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GENETICALLY MODIFIED FOODS VS. ORGANIC FOODS: IS THERE A CONFLICT BETWEEN HEALTH AND PROFIT?

*International Conference Transition to a New Society,
20-22 March 2014, Podgorica, Montenegro*



Introduction

- The issue of genetically modified food is one area where health, ethics and economics have come together.
- In line with this, health, ethics and economics are portrayed as elements of a conflict between commercial interests and those of consumers.
- Both sides have developed strong positions to defend their interests.



Ethical Issues

- Food safety is a major issue in this conflict.
- In this context , researchers were more focused upon the safety of genetically modified food and the ethics of its usage, than on its price, availability to the consumers on the market etc.
- Ethical issues can be explored from many perspectives. Case in point, perspective of the consumers, commercial enterprise and society as a whole.
- Almost all scientists and professional organizations have criticized agribusiness for following profit without concern for potential hazards.

Different aspects of harmful effects of genetically modified food

- The negative effects of GM products can be seen from several aspects :
- Medical aspect
- Ecological aspect
- Economic and social aspects



Medical aspect

- The consummation of GM food can lead to numerous diseases with a deadly outcome or a permanent disability, according to more than 800 global scientists .
- Recently, it was discovered that pregnant women who consumed GM food during pregnancy, experienced birth defects of a child.
- Despite these statements by scientists, there are still no statistical indicators, which would document the above mentioned statements of the scientists.



Economic and social aspects of production and the usage of genetically modified food

- Modern biotechnologies have been announced as a "miracle", which can solve social and economic problems and stop the degradation of the environment.
- Despite this statement, there is certain scepticism among both experts and the direct consumers of such foods. It comes from our knowledge that large multinational companies control modern biotechnologies.
- They only transfer knowledge and products relating to the direct usage of the GM goods. Hence a good reason to ask a question: are their interests above the interests of GM food consumers?
- The problem is additionally complicated by the fact that these foods are not properly labelled in many countries, so consumers have no insight in what they contain.
- Further confusion among the consumers of this food is a result of lack of relevant information and of an insufficient number of independent research.
- In line with this, there is a need for research not funded by large multinational corporations who show their economic interest in this area.

Research

- Given the above facts, this research is an attempt to broaden our knowledge in this domain.
- In our opinion, it is useful to learn the attitudes of GM food production managers, whose role is twofold: they are both the prospective consumers of these foods and the advocates of the interests of the companies they are employed in.



Research methodology

- In connection with GM production, a research survey was conducted in the United States to determine the role and concerns of 100 production managers.
- The survey was conducted in person.
- The participant groupings were divided by gender and age.
- The research was an attempt to test four hypotheses:
- H1 GM food is not safe to consume since it is injurious to health.
- H2 People below 30 years of age are more interested in the safety of food and fear that consuming the GM food will endanger their health.
- H3 The interests of GM food producers differ from those of GM food consumers.
- H4 Despite being more expensive than GM food, organic food is worth its price.

Key findings

- The first hypothesis is not confirmed in our research. As many as 76% of respondents maintain that GM food is not dangerous to health, while 24% are of the opinion that consuming GM food has negative effects upon health (Fig.1).
- The research findings point to the fact that as many as 53% of respondents are not concerned with food safety issues, while only 4% are (Fig.2). According to the research, there are no differences in GM food concerns between men and women (Fig.3).

Key findings (Cont.)

Fig.1. Do you think GM foods have a potential risks to human health?

