Parallel Session 22: Public perception of GMOs

PUBLIC CONCERNS TOWARDS GM FOODS ARE NOT DRIVEN SOLELY BY CONCERNS ABOUT THE TECHNOLOGY, BUT MORE STRONGLY BY CULTURAL DIFFERENCES

Janine Young[1] and Craig Cormick[2]

[1]*Biotechnology Australia, GPO Box 9839 Canberra ACT 2601 AUSTRALIA. Tel: +61 2 6213 6386, e-mail: Janine.Young@biotechnology.gov.au ;*

[2]*Biotechnology Australia, GPO Box 9839 Canberra ACT 2601 AUSTRALIA. Tel: +61 2 613 6805, e-mail: Craig.Cormick@biotechnology.gov.au*

Abstract

Public concerns towards modern biotechnology, particularly GM foods, are not driven solely by concerns about the technology, but are strongly influenced by cultural differences.

Much has been made of the contrasts between European and American acceptance of GM foods. Scientists and industry have advocated increased acceptance through public 'education'. However, this approach is not fully effective because it does not acknowledge that many attitudes are based on cultural traditions which drive acceptance of new technologies.

Further, decisions about acceptance of biotechnology applications are underpinned by personal and cultural ethics, which need to be understood to effectively address attitude change. Information and education on GM technology alone does not, therefore, address attitude formation fully.

Key words: cultural attitudes, GM foods, public concerns

It is clear even to casual observers that there are substantial differences between European and American attitudes with respect to any number of issues. These differences are especially stark when considering attitudes to biotechnology in general, and GM foods in particular. Indeed, Robert Zoellick, the US Trade Representative has called the EU's stance "Luddite" and "immoral" (when discussing Zambian rejection of US food aid in 2003). David Byrne, the EU's health and consumer protection commissioner countered that the EU's position on GM food "is that it is as safe as conventional food".

While this is official EU policy, it is clear that consumers and some member state governments do not agree. Indeed, politicians have won office after campaigning to ban 'Frankenfoods'.

When considering the debate about GM food, gross generalisations such as that of Robert Zoellick's are unhelpful. There are distinct, embedded differences between the cultures and beliefs of the EU and the USA, which need to be considered when discussing their opinions. These differences appear stereotypical, but are absolutely underpinned by distinct different cultural drivers.

One important distinction between Europe and the USA is in their relationships with food. There is a general European food culture, with emphasis placed on food origin and taste, whereas this is not so prevalent in America, who are large consumers of new and convenience foods. Many Europeans buy their fruit, vegetables, dairy products and meat from farmers' markets, whereas most Americans shop at grocery stores stocked with products from large food suppliers. Europeans tend to be more aware of how their food is produced than Americans, who are generally removed from farms and have less understanding about food production.

Europeans also tend to put priority on safe and proven foods, whereas Americans place more faith in food science. Americans are generally unaware that there is a high proportion of GM ingredients (approximately 70%) in their food and are not overly concerned if they do.

Canadian firm Environics has shown that attitudes towards GM foods are driven more by attitudes towards food and food safety than towards gene technology (Figure 2).

These issues over food are exacerbated by differing attitudes towards authority, leaders and regulation. Americans generally have reasonably strong faith in federal food regulation and science in general. British and European handling of several food safety issues in the 1980s and the BSE outbreak led to a significant lack of confidence in government and regulation; consequently progress of GM foods through the regulatory system has been slowed, with development of more stringent and transparent legislation to address the management of potential risks and concerns. In the wake of a recent range of food-related scares, most US consumers are still expressing a reasonable level of confidence in the safety of their food supply (Slagle, 2004).

Europeans place a higher priority on environmental concerns than Americans and are sensitive to campaigns by environmental organisations. Aligned with this is European suspicion and distrust of large multinational companies, which is largely the reverse to that of the USA. Europeans (and indeed many other cultures) are also strongly resistant to the influence of American culture.

It is interesting, however, to look at concerns towards GM foods across cultures in the context of other food-related issues. Figure 1 illustrates that concerns about pesticide use and food poisoning are, in fact, slightly higher in Australia than the UK, and GM food concerns were the lowest among food concerns in all three countries. A recent University of East Anglia opinion poll found that GM food was relatively positively evaluated (particularly when compared to climate change and radioactive waste), although it is noteworthy that a substantial minority still felt that GM food is a bad thing. Nevertheless,

most appeared neutral by indicating that GM food is neither good nor bad (Poortinga and Pidgeon, 2003).

This illustrates that context is extremely important for the consideration of attitudes to GM foods, and even more so when considering different cultures.

