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EVALUATION OF FEEDING BEHAVIOR, ATTITUDES AND KNOWLEDGE STUDENTS FROM ORADEA TO FOODS DERIVED FROM GMOs

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Abstract

The purpose of this study is to assess eating behavior, attitude and knowledge of a representative group of students from Oradea to foods derived from GMOs (Genetically Modified Organism). For this study we used a food frequency questionnaire containing nine questions about personal data (residence, gender and age), feeding behavior (food label analysis and issues tracked on the label) and knowledge of genetically modified organisms. Results showed that over 60% of the 63 students included in this study) have knowledge about genetically modified organisms. Both in urban and in rural areas, the share of female subjects who have knowledge about GMOs is higher than that of the males (38.1% vs. 22.22%). There is a significant percentage of young people should avoid foods derived from GMOs if they were labeled correctly (57.14% of them). The share of girls that would prevent food from GMO is double than that of boys (38.1% vs. 19.05%). Students Oradea in bulk are interested in eating sanogenous: 77.78% of them read food labels before you buy/consume; 70% of them watch the shelf life of food, interest is much higher among female students (49.2% compared to only 22.2% registered among boys). Only a percentage of 14.28% of boys are interested in the caloric value of the food label when analyzed while half (49.2%) of women watching this on the food label before you buy / consume. Most disinterested analysis information provided food labels to be purchased/eaten proved to including men from rural areas (9.52% of them read food labels purchased/consumed).

Key words: feding behavior, food, genetically modified organisms

INTRODUCTION

Genetically modified organisms (GMOs) or transgenic is the term used to define a crop plant or animal appears normal, which, by means of genetic engineering techniques were transferred genes from other species: plants, animals, bacteria, viruses or human genes, in order to conferii certain new properties (Banu et al., 2005). Transgenic organisms can not be launched on the European market without prior approval at EU level, whether it's a food or feed imports obtained from transgenic crops, and for sowing. Establishing nutritional profile of foods derived from genetically modified structures is a challenge (Soubrie et al., 2006). There are studies where the nutritional profiling, GM foods compared to their natural counterpart (genetically modified soybean is compared with non-GM soya) (Garban, 2000; Niac, 2003).

Evidence increasingly clear about the fact that GM food based cause allergies, immunological reactions, liver problems, infertility and even

death. Furthermore, based on the only human feeding experiment based foods genetically modified organisms has been established that the genetic material in food based on GMOs can transfer into the DNA of intestinal bacteria in humans and may continue to multiply. American Academy of Envirnomental Medicine showed that GMOs pose a serious threat to health, and not just by accident that there may be link between them and health effects. Some foods that contain GMO suspected to have adverse health effects are: soy and soy derivatives, tomatoes, potatoes, corn derivatives, food from animals in which food was used feed derived from GMOs (Arcella & Leclercq C., 2005). A public health problem is the food behaviors of young people, either by insufficient intake of food is due to an unbalanced diet (Costin & Segal, 2001; Doroftei, 2002; Chirila, 2004).

The purpose of this study is to assess eating behavior, attitude and knowledge of a representative group of students from Oradea to foods derived from GMOs.

MATERIAL AND METHODS

In the present study, we aimed eating behavior characteristics, preferences, attitudes and knowledge that students of the University of Oradea, Faculty of Environmental Protection to foods derived from genetically modified organisms. For this study we used a food frequency questionnaire (Larocque & Larose, 2001) containing nine questions about personal data (residence, gender and age), feeding behavior (food label analysis and issues tracked on the label) and knowledge of modified organisms genetic. Questionnaires were applied to a total of 63 students from Oradea Faculty of Environmental Protection, during the academic year 2013-2014.

Data were statistically evaluated and interpreted in Excel using "t" test.

RESULTS AND DISCUSSION

Of the students surveyed, 60% (ie 38 of the 63 students enrolled in this study) have knowledge about genetically modified organisms. Both in urban and in rural areas, the share of female subjects who have knowledge about GMOs is higher than that of the males (38.1% vs. 22.22%). The study also reveals that students from urban areas are better informed about the foods derived from genetically modified organisms to those coming from rural areas: 42.86% of the students coming from rural areas have knowledge about GMO front only 17.46% of those coming from rural areas (fig. 1).

