What Are We Eating?

Fact: GMO's have not been proven safe, and the long-term health risks on humans of genetically modified foods have not been adequately investigated.

We have a Right to Know What's in our Food And How It's Grown

There has never been a long term longitudinal study ever done on humans to find the effects of eating GMOs.

There is one long term review done on animal studies. Ninety-eight percent of the animals covered were broiler chickens harvested at 3 months. Their average lifespan is 3 years. That's like using data on someone who has smoked for a few months and saying the data shows smoking is safe.

No one has ever said that eating a genetically engineered food is going to make you drop dead the minute you put it in your mouth. But we continue to speak to the fact that most diseases come from long term chronic conditions...and there have been no long term longitudinal studies done on humans (see opening statement).

In the meantime, there are over 2200 peer reviewed studies or reviews that show potential harm to humans, animals, insects and the environment. Find them here. (http://gmofreeusa.org/research/gmo-science-research/gmo-science-research-0001-0500/)

What is Genetic Engineering or GMO?

GMO is an acronym for "Genetically Modified Organism." It is synonymous with the acronym GE or "genetically engineered."

A genetically engineered food is a plant, meat or synthetic product that has had its DNA artificially altered in a laboratory. As this can be confusing, we follow the definition that the international community (http://www.fao.org/docrep/005/y2772e/y2772e04.htm)uses as its definition. This can be done via the "old school" method of transgenics or the newer technologies that have become popular since around 2012.

The transgenic process takes genes from one type of plant, animal, virus, or bacteria, and inserts it into another plant, animal, virus or bacteria. It uses bacteria and viruses to work. It ia a very expensive process, usually taking many trials or "events" (as they called them) to get them to work. Each event costs around $5000 and takes months to see results.

Most of the old school techniques were only able to produce two traits that worked well for the market:

1. RoundUp Resistance to kill weeds with the GMO plant remaining alive
2. Inserting a pesticide into corn to make it kill any bugs (and???) that eat it.

There are a variety of newer techniques. The most well known is CRISPR. Basically they hacked the immune system process in cells, then used the steps to insert a desired trait into the new host. It has reduced costs exponentially (only about $50 a try and only weeks to wait). It has created a frenzied playground for Gene Hackers (as they call themselves). Who are busy trying to create plants that glow, animals with new traits, and yes, they are even working on genetically engineering humans in some countries (and most likely here, it's just that no one is watching).

The technology is so new that the US government has been caught off guard and is in the process right now (2017) of trying to figure out how to regulate them. That's right….as of today, the government has NO regulatory framework in place to control gene hackers.

In the meantime,

Gene hackers can set up a lab in their living rooms. See here (https://www.wired.com/2011/08/mf_diylab/) and here. (http://tv.fusion.net/story/285454/diy-crispr-biohackers-garage-labs/)

….they can buy a DNA sequencer on Ebay (http://www.ebay.com/sch/i.html?http://www.ebay.com/sch/i.html?_from=R40&_trksid=p2055845.m570.l1313.TR0.TRC0.H0.Xdna+sequencer.TRS0&_nkw=dna+sequencer&_sacat=0)

…they can buy genetic material (http://www.sigmaaldrich.com/catalog/product/aldrich/g11950?lang=en&region=US) on the web. We've copied the link to guanine but the other amino acids that make up proteins are available there, too.
And…drum roll…they can also get the DNA sequence to ebola (http://www.filovir.com/cms/?page_id=127)online!

If they don't want to invest that much they can get a kit. (http://www.the-odin.com/diy-crispr-kit/)

Someone next door to you might legally have a lab in their garage and could, at this minute, be cooking up some fun adventure that could turn sour and become a pandemic. And we aren't the only ones concerned about this. The government is. (https://www.technologyreview.com/s/600774/top-us-intelligence-official-calls-gene-editing-a-wmd-threat/)

Genetically engineered mosquitoes are being released without the approval of the citizens living there. Some in the nature movement are considering genetically engineering invasive or dying trees and animals. The technique usually used in these cases is a "Gene Drive"...a trait that becomes dominant exponentially and can wipe out a species in a few generations (if that's the trait engineered).

