

Submission to the NSW GM Crop Moratorium Review

A Summary of Relevant Data from the 2007
Public Attitude Study Conducted for
Biotechnology Australia by Eureka Strategic
Research.

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Public Awareness Research

Conducted for Biotechnology Australia
May 2007

Research design

- A 3-stage qualitative-quantitative approach was employed
- Partial online migration of quantitative survey with the view to fully migrate next wave
 - ◆ partial migration allowed clean comparison of data over time



Research design

■ Phase 1: Four group discussions

		Location	
		Sydney	Wagga Wagga
Education level	Non-tertiary	18-30 years	31-65 years
	Tertiary	31-65 years	18-30 years

■ Phase 2: CATI/online survey

- ◆ National sample of **N=1118**, Online N=584, CATI N=534 (95% CI = ±4.25%)
- ◆ Both samples structured according to population on location, age and gender
- ◆ Several modifications made to 2005 questionnaire in consultation with stakeholders

■ Phase 3: Nine group discussions

		Location		
		Bathurst	Sydney (city)	Hurstville
Level of support for biotechnology	Low	18-30 years	31-65 years	31-65 years
	Med	31-65 years	18-30 years	18-30 years
	High	18-30 years	31-65 years	31-65 years

Social and global aspirations

(from initial focus groups)

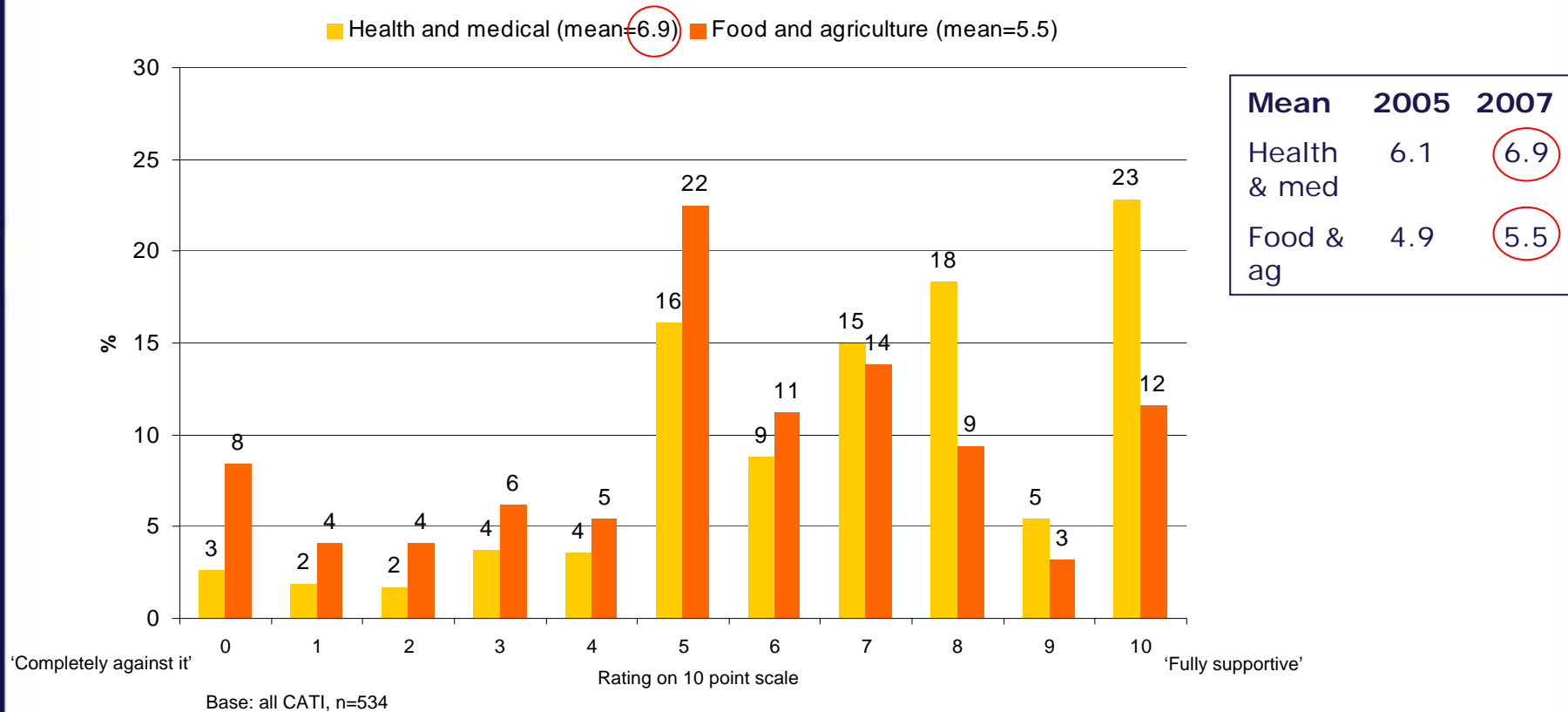
- Beyond the individual realm, aspirations commonly related to the environment and addressing man-made problems:

- ◆ Mitigating climate change
- ◆ Addressing water shortages
- ◆ Famine and malnutrition
- ◆ Protecting biodiversity

If you could plant more trees that would reduce your carbon like that, you could genetically modify the trees so that you could grow them quicker. That would change the climate but I don't see how basic biology could change the climate.

- Some scepticism about the ability of biotechnology to deliver such benefits – but generally very supportive of any attempt to do so
- Wider aspirations did not make reference to GM plants/crops/foods, although there was some mention of the need to end global poverty and food shortages

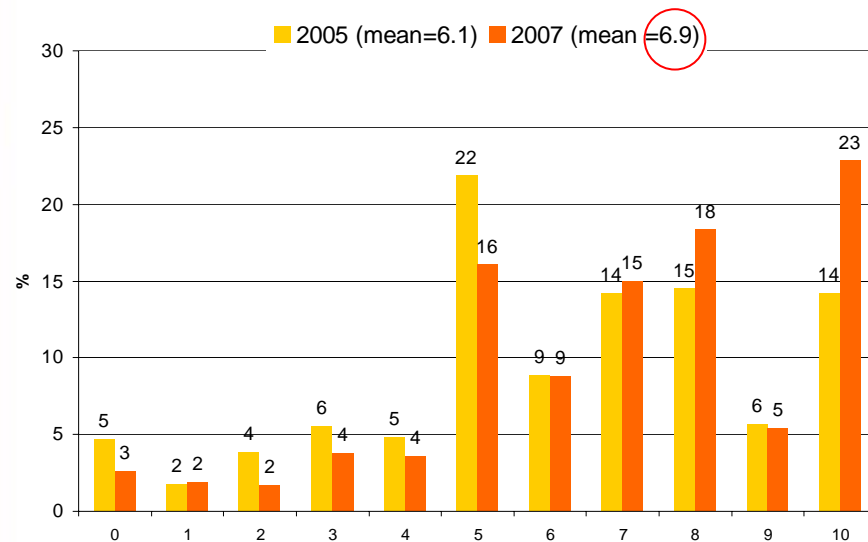
Overall support for fields of gene technology application



Increased support for technologies is likely the result of growing familiarity.