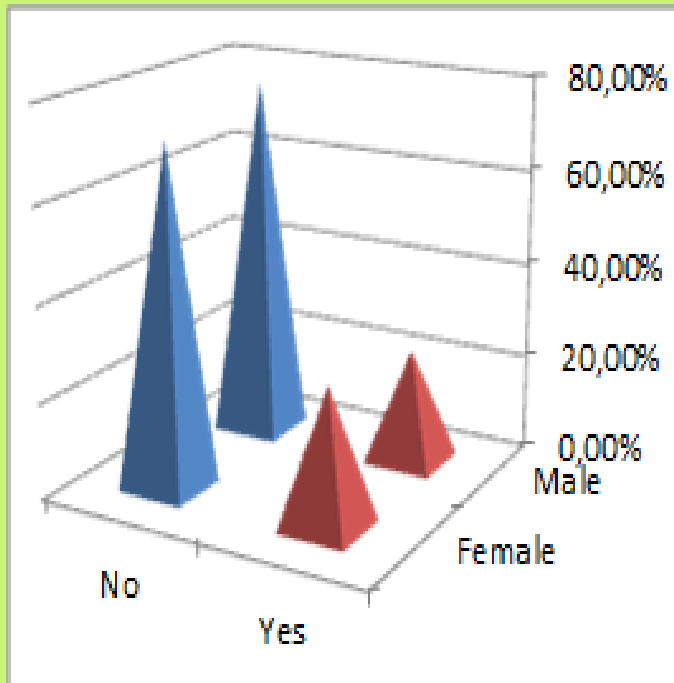
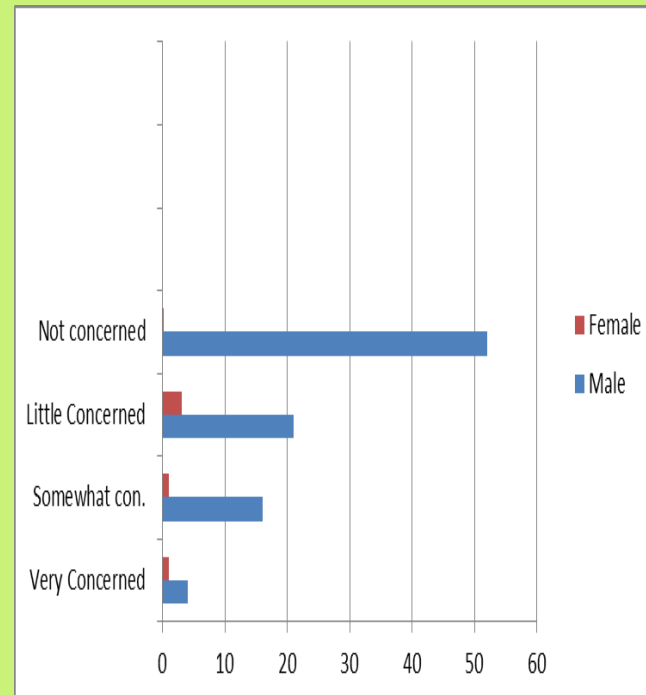


Fig.2. Are you concerned about health risks from GM foods?



Key findings (Cont.)

Figure 3. Do you believe there are possible differences in GM food concerns between men and women?

