## Why buy Organic or NON-GMO food?

5-20-16

**Terms;** GMO (Genetically Modified Organisms) GE (Genetically Engineered) BT (Bacillus thuringiensis) Roundup (trade name for a product containing Glyphosate) Hexane (solvent that comes from petroleum)

300,000 farmworkers a year suffer from pesticide related illness in the United States, according to the United Farmworkers of America.

- 1. Synthetic pesticides are linked to lymphoma and leukemia.
- 2. Roundup (glyphosate) herbicides are linked to kidney disease, cancer, and birth defects.
- 3. Hexane is found in some non-organic foods. Hexane has been identified by the FDA as a powerful neurotoxin and a carcinogen.
- 4. Growth-promoting antibiotics contribute to human weight gain and antibiotic resistance.
- 5. Food grown with BT's break down cell walls in humans.
- 6. A graph of the increase in Autism and the increase in the use of Glyphosate are nearly identical.

I was asked one day, "Why would a Christian farmer risk polluting the earth when it is not necessary to do so?" It made me think of how some of the farm land that I rent is being treated.

Labels: Over the years companies have come up with some wonderful, innovative products. They are proud of what they make and they require recognition for what they do. Most people have seen the words and logo on computers of: Intel Inside, or Pentium Processor. On food products you may see, Family Owned or Organic Certified. Some Pillsbury products have cinnabon on the package, a proud chain of American baked goods. It seems to me that a company that has patented GMO products would not only want, but require that they get recognition on every product made from it, just like Intel. Monsanto not only opposes the 'GMO' on products, but has spent millions of dollars fighting multiple government bills to keep it off food labels. That makes me very suspicious. What are they hiding? What don't they want the public to know? What are they embarrassed about? The secrets they have tried to keep are scary.

**Information:** Over the years I have read numerous books, and watched hundreds of hours of videos containing accounts of studies done on GMO food and farm chemicals. I quickly learned, and have since become aware of the differing results of private, corporate, and independent studies. Every study that I have seen, that says GMO's and Roundup are safe, have been funded, carried out, or tainted in some way, by thee largest, or one of the largest, producers of the product (GMO, Roundup, BT's, etc.) being tested. All independent, non-biased, tests show that GMO's, products, BT's, and the chemical Roundup, yield results that prove them at the very least to be hazardous, and some finding them outright deadly.

**Personal witness:** I have had detailed conversations with dozens of owners of organic farms and I have toured many of the farms in Nebraska. I know organic farms work. One farm that I spent 2 days at, has been farming organic since 1953 and has been certified organic since 1978. Their success has lead them to expand into processing and packaging products that they now sell coast to coast. There is overwhelming proof that farming can be done without chemicals, and livestock can be raised without shots.

**Cost:** If you think Organic foods are expensive, remember what medical costs will be if you continue eating bad food. The same amount of nutrition costs less by purchasing organic. Imagine what the cost will be of cleaning the round-up out of our water system. Think of what we have spent drilling new city wells, and testing wells, because of the nitrates that have leached into our ground water. Glyphosate is next. Glyphosate will be a larger problem.

**Health:** While investigating possible causes of my own health issues, I have found out that GMO's are linked to numerous health problems. BT's break down cell walls in humans, just like they do in the insects that try to feed on farm plants. This break down in human's cells is from indirect exposure from eating the farm products containing BT's, not directly from the BT's themselves. GMO's have proven to have less nutritional value. Roundup contains Glyphosate, which was first said to be safe, then not safe, then it would break down in a short time, and now they are not sure if it ever becomes safe or broken down. Roundup is now found in ground water and is causing health issues for those drinking it. Raw milk is a cure for allergies in many people, but there are a lot of restrictions on selling it. In Colorado it is easier to get pot than raw milk.

**Missed corn:** Whenever a corn field is picked, some corn is missed. These cobs covered with corn lay on the ground in the field. Years back animals would quickly eat them up. Now, with the GM corn, some with BT's, they lay around all winter long and no animals eat them. The same animals will stop at almost nothing to get into our non-GM corn and other non-GM crops to eat all they can. A local organic farmer, in agreement with the neighbor, opened up the fence so the neighbors cows could graze his corn stalks too. They repeatedly walked past the neighbor's GMO stalks and corn over to non-GMO corn to eat, and only returned to the GMO field to get water.

**Other countries:** GMO labeling is mandatory in more than 60 countries, and over 55 countries now refuse to import GMO products from the U.S.

**Roundup resistance:** Over the last 20 years roundup use has increased by 10 times. Now weeds are becoming roundup resistant. Roundup ready crops of one type are growing in fields of other crops. Plans are underway for even stronger, more hazardous chemicals. Where does this end? Recently (2016) some super-weeds have been identified that no known chemical will kill.

