## The Tuesday Minute

Nutritional information.... one byte at a time

## This Week's Topic

## You're Eating GMOs Every Day & Don't Even Know It

As many of you know, in recent years there's been growing controversy about genetically modified foods. Here's the short version: Yes, you are already eating them; No, they are not safe to eat. There is something we can do about it.

The movie Michael Clayton with George Clooney shocked many viewers when a fictitious company U-North provided crops that were resistant to weeds and bugs that later caused cancer and death to hundreds of people. The movie is closer to reality than most of us want to admit.

The issue of genetically modified foods is bigger and potentially more dangerous because we are talking about multiple companies and thousands of foods we are already eating.

First, let's get to the heart of the issue. Right now 89% of soy, 61% of corn, 83% of cotton, and 80% of canola in our current food supply are genetically modified. We are eating these foods now and have been since 1996. Sometimes percentages don't register, so let's look at some of the major foods that contain GMOs (genetically modified organisms).

Chocolate uses soy lecithin, mayonnaise uses soy oil, baby formulas have soy milk, and breads have soy flour. Commercially available fried and baked goods as well as many "heath food products" use canola. Chips and fried snacks use cotton seed oil.

Perhaps the biggest offender is high fructose corn syrup: soda pop, cereals, cookies, candy, salad dressings, and countless other foods!

Baked goods use cornstarch, vegetable oils have corn oil, and some breads contain corn flour. Are you getting the picture? It's everywhere!

Gene insertion is done either by shooting genes from a "gene gun" into a plate of cells or by using bacteria to invade the cell with foreign DNA. The altered cell is then cloned into a plant. These processes create massive collateral damage, causing mutations in hundreds or thousands of locations throughout the plant's DNA.

Natural genes can be deleted or permanently turned on or off, and hundreds may change their levels of expression. In addition, the inserted gene is often rearranged. It may transfer from the food into our body's cells or into the DNA of bacteria inside us, and the genetically modified protein produced by the gene may have unintended properties or effects.

Let's look at some of the documented health risks in animals and humans. Much of the information that I will be talking about comes from a book by Jeffrey M. Smith, Genetic Roulette: The Documented Health Risks of Genetically Engineered Foods.

The list of studies is staggering but here are some of the blatant ones

- Rats Fed GM potatoes had smaller, partially atrophied livers, damaged organs and immune systems.
- The livers of rats fed GM canola were 12-16% heavier.
- Take a look at this: Many offspring of female rats fed GM soy were considerably smaller, and 55% died within three weeks compared to only 9% of the non-genetically modified soy controls. That's more than 6 times the death rate!
- Soy allergies skyrocketed by 50% in the UK, after GM soy was introduced.
- Human subjects showed a skin prick allergic-type reaction to GM soy, but not to natural soy.
- A gene from a soil bacterium called Bt is inserted into corn and cotton DNA, where it secretes the insect-killing Bt-toxin in every cell. After harvest, when sheep grazed on Bt cotton plants within a week 1 in 4 died. Shepherds estimate 10,000 sheep deaths in one region of India.
- Farmers in Europe and Asia say that cows, water buffaloes, chickens, and horses died from eating Bt corn varieties.
- About two dozen U.S. farmers report that Bt corn varieties caused widespread sterility in pigs or cows.

Bottom line, genetically modified organisms are not safe. They have been linked to thousands of toxic and allergenic reactions; thousands of sick, sterile, and dead livestock; and damage to virtually every organ and system studied in lab animals. The primary reason companies genetically engineer plants is to make them tolerant to their brand of herbicide. The four major GM plants, soy, corn, canola, and cotton, are designed to survive an otherwise deadly dose of weed killer. These crops have much higher residues of toxic herbicides. About 68% of GM crops are herbicide tolerant.

What effect will these genetically induced pesticides and herbicides have on our bodies? No one knows.

Many of you will remember our" "Food for Life" CD. On it we hear about 3 things to look for in the food we eat: (1) eat food that will rot or spoil but eat it before it does, (2) eat food with as much color as possible as the color in food contains many of the antioxidants and health promoting natural phyto-chemicals which increase healing and repair, and (3) eat food in the same form it was 100 years ago. Wait a minute. Did they grow GMO foods 100 years ago? I don't think so. You get the idea.

Our "Food for Life" CD will save you a lot of time and energy as you educate your clients. If you need another copy or if you've never heard it, there's a link on the web page. It's yours to use at no cost.

For further information, The Institute for Responsible Technology provides action steps and ways to avoid genetically modified foods. You will find the link on the web page. Please take the time to review the site and pass it on to your clients. Promoting wellness is ongoing... and clients are eager for nutritional education and practical instruction.

Well thanks for taking the time to watch... see you next week.