
**IMPACT OF GENETICALLY MODIFIED FOOD (GMOs) ON THE TOURIST
ATTRACTIVENESS OF THE HOTELS - TERMS AND ACCESS TO THE GMO IN
HOTELS WITH 4 STARS IN OHRID**

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Abstract: The purpose of this paper is to set up an analysis of the actual conditions for development (maturation) of the idea of (non) use of genetically modified food in the hotel industry in the country. More specifically, it is about specifics of the process of managing hotels in the direction of direct insight knowledge of the frame with indicators of GMO food, negative and harmful impact thereof on human health, and the impact to the tourism industry and the attractiveness of the hotel. Despite the theoretical framework that will be implemented within the labor market, the same will be implemented and empirical research, in terms of analysis of four-star hotels in Ohrid, Republic of Macedonia who is seen as particularly important and tourist destination worldwide. Through the application of appropriate methodological framework will be drawn conclusions that are particularly important for principled explanation of the essence of causation that are related to the current conditions of management of hospitality and knowledge of the impact of GMO food, with special regard to the situation in Ohrid, Macedonia. Furthermore, due to the apparent situation in this area, the presence of a number of seminars, conferences and discussions with experts have positive significance to encourage awareness of the personnel involved in the operation of the respective hotel. Also, it is necessary to influence raising awareness among staff as well as among the guests at the hotel, about harmful effects of GM food on their health. Moreover, if the hotel within itself implements a menu which does not involve GMO foods, it should be used as a positive asset to the hotel and to promote the campaign to attract domestic and foreign tourists, stating that the hotel additionally besides offering nice and hospitable environment, also take care of their health.

The analysis of the hotel business in order to inspect the implementation of GMO food, is an issue that has an impact on the lifestyles of visitors (tourists). Consequently, the idea of development of modern management models through the strategic application of innovations in the field of nutrition, will allow laying a solid foundation of competitive business in the area of hospitality and tourism. The same applies especially to the Republic of Macedonia, a country that is located on a great geographic area with a climate and environmental conditions for tourism development. Additional efforts in the field of GMO food will reflect positively on the tourism campaign of the country, overall. Therefore, and based on research conducted framework, this paper will promote the idea of encouraging campaigns for greater awareness of hotel and restaurant businesses about GMO food in order to improve the existing conditions in the sector.

Through the application of qualitative and quantitative methodological framework, i.e. content analysis of theoretical aspects, review the prepared statements of the scope of this issue and comparative analysis capabilities against modern challenges, and the conducted empirical research, efforts will be made to get solid basis for the establishment of appropriate access to analyzing the impact and effects of the application of GMOs in the food in the hotel's business.

Keywords: genetically modified food, hotels, tourism, strategic approach

**ВЛИЈАНИЕТО НА ГЕНЕТСКИ МОДИФИЦИРАНА ХРАНА (ГМО) ВРЗ
ТУРИСТИЧКАТА АТРАКТИВНОСТ ВО ХОТЕЛИЕРСТВОТО – УСЛОВИТЕ И
ПРИСТАПОТ КОН ГМО ВО ХОТЕЛИТЕ СО 4 ЗВЕЗДИ ВО ГРАДОТ ОХРИД**

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Резиме: Целта на овој труд е да се постави анализа на реалните услови за развој (созревање) на идејата за (не)употреба на генетски модифицирана храна во хотелиерството во Република Македонија. Поконкретно, станува збор за специфичности на процесот на менаџирање на хотелите во насока на директен увид на познавањето на кадарот со индикаторите на ГМО храната, негативното и штетно влијание на истата по здравјето на луѓето, како и влијанието кон туризмот и атрактивноста на хотелот. Покрај теоретската рамка која што ќе биде приложена во рамките на трудот, во истиот ќе биде

имплементирано и емпириско истражување, од аспект на анализа на хотелите со четири ѕвезди во градот Охрид, Република Македонија кој важи за особено важна и истаканата туристичка дестинација ширум светот. Преку примена на соодветна методолошка рамка ќе бидат извлечени заклучоци кои што се особено значајни за принципелно објаснување на суштината на причинско-последичните односи кои што се поврзани со моменталните услови на менаџирање на хотелиерството и познавањето на влијанијата на ГМО храната, со посебен осврт на состојбата во градот Охрид, Република Македонија. Понатаму, како резултат на видливата состојба во овој домен, присуството на голем број на семинари, конференции како и разговори со стручни лица има позитивно значење за поттикнување на информираноста на кадарот кој е инволвиран во работата на соодветниот хотел. Исто така, потребно е да се влијае на подигнување на нивото на свесност, како помеѓу кадарот така и помеѓу гостите во хотелот, во врска со штетните дејствија на ГМО храната по нивното здравје. Притоа, доколку хотелот во своите рамки имплементира мени кое што не опфаќа ГМО храна, истото треба да се искористи како позитивна придобивка на хотелот и да се промовира во кампања за привлекување на домашни и странски туристи, со назнака дека хотелот, дополнително покрај со понудата на убав и гостопримлив амбиент се грижи и за нивното здравје.

