

## Fertility and GMO

### **Is it possible that the foods you eat are actually affecting your fertility and inhibiting your chances of getting pregnant?**

The answer is a resounding, “Yes,” according to dozens of research groups worldwide who have been studying the effects of Genetically Modified Organisms found in many of today’s most common foods.

Genetically Modified foods, according to researchers, are becoming a real problem when it comes to fertility, causing an influx in worldwide infertility rates. Since the 1970’s alone, sperm counts among the world’s male population have declined as much as 40-50%, according to some studies. GMO foods may be just one of the reasons, warn those studying the phenomenon.

Despite alerts being published by the world’s most renowned scientists, manufacturers continue to use these products in their products fed to both livestock and humans.

The problem has become so great that the EU has actually banned the use of GMO products throughout Europe, while the United States continues to allow them throughout our nation. While some of the top food manufacturers like Kellogg, Heinz, Pepsi, Coke and Kraft, have changed their recipes in Europe, no longer using GMO ingredients in their products, those same products sold in the States continue to use these dangerous ingredients, thanks to the inaction being taken by the FDA.

### **So, why do genetically modified foods present such a danger for animal and human fertility?**

According to a report published last spring by the American Academy of Environmental Medicine (AAEM), “there is more than a casual association between GM foods and adverse health effects.” These findings have caused the AAEM to encourage all physicians to “educate their patients, the medical community and the public to avoid all genetically modified foods.”

### **So, what are the risks most associated with GMO foods?**

The Austrian Health Ministers reported in 2008, that their own research indicated that fertility rates have suffered dramatically due to GMO exposure, as have the health of the human immune system. Those who regularly ingest GMO foods are more likely to be sick, age faster and have a harder time getting (and staying) pregnant.

In study after study, the effects of fertility were alarming, claim researchers. In one report, the testicles of some animals actually changed colors from a normal pink to an alarming blue after being fed GMO produced feed. In addition, sperm was shown to be altered, resulting in fewer pregnancies overall. DNA too has shown alterations after ingesting even the smallest amount of GMO foods.

But, males are not the only ones being affected by GMOs. Female fertility too is under attack. Female animals being studied showed an alarming increase in an inability to get pregnant as well as a spike in premature births; low birth weight babies and infant mortalities after being fed a regular diet of GMO. Rats given GMO feed in Europe were shown to give birth to babies that regularly died within weeks of their birth (sometimes as many as 99%), compared to only a 10% mortality rate for those fed regular feed.

One of the few long-term studies (there are not many long-term studies done on GMO foods) showed that mice fed GMO corn over a period of 20 weeks had greatly impaired fertility compared to the mice fed non-GMO corn. In addition the offspring of the GMO mice also suffered from lower fertility rates.

In the U.S., pig farmers in the Midwest reported that more than 1,000 pigs on their farms became sterile after being fed a regular diet of GMO feed over several months.