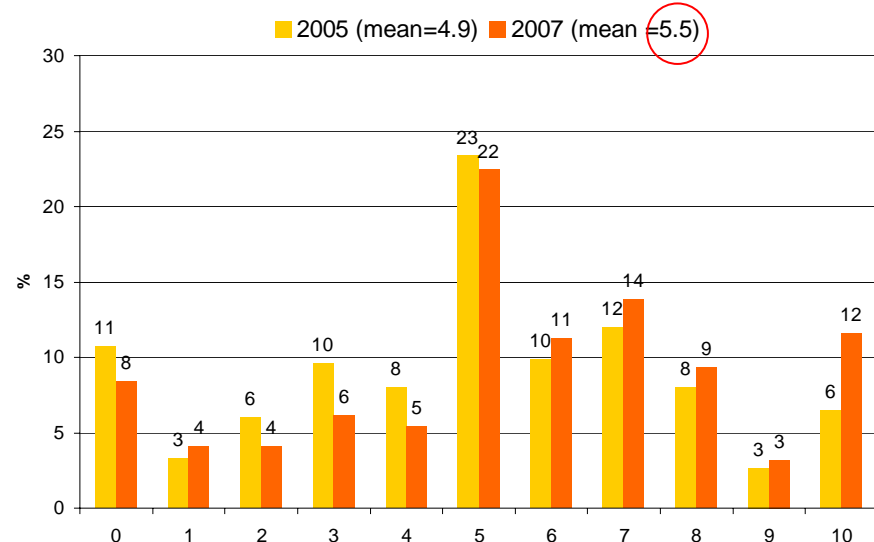
Overall support for fields of gene technology application: trends over time

Health and Medical



Base: All CATI, 2005 n=1,068, 2007 n=534

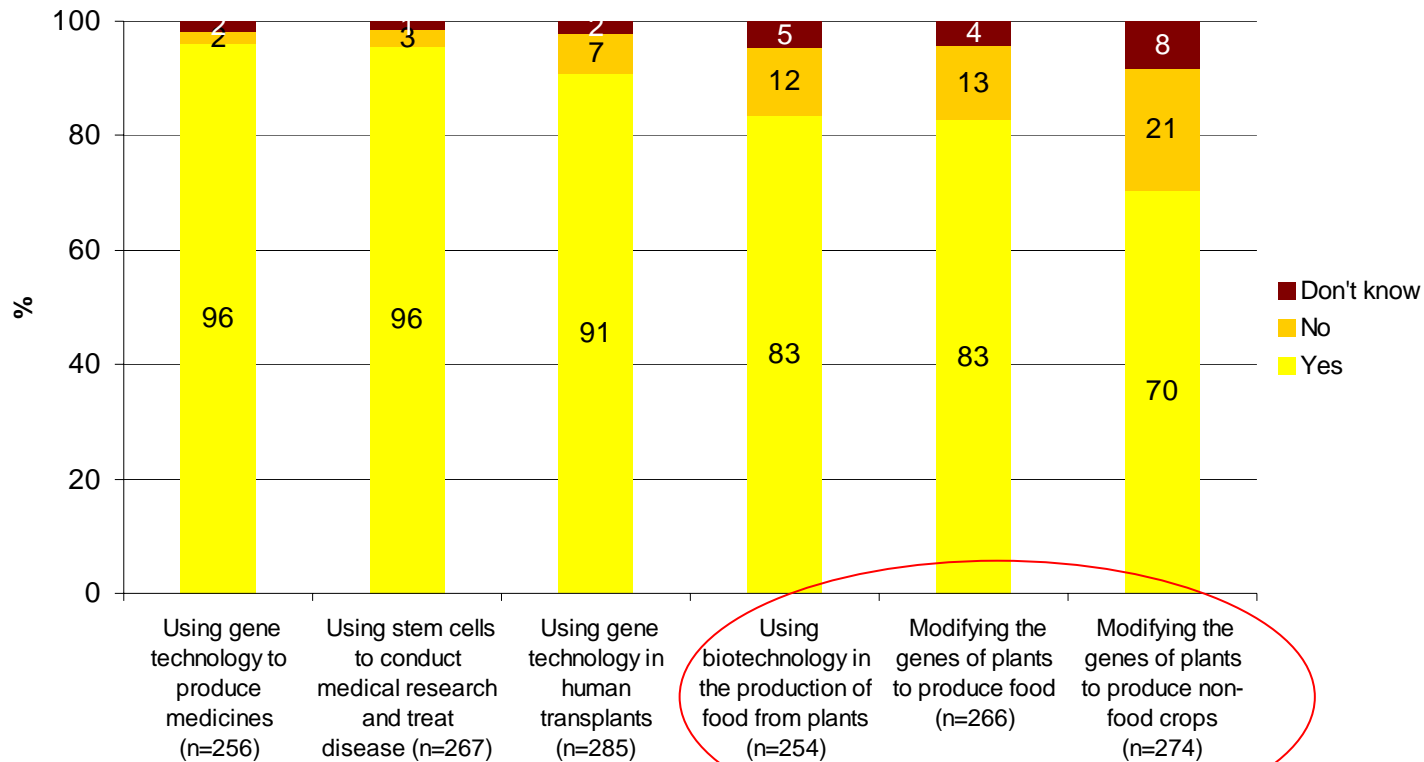
Food and agriculture



Base: All CATI, 2005 n=1,068, 2007 n=534

Significant increase in support since last wave for both health/medical and food/agricultural applications of gene technology.

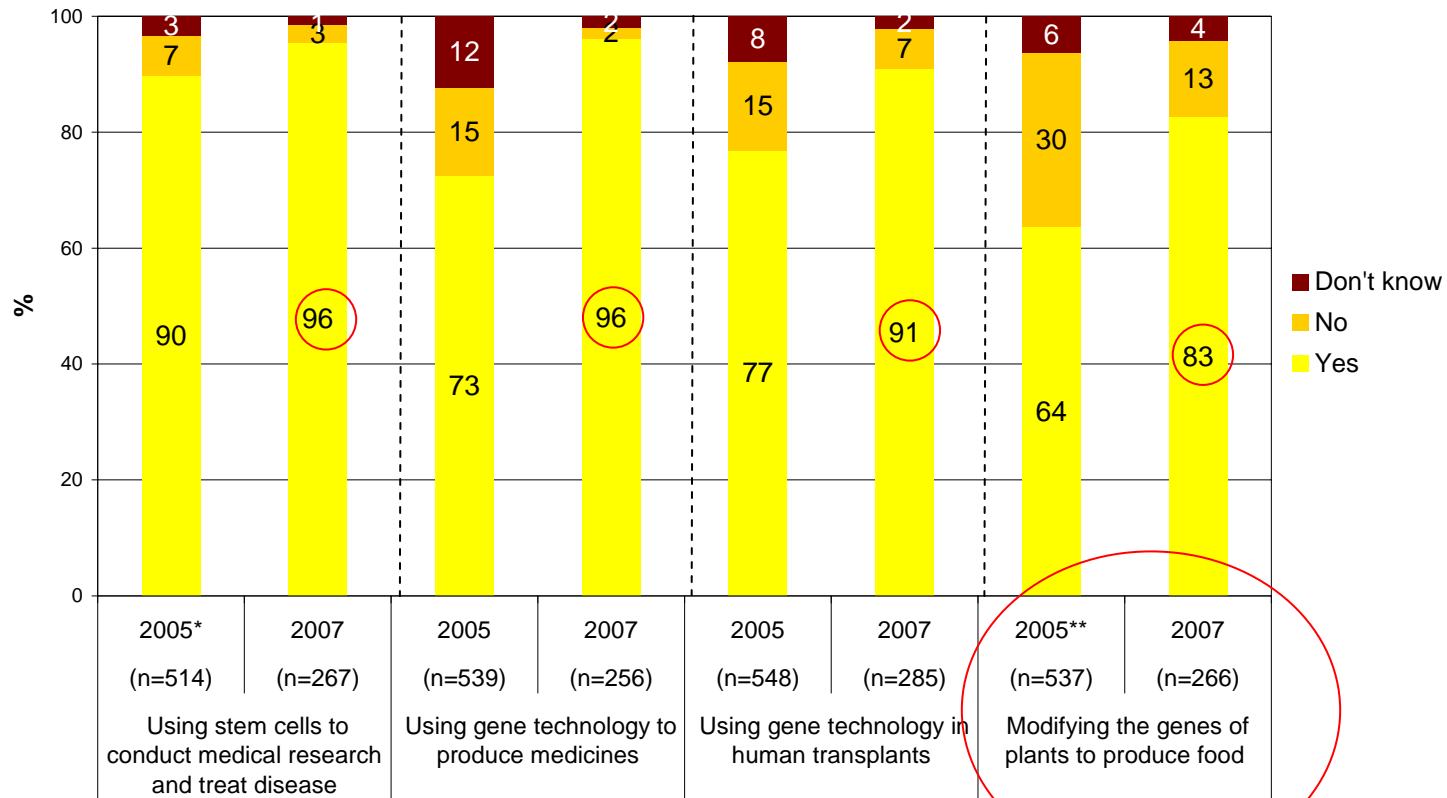
Usefulness of applications



Base: rotated questions CATI

All applications seen to be useful by the majority, medical applications more so. Least utility seen for GM non-food crops [qual suggests this is poorly understood].

