupt proper enzyme function in the body of mammals, causing inflammation.[28]

Because research links glyphosate exposure with the alarming rises in chronic degenerative disease in the United States. According to one study published in The Journal of Organic Systems "Evidence is mounting that glyphosate interferes with many metabolic processes in plants and animals and glyphosate residues have been detected in both. Glyphosate disrupts the endocrine system and the balance of gut bacteria, it damages DNA and is a driver of mutations that lead to cancer." [29]

Because glyphosate can act as a genotoxic endocrine disruptor in human cells.[30]

Because glyphosate has been identified as a potential health hazard for decades yet nothing has been done to curb its production. The Permaculture Research Institute states that "Monsanto and the European Commission (EC) have known about birth defects since the 1980s. Industry studies found statistically significant skeletal and/or visceral abnormalities as well as reduced viability and increase in spontaneous abortions in rats and rabbits exposed to high doses of glyphosate. Lower doses were later shown to cause dilated hearts. The EC dismissed all the findings." [31]

Because glyphosate may no longer be as effective at killing weeds. Worse still, glyphosate use has been shown to give rise to "superweeds" that are resistant to the chemical and therefore highly problematic for farmers. [32]

Because glyphosate residues do not break down as quickly or completely but end up poisoning our soil, rainwater and air, accordingly to official government research.[33][34]

Because evidence suggests that glyphosate not only contaminates soil with its chemical compounds, but actually destroys beneficial soil organisms.[35]

Because glyphosate contamination has become so pervasive that it is present in our urine. One German study found the pesticide to be present in significant concentrations in all the urine samples tested from non-agricultural workers in Berlin.[36]

Because glyphosate exposure has been linked with birth defects. [37]

Because evidence suggests that glyphosate may contribute to Parkinson's Disease.[38][39]

Because glyphosate may seriously damage the kidneys. In early 2014, the International Journal of Environmental Research and Public Health published a study linking glyphosate runoff in Sri Lanka's water systems to an epidemic rise in a fatal unknown chronic kidney disease or CKDu.[40]

Because recent studies reveal that Monsanto's Roundup herbicides are contributing to the decline of honeybee populations. In August 2014, Mexican beekeepers in the state of Yucatan won a victory to halt Monsanto's plans to plant thousands of acres of Roundup Ready soybeans. After a careful review of the science, a Mexican judge ruled that GMO soy agriculture is an economic threat and incompatible with the state's honey production, home for 25,000 families involved in producing 40% of Mexico's honey exports. The ruling is having a rippling effect across other Mexican states involved in honey production.[41]

Because oversight on pesticide use may be hampered by serious conflicts of interest. In October 2015, the Washington Post reported that entomologist Jonathan Lungren blew the whistle on his superiors at the US Agriculture Department for attempting to block his research conclusions showing that pesticides are particularly lethal to key pollinators such as bees and butterflies.[42]

Because the rise of Big Ag monoculture and GMO farming in India has resulted in significant economic and social hardships among Indian farmers and their families. Dwindling crop yields stemming from farmers' reliance on corporate agricultural models to grow crops such as bioengineered cotton has contributed to many farmers going bankrupt. It is suspected that around 250,000 Indian farmers have committed suicide over the last 16 years; some of them are thought to have been brought to the brink by the economic difficulties that accompany corporate farming practices. [43]

Because simply handling bioengineered cotton crops caused Indian farmers to develop a range of frightening symptoms, which included, according to one report "allergic reactions in various body parts which included hands, feet, face, eyes and nose, with some having fallen seriously ill." [44] Similarly, more than a decade of documentation shows that Argentinean agricultural workers who were exposed to glyphosate had developed medical conditions including skin rashes, infertility, cancer and respiratory issues.[45]

It's Time to Act

Time is running out for your voice to be heard on this issue. Contact your local members of Congress today to let them know that we want all GMO foods to be labeled, if not removed from the shelves completely, until they are proven to be safe for consumption. Let them know that we would like congressional hearings on this issue during which qualified independent scientists present the evidence for GMOs being harmful.

To find the contact information for congressional members visit:
<https://www.opencongress.org/people/zipcodelookup>

There are many small local food organizations in the individual states. However, the following list of organizations 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 was founded by Jeffrey Smith, who 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 was founded by David Murphy, who has built a national grass-roots 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, directed by food activist Ronnie Cummins, is a grass-roots 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 goal to convert American agriculture to at least 30% organic by the year 2015.

GM Watch 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 is directed by national legal and consumer-interest advocate Andrew Kimbrell. The organization is a non-profit environmental advocacy initiative challenging harmful food production technologies, including genetic modification, and a leader in promoting sustainable agriculture.

Food and Water Watch 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 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 all issues related to health, including alternative medicine, genetically modified foods, vaccines science, and corporate corruption.

Dr. Joseph Mercola publishes one of the nation's most widely 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 of people.

Coalition of States for GMO Labeling is a grass-roots 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 gmlabelingstatecoalition@gmail.com

The Alliance for Natural Health 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 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 is a non-profit organization taking on the industrial chemical industry to eliminate the threats chemicals pose to children, families and communities.

Consumers Union 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 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 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 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 was founded by Dr. Vandana Shiva in India to lead the way to 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 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 is an alliance of grass-roots 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 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 is an online health, diet and food site taking a lead in promoting GMO labeling.

Food Freedom News is an educational 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 is a national community blog website offering a lot of advice about transitioning to eating a safe, healthy, GMO-free diet.

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