



Polish consumers acceptance of genetically modified food

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Summary

The paper presents the preliminary results of on going research on Polish consumers attitudes towards GM food and their willingness to pay for such food products. We focus on consumers acceptance of GM food having attributes related to taste, price, nutritional and environmental benefits. The results of the research show that despite the potential benefits GM food may bring majority of the consumers claim they would not buy GM food. Consumers more likely to buy GM food belong to the segment of “indifferent consumers” who expressed less concerned about risk associated with food and are distinguished by lower level of education, average income and older age.

Key words: genetic modification, food, consumers, willingness to accept

Introduction

Poland is one of the few countries of the European Union where the concerns towards the genetic engineering and coexistence of GM and non GM crops are particularly pronounced. All Polish provinces have already announced that they aim for a total ban of GMO crops (GMO free zones..., 2007). Attitude surveys on Polish consumers show that they strongly oppose GM in food. However, there is limited understanding of what lies behind demand side resistance to the introduction of GM in food. Approval for conducting research on the use of GM in food production in Poland is currently less than it was several years ago. Comparing the results of consumers attitude surveys in the year 2000 with 2003, the percentage of respondents who believe that such research should be conducted and supported fell by 27% and 18% more Poles are convinced that such research is associated with threats to the environment and human health (Janik-Janiec, Twardowski, 2003). There were no studies that aimed at gaining more insight into aspects influencing consumers' acceptance of GM food in Poland and their willingness to pay for GM food.

Methods

Consumer acceptance of genetic modifications in food can be approached on different levels. The concept of attitudes provides the framework for scientific social research in this area. However, the attitude surveys are constrained by their hypothetical structure, especially since they do not account for price and income effect on consumer stated preference.

The research on Polish consumers was divided into two stages consisting of attitude survey to investigate consumer acceptance of GM food having various attributes (1) and experimental auction to measure their willingness to pay for GM food (2). In this paper we will focus on the results of the first stage of the research on consumer acceptance of GM food. The aims of the first stage of the research were threefold. Firstly to identify the perceived attributes of GM food. Secondly to investigate Polish consumers' knowledge on GM food and their ability to recognize food products containing GM. Finally to assess consumers' willingness to buy GM food. The survey using structured questionnaire was conducted in December 2005. A nationally representative sample (n=995) was undertaken and the population demographics were mirrored in the sample. There were four segments of consumers identified to support further analysis of consumers' acceptance of GM food.

Results

Majority of Polish consumers are familiar with the term "GM food" but 47% admit that they have never heard about GM food products. Nearly 85% of respondents claim they do not buy GM food because they are concerned about its safety. Moreover, the same percentage of consumers declare they are not able to recognize GM food. The most often mentioned attributes of GM food are "attractive appearance", "cheap" and "controlled". The consumers were asked to rank the circumstances under which they would choose to buy GM food. The results showed that there are no benefits of GM food that would significantly affect consumers willingness to buy GM food (fig. 1). Almost 60% of respondents agreed with the statements "I definitely would not buy GM food" and "I would not buy GM food" evaluating the potential attributes of GM food.

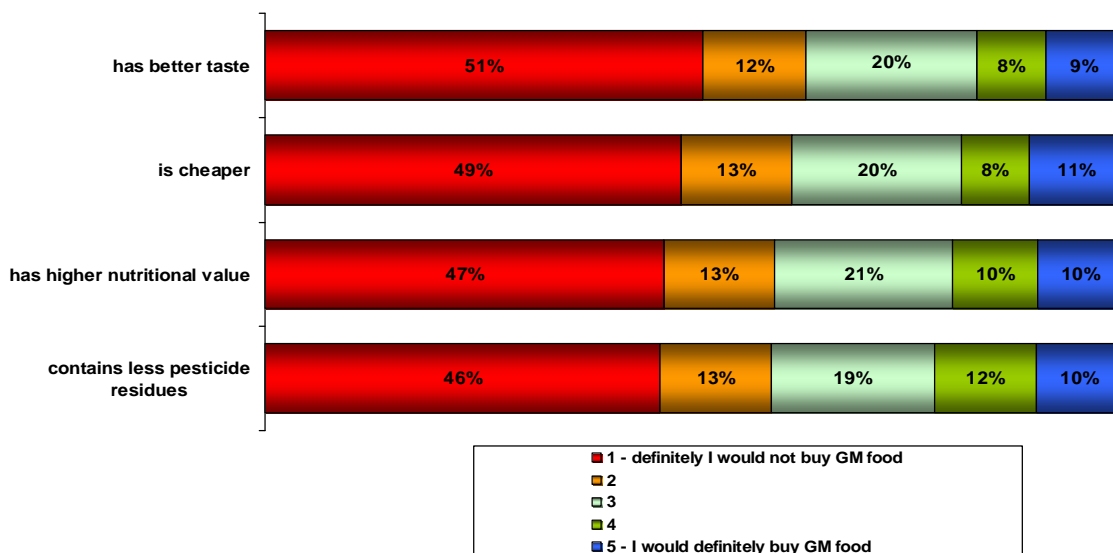


Fig. 1. Consumers' willingness to buy GM food having selected attributes.

Source: own research, 2005

The segmentation of the consumers revealed that consumers who express less food related threats, older and with lower education more often declare to buy GM food. On the contrary consumers belonging to the segment of “traditional consumers” more often declare not to buy GM food.

Conclusions

Polish consumers tend to reject GM food despite potential monetary, environmental, nutritional and hedonic benefits the GM food may bring. They are concerned about safety of GM food but they do not have enough knowledge on the labelling of GM food that may impact their ability to identify GM food products. There is a need to provide more information on GM food attributes and its labelling. However, providing information on the risk and benefits of GM food would not be sufficient of itself, to promote attitudinal change in consumers. There are more efforts needed to develop effective communication about GM food and the identified differences between the consumer segments must be taken into account. This asks for the development of a segmented communication policy.

References

- GMO free zones in Poland. ICPPP International Coalition for Protection of Polish Countryside, <http://icppp.pl/pl/gmo/>, read on 14.04.2007
- Janik-Janiec, B. and Twardowski, T. (2003) The social acceptance of biotechnology in 2003 Europe and Poland. Polska Federacja Biotechnologii (PFB), Łódź. <http://www.pfb.p.lodz.pl>

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