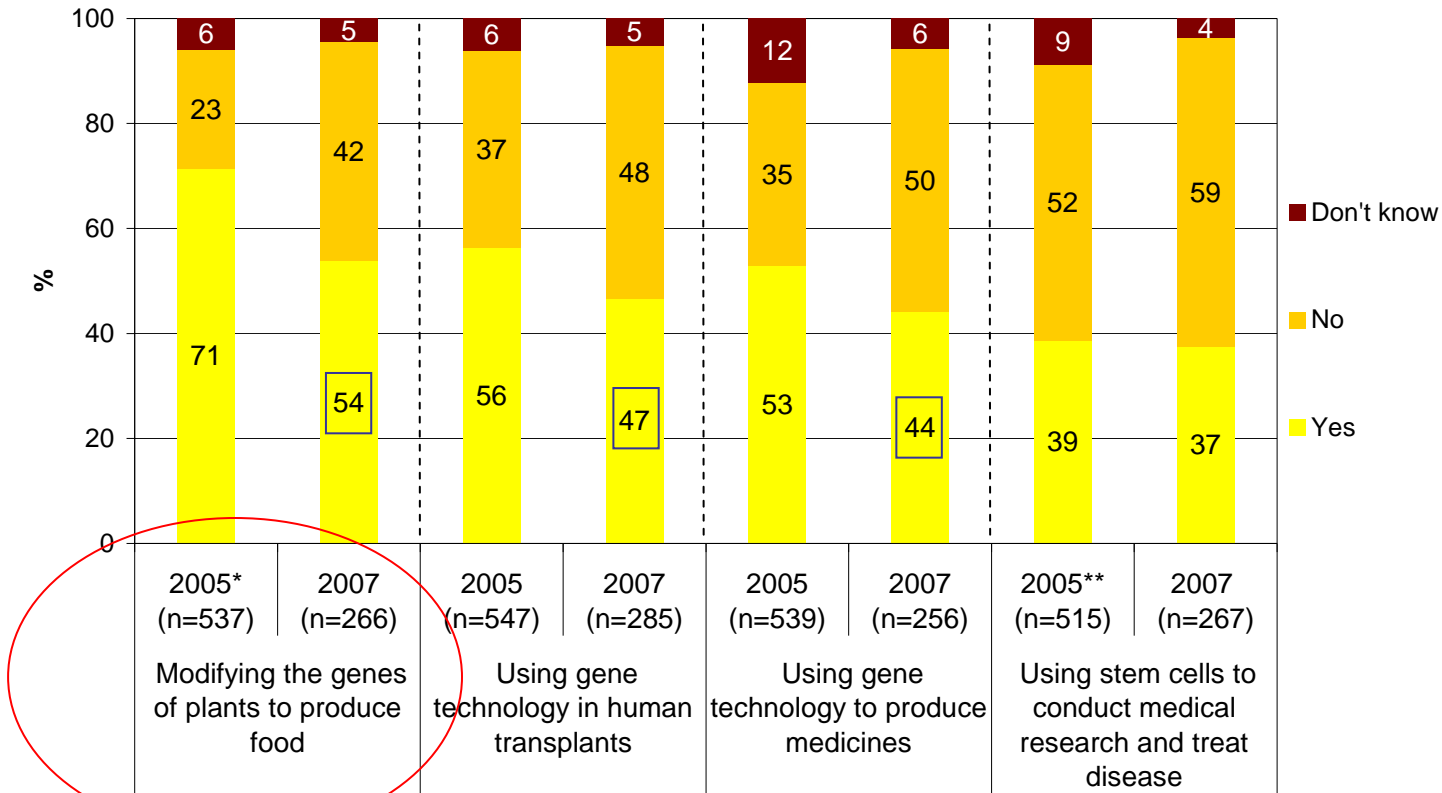
Usefulness of applications: trends over time



Base: rotated questions CATI
 *2005 Using stem cells to conduct medical research
 **2005 Using gene technology to modify plants used to produce food

Significant increase since last wave in perceived utility of all applications.

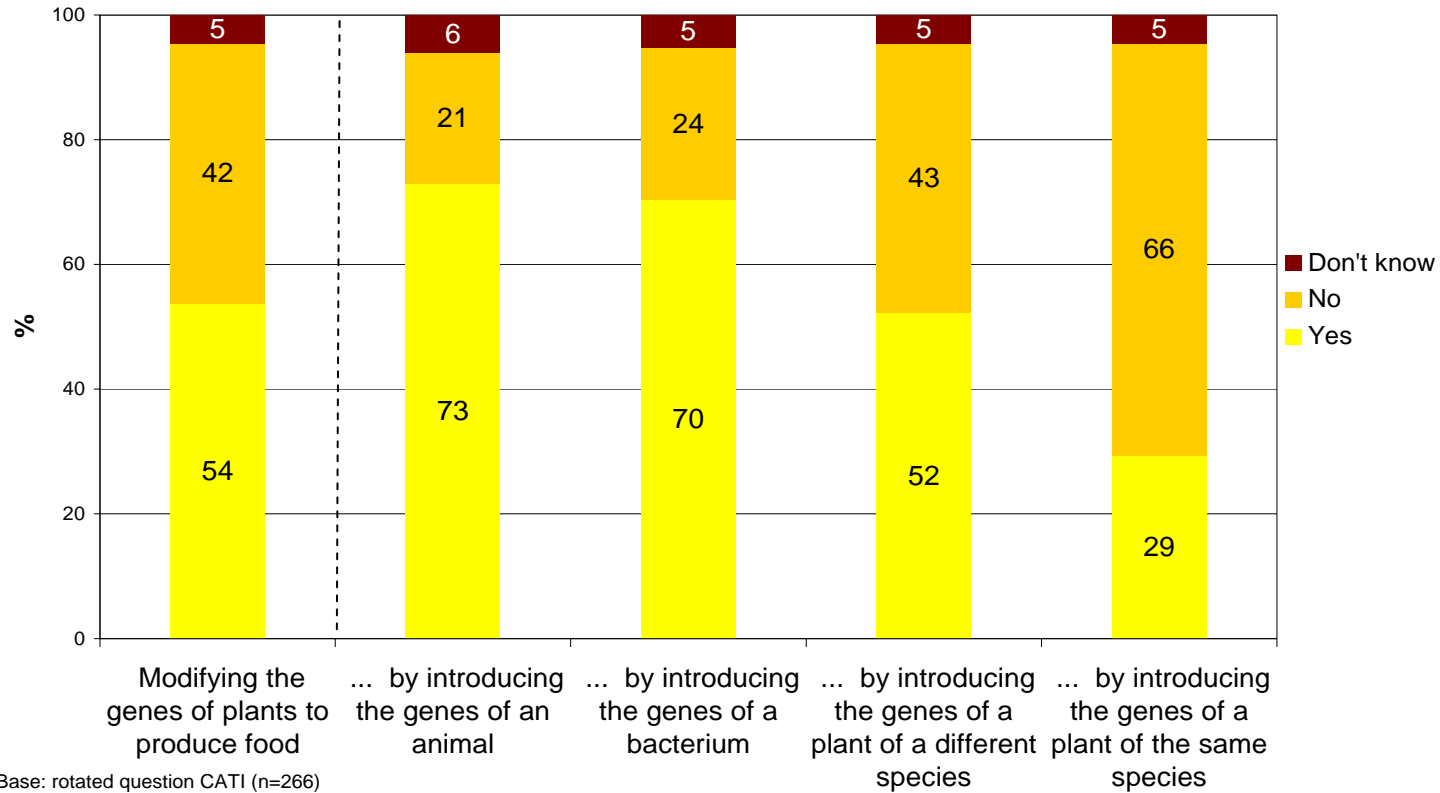
Risk associated with applications: trends over time



Base: rotated questions CATI
 *2005 Using gene technology to modify plants to produce food
 **2005 Using stem cells to conduct medical research

Significant decline in perceived risk associated with use of gene tech in human transplants, medicine production and GM food crops.