Анализата на хотелскиот бизнис во насока на увид во примената на ГМО храна, претставува проблематика која што има влијание врз начинот на живот на посетителите (туристите). Следствено, идејата за развој на современи модели на управување преку стратешка примена на новитетите во доменот на исхрана, ќе овозможи поставување на солидна основа на конкурентен бизнис во подрачјето на хотелиерството и туризмот. Истото, особено се однесува на Република Македонија, земја која што се наоѓа на одлично географско подрачје, со соодветна клима и еколошки услови за развој на туризмот. Дополнителен ангажман во доменот на ГМО храната ќе се одрази позитивно врз туристичката кампања на земјата, целокупно. Токму затоа, а на основа на спроведена истражувачка рамка, овој труд ќе промовира идеја за поттикнување на кампањи за поголема свесност на хотелските и ресторански бизниси во врска со ГМО храната, со цел подобрување на постоечките услови во овој сектор.

Преку примена на квалитативна и квантитативна методолошка рамка, односно анализа на содржина на теоретски аспекти, осврт на изготвените извештаи од доменот на оваа проблематика и компаративна анализа на можностите наспроти современите предизвици, како и анализа на спроведено емпириско истражување, ќе се вложи напор да се добие солидна основа за воспоставување на соодветен пристап на анализа на влијанието и ефектите од примената на ГМО храната во хотелиерскиот бизнис.

Клучни зборови: генетски модифицирана храна, хотелиерство, туризам, стратешки пристап

INTRODUCTION

The role which food plays in the tourism industry cannot be ignored. However, the literature has also led to believe that food risks are perceived to be higher abroad than at home and this could act as an impediment for the tourism industry. Though research on food as a tourism product has been growing in the literature, little has been said about genetically modified (GM) food intake by tourists.

Food tourism is quite simply the exploration of food as the purpose of travel. Food already ranks with climate, accommodation, and environment as being important to tourists. Food tourists are often attracted to the locally grown produce of a destination, which they see as deeply connecting them to its origins. Each destination becomes unique because of its offerings, which are appealing to the tourists who want to become part of the local community. Tourists today seek travel experiences based on local culture and identity, which revolve highly around food. A newer form of tourism, it is spreading widely across the globe as the food industry continues to explode through more restaurants, as well as a growing industry of chefs and other careers.

In this context, it is especially important to pay attention to the role of food in the hotel business, which can be used as an additional attraction for tourists. All this especially applies to the selection of food, or is there a possibility for preference for natural food from a healthy and clean environment, or the hotel is focused on the use of GMO food

This research developed a model to predict the impact of genetically modified food in the hotel industry, based on planned behavior among tourists and the caterers. The research aims to point the familiarity of the catering and hotel staff with genetically modified foods, its meaning and application, as well as professional staff familiarity with this area. This is particularly important to emphasize the positive and negative benefits in terms of tourism, in terms of the use of GMO food.

THE ROLE OF GENETICALLY MODIFIED FOOD IN THE AREA OF TOURISM

Food tourism is evolving, and is predicted to continue changing in the future. There are multiple possibilities for how it will end up, depending on the popularity of people living sustainable lifestyles versus those contributing to a faster depletion of natural resources. If the scale tips towards the part of humankind that is environmentally aware, then the future of tourism will lean toward one future. If the depletion of natural resources happens faster than anticipated, however, a complete collapse is more likely.

Besides the man, science will be a determinant of the future of food tourism. There is the possibility that food tourism will continue to seek out food grown naturally from the Earth at every destination. But the parallel future may be an elevated version of today's obsession with master chefs' artificially created cuisines. Scientists have been creating synthetic food for mankind in preparation as a solution for possible future food shortages. Unlike genetically modified organisms (GMO) that splice in traits from other species to create the food we see on the shelves of markets today, synthetic biology involves the creation of new organisms in a lab with their own full DNA. The technology used to do this is closely guarded to prevent an adverse reaction from the public. But in order for the planet, and food tourism, to flourish in the future, all possible outcomes must be explored and prepared. If synthetic food is the future, food tourism may focus more on the technology used to create these foods and the unique outcomes it might explore. Some may scour the planet still in search of natural food, as it becomes a rare and much desired delicacy. In fact, the pursuit of organic, natural food for tourism purposes may become reserved for the wealthy class and unattainable to the rest of the world. But just because synthetic food is undesirable to the world today, the burden of the predicting the future of how to feed the world in the face of depleted resources has been taken up responsibly by scientists through extensive, and reliable, scenario planning.²⁹⁹

The use of GMOs is one of the most controversial topics in discussions concerning the future of farming. For some people, generic engineering seems to represent a sort of "silver bullet" for most of the problems related to agriculture, such as the climate crisis and food security. At the same time, others see GMOs as a menace, a technology that does not maintain its promises, and that even represents a threat to humans and the natural environment.³⁰⁰

The most important question for the restaurant and hotel business is - if there genetically engineered (GMO) ingredients in the food that is eating? Moreover, it's hard to know for sure, because there are no requirements for clear GMO labels on food packages. That's why, there is need for a federal law to require real, clear GMO labels. It is the same with the tourists in the country. They need to know their rights of the food they consumed.