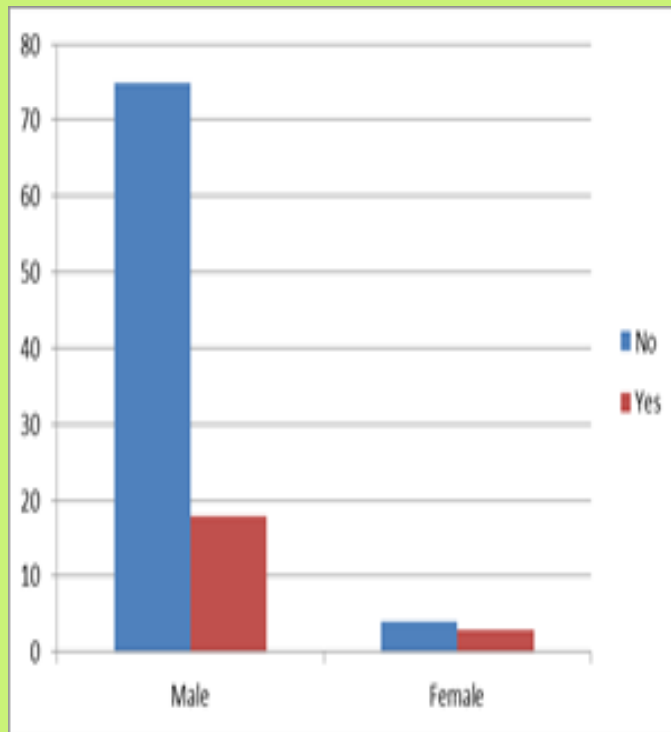
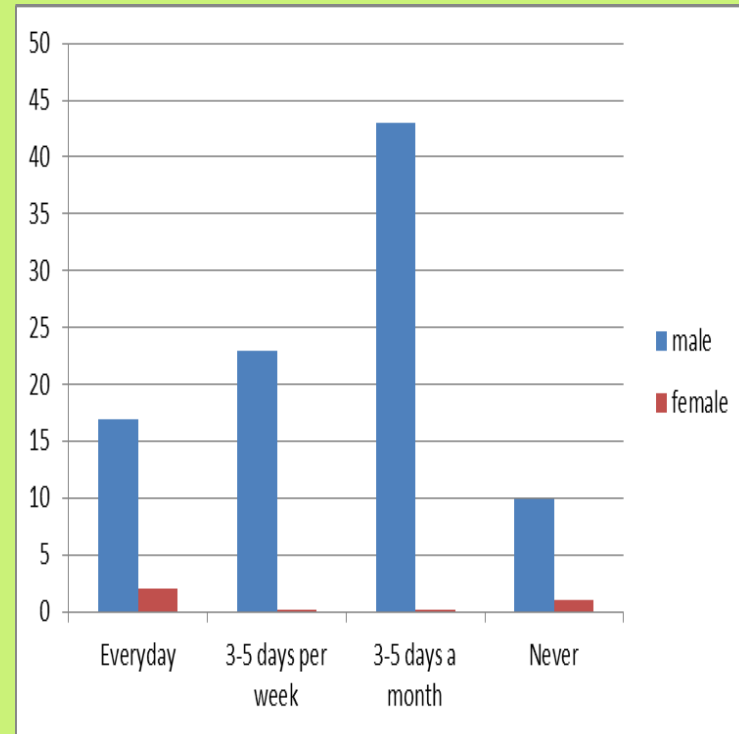


Fig.4. How often do you eat GM food?



Key findings (Cont.)

- Our research has also shown that a majority (43%) of our respondents consume GM food 3 – 5 times a month, 23% of respondents consume it 2 – 3 times per week, 17% of them consume GM food on a daily basis, while 10% of respondents do not consume this food at all (Fig.4).
- Our hypothesis that people younger than 30 years are more concerned with what they eat and pay more attention to food safety is rejected, the results of the research have shown.
- Namely, the results have shown that as many as 75% of the respondents do not agree with the statement, and 25 % maintain that the young are more interested in food safety.
- The analysis conducted as regards gender, however, has shown that it is women rather than men respondents that believe young people are more interested in food safety.

Key findings (Cont.)

Fig.5. Who do you believe benefits from GM crops?

