Warning: GMO's Causes Devastating Offspring Defects in New Research Study - Mercola and Jeff Smith Posted By Dr. Mercola | May 22 2010

http://articles.mercola.com/sites/articles/archive/2010/05/22/jeffrey-smith-interview-april-24.aspx

** Everything You HAVE TO KNOW about Dangerous *** GeneticallyModified Foods by Jeffrey Smith

http://tinyurl.com/GMOfreefoods

In this interview, Jeffrey Smith, author of the bestseller *Seeds of Deception*, and *Genetic Roulette*, discusses the latest GMO research findings coming out of Russia, which adds fuel to previous concerns about long-term sterility and other highly bizarre physiological side effects.

Mercola Interviews Jeffrey Smith

- Part 1 http://www.youtube.com/watch?v=yCZBy76hNHM
- Part 2 http://www.youtube.com/watch?v=IZVglwBgHQM&feature=related
- Part 3 http://www.youtube.com/watch?v=1ta3v|TGZ0I&feature=related
- Part 4 http://www.youtube.com/watch?v=n3VW6aVN ts&feature=related
- Part 5 http://www.youtube.com/watch?v=fXQW5g8zL-8&feature=related
- Part 6 http://www.youtube.com/watch?v=HKC -KKyd6o&feature=related

Sources:

<u>Institute for Responsible Technology, "Genetically Modified Soy Linked to Sterility, Infant Mortality"</u>

The Voice of Russia April 16, 2010

Grist April 20, 2010

Jeffrey Smith Interview Transcript (PDF)

Huffington Post April 20, 2010

Mercola's Comments:

I strongly believe that one of the most obvious clues about the danger of GMO foods are that just about EVERY species of animal that is offered a GMO food versus a non-GMO food will avoid the GMO one. Many times they will do this to the point of starvation, as they have an intuitive sense of the danger of this food.

Please listen to the interview as Jeffery expands on this point in great detail. It's one you can use to effectively share with your friends and family who are not yet convinced of the dangers of GMO foods.

If you have more time with them you can bring up the sterility argument that is expanded upon with these new research findings. You might have read this before that genetically modified foods may cause sterility in future generations but now the latest research from Russia provides shocking confirmation of this potential.

This study, which was conducted by the Russian equivalent of the US National Association for Gene Security, has not yet been published, but its findings were recently announced. It's anticipated that the details will be published later this summer.

The release of this new information provides yet another health risk, and confirmation on earlier problems related to fertility, birth weight of offspring, and infant mortality. In this feeding study they used hamsters, an animal which has not been previously featured in GM safety studies.

One group of hamsters was fed a normal diet without any soy whatsoever, a second group was fed non-GMO soy, a third ate GM soy, and a fourth group ate an even higher amount of GM soy than the third.

Using the same genetically modified (GM) soy that is produced on over 90 percent of the soy acreage in the US, the hamsters and their offspring were fed their respective diets over a period of two years, during which time the researchers evaluated three generations of hamsters. First they took five pairs of hamsters from each group, each of which produced about seven to eight litters each, totaling about 140 animals.

At first all went well, but serious problems became apparent when they selected new pairs from the offspring.

The first problem was that this second generation had a slower growth rate and reached their sexual maturity later than normal.

However, this second generation eventually generated another 39 litters:

- The no-soy control group had 52 pups
- The non-GM soy had 78
- The GM soy had only 40, of which 25 percent died

So these second-generation GM soy-fed hamsters had a **five-fold higher infant mortality rate**, compared to the 5 percent normal death rate that was happening in the controls.

Nearly All of the Third-Generation GMO Babies Were Sterile!

But then an even bigger problem became apparent, because nearly all of the third generation hamsters lost the ability to have babies altogether.

Only a single third-generation female hamster gave birth to 16 pups, and of those, one fifth died.

In short, nearly the entire third generation of GM soy eaters were sterile! But it doesn't end there.

In the GM soy-fed groups they also found an unusually high prevalence of an otherwise extremely rare phenomenon – hair growing inside the animals' mouths.

Says Smith:

"... it's a very rare phenomenon but he [study author, Dr. Surov] had never in his life seen more hair in mouths of hamsters than with these GM soy-fed, third generation hamsters."

As you may know, genetically modified crops weren't released until 1996, starting with GM soy, corn and cotton. Modified canola came about a year later.

Please remember humans have MUCH longer life spans than rats and that GMO foods were only introduced in 1996. This is LESS than one generation.

