

## ATTITUDES AND INTENTIONS TOWARD PURCHASING GM FOODS AMONG COLLEGE STUDENTS IN ROMANIA

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### Abstract.

This paper focuses on examining some of the main issues related to the consumption of genetically modified food products in Romania, respectively the attitudes and intentions of purchasing food products that are genetically modified. The survey was conducted in the year of 2006, the focus group being composed of college students. The majority of respondents has expressed a negative attitude and is not willing to purchase food that is genetically modified.

**Key words:** GM food, consumer attitudes, intentions of purchasing

### INTRODUCTION

In the last years, researchers have focused on assessing the level of awareness and acceptance of biotechnology among different user groups. The interest to such studies has increased in last years all over the world. It is known that in general, European consumers have a negative attitude toward biotechnology. However, differences of attitudes and perceptions appear also among European countries.

Some remarkable studies published in the last years are of Burton *et al.* (2001) on analyzing the attitude of the population from UK, which are willing to pay more to be sure that the food was not genetically modified (GM); Grimsrud *et al.* (2004) on analyzing the consumers' attitude about genetically modified foods in Norway, which are more open to these products if they are offered at a discount; Renko *et al.* (2003) on analyzing the attitudes of Croatian population toward genetically modified food.

Until recently, the Romanian consumers have been relatively indifferent and unaware of issues related to genetically modified food products. However, only lately, the population started to become more and more interested in learning about the consumption of genetically modified foods.

The objective of this study is to investigate the attitudes of college students about genetically modified foods and their intentions of purchasing and consuming genetically modified products.

## MATERIALS AND METHODS

Data was collected from samples of 57 Romanian and 65 foreign students, which are studying at universities in Romania. The surveys were completed by students from two universities: University of Agricultural Sciences and Veterinary Medicine and University of Medicine and Pharmacy, both from Cluj-Napoca, Romania. The surveys were provided in three different languages: Romanian, English and French, for a better understanding of the questions.

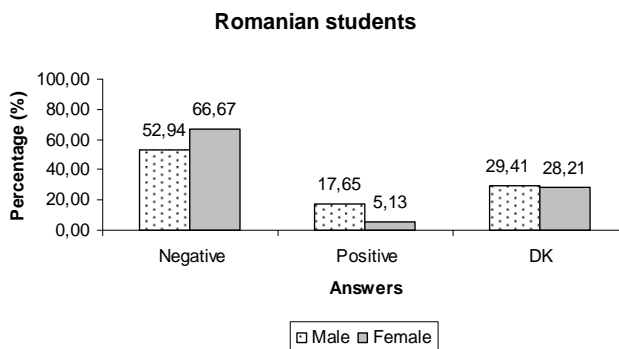
The sample of this study is not representative for the general population of Romania, but it offers some insight about the attitude and perception regarding the genetically modified food among young people.

Students' age ranges between 19 and 32 years. Among Romanian students, 29.82% are male and 68.42% are female, 1.75% refused to reveal their gender. Among foreign students, 58.46% are male students and 38.46% are female, 3.08% refused to reveal their gender.

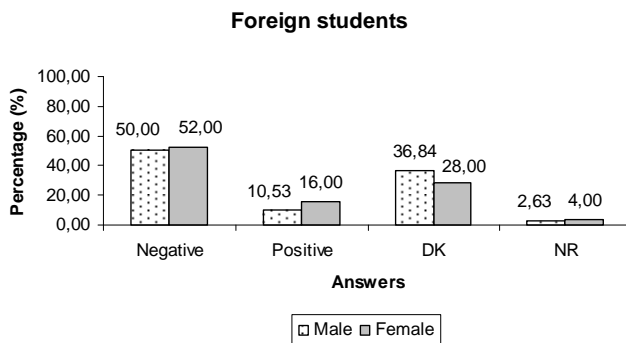
## RESULTS AND DISCUSSIONS

Several questions were posted in order to investigate and analyze the perception of the students toward the GM food products. This study emphasizes the attitude about GM food products and the intentions of buying GM food products for the two main groups: Romanian and foreign students, differentiating the responses by gender.

