

EARNSCLIFFE



Public Opinion Research Into Biotechnology Issues

Presented to the Biotechnology
Assistant Deputy Minister Coordinating Committee
(BACC), Government of Canada

December 2002

Seventh Wave Report – Executive Report

Prepared for the Biotechnology Assistant Deputy Minister Coordinating Committee,
Government of Canada, by Pollara Research and Earnscliffe Research and Communications.

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Introduction

Pollara Research and Earncliffe Research and Communications are pleased to present this report on a public opinion research program conducted in the fall of 2002 for the Assistant Deputy Minister Coordinating Committee (BACC). This was the seventh wave of a series begun in the fall of 1999. During that time, the BACC has commissioned eight opinion surveys and more than sixty focus groups. In all, there are more than 11,000 data points available in what is North America's largest and most comprehensive investigation into attitudes about biotechnology and the public policy that surrounds it. The program is designed to produce two waves of research each year with a large tracking component and chapters of more intensive inquiry into specific issues like GM food, patenting, and stem cell research.

The seventh wave was completed in early November, 2002 and was comprised of two separate instruments:

- a telephone survey of 1200 Canadians;
- three sets of focus groups (a total of 6 groups) to support the survey.

The research was designed to accomplish three major objectives:

- to track sentiment on a range of biotechnology issues, using a baseline of data developed in previous waves of research;
 - to assess opinion more comprehensively in discrete areas, including GM food labeling and trade issues, as well as patenting related issues; and
 - to investigate communications issues associated with stewardship of the technology.

The telephone work began on October 3, 2002, and ended on October 14, 2002. The survey reports on the views of a random sample of 1200 Canadians and carries a margin of error for the national sample of +/- 2.8%, nineteen times out of twenty.

Three nights of focus groups (six groups in all) were conducted in Vancouver, Toronto, and Montreal between October 15, 2002 and October 30, 2002.

The focus groups followed a set agenda for discussion and probed in more detail opinion underlying the results of the telephone surveys. Each night comprised a group of approximately ten participants drawn from the general population and a group of similar size of *Involved Canadians*, our proprietary population segmentation of Canadians who are significantly more interested and involved in public policy issues.

This report combines the results of the telephone survey and the focus groups. It indicates where the focus group discussions either elaborated or deviated from the survey results.

Further information can be obtained from Pollara Research in Toronto and Earncliffe Research and Communications in Ottawa. Please contact us at our offices, at (416) 921 0090 or (613) 233 8080, or via e-mail:

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Executive Summary

Trend Lines

This wave of research marks a subtle but important shift in public perceptions of biotechnology. Biotechnology is maturing as an issue -- most people have now read or heard something about it, and know some of the pros and cons involved. There is a very clear sense of inevitability about the technology now, demonstrated best in focus groups where discussions have largely shifted from whether the technology will be accepted to how it will be managed.

Overall opinion towards biotechnology – its processes, products and/applications – has remained fairly stable over the past three years, with a slight increase in support in this most recent wave. Canadians continue express about two to one support for the technology. Although there is a small segment, in the range of 10%, which is strongly opposed to biotechnology.

However, one of the more notable subtexts identified in this research is that the degree to which support is articulated appears to be growing. Those who support biotechnology, about 60% of the population, are increasingly willing to defend it in a discussion, whereas in previous waves of research the small group of strongly opposed would not have their views challenged in focus groups.

Many, particularly those who are more highly engaged and educated, believe that biotechnology will be central to Canada's future economic success -- a large majority want the country to be a world leader in the technology so that they and Canada as a whole can gain its benefits. In this survey, it was found that Canadians are willing to allow government to contribute to private sector venture capital funds earmarked for Canadian biotech R&D.

However, there continue to be areas of biotechnology, chiefly in the areas of cloning and GM food, where there are strong reservations among significant pockets of the populace about the potential risks involved. In this wave of research, almost half of the population expressed some level of discomfort with GM food.

This issue of informed choice plays an important role in how Canadians wish decision-making about biotechnology, and GM food specifically, to occur. The research shows that Canadians expect that ethical considerations will guide the development of these technologies, but they are loath to allow the ethical standards of one person or group to determine whether a product should be allowed for all. The only exception to this rule is with regard to human cloning where people strongly advocate an outright ban. The preference of the vast majority is for individuals to make their own choices, based on their own ethical standards.

Awareness and Familiarity

Canadians exhibit a blend of high awareness of biotechnology mixed with low levels of engagement and knowledge. Polling data and focus group discussions show that a clear majority of Canadians have heard about and discussed the issue of biotechnology. Nevertheless, the number of people who say they are very familiar with biotechnology remains below 10%. Most find the area very complex — involving so many applications and so many issues that they suggest it is difficult to follow closely.

