BE IN THE KNOW ABOUT GMOs

Untold Risks, Unanswered Questions and Needed Action

by Melinda Hemmelgarn

Anyone walking into a typical American supermarket finds a dizzying display of more than 40,000 products, the majority of which are processed foods. According to the Grocery Manufacturers Association, at least 75 percent of the processed foods contain one or more genetically modified (GMO) ingredients, most likely from corn, soy and canola. With the U.S. Department of Agriculture's recent approval of GMO alfalfa and sugar beets, non-GMO choices will grow even narrower. What is a health-conscious consumer to do?

Heads Up

What many people don't realize is that the majority of GMO crops have been genetically engineered to withstand spraying with herbicides, such as Monsanto's Roundup. Its active toxic ingredient, glyphosate, is systemically transported throughout the plant and into our environment and food chain.

According to the American Academy of Environmental Medicine, "There is more than a casual association between GMO foods and adverse health effects." Scientists familiar with the technology warn about the risk for new allergens, toxins and unpredictable, hard-to-detect side effects. Even the President's Cancer Panel Report advises against choosing foods grown with pesticides, herbicides and chemical fertilizers.

Most Americans are shocked to learn that for decades now, they've been blindly purchasing and feeding their families GE foods, not to mention toxic herbicide residues. Unlike other developed countries, the U.S. government does not require labels on GMO foods, leaving citizens to shop—and eat—in the dark.

Dangerous Developments

Thanks to lobbying by the biotechnology industry, the U.S. Food and Drug Administration has taken the stand that GMOs are "substantially equivalent" to their non-genetically modified counterparts. Therefore, labeling a GMO food product would be admitting that the GE products are somehow different.

However, genetically modified crops are different. Don Huber, Ph.D., a plant pathologist and professor emeritus at Purdue University, says that when scientists insert genetic material from one organism into another that would not normally crossbreed or be possible with standard breeding programs, they disrupt an entire system.

For example, both Huber and Warren Porter, Ph.D., a biologist at the University of Wisconsin–Madison, explain that glyphosate disrupts the soil's complex microbiological system, critical for delivering micronutrients to plants. This both increases the plants' susceptibility to diseases and reduces the nutritional quality of food crops.

Farmers were told that GMO technology could simplify weed control and increase yields. Yet, according to The Organic Center, since the introduction of GE crops, nationwide pesticide use has increased substantially, by a total of more than 300 million pounds. The Union of Concerned Scientists reports that claims for higher yields have fallen short, as well.

Now, new superweeds have developed resistance to glyphosate, and the biotech giants have responded by promoting new GE plants, resistant to stronger herbicides such as 2,4-D. The Pesticide Action Network of North America continues to collect research that links this suspected endocrine disruptor to thyroid problems, prostate cancer, reproductive abnormalities, Parkinson's disease and delays in brain development. Both Porter and Chuck Benbrook, chief scientist at The Organic Center, warn that, as confirmed in multiple studies, pregnant women and children are most susceptible to harm.

Making matters worse, the Organic Seed Alliance reports that there is, "unwanted spread of GE pollen and seed into organic agricultural systems," and the genetic contamination of non-GMO crops.

Roundup Ready alfalfa grieves Chris Blanchard the most. Blanchard, an organic farmer in Decorah, Iowa, explains: "Alfalfa is pollinated by bees, which can travel for miles, so we can be certain that seed stocks will be contaminated, threatening the livelihoods of organic farmers."

What We Can Do

It's up to informed consumers to increase demand for non-GMO and organic foods. Here's an effective action plan to protect our health and save Planet Earth.

- Read ingredient labels and vote with your food dollars. Reject products likely to contain GMOs, such as dextrose, corn starch, corn syrup or corn sugar, soy lecithin, canola and cottonseed oils, and sugar from sugar beets.
- Choose certified organic foods. They are our single best bet for avoiding GMO ingredients, synthetic pesti cides, chemical fertilizers, antibiotics and hormones.
- Call or write President Obama, your state representatives and food manufacturers. Voice opposition to GMO crops and demand GMO-food labeling.
- Grow some food using organic seeds.
- Stay informed and don't be duped. Here are some helpful resources:

Center for Food Safety, *CenterForFoodSafety.org*

Radio interviews with Warren Porter (2/18/10) and Don Huber (4/21/11) on *kopn.org, tinyurl.com/yjhurre*

The Organic Center, *Organic-Center.org*

American Academy of Environmental Medicine's *Genetically Modified Food Position Paper, aaemonline.org/gmopost.html*

Melinda Hemmelgarn is a registered dietitian and award-winning writer and radio host based in Columbia, MO. Reach her at FoodSleuth@gmail.com and tune in to Food Sleuth Radio at kopn.org.