Another contextual issue in cultural decision-making is that of ethics. Ethical decisions made by individuals, regardless of the country they live in and culture that surrounds them, will also vary across a wide spectrum of opinion. A person's intrinsic (that cannot be altered) ethics can drive opinion more strongly than extrinsic (moveable, context-dependent) ethics. In making these decisions, reasons for food being modified can be as important as it being modified at all. Our research shows that communities are discriminating about individual applications of biotechnology and make decisions on the basis of the reason for the modification, who benefits or is harmed and who has undertaken the work.

References

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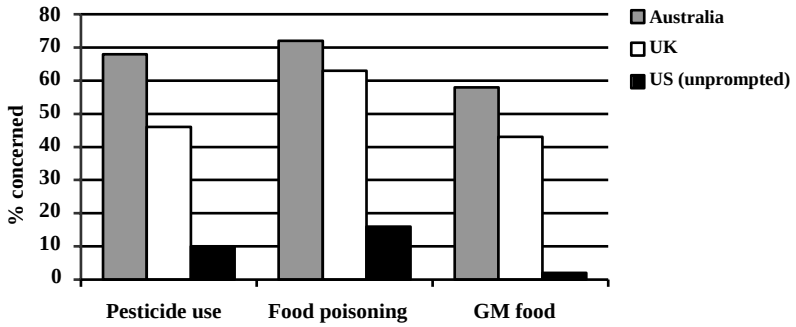
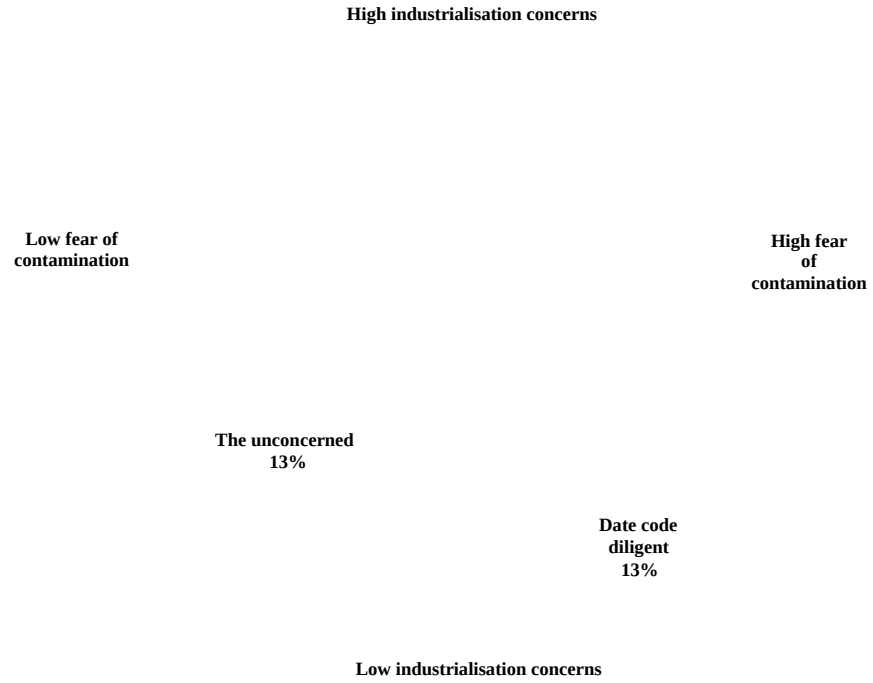
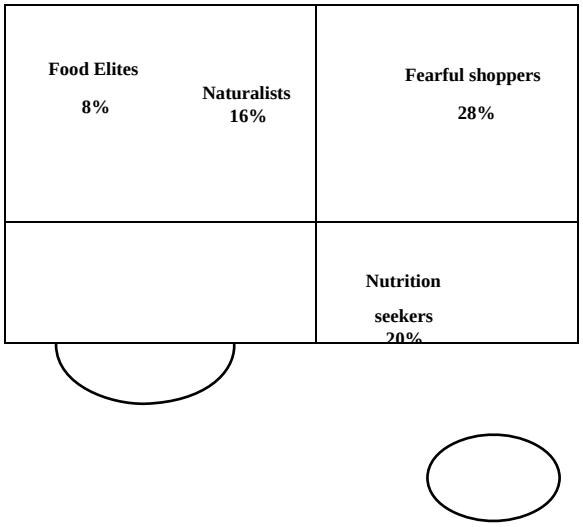


Figure 1: Relative food concerns by country.

Figure 2: Food concerns segmentation map (Environics International, 2001).

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8%
Naturalists
16%
Fearful shoppers
28%
Nutrition
seekers
20%