What could possibly go wrong?

We question this new science that only been used for 5 years and that doesn't fully understand what it's doing. It was only in 2012 that geneticists, who are the "experts" discovered that MOST of the stuff in and around DNA is actually important stuff. Before that, they called it "Junk DNA".

"For years, the vast stretches of DNA between our 20,000 or so protein-coding genes – more than 98% of the genetic sequence inside each of our cells – was written off as "junk" DNA. Already falling out of favour in recent years, this concept will now, with Encode's work, be consigned to the history books." Read the full article here. (https://www.theguardian.com/science/2012/sep/05/genes-genome-junk-dna-encode)

So now these "experts" who just discovered that most of DNA they thought "junk" actually runs the show assure us that there's nothing to be concerned about. And we don't get the choice to avoid their products.

And there's more. It turns out that while CRISPR enthusiasts have been diligently tracking the impact on the genome in the place where they insert the new trait, they haven't been checking on the rest of the genome. Oops!!

In late May of 2017, revealed for the first time, is a study that looked at how the rest of the DNA is impacted. (http://newsroom.cumc.columbia.edu/blog/2017/05/30/crispr-gene-editing-can-cause-hundreds-of-unintended-mutations/) Over 1500 mutations were counted in the DNA that was not directly targeted by the CRISPR engineering. We think that's 1500 opportunities to be concerned about, no matter what the industry talking points are. If these techniques were only being used for medicinal purposes, then that would be one thing as we get a warning on the package insert. But they are engineering all sorts of foods with these unintended/untested mutations. And we if we don't know where they are, we can't make the choice to remove them from our diets.

It takes very little critical thinking to arrive at the conclusion that since they didn't know about the function of the junk, that maybe, just possibly, they don't know other things or how they work, either. The well paid propaganda machine that tries to convince you that they have it all figured out is the epitome of arrogance.

If you want to find out more about CRiSPR and Gene Drives, go here. (http://www.etcgroup.org/content/reckless-driving-gene-drives-and-end-nature)

The biotech industry is doing its best to downplay their connection to the word "GMO." But don't let them fool you. At the end of the day, their multi million dollar propaganda campaign cannot alter the fact that they are changing the structure of the basis of life in a lab. They claim it is precise, but they said that about the old school techniques, too. Independent scientists all know that the effects of tampering with one gene don't stop there. The whole chain is impacted.

Synthetic Biology-.. GMO 2.0

But that's not all. Gene hackers are genetically altering bacteria and yeasts to secrete synthetic variations of vanilla, other oils and products. They eat GMO corn to feed these synthetic organisms that are slated to grow everything from oil for our cars to clothes to plastics. Synbio products are already on the market and you haven't even heard of them.

You don't know get to know where they are. Therefore, you don't get a choice about whether to eat them or not.

Learn more about Synthetic Biology here. (http://www.foe.org/projects/food-and-technology/genetic-engineering/synthetic-biology)

"Bought Science"

Unlike the strict safety evaluations required for the approval of new drugs, the safety of genetically engineered foods for human consumption is not adequately tested by independent, unbought scientists. To find out more about how GMO science is not what it seems, read Seedy Business. (https://www.usrtk.org/seedybusiness.pdf) You can find numerous other reports, FOIA disclosures on the biotech industry, and investigations about how corporations use propaganda to confuse the public about their products and the food industry here (https://usrtk.org/our-investigations/)

Again: There have been NO long-term studies conducted on the safety of genetically engineered foods on humans.