Students were asked to state their attitude about GM food products (Figure 1). More than 50% of the students have a negative attitude about GM food products, the highest being represented by female Romanian students (66.67%). Among Romanian students, male students seem to have a positive attitude in a higher percentage than female students (with 12.52% more). Among foreign students, male students posted a positive attitude in a smaller percentage than female students (with 5.47%). A fairly high percentage of students are not sure about their attitude about GM foods.

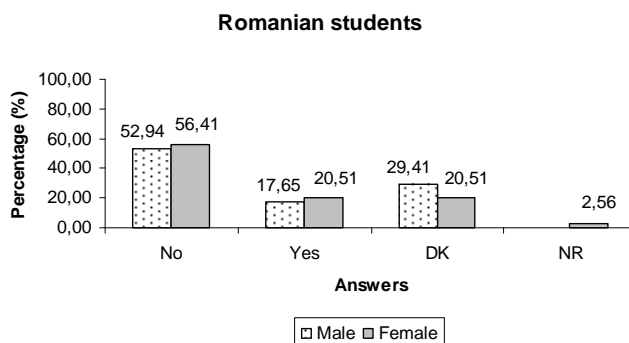


**Fig. 1a.** Attitude about GM food

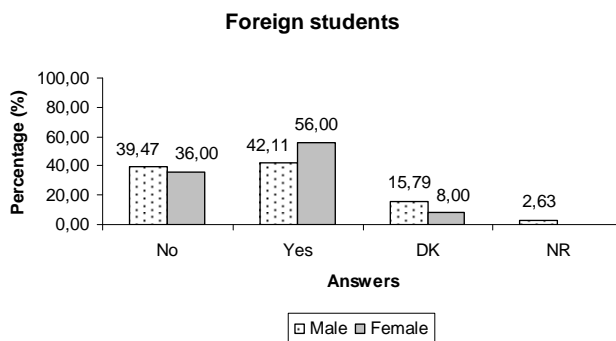


**Fig. 1b.** Attitude about GM food

In order to investigate the intentions of buying GM food products several questions were addressed. The first step is to assess the level of awareness among the respondents. The addressed question is “Are you aware of buying GM foods?” The majority of Romanian students, both male and female, have answered “No” to this question (52.94% in the case of male and 56.41% in the case of female students) (Figure2.) A relative high percentage of students are not sure if they are aware of buying or not. On the other hand, foreign students seem to be much more aware of purchasing GM products, especially the female foreign students, which said “Yes” in a percentage of 56.00.