There is a significant percentage of young people should avoid foods derived from genetically modified organisms, if they were properly labeled

(57.14% of them). Almost half (44.44%) of the students coming from rural areas should avoid foods derived from genetically modified organisms, while only 15.87% of students coming from rural areas would have the same attitude towards foods derived from GMOs. It is observed that the share of girls that would prevent food from GMO is double that of boys 38.1% vs. 19.05%), which again highlights that girls are more careful about what they eat to boys (Fig. 2), which is known to have a nesanogen eating behavior (Farr et al., 2006).

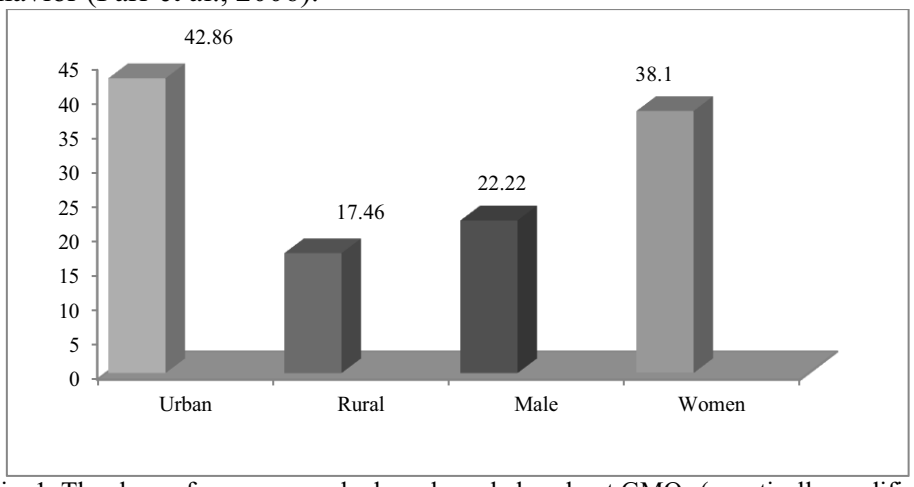

Fig. 1. The share of consumers who have knowledge about GMOs (genetically modified organisms), grouped by residence and sex.

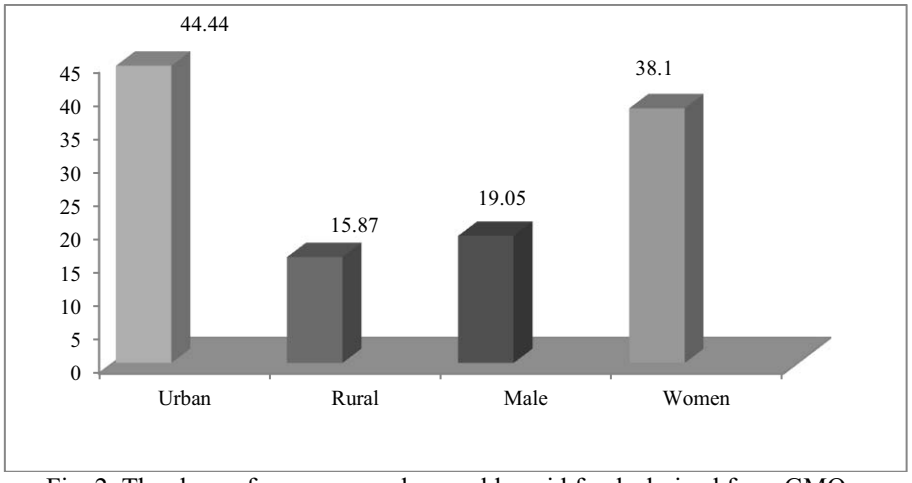

Fig. 2. The share of consumers who would avoid foods derived from GMOs.

The study reveals that students from Oradea, in most shows interest sanogena eating; 77.78% of them read food labels before you buy / consume (Table 3). Although the share of students who would not eat foods derived from modified organisms is relatively high (57.14%), yet only 22.22% of

them explicitly follow the food label, "contains / does not contain GMOs" (fig. 3).

Table 3

The share of consumers who read food labels in relation to information tracked and according to residence and sex.

