



**Testimony for House of Commons Standing Committee on Agriculture and Agri-Food - “GM Animals for Human Consumption” - September 29 for Oct 4 testimony**

**Canadian Biotechnology Action Network  
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Thank you very much for the invitation to present before the Committee today. We very much appreciate this opportunity and thank the Committee for undertaking this study.

I work in Ottawa as the Coordinator of the Canadian Biotechnology Action Network, which is often referred to as CBAN.

CBAN monitors, researches and raises various concerns and critiques – to encourage and engage democratic discussion over the introduction and use of this technology in food and farming. We provide information to Canadians – for example, in the absence of mandatory GM food labelling, we provide a list of which genetically modified foods are on the market.

CBAN has worked nationally on this issue for 10 years. The network brings together experience that spans the full two decades, and even longer, since GM crops were first approved.

CBAN brings together 17 organizations on the shared platform of Tides Canada. We are comprised of environmental groups, farmer associations, international development groups and regional coalitions of grassroots community groups. Together, CBAN’s membership raises diverse types of concerns over the use of genetic engineering, and brings together a wide and rich range of perspectives and expertise.

I will use the terms genetic engineering and genetic modification interchangeably, and use the short-form GM or GMO.

How close GM products and technologies are to market is actually difficult to determine. The pipeline of GM animals is difficult to monitor because the research is most often owned by private companies, and the majority of research in the lab never actually leads to working products. We heard last week from regulators that they discuss the product pipeline with companies, but this is not information that the Canadian public is privy to.

However in Canada we already have two concrete examples that we can use to discuss the issues raised by GM animals and the regulatory and policy challenges, the GM salmon in particular:

1. Canada approved the world's first GM food animal, the GM salmon – that could make its way to market in the next 2-3 years. The company's initial plan was to produce GM salmon eggs in Prince Edward Island, ship the eggs to Panama, and ship the processed GM fish to the US and Canadian markets. However, the company now has approval to produce both the GM salmon and eggs in PEI - provided production is in a contained facility on land. It has not yet been mentioned, that there is a court case that challenges the environmental safety approval. Two environmental groups, one on the East and West coast (Living Oceans Society in BC and Ecology Action Centre in Nova Scotia) are likely to be back in federal court before the end of the year.
2. In Canada, we have the additional concrete example of the GM pig from the University of Guelph – that was called “Enviropig” because it produced less phosphorous in its feces. This pig was approved by Environment Canada for production, but the review by Health Canada for safety was halted when the University shelved their project after pork producers withdrew their support.

Last year, CBAN produced six reports in a research project that we called the GMO Inquiry. After twenty years of GM crops and foods in Canada, we wanted to evaluate the impacts. You received the files of these reports last week. Much of the information and analysis I will present is detailed in these reports – though we also have earlier research specific to the issue of Enviropig and additional research on the specific issues relating to the GM salmon.

In the interest of time, we have structured our comments around 5 specific policy recommendations and a further, final, broader proposal.

**1. There needs to be an assessment of economic impact before any GM product is approved for release.**

The release of some GM products poses economic risks. These risks are not assessed by any department before a new GM product is released. Economic risk-benefit analysis is not part of Canadian regulation. This also means that farmers are not consulted before GM products are approved - Or in the case of the GM fish, fishers, the aquaculture industry and aboriginal peoples and local communities were not consulted.

There is no assessment of risks but there is equally no assessment of benefits, before or after commercialization.

We only need look at the \$29 million dollar cost of GM contamination to Canada's flax industry to see a little of what is at stake.

This problem of the costs for some farmers is not new – it was articulated by farmers over the possible commercialization of GM wheat in 2004 and it continues to be heard in the objections to GM alfalfa by Albertan forage groups, and in fact 15 farm groups together earlier this year.

