

## CONSUMERS WANT MANDATORY LABELLING

There is no mandatory labelling of GM foods in Canada (or the US) but an overwhelming majority of Canadians want labels. A 2015 Ipsos Reid poll commissioned by CBAN confirms that 88% of Canadians want mandatory labelling.

Instead of labelling, the government and industry have spent millions to reassure consumers that GM foods are safe. The federal government spent \$13-million on biotech communications between 1997 and 2003.

**Are GM foods better for consumers?**



## Identifying GM Foods in Canadian Grocery Stores

Without mandatory labelling, the only way to identify GM foods on grocery store shelves is to check for ingredients that come from the GM foods on the market: corn, canola, soy, white sugar beet (and some papaya, squash, cotton and US milk products from Bovine Growth Hormone).

[cban.ca/gmfoods](http://cban.ca/gmfoods)

### Non-GM Food Labels

There are two main non-GM food labels on the North American market. Both labels are backed by strong certification programs. Some products carry both labels but they are two very different programs.



The national organic standard in Canada (and the US) prohibits the use of GM seeds and other GM products including GM feed for livestock. Organic farming is a defined model of ecological farming that also prohibits the use of synthetic pesticides. See [thinkcanadaorganic.ca](http://thinkcanadaorganic.ca)



The Non-GMO Project verifies products as non-GM. The standard requires testing of all ingredients that could be at risk of GM contamination with a maximum contamination level at 0.9%, aiming to reach zero. While these foods are not produced with GMOs, unless they are also certified organic, they can be produced with synthetic pesticides. See [nongmoproject.org](http://nongmoproject.org)

Twenty years ago, the first genetically modified (GM, also called genetically engineered) foods were approved in Canada. GM foods were allowed onto grocery store shelves in Canada (and the US) without labels, without meaningful public debate, without government testing, and without long-term animal feeding studies.

There is no scientific basis to conclude that GM foods are safe. Research continues to raise serious questions about potential health hazards and more study is needed. The risks from eating GM foods have not been fully investigated.

Releasing genetically modified organisms (GMOs) into our food system and environment remains an ongoing experiment, still in need of testing and evaluation.

There is a lot of money to be made by bringing new GM seeds, animals and foods to market, and a lot at stake if something goes wrong.

### GM Crops Currently Grown

| Canada     | Global  |
|------------|---------|
| Corn       | Cotton  |
| Canola     | Squash  |
| Soy        | Papaya  |
| Sugar beet | Alfalfa |

## THERE ARE NO GM FOODS ON THE MARKET WITH CONSUMER BENEFITS

Although launched with many promises of benefits to consumers, two decades later **GM foods on the market are not cheaper, tastier, fresher, more nutritious, or more environmentally-friendly.** In fact, the use of GM crops has increased rather than decreased the use of synthetic herbicides.



Join the inquiry. Get new research, inquiry updates and ways to get involved. [GMOinquiry.ca](http://GMOinquiry.ca)

For the FULL REPORT see [GMOinquiry.ca/consumers](http://GMOinquiry.ca/consumers)

## THERE ARE INHERENT RISKS IN THE PROCESS OF GENETIC ENGINEERING

The process of genetic engineering is not precise and can create unintended and unpredictable changes in organisms. These uncertainties are enhanced by the complexity of organisms, a complexity that scientists do not fully understand. Genetic engineering is used to transform plants and animals even though we cannot predict all of the impacts, and we do not know how all of the genetic material in organisms works.

## THERE IS NO SCIENTIFIC CONSENSUS

“ In reality, many unanswered questions remain and in some cases there is serious cause for concern.

— *No scientific consensus on safety of genetically modified organisms* statement endorsed by over 300 scientists. See [www.ensser.org](http://www.ensser.org)

There is a diversity of opinion on the safety of GMOs in the scientific community. The biotechnology industry has a vested interest in promoting the incorrect idea of a scientific consensus. We need more science, not less.

## THERE IS NOT ENOUGH SCIENCE

The peer-reviewed literature on GM food safety questions mostly consists of short-term studies. We are often presented with big lists of studies as evidence of safety, but these lists can be misleading. The studies that exist examine different questions, for different durations, and use different test animals – some are not even safety studies.

Even after twenty years, the scientific literature on GM food safety is inconsistent and far from robust, leaving more questions than answers.

## THERE IS LITTLE INDEPENDENT SCIENCE

Independent studies on GM food safety questions are rare, and long-term studies are even rarer. The studies that do exist indicate that some genetic modification could result in toxic effects, allergic responses, or altered nutrition, and clearly point to a need for further research.

Globally, there is very little independent science, partly because governments rely on corporate science to assess the safety of new GM foods. Barriers to conducting independent studies include funding and access to GM seeds for

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testing. The high stakes involved in commercializing new GM products have also added to an environment that is hostile to critique, from the public and even from within the scientific community.

The commercial pressures behind getting GM products to market are undeniably influencing how science is being done, and how much.

## THERE ARE FEW LONG-TERM STUDIES

Very few long-term tests have been conducted. Health Canada has approved GM foods in Canada without long-term safety tests.

## THERE ARE POTENTIAL HEALTH RISKS

### Toxicity

Many studies show signs of toxicity (such as in the kidney and liver, which could mark the onset of chronic disease) and some show actual toxic effects (such as damage to organs). Also, the herbicides used with GM crops pose known risks to human health.

### Allergies

Finding out if any GM foods could trigger allergic responses is difficult. There is no single reliable method or test. There is no reliable way to discover if a GM food is allergenic before it is released onto the market.

### Antibiotic Resistant Marker Genes

Approving GM foods that are made with antibiotic resistant marker genes is discouraged around the world because of the slim chance that a GM food could transfer antibiotic resistance to human gut bacteria. However, most of the GM foods on the market were made this way, including the GM non-browning apple approved in 2015 (not yet on the market).

### Dietary Exposure

Government regulators in Canada do not know how much GM food is in our diet, or what kinds of GM foods we are regularly eating. There is no government or industry monitoring of human consumption of GM foods.

## THERE IS NO TRACING AND MONITORING

There is no tracing system for GM foods in the market. This means that we do not know if the foods we have been eating for the past twenty years have had any health impacts.

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