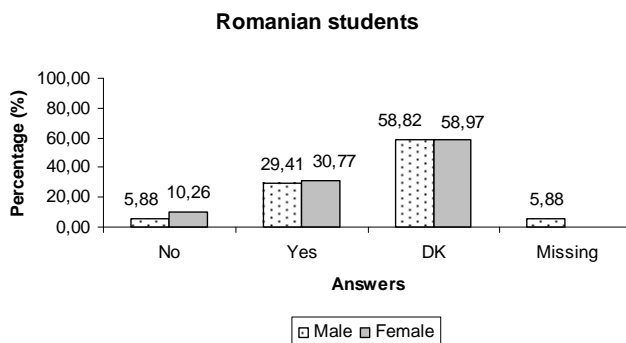


**Fig. 2a.** Aware of buying GM food

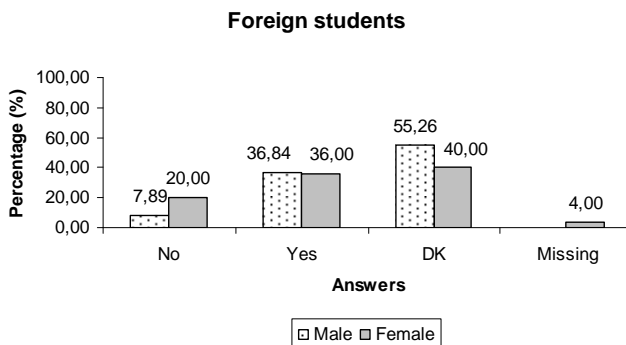


**Fig. 2b.** Aware of buying GM food

Another step of the analysis is to find out if the respondents have consumed any product that is genetically modified. The analysis of the responses to this question is represented in Figure 3. A high percentage of students are not sure if they have consumed or not any GM food products: 58.82% and 58.97% of Romanian male and, respectively female students; 55.26% and 40.00% of foreign male and, respectively female students. Only around 30% of students are aware of buying products that are genetically modified.

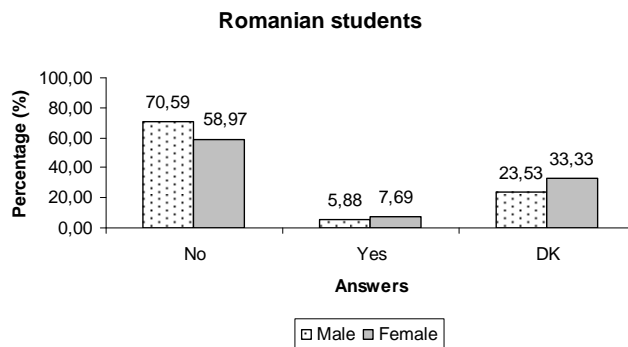


**Fig. 3a.** GM food consumers

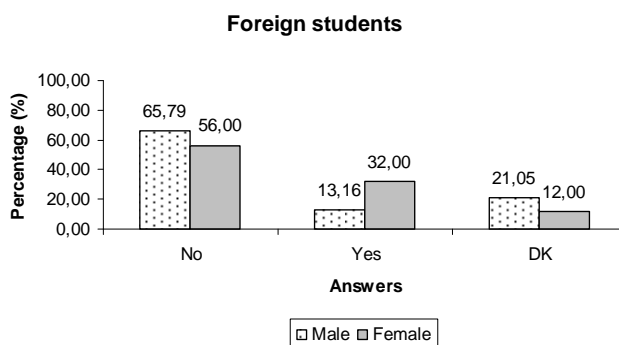


**Fig. 3b.** GM food consumers

Next, it is supposed that the GM food products and non-GM food products are sold at the same price. The question that directly addresses the problem of purchasing intentions is: “If the price were the same would you buy or consume genetically modified food products?” 70.59% of male Romanian students and 65.79% of male foreign students have answered “No” to this question, thus they are not willing to buy GM foods at a same price as non-GM foods. Also, female students expressed a negative position, but in a smaller percentage (58.97% and 56.00% of Romanian, respectively foreign students). On the other hand, a relatively high percentage of female foreign students are willing to buy and consume GM food products (32.00%).



**Fig. 4a.** Willingness to buy GM food



**Fig. 4b.** Willingness to buy GM food

## CONCLUSIONS

Most students have expressed a negative attitude about the genetically modified food products. However, some students have a positive attitude, especially the male Romanian and female foreign students. Further findings of this study show that more than half of the respondents are not willing to purchase food that is genetically modified. The opinions about the level of awareness are divided, still foreign students are more aware of buying GM foods than Romanian students.

## BIBLIOGRAPHY

1. Renko, N., V. Brčić-Stipčević. 2003. Attitudes of the Croatian Population toward GM Food. *British Food Journal*. 105(3): 148-161
2. Grimsrud, K., J. McCluskey, M. Loureiro, T. Wahl. 2004. Consumer Attitudes toward Genetically Modified Food in Norway. *Journal of Agricultural Economics*. 55(1):75-90
3. Burton, M., D. Rigby, T. Young, S. James. 2001. Consumer Attitudes to Genetically Modified Organisms in Food in the UK. *European Review of Agricultural Economics*. 28 (4): 479-498.