The economic risk manifests itself in at least two major ways:

1. The introduction of a GM product, especially in the absence of mandatory labelling of GM foods, can undermine the market for an entire commodity. The GM apple was approved over the objections of The BC Fruit Producers Association and Quebec Apple Producers Association who stated they did not want the GM apple approved because they wanted to protect the reputation and market for apples. The approval of the GM apple was anticipated to undermine consumer confidence and damage the entire market for apples.

2. If a new GM product is released and contamination occurs, the result can be market closure in export markets that have not approved the GM product, as happened with flax contamination.

**2. There is a need to strengthen environmental risk assessment including a need to assess the long-term, system-wide risks of each GM product and the use of this technology as a whole.**

Unfortunately, the risk of contamination is not necessarily diminished with GM animals.

There have already been two contamination incidents with GM pigs in Canada - on two separate occasions, at two different institutions, with two different experimental pigs - that is GM pigs that were not approved for human consumption or release. In both cases, GM pig carcasses were rendered into animal feed rather than incinerated as biohazard. Both contamination incidents were caused by human error.

These two incidents highlight the problem of contamination, even with large organisms – not just small flax seeds or pollen from flowering alfalfa plants. If we can't contain GM pigs, how can we successfully contain GM salmon or salmon eggs? (Or alfalfa, or flax or wheat for that matter.)

### **3. Canada need systems for tracking and tracing all GM organisms.**

Statistics Canada does not track all GM products on the market. Regulatory agencies do not track which products are commercialized and being grown. The government only knows what GM traits have been approved – not where they are, or how much are on the market.

This means that the government does not have tools it needs to assess risks and benefits in the long term or even answer your question about the market status of the GM apple.

The Committee has already heard about the challenges of tagging from the Cattlemen. The industry already struggles to track seafood – it is too common that seafood on the food market is actually mislabeled.

### **4. Canadians need transparency in regulation.**

CBAN examined this issue very closely in our GMO Inquiry. Transparency is missing in almost every step of regulation. In a few cases there is partial transparency.

For example, GM animals are not covered under the voluntary agreement between CropLife and the CFIA that allows the CFIA to post notices of products under review, if companies agree. This is called the Biotechnology Notices of Submission project. This means that at any given time, Canadians do not know what GM animals, if any, are under government review.

### **5. Canadian consumers need mandatory labelling of all GM foods in the grocery store**

Lack of transparency is most obviously manifest in a lack of labelling. The issue of GM animals makes labelling an even more urgent issue for Canadians. The issue of GM animals also highlights the range of concerns that could bring a consumer to want GM food labelling, to want to choose. For example, some Canadians have specific ethical concerns.

Twenty years of polling consistently shows that over 80% of Canadians want mandatory labelling of all GM foods, including the most recent which was 88%. So whatever disparate concerns are expressed by Canadians over GM foods, over 80% agree on this one point.

A GM apple and a GM potato are now approved, are they going to be on the market this year for the first time? The GM salmon could be on the market sometime in the next three years – When? Where? Who will know?

Mandatory labelling needs to be place before this GM fish hits the market.

## **In Conclusion,**

The specific proposals we have outlined are all needed to get regulation and policy close to what it needs to be to address the challenge of GM animals. We have articulated these specifics because the first GM food animal has already been approved and could find its way onto the market really soon - but there is a **more fundamental need**.

### **We need to step back and ask:**

#### **Is genetically engineering animals ethical?**

(There are religious and spiritual communities in Canada that may have something to say about the morality of genetically engineering animals)

#### **Is it acceptable to Canadians?**

#### **Is it necessary?**

It is Canadians that need to answer these questions. It is Canadians that should be asked.

There needs to be a moratorium on the introduction of GM animals until Canadians have a chance to be heard, and until changes are made to increase the government's ability to regulate GM organisms and foods, including tracking and traceability, and transparency including mandatory GM food labelling.

Canada has two decades of experience with GM crops and foods that has not yet been evaluated. We need to step back so that we can also evaluate the impacts of GM crops. We need to do this and then learn and apply any lessons from the release of GM crops and foods before we consider allowing GM animals into our environment and food system.

Thank you for your attention to our comments and for your consideration of this important issue.