GM food crops: risk



Perceptions of risk increase when additional details on techniques are provided. Same species GM seen as much less risky than inter-species GM (qual: similar).

GM food crops: risk

- Concern that GM crops may be more virulent than natural varieties
 - ◆ more immune to pests and chemicals
 - ◆ will eventually 'take over' their environment
 - ◆ Low cost of GM crops may exclude non-GM varieties, limit choice
 - ◆ consumers unable to exercise their choice to buy organic/non-GM
- Difficult to predict long-term effects, research would need to take place over decades

The difference is once you've got the GM crops in place, they can naturally be cross-pollinated with non-GM crops, and you get GM crops spreading because they're stronger and natural selection takes its own course.

Only time and research can dispel any concerns.

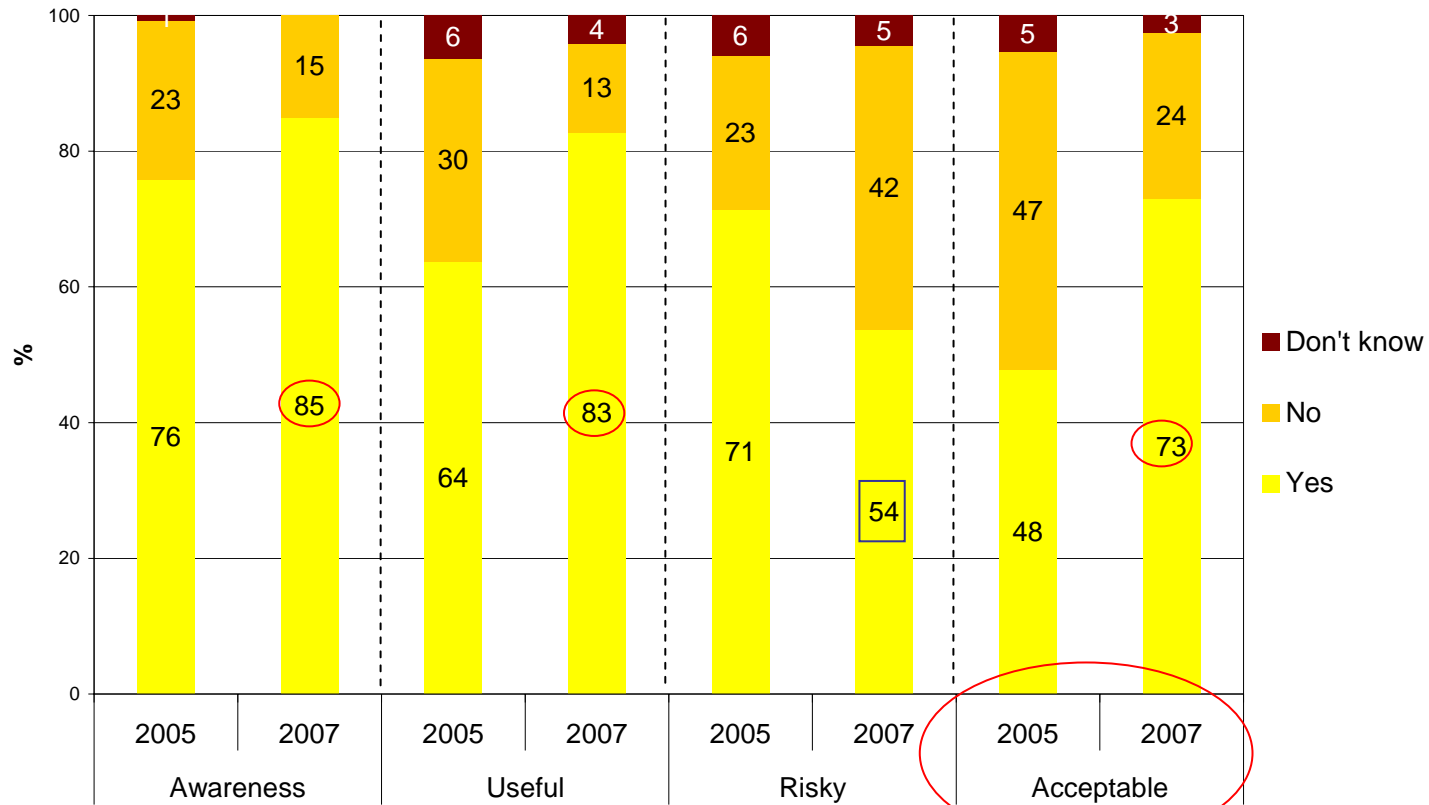
Once these changes are made, there's no going back. You can't change your mind.

GM food crops: usefulness

- Positive attitudes about the usefulness of GM food crops were raised when discussing pressing global problems:
 - ◆ Climate change/drought
 - ◆ Food shortages, malnutrition in the third world
- Rural groups more likely to comprehend the potential benefits of GM crops for farmers
 - ◆ Only so long as there is a healthy market, with no monopolistic arrangements or control of seed supply
- Changes to crops through genetic modification regarded as cosmetic
 - ◆ More about 'look and feel' than 'grow-ability'
 - ◆ Stems from the widely held perception that today's fruit and vegetables are unnaturally attractive, but 'don't taste like they used to'
 - ◆ Consumers feel misled into buying GM when they don't want to

I remember as a kid you used to get a pear and it tasted like a pear. Now it tastes like chalk.

GM food crops: trends over time



Base: rotated questions CATI 2005 (n=537) 2007 (n=266)

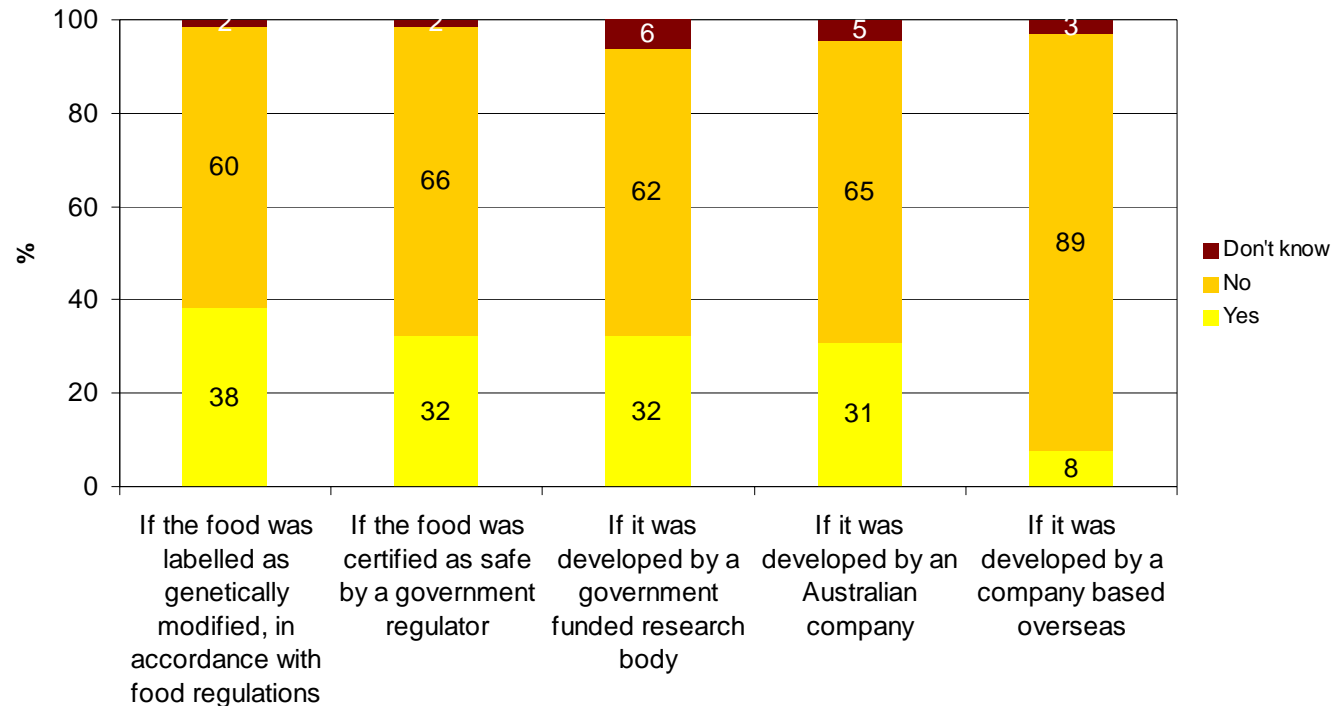
Significant increase in awareness and positive perceptions of GM food crops since 2005.

