

Biotechnology and the Consumer as it Relates to Pork Production

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▪ Don't Pee In My Well

As a scientist, I learned a long time ago that many public debate issues are "fought" on the basis of safety and science but in reality, other forces are at work. Biotechnology and swine production facilities are examples.

This hit me between the eyes when I spoke to a large audience on pesticide issues and groundwater. Despite only two wells of about 1600 not meeting legal drinking standards on pesticides (unlike nitrates and bacteria), we had trace amounts of pesticides (legal) in some 6% of wells. I thought this was good news especially since the two contaminations related to back flow issues.

A gentleman came up afterward and said, "You just don't get it!"

"What?" I asked.

"I believe your science. I trust that I would not be made sick, will not get cancer, or have birth defects in my children. But! Every time I have a glass of water I look at it like this. You "peed" down my well head. Your pee gets diluted and I agree I won't get sick, I won't get cancer, my children won't have birth defects. But every time I have a glass of water I think of your urine in my glass."

Fair comment: We were arguing science, but trespass issues, trivializing this contamination, were their issues.

No one cares how much you know until they know that you care!

▪ **How to ensure a technology will not be successful**

From Conrad Brunt, University of Waterloo.

- **Say there is no risk!** In any new endeavour, there is risk; including not accepting a technology. The question is how much and can it be reasonably managed. In Britain, consumers lost regulatory trust when government said there was no risk of mad cow disease affecting people. People accept risk but they have questions about how much and how is it being managed.
- **Hide the negatives!** Dow Corning was found to have hidden data on silicon-breast implants. Science doesn't show implants to be a problem from an epidemiological perspective. Nevertheless, every jury convicts, one reason being you hid data. Put negatives up front and speak of how you are addressing the problem.
- **Provide no benefit!** With current biotechnology seed companies and farmers are the beneficiaries. Intangible benefits, environment, food security etc. don't answer the question. What's in it for me personally? This is one essential reason why biotechnology medical products are perceived so differently than biotechnology food.
- **Provide no choice!** I agree the risks are extremely small, I agree the science says it will not harm me. However, let me make the choice! Otherwise you are telling me what's good for me. We are dealing with adults. There is no scientific reason to say dog meat is unsafe but do I have the right to know?
- **Call Opponents Idiots/Luddites!** The most important communication skill is the ability to listen. There are some genuine concerns that we must ask, have open and honest dialogue about them.

▪ **What are some underlying factors?**

- **Where is the line!** In biotechnology, we are moving genes from plants and bacteria primarily. People think differently of a fish gene or human gene. Where do we as a society want the line to be?
- **You're playing God!** To some this is a religious issue *but* how do we answer those that feel this way! Maybe we agree to disagree! Sunday shopping was such an issue.
- **Multinational control!** Fewer and fewer companies are controlling our food supply. It's the same in computers, cars, banks, and airlines and is an underlying issue in this debate. Council of Canadians are at the table for this reason. Companies (some in particular) didn't look to the *public* good.

They have learned, Monsanto has released the rice genome to the world / Novartis has made Bt corn available to subsistence producers.

- ▶ **You're going too fast!** I agree its safe, but this has been the fastest pick-up of a technology in the history of agriculture. If something goes wrong will it be massive and continued. Unlike chemistry, we are dealing with living things that can self-replicate. This is built on over a hundred years of science. The first GMO medicine - "humanized insulin" - came out in 1982.
- ▶ **Finally, prove the negative!** What about two generations from now. Can you prove that it won't harm? There are no absolutes: but "Here is what we are doing to answer that question" is the proper response.

Biotechnology is a media battle for public opinion. Unlike England, the Canadian public hasn't responded and in my opinion in North American, this issue will become like organic food. Remember, consumers' number one concern about food is price. Science should say that the number one health risk today in Canada from food is over consumption.