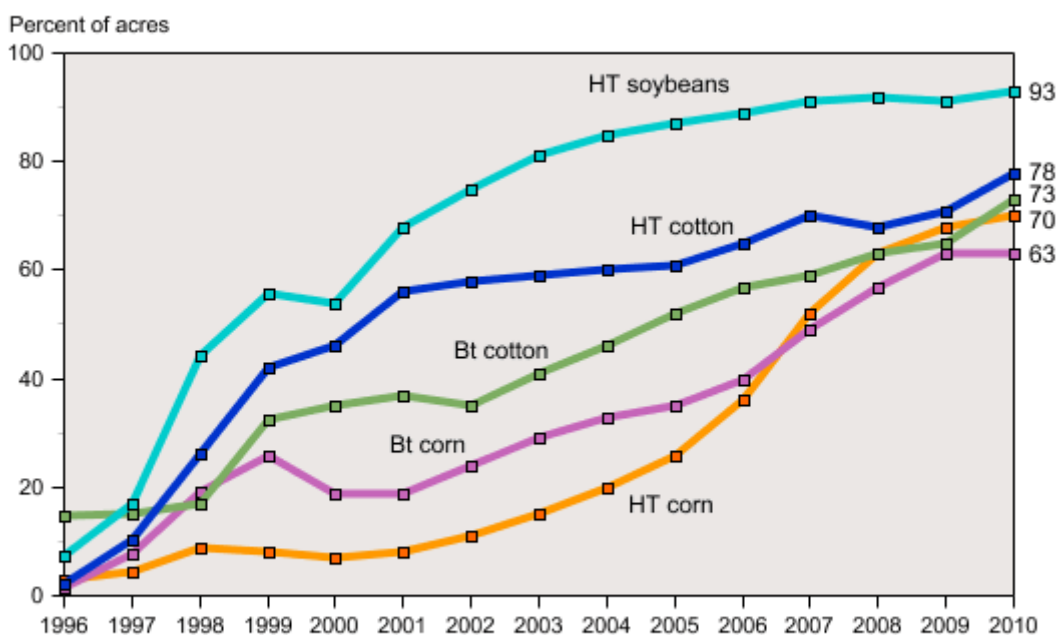
Considering the dire consequences of using this type of food product, why do manufacturers continue to add it to both livestock feed and human food products? Designed to include a built-in pesticide that kills insects when they eat it, Genetically Manufactured Foods contain *Bacillus thuringiensis* (Bt) to keep all sorts of insects from killing the crops. This increases profit margins as farmers lose less of their crops. Unfortunately, the same Bt that kills off the insects is believed to be causing widespread health and fertility issues throughout the world, causing many countries to ban its use altogether until it can be proven to be safe for consumption. This has left some food manufacturers scrambling to change their ingredients in Europe, while continuing to use these same dangerous products in U.S. foodstuffs.

To make matters worse, the FDA has yet to require food manufacturers to list the use of GMO foods on their packages, leaving many consumers unaware of what they are really eating. This can make it even harder to make the wisest and healthiest food choices while shopping.

### Which Foods are Most Likely GMO?

The highest GMO food grown is soy. In the U.S., approximately 54% of all soybeans cultivated in 2000 were genetically-modified, in 2010 93% of soybeans are genetically modified. Yet another reason to avoid soy foods.

### Rapid growth in adoption of genetically engineered crops continues in the U.S.



Data for each crop category include varieties with both HT and Bt (stacked) traits. Sources: 1996-1999 data are from Fernandez-Cornejo and McBride (2002). Data for 2000-10 are available in the ERS data product, Adoption of Genetically Engineered Crops in the U.S., tables 1-3.

While soy, corn and potatoes are the most prevalent GMO foods, there are many others that you should be aware about as well, such as:

- Salmon
- Canola oil
- High fructose corn syrup/corn sugar (on of the reasons there is so much GMO corn being grown. The other reason for so much corn is that it is readily fed to livestock)
- Dairy (conventional cows are injected with the genetically engineered hormone rBGH/rBST and are frequently fed GMO corn and grains.)
- Processed foods (many processed foods have been tested and shown to contain some GMO ingredients.)

## How To Avoid GMO Foods

In the US there are currently no labeling laws requiring that the inclusion of GMO foods be placed on the label. The best ways to avoid GMO foods are to buy organic and shop at the farmer's market.

Buy organic – If it is organic is is not a GMO food. In the US and Canada manufacturers are not allowed to label something as 100% organic if it has been genetically modified or if it is an animal and has been fed genetically modified feed. So when it comes to eggs, dairy and meats, organic is a must.



Know your numbers – on produce there is a little sticker that has a number on it. This can tell you if the produce is GMO, organic or conventional. Keep in mind that food producers are not required to tell us if the produce they are selling is GMO, so buying organic is still the best option.

If it is a 4-digit number, the food is conventionally produced.

If it is a 5-digit number beginning with an 8, it is GM.

However, do not trust that GE foods will have a PLU identifying it as such, because PLU labeling is optional.

If it is a 5-digit number beginning with a 9, it is organic.

Avoid processed foods – Processed foods can contain GMO ingredients and do not have to disclose it on the label. They can also contain other harmful ingredients such as MSG and other chemicals without disclosing them on the label. In addition, processed foods are not healthy and should be avoided anyways.

### References:

1. Seeds of Deception by Dr. Jeffrey M. Smith
2. Austrian Health Ministers Report 2008
3. Organic Consumers Organization (website)
4. American Academy of Environmental Medicine