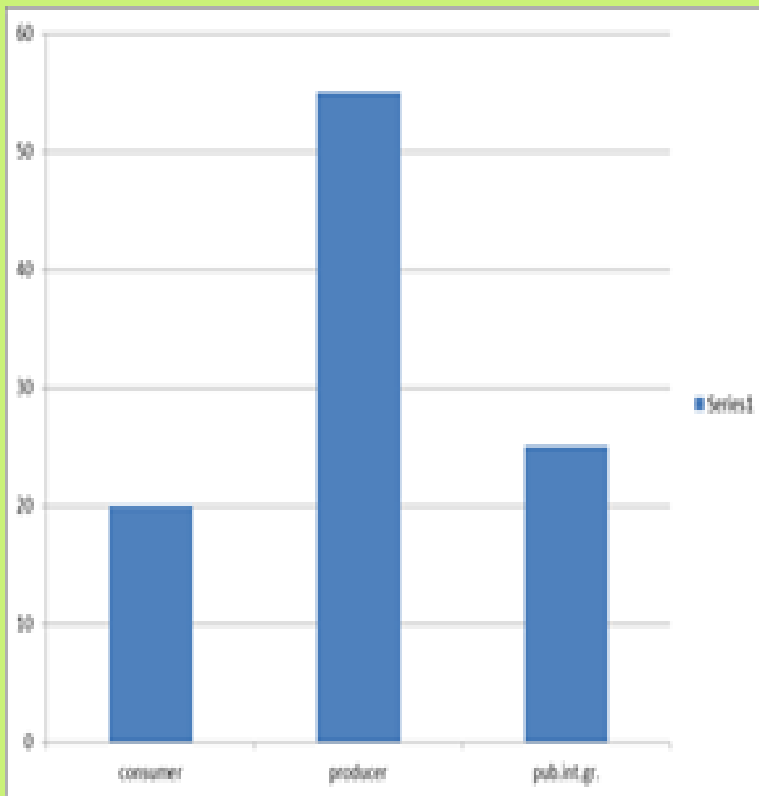
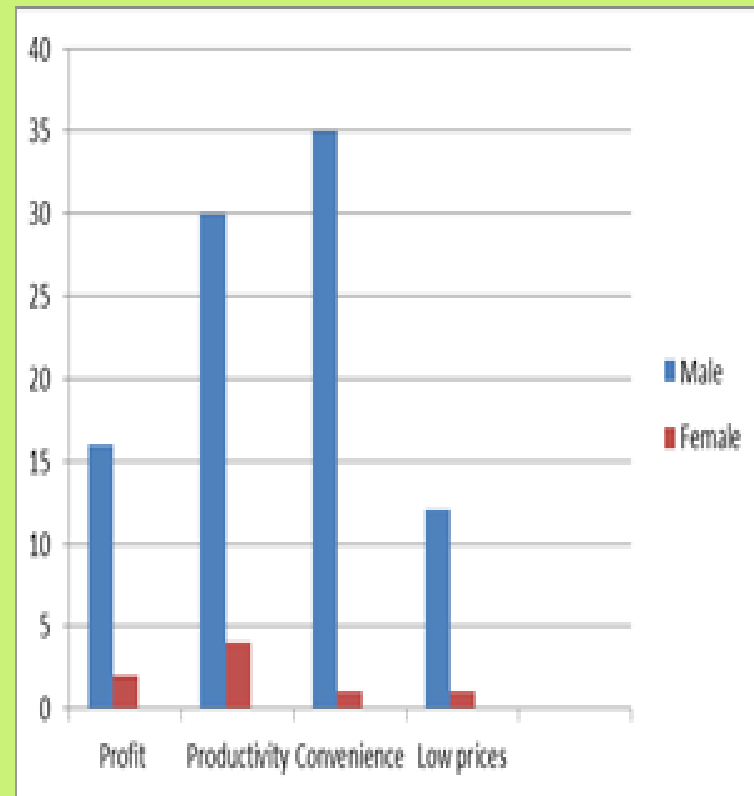


Fig.6. What is the current benefit of having foods made from GM crops?



Key findings (Cont.)

- A large percentage (79%) of our respondents has confirmed our hypothesis H3 that there is a difference in the interests of GM food producers and those of GM food consumers. Thus, the answers to our question, “Do you believe there are differences among some public interest groups, producers and consumers regarding GM food”? are “strongly agree“ by 70%, while a very small number of respondents disagree (5%) (Fig.5).
- Our research has also shown that the major benefits of GM food production are practicality of production (35%), followed by higher productivity (30%) and rise in profits (16%), the low price being at the bottom of the list (12%) (Fig.6).
- The fourth hypothesis is confirmed in our research. Namely, 87% of respondents agree that organic food is worth its price although it is more expensive than GM food (Fig. 7).

Conclusion

- This research has, in our opinion, led to new conclusions.
- In the first place, it has shown that there are no age differences as regards the consumers' attitudes towards the kind of food they eat.
- Namely, in choosing their food, neither the older nor the younger generations are really concerned about health problems.
- Given that our respondents are not concerned about the choice of food they consume, a conclusion can be drawn that their consumption of GM food can be explained by their attitude to their diet and health, rather than by their assurance that GM food is safe.
- Therefore, the fact that our respondents are GM food production managers has not raised their awareness, nor has it contributed to our insight into the extent to which this food is safe.
- To sum up, we can conclude that the results of the research apply to the United States and cannot be generally accepted for other countries. This is corroborated by our respondents, the majority of whom (76%) point out the fact that the differences in the extent to which GM food is accepted depend on cultural, social and economic circumstances in different parts of the world.
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Thank You