GM food crops: trends over time

- Genetic modification is no longer an exotic or futuristic concept
- Greater familiarity appears to have had a positive effect on acceptability
- Conversely, low support for GM foods appears to stem from lack of knowledge rather than direct opposition
 - ◆ Particularly the case for younger people
- Nevertheless, some concerns remain about GM foods and GM crops
 - ◆ Even among those who are reasonably familiar with the concept

Acceptability of GM food crops if ...

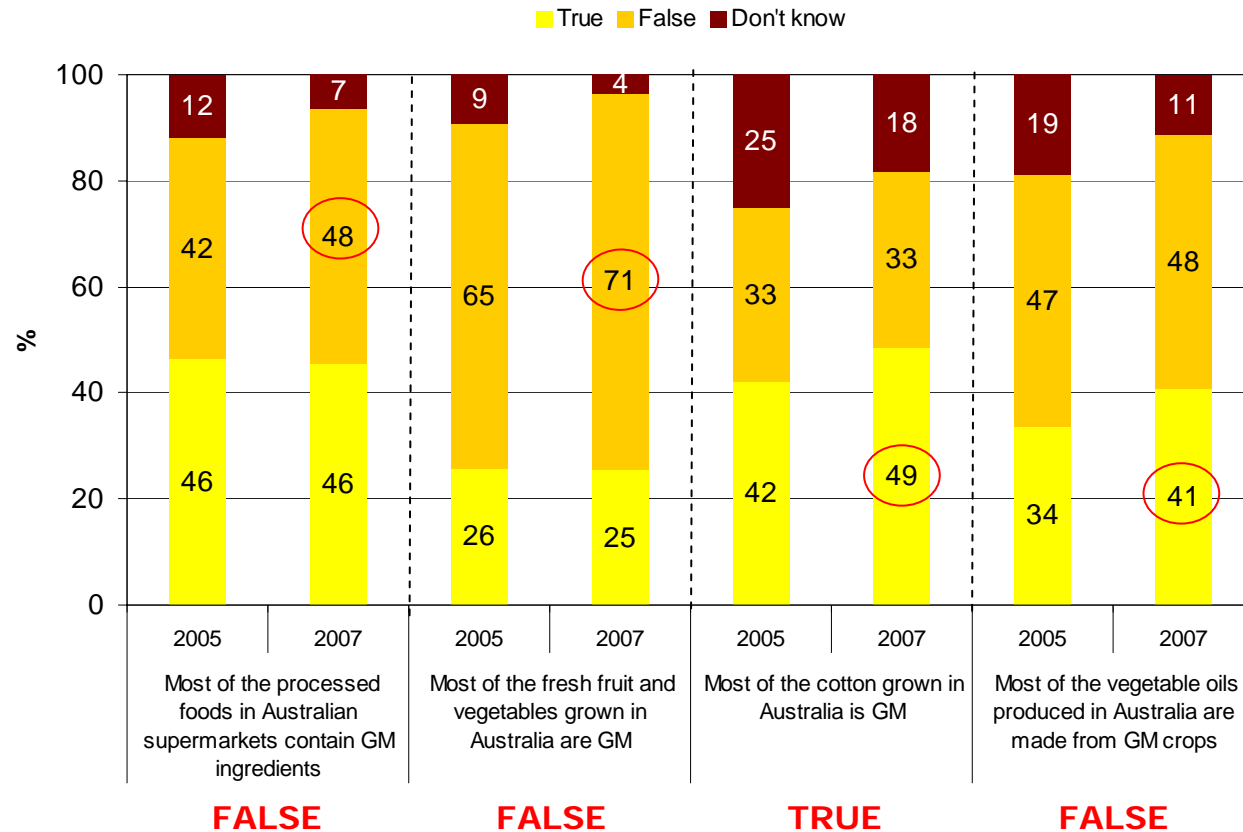
Among those who find GM crops unacceptable



Base: those who said GM food crops unacceptable, CATI (n=65)

The majority who think GM food crops are not acceptable are not influenced by further information on labeling regulation, certification, or its source. Overseas companies have the least positive impact on perceptions.