So we're still nowhere near seeing the full effects of these potential ramifications in humans, as we're only about 15 years into it. But if the effects are anything like the effects on numerous types of animals, we could be looking at sterility on a grand scale as our great-grandchildren grow up and begin to try to procreate...

The fact that the US is completely unwilling to implement the precautionary principle with regards to GM foods is incomprehensible in light of the findings we already have from animal studies.

Additionally, some 800 genetically engineered food applications have been submitted to the USDA, but not one single environmental impact statement has been prepared. So not only are human health ramifications ignored, but the entire eco system is being jeopardized.

Rampant Conflicts of Interest Put You and Your Family at Great Risk

Unfortunately, it's clear that the US government is not in a position to make reasonable and responsible decisions related to GMOs at this point, when you consider the fact that the Obama administration has placed former Monsanto attorney and Vice President, Michael Taylor, in charge of US food safety, and serious conflicts of interest even reign supreme within the US Supreme Court!

That's right. <u>Supreme Court Justice Clarence Thomas is also a former Monsanto attorney</u>, but refuses to acknowledge any conflict of interest as he's hearing Monsanto's third appeal for deregulation of genetically modified alfalfa seeds.

After corn, soy and wheat, alfalfa is the most widely grown crop in the US, so allowing GM alfalfa to be deregulated could spell disaster in several ways. It's easily cross-pollinated by bees and wind, and it's a perennial, meaning GM alfalfa could live on for years, spreading their genetically modified traits far and wide for a long period of time.

It remains to be seen how Justice Thomas rules in this case...

But in addition to conflicts of interest, we're also dealing with government agencies that <u>refuse to acknowledge the science produced by their own scientists</u>.

Closely tied to the production of GM crops is the use of the herbicide Roundup, which contains glyphosate. Monsanto's Roundup is the most widely used herbicide in the world, and contrary to the popular belief propagated by industry, pesticide use has significantly increased – DOUBLED since 2005 -- rather than decreased with the use of GM crops.

As it turns out, this is a serious problem for more reasons than one. Not only are GM food crops saturated with more pesticides than ever before, which naturally ends up in your body when you eat them, but glyphosate may also be killing the soil itself.

This startling conclusion comes straight from one of the USDA's own scientists, Dr. Kremer. However, his employer has opted to more or less ignore his findings, which, according to this article in <u>Grist</u>, include evidence that glyphosate causes:

- damage to beneficial microbes in the soil increasing the likelihood of infection of a crop by soil pathogens
- interference with nutrient uptake by the plant
- reduced efficiency of symbiotic nitrogen fixation
- overall lower-than-expected plant productivity

More Evidence of Reproductive Problems from Eating GM Foods

But let's get back to the infertility caused in animals.

The evidence of third-generation sterility in hamsters is just one link in a chain of studies that show evidence of this tragic side effect.

For example, back in 2005, Dr. Irina Ermakova, one of the senior scientists with the Russian National Academy of Sciences, reported that more than 50 percent of the babies from mother rats that were fed GM soy died within three weeks, compared to a 10 percent death rate among the controls.

Again, that's a death rate five times higher than normal – identical to the findings in the hamster study above.

Similarly, the rats were also growing more slowly, just like the hamsters, and their offspring also had lower birth weights. And again, when the rats' offspring tried to reproduce, they too were found to be mostly sterile, but it happened sooner, with infertility striking the second generation of rats, as opposed to the third generation of hamsters.

Ermakova wanted to perform further studies to analyze the organs she'd collected from the study, but she never got the chance. Says Smith:

"She told me as we were sitting at the EU Parliament after giving a presentation there, that her boss had been pressured by his boss.

So, she was told to do no more GM food study on animals, her documents were burned on her desk, samples were stolen from her laboratory, and one of her colleagues tried to comfort her by saying, "Well maybe the GM soy will solve the overpopulation problem on earth."

She wasn't impressed." Neither am I.

However, she inadvertently stumbled upon further proof that GM soy wreaks havoc with reproductive health. She discovered that the rat chow being fed to all rats in the facility had been switched, so that all of it contained GM soy... Two months later she asked her colleagues whether or not they'd discovered any surprising changes in the infant mortality of their various studies, and yes indeed, they had!

Inexplicably, infant mortality in the animal studies performed at the National Academy of Scientific Laboratory in Moscow had skyrocketed to over 55 percent, sometimes higher.

