Policies and Strategies

Understanding Western Australian Consumers' Views: Acceptance of Food Produced Using Gene Technology

A case of herbicide tolerant canola (*Brassica napus* L.)

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In 2003, the Australian Office of the Gene Technology Regulator approved the commercial release of two genetically modified canola varieties in Australia, which sparked considerable public, policy and political debate about the safety of GM canola for the environment and human health, as well as overseas market access of GM canola (SCEPA 2003). From December 2002 to March 2003, we conducted an extensive consumer opinion survey by postal mail with telephone follow-up in Western Australia regarding GM foods, taking herbicide tolerant canola as a case study. The aims were to determine whether consumers would like oil made from genetically modified herbicide tolerant canola to be labelled as being 'GM', whether or not they would prefer the introduction of GM canola and other GM crops to Western Australian agriculture to be temporarily banned, and which factors influence consumer preferences of labelling and banning GM canola.

All in all, 280 subjects responded to the question whether or not GM canola oil should be labelled when it becomes available on food shelves in Western Australian supermarkets. Of those, 253 (90.36%) were in favour of labelling GM canola oil, 15 (5.36%) were against labelling, and 12 (4.29%) were neither in favour nor against labelling of GM canola oil. These figures show that the majority of Western Australians prefer GM canola oil to be labelled. This finding is similar to results reported in the literature on consumer concerns regarding GM food safety and labelling (Kelley 1995, Noussair et al. 2002). Consumers who are in favour of labelling GM canola oil argue that they have the right to know what they buy and to make informed purchasing decisions. Respondents who are against labelling believe that non-GM and GM canola oils are not different. Subjects who are unsure whether or not labelling of GM canola is useful are of the opinion that they lack sufficient knowledge to make the judgment. Overall, 181 subjects responded to the question whether GM crops and GM foods should be banned. Of those, 131 (72.38%) were of the opinion that GM crops and GM foods should be temporarily banned from Western Australia, while 50 (27.62%) were against temporary ban. It was noted from the ordered logit model of consumer choice of labelling that consumers are not supportive of labelling GM crops if the crops have potential advantages, such as perceived benefits to the environment. Consumers who are sceptical about the perceived unknown health risks of GM crops are in favour of labelling GM foods if these are to be sold in Western Australian supermarkets. The probit model of whether or not to ban GM crops from Western Australia shows that respondents do not support the temporary ban of GM crops if the crops are beneficial for Western Australian farmers or the environment, or if they enable to produce healthier and more nutritious food.

It can be concluded that Western Australian consumers would not demand labelling GM foods or banning of GM crops if the crops have perceived benefits for consumers, farmers and the environment and do not pose health risks. If these issues are conclusively addressed, there is market potential for GM canola in Western Australia. We believe that this study has made a significant contribution to the understanding of consumer perceptions about labelling GM canola oil as well as making major input to the ongoing research effort on GM issues in Western Australia. A detailed research using a larger sample is recommended, in order to fully address additional issues relevant to commercial introduction of GM canola. Future research could include consumer opinions about specific methods of genetic engineering of the canola plant, possible co-existence of GM and non-GM canola, various health, environmental and ethical concerns of genetically engineered canola, as well as type and level of details of labelling information. Moreover, future research should focus on assessing potential direct benefits of canola produced with methods involving biotechnology to the environment and humans.

References

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