Although there remain low levels of reported familiarity and interest about the subject, focus groups often reveal that people are actually more informed about the subject than they give themselves credit for. This increased knowledge among interested people about these technologies is contributing to the “maturing” of the issues in the minds of many. Heightened awareness is driving the growth of more complex, nuanced and moderate views. And, with the exception of GM food, heightened awareness correlates with higher levels of comfort with most aspects of the technology.

A significant number, totaling almost half of the survey sample, indicated that they recalled seeing or hearing about a recent Canadian achievement in this area in recent months. Among involved Canadians, the number totaled almost six in ten, again a very strong indication of increasing recognition among Canadians of the growing importance of this field.

The focus groups strongly reinforced this important finding. In this wave of focus groups, there was a notably higher level of recognition of Canadian achievements. According to focus group respondents, in some regions of the country, notably British Columbia, Alberta, and Quebec, respondents are noticing growing media coverage of the work of university scientists and researchers.

Applications

Attitudes regarding biotechnology applications remain unchanged, although the 3 new applications tested in this wave of research produced some important findings.

As discussed in previous reports, the vast majority of Canadians resist offering systemic views on biotechnology applications. Most people evaluate each application on its individual merits, employing a core analytical framework to assess applications on a case-by-case basis.

People come to views about applications using an implicit risk/benefit calculation, with their conclusion driven by an assessment of the marginal personal benefit conveyed by

the application. In other words: “do the potential benefits of the application (compared to non-GM products already available) outweigh the potential risks to myself or my family?” In simple terms, the larger and more personal the anticipated benefit, the more acceptable the risk and the higher the level of support for a given application.

The most prevalent negative driver in the realm of biotechnology is concern about long-term risks and unknowable outcomes that these technologies may produce — in particular, potential long-term risks to human health and the environment. The more intrusive the application, the higher the life form it involves and the larger the degree to which the application crosses boundaries separating plants, animals and humans, the larger the perceived risk.

To most Canadians, the acceptability and approval of biotechnology products and processes is largely a technical and scientific issue with relatively few significant moral or philosophical determinants. The vast majority believes that science should be the primary guide to decision-making about biotechnology applications.

- The proposed uses or outcomes have to be within a range of acceptability. Good science will not trump highly contentious applications that seem to fail the risk/benefit test.
- Biotechnology products have to meet higher scientific standards than non-biotech products.
- Long-term research into potential impacts is important to the credibility of the regulatory system.

More than 40 current and prospective biotechnology applications in health, environment and agriculture have been tested in the research. What has emerged is a clear hierarchy of support that finds health applications at the top, environmental applications in the middle range, and agricultural and food applications with decidedly lower levels of support.

The three new applications introduced in this wave of research each were acceptable to a majority, though there was a range of reservations expressed.

- The first, “products that use gm grains, forest products and other agricultural products to generate energy” garnered high levels of support, totaling more than eighty per cent of the sample, with only 14% opposed.
- The second, “bioplastics, which involve the use of genetically modified bacteria or plants to produce plastic products”, received 3:1 support in the survey. In focus groups, this application was met with very strong interest and appeal among those who are generally supportive of biotechnology, and fairly high levels of concern among those who are generally opposed to biotechnology.

- The third, “a reverse engineering technology that would remove genetically modified elements from a plant” received about 2:1 support, which is more opposition than most other applications tested in this or other waves of research. Both the survey and focus group discussions revealed that those who are most concerned about GM food have no less concern about foods produced in this way than about standard GM methods, and some say they are more concerned because now “at least two genes have been modified, rather than one”.

GM Food and Labeling

This research wave tracked several questions involving genetically modified food and food labeling. The results indicate that Canadians may be becoming somewhat more uncomfortable with GM foods. More than half said they were uncomfortable with the idea of buying GM food, with one in four saying that they are very uncomfortable.

There is little question that GM food is among the least acceptable of all biotechnology applications. This probably reflects, in part, wider concerns about food ingredients. Focus group discussion indicates that many people are quite concerned about chemical additives, pesticides and other potential dangers in the food they eat.

There appear to be other issues at work as well. Focus group discussion consistently reveals that people increasingly know that they are eating GM food but in spite of higher levels of awareness, they know of few benefits of GM food. Indeed, most believe that GM foods are of lower quality than other foods.

Informed choice is the key driver of opinion on the issue of GM food and by consequence, GM food labeling. As found in previous waves of research, there continues to be widespread demand for GM food labeling. People feel strongly that they have a right to choose to eat GM food or not and that is enabled by the creation of a labeling system.