How conventional farmers are paid: America pays conventional farmers by bushels and by pounds. There is no incentive for farmers to concern themselves with nutritional value of a crop in order to be financially viable. There is no incentive for quality of meat in animals when producers are paid only by the pound. With the exception of Organic and Non-GMO producers quantity is the number one incentive for how food is produced. When people eat meat from animals that have been raised to gain weight and not exercise, it is no surprise that these traits show up in those same people.

**Feeding the world:** We currently waste over 30% of the food the world produces (food not eaten). If we eat only the amount of food we need to live healthy on, then it is accurate to say we are wasting well over 55%. In the U.S. we waste nearly 40% of our food (food not eaten), and the waste is over 40% in our public schools (food not eaten). We could easily feed the world now, but we don't. Since Organic food has more nutritional value, a person can eat less and be both healthier and less obese. Lack of nutrition in GM food can cause obesity and lack of nutrition at the same time. In drought conditions, non-irrigated organic farms out produce non-irrigated conventional farms, bushel for bushel. Organic farms can produce more calories per acre than conventional farms.

### More details:

**University of California, Dr. Donald Davis:** The results of 20 years showed declines in: protein of – 6%, calcium: –16%, phosphorus: – 9%, iron: –15%, riboflavin: – 38%, and vitamin C: – 20%. To read the article go here: <a href="http://www.organicauthority.com/organic-food/organic-food-articles/declining-nutritional-value-of-produce-due-to-high-yield-selective-seed-breeding.html">http://www.organicauthority.com/organic-food/organic-food-articles/declining-nutritional-value-of-produce-due-to-high-yield-selective-seed-breeding.html</a> or read Davis' study, "Tradeoffs in Agriculture and Nutrition" in March 2005 in "Food Technology".

**Roundup:** (used in non-organic [conventional] farming) kills beneficial gut bacteria and does NOT kill the nasty stuff like salmonella or botulism. **Gut bacteria is extremely important for the immune system**, which links the problem to a whole host of human diseases. These diseases have been on the rise since roundup use saw a huge increase due to genetically modifying seed for roundup-ready resistance. A big example is **GMO corn for nearly all high-fructose-corn-syrup**, used in most of what most Americans eat. Roundup can persist in the soil for decades or more, and leach to our water sources contaminating our aquifers.

Laboratory studies prove that genes can transfer from GMO (genetically modified organisms) crops into the micro-organisms in the soil, and the little critters in the soil. Roundup (millions of pounds sprayed on GMO crops) **destroys the beneficial bacteria in the soil**, which provide nutrients to the plant, and it promotes the pathogens in the soil, so there are **more than 40 plant diseases on the rise in the US agriculture.** 

BT toxin is produced in corn and cotton. It is designed to break little holes in the cell walls of insect stomachs to kill them, and it is now found to break holes in human cells, possibly causing leaky gut. It gets through the cell walls and into the bloodstream. It was found in 93 pregnant women tested, and 80 percent of the unborn, so now we have it getting to their brains because there is no blood-brain barrier at the unborn stage - it is a nightmare for the human race.

BT also binds with clay and washes into rivers affecting the whole marine ecosystem.

It is even possible for BTs to colonize your gut bacteria and turn it into a living pesticide factory. BT is in some GM crops, but can be sprayed on too, so NON-GMO doesn't guarantee no BT's. Organic and Certified Organic products should not have BTs. The scary part is that with wind drift, flooding, and animals traveling between fields, organic producers are constantly fighting contamination from GMO and BT.

**Seeds:** Organic farmers can eat the seeds they plant. Conventional seeds are coated with chemicals that are hazardous to human health. Think what these chemicals do to the micro-organisms that try to keep the soil healthy. Think what happens when these chemicals leach into our water systems.

**More Proof:** A New England Journal of Medicine article is included near the end of this.

Please support: Organic, Non-GMO, BT-free, and Chemical-free farm products.

From the RT http://rt.com/op-edge/monsanto-gmo-ecology-profit-411/

#### See also:

Jeffrey M. Smith is the Executive Director of the Institute for Responsible Technology, author of the #1 international bestselling book on GMOs, *Seeds of Deception*, and of *Genetic Roulette*: *The Documented Health Risks of Genetically Engineered Foods*. To avoid GMOs, which is the advice of the American

### NUTRITION

A 2012 nutritional analysis of GM versus non-GM corn shows shocking differences in nutritional content. Non-GM corn contains 437 times more calcium, 56 times more magnesium, and 7 times more manganese than GM corn, raising alarming red flags that GM food is *not* substantially equivalent to non-GM food, as we have been led to believe.

The USDA National Organic Program (NOP) defines organic as follows: Organic food is produced by farmers who emphasize the use of renewable resources and the conservation of soil and water to enhance environmental quality for future generations. Organic meat, poultry, eggs, and dairy products come from animals that are given no antibiotics or growth hormones. Organic food is produced without using most conventional pesticides; fertilizers made with synthetic ingredients or sewage sludge; bioengineering; or ionizing radiation. Before a product can be labeled "organic," a Government-approved certifier inspects the farm where the food is grown to make sure the farmer is following all the rules necessary to meet USDA organic standards. Companies that handle or process organic food before it gets to your local supermarket or restaurant must be certified, too.