Knowledge of GM crops and foods: trends over time

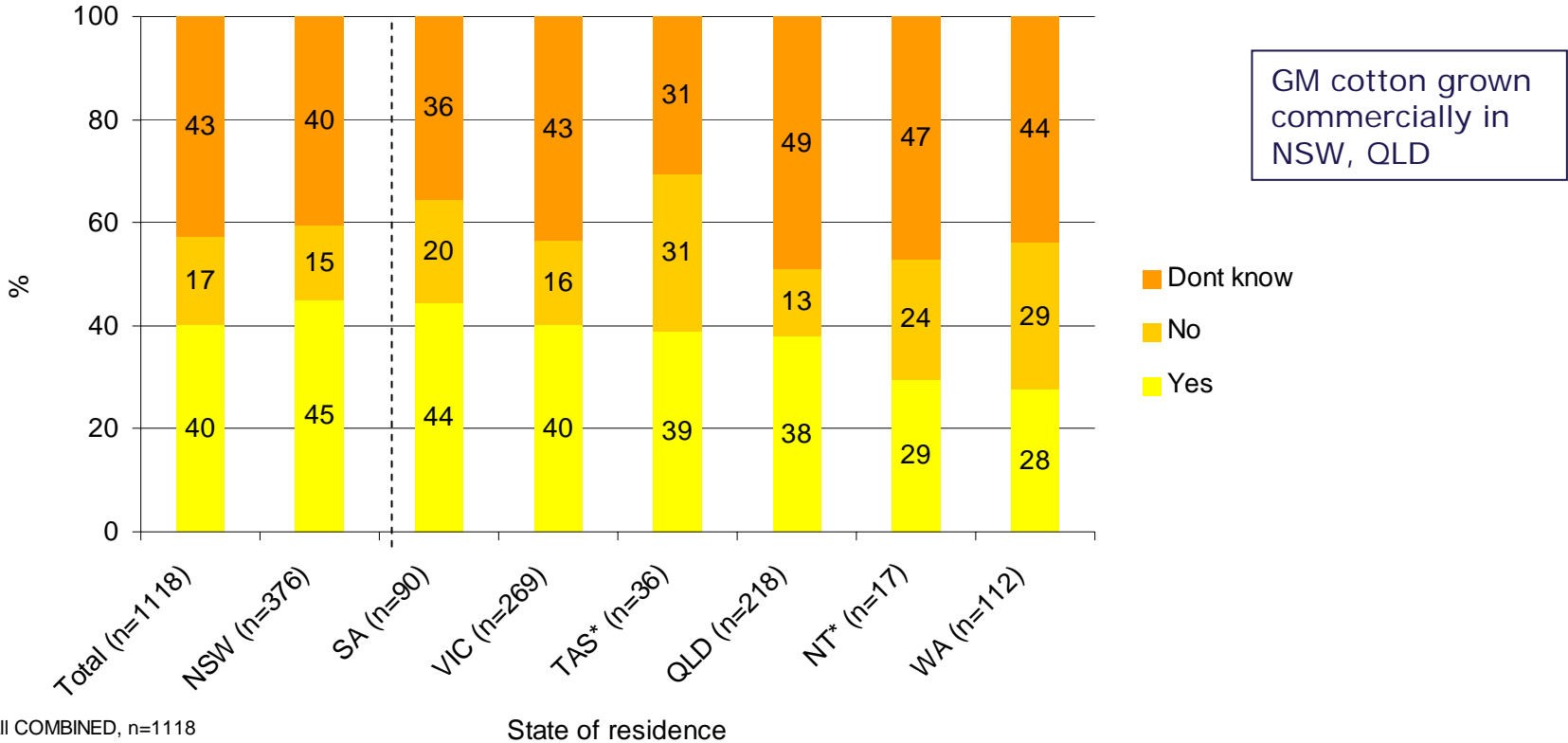


Base: 2005 all (n=1118), 2007 all CATI (n=534)

Improvements in knowledge of GM crops and foods since last wave (except regarding vegetable oils). However, widespread misconceptions regarding GM crops and foods continue.

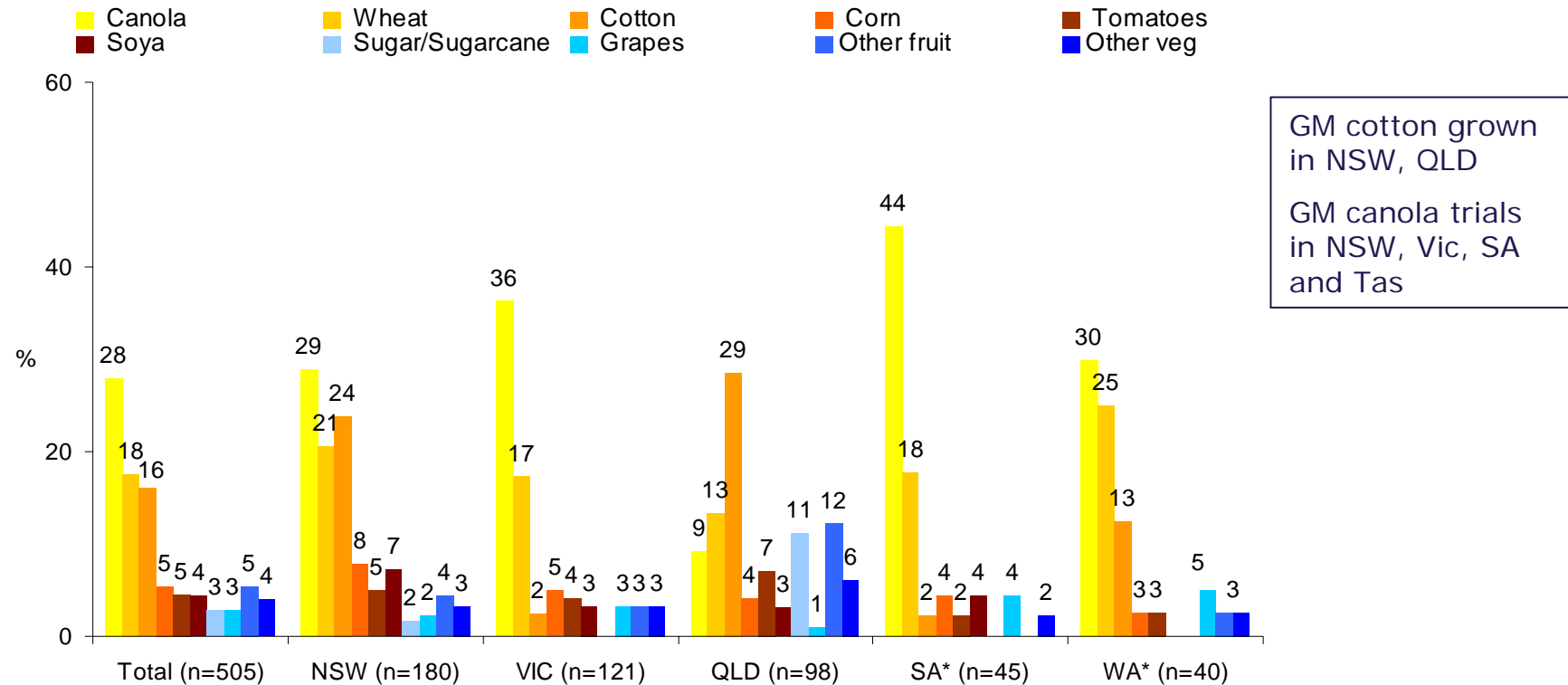
Awareness of GM crop growth in Australia

Are GM crops grown commercially in your state?



In most states, people more likely than not to think GM crops are grown commercially. Overall, 4 in 10 think GM crops are grown commercially. High 'don't know' response.