The issue of GM food safety was first discussed at a meeting of the Food and Agriculture Organization (FAO), the World Health Organization (WHO) and biotech representatives in 1990. The "substantial equivalence" concept was proposed in early 1996. The adoption of the concept of substantial equivalence allowed permission to market and sell new foods without any safety or toxicology tests as long as they were not too different in chemical composition to foods already on the market. [FDA GRAS proposal] To decide if a modified product is substantially equivalent, the product is tested by the manufacturer for unexpected changes in a limited set of variables such as toxins, nutrients or allergens that are known to be present in the unmodified food. If these tests show no significant difference between the modified and unmodified products, then no further food safety testing is required.

In the meantime, Dr. Michael Antoniou and associates released a study in 2016 (http://www.gmwatch.org/en/news/latest-news/17378-gmo-maize-nk603-is-not-substantially-equivalent-to-non-gmo-counterpart) that clearly shows that GMO corn is NOT substantially equivalent. Did you hear about this on the mainstream news? Seems pretty important that a whole industry that's taken over our food system is based on a lie.

Much of the World Already Requires At LEAST Labeling of Genetically Engineered Foods

64 countries with over 40% of the world's population already label genetically engineered foods, including the entire European Union. China labels genetically engineered foods. The same companies that fight GMO labeling in the US reformulate or label GMOs in the foods they sell overseas. Why do they afford non-citizens transparency when they've spent over $100M to keep us from knowing what's in our food here in the US?

In 2012, California restarted the GMO labeling movement with a ballot initiative. We lost that battle as did Washington, Oregon and a number of other states. But there were three states on the east coast the enacted labeling laws: Maine and Connecticut (which both had protective "trigger clauses") and Vermont, which was supposed to go into effect in July of 2016.

As we expected, Biotech multinational chemical companies along with big food conglomerates freaked out. They spent, literally, hundreds of millions of lobbying dollars to fight us. The Good Food, NonGMO and Organic movements were united. We were standing strong and winning battles.

But then at the last moment, the Organic Trade Association broke ranks and supported a "labeling" bill we called the DARK Act. (Deny Americans The Right To Know).

When they did that, it gave the Democrats who had been holding strong to vote yes. We were pests and they wanted us to get us out of their hair and voted it in "because organics supported it". The bill does not require an on package label. It does not define what a GMO is (leading the door open for the new technologies to be let in). It has no threshold (so feasibly the product could be 10% GMO with no label). Obama signed it into law in July 2016.

Given the way many regulatory bills go, we are not hopeful that it will go anywhere, but will most likely languish for decades like so many other bills that address safety and individual rights. Thank you, Organic Trade Association.

Why GMO Free Growing Zones?

The good news is that in many states, we can still create GMO Free Growing Zones to protect organic farmers and eaters from cross contamination. Some states prohibit counties from controlling their own seeds and the poison companies are trying to enact restrictive laws across the nation.

Biotech tried twice to outlaw our GMO bans here in California, but both times we told them that county and individual rights supersede their right to pollute. Humboldt, Mendocino, Trinity, Sonoma and Marin Counties create a 13,734 square mile GMO Free Growing Zone in California. Jackson county in Oregon and San Juan county in Washington are also GMO Free.

Contamination has cost farmers billions of dollars of lost export sales. It has impacted family farmers in Oregon who grow organic seed. Other countries are fighting to keep GMOs out (as is their right, as consumers and sovereign nations to do). They don't want our contaminated seeds or products.

We came to this issue because we studied the unbiased, unbought science available. We know that any true scientist acknowledges that science is ever changing. Our knowledge of the universe and how life "works" is still in its infancy.

Yesterday's "safe" chemicals are today's poisons. After decades of propaganda selling us a pack of lies, DDT, Glyphosate, Trans fats, smoking, sugar and more were all found to be toxic killers to us, the planet and all ecosystems on it. If people want put themselves in potential harm's way, they have a right to do so. But we have a right to refuse to be part of the experiment.

If you'd like to join the ranks and let folks know the truth about GMOs, contact us here (https://gmofreeca.org/contact-us/).
We'll mentor you and, if you want, help you make your county a GMO Free Growing Zone, too!