There are three categories of organic labeling...

- 1. 100% Organic: Made with 100% organic ingredients
- 2. Organic: Made with at least 95% organic ingredients
- 3. Made With Organic Ingredients: Made with a minimum of 70% organic ingredients with strict restrictions on the remaining 30% including no GMOs (genetically modified organisms)

http://articles.mercola.com/sites/articles/archive/2013/09/10/monsanto-bt-corn.aspx

# NEW ENGLAND JOURNAL OF MEDICINE **GMOs, Herbicides, and Public Health**

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..... These developments suggest that GM foods and the herbicides applied to them may pose hazards to human health that were not examined in previous assessments. We believe that the time has therefore come to thoroughly reconsider all aspects of the safety of plant biotechnology. The National Academy of Sciences has convened a new committee to reassess the social, economic, environmental, and human health effects of GM crops. This development is welcome, but the committee's report is not expected until at least 2016.

In the meantime, we offer two recommendations. First, we believe the EPA should delay implementation of its decision to permit use of Enlist Duo. This decision was made in haste. It was based on poorly designed and outdated studies and on an incomplete assessment of human exposure and environmental effects. It would have benefited from deeper consideration of independently funded studies published in the peer-reviewed literature. And it preceded the recent IARC determinations on glyphosate and 2,4-D. Second, the National Toxicology Program should urgently assess the toxicology of pure glyphosate, formulated glyphosate, and mixtures of glyphosate and other herbicides. . . . . . . . . .

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We do NOT need GMO or Roundup or BTs to farm the land, or to feed the world.

### Rodale Institute 30-Year Farming Systems Trial

Rodale has recently completed their report on the longest side-by-side conventional vs. organic farming systems trial ever completed in the United States. Here are some of their conclusions:

- Organic yields match conventional yields in long-term trials. Organic outperforms conventional in years of drought. Organic farming systems build rather than deplete soil organic matter, making it a more sustainable system.
- Organic farming uses 45 percent less energy and is more efficient. Conventional systems produce 40 percent more green- house gases. Organic farming systems are more profitable than conventional.

The entire report is worth reading and confirms many of our assumptions and busts many of the antiorganic myths: <a href="https://www.rodaleinstitute.org/fst30years">www.rodaleinstitute.org/fst30years</a>

### The Long-Term Agroecological Research (LTAR) Experiment – Iowa State

**University** Organic crop systems can provide similar yields and much higher economic returns than a conventional corn-soybean rotation, according to 13 years of data from a side-by-side comparison at Iowa State Univer- sity's Neely-Kinyon Research and Demonstration Farm. Some of the findings from this experiment:

- Averages from 13 years of the LTAR experiment show that yields of organic corn, soybean and oats have been equivalent to or greater than conventional counterparts. A 12-year average for alfalfa and 8-year average for winter wheat also show no significant difference between organic yields and the county averages.
- On average, returns to management (after deducting labor, land and production costs) for organic systems are roughly \$200 per acre greater than conventional returns, according to actual LTAR data and modeling.
- Organic systems have lower production costs because they eliminate the need for expensive herbicides and synthetic fertilizers. Total nitrogen increased by 33 percent in the organic system.
- The results suggest that organic farming can create greater efficiency in nutrient use and higher carbon sequestration potential.

Full details about the LTAR can be found here: <a href="http://www.leopold.iastate.edu/pubs-and-papers/2011-11-ltar-experiment">http://www.leopold.iastate.edu/pubs-and-papers/2011-11-ltar-experiment</a>

### **Other Studies/Reports**

• A United Nations examination of farming in 24 African countries found that organic or near-organic farming resulted in yield increases of more than 100 percent. • Not only can organic agriculture feed the world, ac- cording to the U.N. Environment Programme (UNEP)

in a report released in October, 2008, it may be the only way we can solve the growing problem of hunger in developing countries. UNEP reported that organic practices in Africa outperformed industrial,

chemical-intensive conventional farming, and also provided environmental benefits such as improved soil fertility, better retention of water and resistance to drought.

### Message: What We Can Say about Organic Feeding the World

- Yes, organic can feed the world. Long-term research studies show that organic production can equal conventional yields and even outperform it during drought. Organic production also yields better economic returns, needs fewer inputs, builds the soil, and lowers green-house gas emissions.
- Agriculture is not feeding the world now! Nearly one billion people are seriously undernourished, and two billion suffer from micronutrient malnutrition. Organic offers the best opportunity for people to feed themselves affordably.
- An expensive, fossil fuel dependent agriculture is not the answer. Our current conventional farming model worked only as long as fuel was cheap and water was abundant.

The Midwest Organic and Sustainable Education Service (MOSES) provides education and resources to farmers to encourage organic and sustainable farming practices.

To learn more, go to: www.mosesorganic.org