Perceived GM crops grown commercially in own state

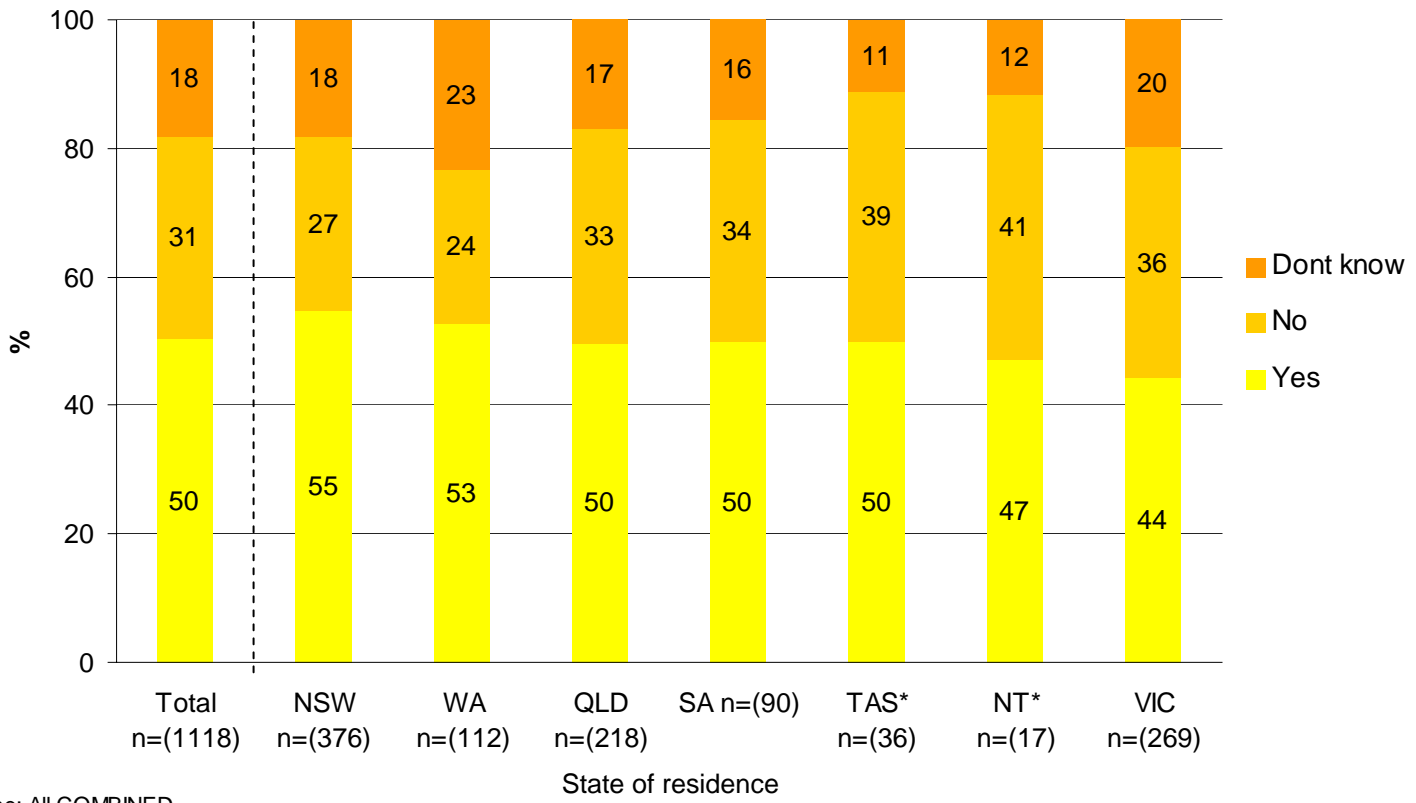


Base: Think GM crops grown commercially in own state, COMBINED DATA

* Caution, low base

GM canola most commonly assumed to be commercially grown, except in QLD. Awareness of GM cotton highest in NSW and QLD, where it is grown. Many also assume GM wheat is grown. Some misconceptions regarding GM fruit and vegetables.

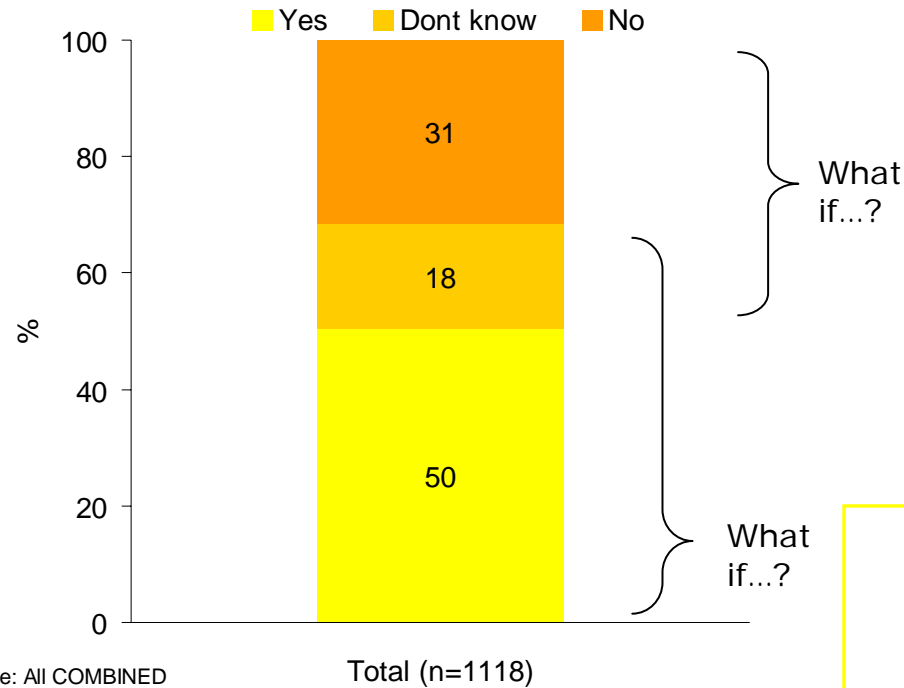
Support for GM crop growth in own state



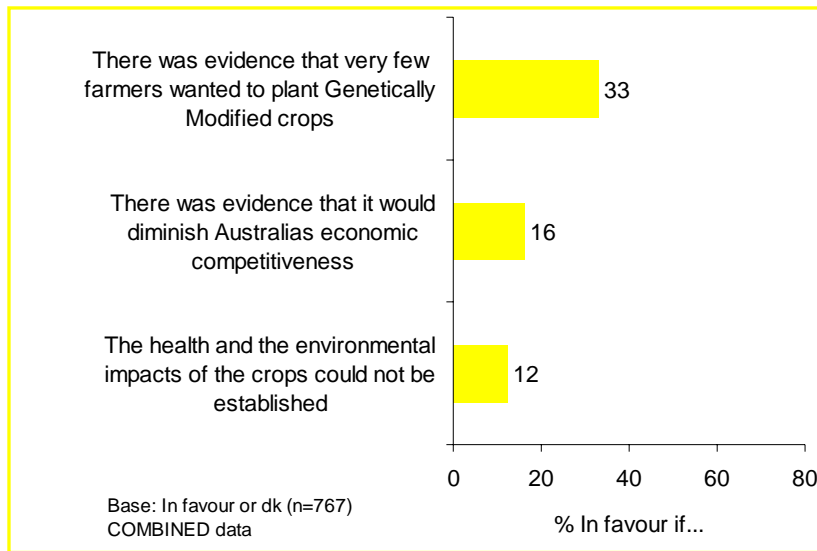
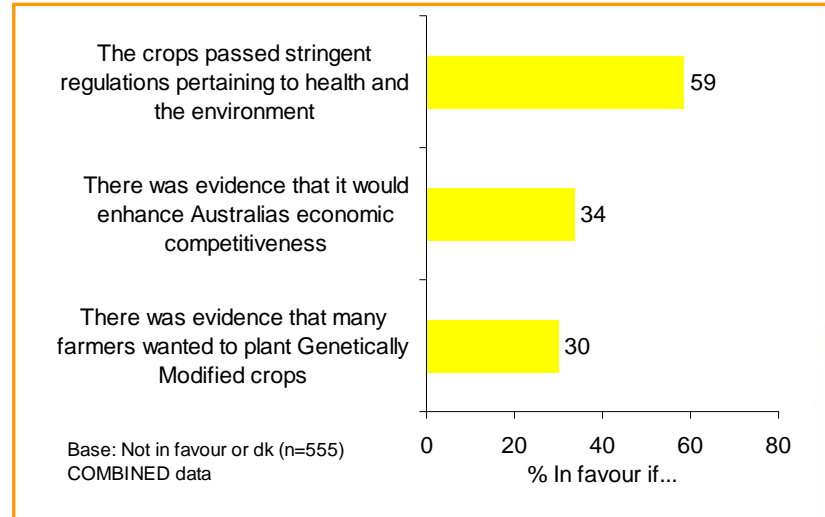
Base: All COMBINED
 * Caution, low base

Support for commercial growth of GM crops is similar across all states, at one in two.

Support for growing GM crops in own state



One in two in favour of growing GM crops - but more than half those against would change their mind if crops passed strict regulations = **80% support in states.**