There's more evidence of reproductive health being harmed in various ways. Smith explains: "[Ermakova] gave me a slide of a completely new study in which she fed male rats genetically modified soy, and it's absolutely stunning.

On the left side of the slide is a pink testicle. On the right side of the slide, is a blue testicle.

She said that when the GM soy was fed to the male rats, it <u>changed the color of their testicles</u> <u>from pink to blue</u>, and you could see the cells on another slide, left to right, the structure of the cells in the testicle was different; a completely different blood flow.

And this reminded me of what they had studied in Italy, where they fed mice genetically modified soy and they also had changes in their testicles, including damage to the young sperm cells.

Now, if you're damaging the young sperm cells, it could result in one of two things. They can result in infertility, or problems with the offspring.

Well, it appears that they may have had both.

In fact, with the mice, they looked at the offspring and they took the embryos out of the pregnant mothers and looked at how the DNA was functioning. And they compared the DNA of those who were born to GM soy-fed parents versus those who were fed non-GM soy and the DNA functioned differently.

So we're seeing a fundamental change in the offspring of mice that were fed genetically modified soy, whose parents were also fed genetically modified soy."

Other feeding studies using GM corn have also produced similar results. For example, mice fed GM corn had increasingly fewer and smaller babies the longer they stayed on the GM diet.

There are also plenty of reports about pigs, cows and other livestock having reproductive problems when fed genetically modified feed.

It's Time to Save Yourself and Your Famiy Because White Knights Don't Exist in Government

It's important to realize that the key to ending the ongoing atrocity of GM foods lies not with government, but with you and me.

Consumers are going to have to drive GM foods out, and we CAN do it.

Through educating yourself, your family, friends and community about GMOs, and most importantly of all, through the food purchases you make, you can stop this unregulated science experiment.

Once we reach the tipping point, which is probably as little as five percent of the US population, the market WILL respond. They can't afford not to!

Once enough people refuse to buy GM food products, it won't be long before food manufacturers start switching their ingredients.

How to Sniff Out GMOs and Vote with Your Pocketbook

You CAN avoid GMOs, if you know what to look for.

First of all, remember there are eight genetically modified food crops:

- 1. Soy
- 2. Corn
- 3. Cottonseed (used in vegetable cooking oils)
- 4. Canola (canola oil)
- 5. Sugar from sugar beets
- 6. Hawaiian papaya
- 7. Some varieties of zucchini
- 8. Crookneck squash

Based on this list, anything containing soy or soy derivatives should be avoided, as well as anything containing corn, the most obvious ingredient being high fructose corn syrup. The easiest way to avoid ending up with GM foods in your shopping cart is to do some preplanning using this free non-GMO shopping guide.

The <u>Institute for Responsible Technology</u> has also created a free iPhone application that is available in the iTunes store. You can find it by searching for ShopNoGMO in the applications. The shopping guide lists the various derivatives of each crop to be avoided, and even better, it lists hundreds of brand products in 22 food categories that are non-GMO, so if you're still buying processed foods, at least you can easily select a brand that does not use genetically modified ingredients.

Tipping Point... If Europe Did it, the US Can Too!

Getting into a shopping habit of continually avoiding GM food products will create pressure on the marketplace, without which there is little hope. So take this one step! Download the shopping guide, and make note of which brands to buy and which ones to avoid like the plague that they are.

Europe managed to reach their tipping point in April of 1999, ELEVEN YEARS AGO(!), within a single week of negative media which swayed the shopping habits of consumers enough for food companies to commit to stop using GM ingredients.

The idea that consumers have tremendous power is not wishful thinking. It's an absolute fact.

Monsanto could probably be effectively bankrupted by the end of this year, if enough consumers were to take individual, proactive steps to avoid purchasing anything even remotely related to their business.

Another point that validates the effectiveness of this consumer-driven strategy is the progress we're now seeing with high fructose corn syrup. Within the last few weeks, several major

corporations have declared they're taking HFCS out of their products due to consumer demand.

More Educational Material

You can find loads of additional information about GMOs on the site

www.ResponsibleTechnology.org.

There you can also order additional guides to hand out to friends, health care practitioners, and decision makers within your community, along with free online videos, pod casts, and articles that you can repost and republish.

Last but not least, I want to put out a call for a very special donation.

The iPhone application was created by someone who generously donated their time to make it, and if you or someone you know is a competent Android developer who is willing to assist in this cause, please contact

info@ResponsibleTechnology.org.

You can also make financial donations on their website to help accelerate the tipping point against GMOs.