The number of Canadians who seek a labeling system for GM food continues to be high, and the issue shows no sign of abating. In focus groups, as soon as discussion about GM food is joined, a substantial majority begin talking about the importance of GM food labeling and often begin asking pointed questions about government's oversight role in this area.

The underlying issue that strongly emerges in focus group discussion of labeling is not the long-term risk of GM foods but the principle of informed consumer choice. Even those people who are comfortable with GM foods generally believe that everyone has the right to know whether there are GM ingredients in his or her food. The strong, un-

nuanced views that emerged reflect the core strength of the principle of the consumer's right to know and choose.

Moreover, few people see much point in voluntary systems of labeling rather than mandatory systems. It is the outcome of full compliance that most people want and mandatory labeling is the common sense proposition to achieve that end.

Government Priorities/Performance

In this survey, respondents were invited to evaluate current performance and future priorities for government. The results suggest that Canadians continue to place the highest priority on ensuring health and environmental risks are being managed for both the near and longer term. Other priorities, such as reaping the economic benefits of the technology, are important but not as important as those stewardship activities.

In terms of performance, Canadians believe that government performs best at garnering the economic benefits of the technology for Canada and Canadians. In past waves of research, government ratings on stewardship of health and the environment ranked quite low in relation to other areas but in this wave, it appears that perceptions in this area have improved and while not at ideal levels, are moving in the right direction.

The current government policy approach to biotechnology continues to be accepted by a wide majority of Canadians. There is broad support for a two-track policy approach which includes a strong regulatory and scientific oversight system for long-term surveillance and research, in concert with measures designed to foster the development of the technology and the industry. Almost nine in ten agree that “the primary role of government in this field is to gain the benefits while managing the risks,” suggesting that gaining the benefits is an acceptable and appropriate objective to strive for, as long as stewardship is diligently pursued. People don't see stewardship and promotion as a “zero-sum” game – both can and should be pursued, but primacy is assigned to the stewardship function because the newness of the technology is seen to have the potential to create negative side-effects for people and the environment.

Economic Benefits

Nevertheless, Canadians very much want government to ensure they reap the benefits of what they see as truly important scientific breakthroughs, particularly in health and medicine. They also want to ensure that Canada is at the forefront of scientific research internationally because of the economic benefits it can bring and because it can help to address perceptions of a “brain drain” of bright young Canadians to other countries.

To achieve these ends, two quite specific measures that could be undertaken to foster the development of the biotechnology industry were tested in this wave of research. Opinions diverged significantly on the two ideas, where one was widely supported and the other widely opposed.

The measure that was widely supported in the survey and in the focus groups was the idea of government contributing to a pool of Canadian private sector venture capital that would be earmarked for biotechnology R&D. In all, more than three in four respondents supported this measure, while fewer than one in five opposed it. The focus groups explained the underlying rationale. The first reason is that it appears to provide a remedy to what many believe is a frequent problem for Canadian companies and researchers – access to capital. There is a widely shared belief that being a small country beside such a large and rich country as the United States, Canadians have difficulty getting the resources needed to make their businesses work, particularly in the area of biotechnology where there are many start-ups.

The measure that was widely opposed in the survey and in the focus groups was the idea of fast-tracking approval of products produced using biotechnological methods. People already harbour concerns about the stringency of government product approval processes, both because they perceive there to be a lack of available resources for government scientists, and because they perceive that industry “lobbying” influences the process. So the idea of speeding up the approval process is a measure that many are reluctant to approve. Indeed, they equate slower approval with more thorough study and analysis, increasing the likelihood of a product’s safety.

DNA Mapping and Patenting

In this wave of research, a limited number of questions were tracked with regard to DNA mapping and the patenting of genes as well as higher life forms. These questions were first asked two years ago, in the fall of 2000 in the aftermath of the announcement of the mapping of the human genome.

In terms of mapping human DNA, 72% say that there are more benefits than drawbacks, while 14% say there are more drawbacks than benefits. Focus groups concur – virtually all participants believed that the mapping of the human genome would lead to significant medical breakthroughs that will outweigh the potential drawbacks.

The idea of patenting genes with particular traits was met with more resistance in this wave than when it was originally asked in 2000. In this survey, a plurality of the sample, 46%, said there are likely more risks than benefits to allowing such patenting, up from 37% in 2000.

In focus groups, discussions yielded more detailed prevailing views on patenting. The most important finding is that Canadians are ill informed about the purpose of patenting and misunderstand some of its most fundamental elements.

Once people in focus groups were informed about what patenting is and some of the pros and cons of having a patenting system in place, there was about a 65-35 split between support and opposition to patenting genes.