Place of residence	The sex	People who read food labels	Information tracked	Nr. people	%	% of group
RURAL	Men	6	Period validity	5	7,94	9,52
			Calories contained	4	6,35	
			Ingredients contained	5	7,94	
			This E-is	6	9,52	
			This OMG	1	1,59	
	Women	13	Period validity	11	17,46	20,63
			Calories contained	10	15,87	
			Ingredients contained	9	14,28	
			This E-is	10	15,87	
			This OMG	3	4,76	
URBAN	Men	9	Period validity	9	14,28	14,28
			Calories contained	5	7,94	
			Ingredients contained	6	9,52	
			This E-is	8	12,70	
			This OMG	3	4,76	
	Women	21	Period validity	20	31,74	33,33
			Calories contained	21	33,33	
			Ingredients contained	12	19,05	
			This E-is	15	23,80	
			This OMG	7	11,11	
Total consumers who read food labels before you buy/consume				49	-	77,78
Total food consumers follow label "Contains GMOs":						
- Rural				4	-	6,35
- Urban				10	-	15,87
- Total				14	-	22,22
TOTAL SURVEYED				63	-	100,00

We completed this study analyzed student data information on food labels, grouped by residence and sex (Radulescu, 2004). I noticed that there is a growing interest among students from Oradea, to the information listed on the food label. Thus, over 70% of them watch the shelf life of food,

interest is much higher among female students (49.2% vs. 22.2% registered only among boys). Only a percentage of 14.28% of the boys are interested in the caloric value of the food label when analyzed while half (49.2%) of women watching this on the food label before you buy/consume.

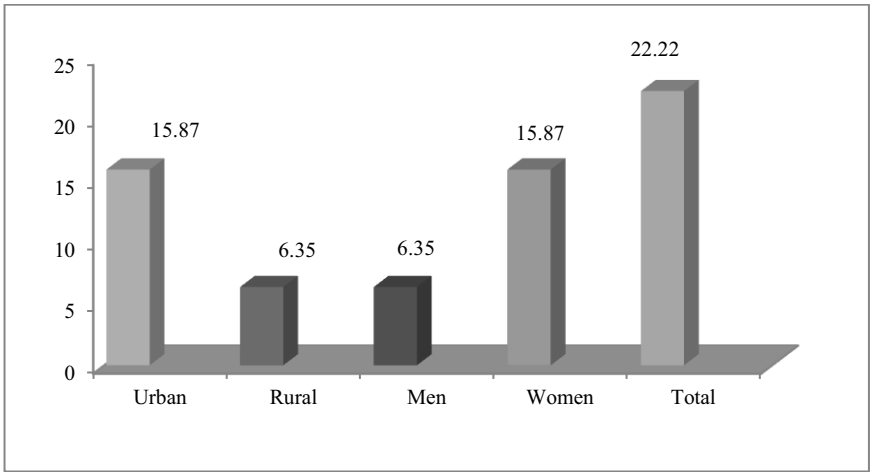

Fig. 3. The share of consumers who watch the food label "Contains GMOs".

Students Oradea show a growing interest from food additives present in food composition, and in this regard women manifesting greater attention (39.68% vs. 22.22% for boys only). Almost half (47.61%) of the students coming from urban Oradea read food labels intainte them buy / consume their share in tim among students coming from rural areas is only 30.15%, respectively 36.7% less. Most disinterested analysis of information provided by food labels to be purchased / eaten proved to be men from rural areas (9.52% of them read food labels purchased/consumed).

CONCLUSIONS

Assessment of eating behavior, attitude and knowledge of a representative group of students from Oradea to foods derived from GMOs reveal the following aspects:

• 60% (ie 38 of the 63 students included in this study) have knowledge about genetically modified organisms. Both in urban and in rural areas, the share of female subjects who have knowledge about GMOs is higher than that of the males (38.1% vs. 22.22%);

• Almost half (44.44%) of students from urban areas should avoid foods derived from genetically modified organisms, while only 15.87% of students from rural areas would have the same attitude towards foods derived from GMOs;

• Oradea students in mostly are interested in eating sanogenous; 77.78% of them read food labels before you buy/consume.
• There is an increased interest among students Oradea, to the information listed on the food label. Thus, over 70% of them watch the shelf life of food, interest is much higher among female students (49.2% against 22.2% registered only among boys);
• the most disinterested analysis information provided food labels to be purchased / eaten proved to including men from rural areas (9.52% of them read food labels purchased/consumed).

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