



What is a Genetically Modified Food?

Essentially transferring genetic material from one organism (or food) to another.

Cutting out the genetic material from one place and putting it into another place.

The new GM food now has the desired trait. The corn we are talking about today was genetically modified to resist a weedkiller called Roundup.

Its important to remember these foods do not occur naturally in nature. They are experimental crops and we don't know the long term effects on humans.

(Monsanto is a company that produces a weedkiller called Roundup. They are also the leading producer of genetically engineered corn. This was the corn studied.)

88% of Corn in the US is GMO

94% of Soy in the US is GMO: Avoid soy in thyroid disease! Makes it worse potentially due to GMO effects on thyroid hormone!

Possible Health Risks:

- Increase in food allergies
- Diabetes
- Cancer
- Neurological diseases like Parkinsons and Alzheimers

Cancer is the leading cause of death in Canada and the study we are going to talk about shows how the GM corn lead to huge tumors in these rats!

2nd is heart disease and stroke!



First Study looking at the longterm (lifetime) Health Effects of GM Corn on Rats

So far only 90 day studies have been conducted to get the approval of the use of GM foods. This study looked at the lifetime effect. The results were shocking!

Findings from the study (Caen University; presented in London)

1. Rats fed the GM Corn died faster than rats that ate non GM corn. For example, **20%** female rats eating non GM corn died early, compared to **70%** eating the GM corn from Monsanto!

- The rats that ate the GM Corn died faster: Up to 50% of males and 70% of females suffered **premature death** (compared to 30% and 20% in the control group)

2. Rats that drank trace amounts of Roundup (the weedkiller) at levels legally allowed in the water supply had 200% to 300% increase in tumors (breast tumors).

The pictures showed how horrific and large the tumors were.

3. Rats fed the GM corn AND Roundup had severe liver and kidney damage!

- The study fed these rats **NK603**, the Monsanto variety of GM corn that's grown across North America and widely fed to animals and humans. This is the same corn that's in your corn-based breakfast cereal, corn tortillas and corn snack chips.



We don't know the long term safety. These foods have not been around long enough to know. Are we the science experiment??

What can we do to protect ourselves?

Recognize the Foods that are most likely GM include:

- Soybean
- Corn
- Canola oil
- Rice
- Aspartame (contains an amino acid that is most likely GM)
- Farm raised salmon

Buy organic. Eat grass fed beef. Buy local. Look for GMO free labels.

In Canada a bill was defeated in 2011 that would have made it mandatory to label GM foods.

This is an eye opener!!! Many other countries have banned GMO foods! (In Asia, Africa, EU, the Americas).

Canada and US still allow GM Foods !

Russia just banned it!!!!!!!!!!

Rice and Arsenic

A consumer report was released that examined 223 samples of rice and rice products. They found an alarmingly high amount of these foods contained Arsenic.

Arsenic is naturally occurring in the food and soil.



But many of the rice products sampled had very high amounts of Arsenic.

Repeated small exposure of Arsenic over time has been linked to:

- cancer,
- cardiovascular disease,
- respiratory problems
- diabetes.

The FDA says this small exposure is okay, but what about the accumulation over years? We just don't know!

*** In 2001, National Academy of Science estimated that if a person drank Arsenic contaminated water at 10 parts per billion, their risk of developing cancer would be 1: 300 over their lifetime.

Shockingly, ½ a cup of rice contains that much Arsenic.

*** A report from the Environmental Protection Agency examined the effects of eating rice over a 24 hour period in children. They found those kids that ate rice had 14% more Arsenic in their urine than children who did not eat rice.

Arsenic has been linked to lowering IQ and developmental problems in children.

Do we know which rice is better?

Unfortunately the report found brown rice has more Arsenic than white rice!

Rice from the Southern States like Arkansas, Louisiana, Missouri and Texas had more Arsenic than California, India and Thailand

Rice soaks up Arsenic found in pesticides and fertilizers.



Currently there are no federal limits for how much Arsenic can be found in food.

The US FDA will now start testing different rice and their products. They expect to release their report end of this year with their recommendations and findings.

What can we do?

Vary your diet! Eat other grains like barley, quinoa, couscous. Limit rice to no more than 2 times a week and boil and wash the rice well.

EDUCATE YOURSELF, UNDERSTAND THE FOOD YOU ARE EATING AND MAKE THE BEST CHOICE FOR YOU AND YOUR FAMILY.

CHOOSE NON-GMO FOODS, LOBBY TO GET PROPER LABELLING OF FOODS, CHOOSE OTHER GRAINS INSTEAD OF RICE.