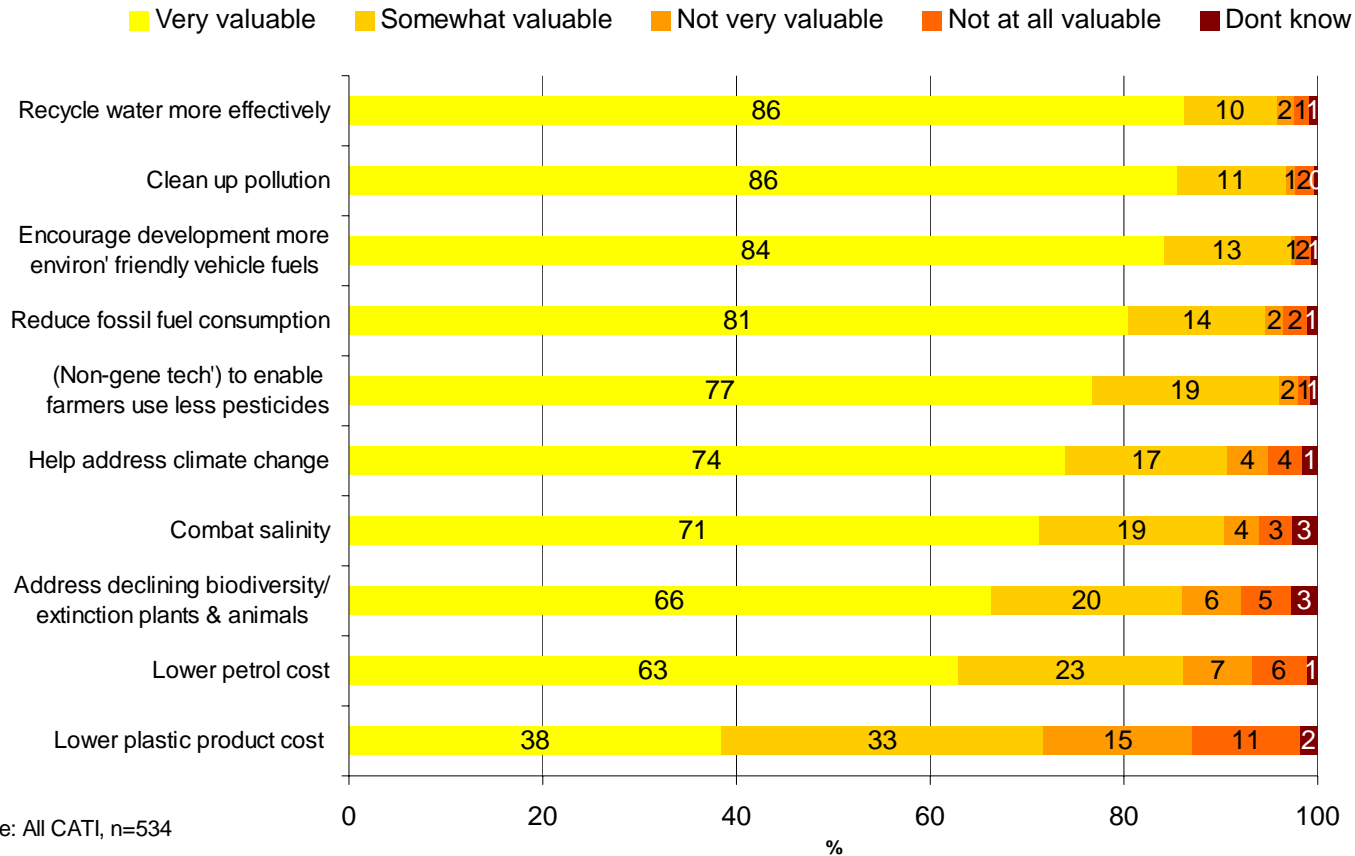
Perceived value of environmental objectives of biotechnology

- Focus group participants regarded all these objectives as valuable
- Some uncertainty about how biotechnology would contribute to each
- Man-made problems seen to require man-made solutions

I guess in my mind, there's no options that shouldn't be explored that have an environmental and economic benefit, whether it's a genetic modification of anything if the environment is going to be better off for it. It should be seriously looked at.

I think I'm more interested in the things that preserve the earth than I am in preserving individual lives, to be honest, because that's the future generation. As we get more and more into this thing where we're curing diseases ... we all look at human life as such a precious thing. The earth is a lot more precious and has been around a lot longer.

Value of different objectives of biotechnology



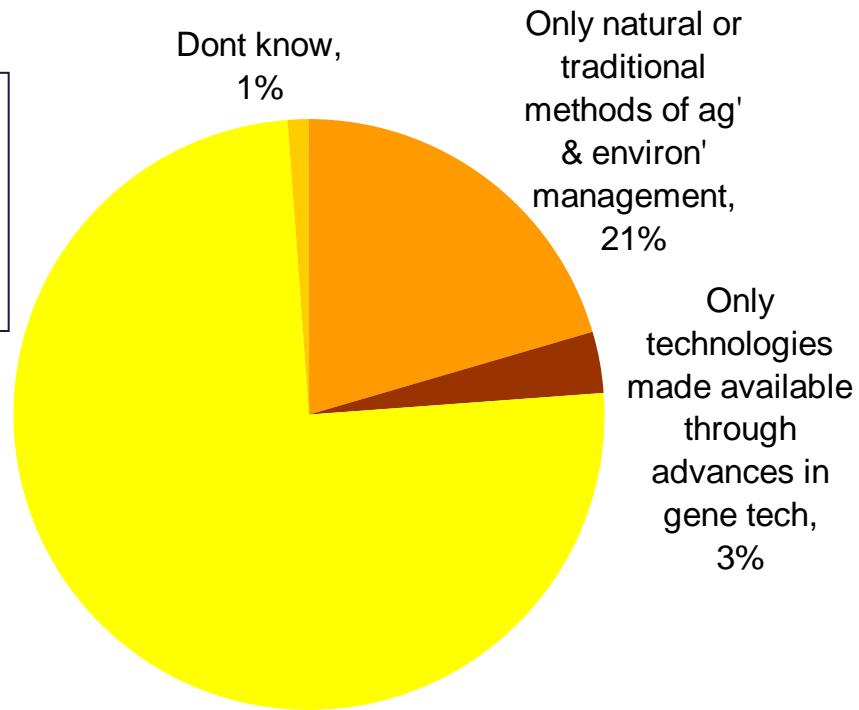
Very high perceived value for all objectives except reduced plastic product costs. Objectives of recycling, addressing pollution and environmentally friendly fuel development regarded most highly.

Preferred approach to solving environmental problems

Support for food & ag applications			
%	Low	Med	High
All avenues	47	83	92



Pursuing all avenues available, 75%



Base: All CATI, n=534

The majority advocate pursuing all avenues available. Less than 1 in 5 support only natural methods of agricultural and environmental management.

Changed factors that are influencing attitudes

- Concern for the state of the globe has been a major factor in changing people's perceptions towards gene technology.
 - ◆ "We need to find man-made solutions to man-made problems"
- Genetic modification is no longer an exotic or futuristic concept.
- Greater familiarity appears to have a more positive effect on acceptability than any understanding of the technology.
- There is a small strong group who will always oppose GM foods
- Positive attitudes towards science and technology as providing solutions to local, global and personal problems has risen across most technologies (nanotechnology too).
- People are thinking more like global citizens than they have for many years.

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May 2007



Media Release

7 August 2007

07/300

Accusations of Push-Polling in Biotechnology Poll Unfounded and Unjustified

Accusations of push-polling in a survey of public attitudes towards biotechnology, conducted by an independent research company for the Australian Government agency Biotechnology Australia are unfounded and unjustified.

Responding to criticisms of the survey by anti-biotechnology activist groups, including Greenpeace and the GeneEthics Network, the Manager of Public Awareness for Biotechnology Australia, Mr Craig Cormick, said: "These accusations seem hypocritical when you consider the fact that the groups were involved in the round table with industry groups and researchers that workshoped the questions for the survey, and they were happy with the questions when they were developed.

"However, now that the survey has found a large change of public attitudes in favour of gene technology and biotechnology they have suddenly decided they are unhappy with the survey.

"Interestingly, two years ago, when the last similar survey was done, industry groups criticised the survey because it found that the public had many concerns about gene technology," he said.

"The fact is, the survey is statistically valid, is well regarded internationally, and many academic papers have been published based on the findings revealed by these biennial surveys of community attitudes to biotechnology. They are conducted by a highly-reputable independent research company, Eureka Strategic Research.

"The NGO criticism is misleading in calling the study push-polling, as this is when a survey is conducted with a hidden objective to disseminate information, rather than collecting opinions. This study is clearly not push-polling as it has used questions identical to those used in the past, it explored the public's view of both risks and benefits of GM and was carefully balanced. The same questions have been used deliberately so that we can track changes in public attitudes over time.

"The NGOs who are taking issue with the survey are really taking issue with the Australian public, as it is their change of attitude towards biotechnology that is causing the NGOs most concern."

The full study, and the questions used in the survey, are available from Biotechnology Australia's website: www.biotechnology.gov.au/reports.

Further information: Craig Cormick, Biotechnology Australia, 0418 963 914

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