Tourists all deserve the right to know what's in their food, and that includes GMOs. Over 90% of Americans support the labeling of food with GMO ingredients, but currently there's no clear way to know if your food contains GMOs. But, the situation is not the same in Europe.

The most important thing that there should be known about GM foods is that they are unproven and unlabeled experiments. Mostly, people are the subject of these experiments. The technology holds incredible potential, but should be used with extreme caution and only with the absolute awareness and willingness of participants.

The question of genetically modified organisms is potentially the most important debate we face as a species. Furthermore, no one has the right to make this decision for someone else, so the hotel staff needs to respect their guest's right to make this decision for them.

Genetically modified foods have the potential to solve many of the world's hunger and malnutrition problems, and to help protect and preserve the environment by increasing yield and reducing reliance upon chemical pesticides and herbicides. Yet there are many challenges ahead for governments, especially in the areas of safety testing, regulation, international policy and food labelling. Many people feel that genetic engineering is the inevitable wave of the future and that we cannot afford to ignore a technology that has such enormous potential benefits. However, we must proceed with caution to avoid causing unintended harm to human health and the environment as a result of our enthusiasm for this powerful technology. That is, especially in the process of hotel managing and teaching stuff about the GMO food positive and negative aspects.

²⁹⁹ Whitman, D. B. (2000). Genetically Modified Foods: Harmful or Helpful? CSA Discovery Guides, pg. 19

³⁰⁰ Giovannetti, M., Sbrana, C., & Turrini, A. (2005). The impact of genetically modified food on the tourism in the community. *Rivista di societa*, 98(3), 393-417.

EUROPEAN REGULATIONS FOR IMPORT AND CONSUMPTION OF GENETICALLY MODIFIED FOOD

The European Union chose to allow its member states to ban genetic modification in their respective societies. However, it is clear that the anti-GMO movement is gaining steam in some European countries, which aims to become the first EU nations to cut out the cultivation of genetically modified crops. Some of the governments of these countries start to create a host of new regulation law, for instance a brand new labeling system that will be used to identify products such as meat, fish, eggs, milk, and honey certified as GMO-free and livestock fed GMO-free food. Furthermore, the state officials of these countries think that this is the only way to ensure that families have access to safe and sustainably produced food and to preserve natural diversity and the competitiveness.³⁰¹

Such a radical reaction to the EU legislation generates a number of questions: Do GMOs actually pose a threat? And if so, should the EU provide more specific directives? Moreover, who will gain from the activities of the anti-GMO movement? A possible explanation for the current situation in the EU lies in its history – more specifically, in the history of European attitudes, policies and risk regulations developed after the Second World War in terms of GMO growth and import.

European regulatory policies have during the last 15 years of the 20th century become politicized and characterized by a suspicion of science, with a growing mistrust of government and industry. By contrast, the current US regulation of GMOs resembles the European regulatory style of the past with regulators working cooperatively with industry and supportive of technological innovation.

While growing GM food in Europe has been enriched with a set of new policies, importing them is an entirely different case. In fact, the EU was unable to fully agree on GMOs for import as food and feed since 2003. Using the template of the newly introduced law for using GMOs, the European Commission has recently proposed to change the policies regulating the way GMOs are approved for import. If a company wants to import GM foods, it needs to apply to the European Food Safety Authority (EFSA), which is responsible for assessing products for import. After a positive ruling, member states must approve the GMO in question by qualified majority. Some of the governments of the countries believe that this Commission proposal is a bad idea because it would be impossible to implement for Member States because of internal markets, it would be impossible to control. Member States anyway will face huge pressure from the US and other GMO exporting countries not to use this possibility to ban imports of GMOs. It's interesting to note that the proposal was also criticized by those who favor, in terms that really run against the principles of the internal market to have a patchwork of national bans on safe products. So it's just another license to ban very bad precedent also for science based regulation.³⁰²

According to the above, where is Europe headed in terms of GMO growth and import? In the near future we will surely witness a host of in policies employed to assess the risk of introducing GMOs to European ecosystems and markets as Europe will have to negotiate its position in trading with the US, at the same time embracing public attitudes towards GMOs, which is still verging on negative.

EMPIRICAL RESEARCH OF THE ROLE OF GENETICALLY MODIFIED FOOD ON THE TOURIST ATTRACTIVENESS OF THE HOTELS - TERMS AND ACCESS TO THE GMO IN HOTELS WITH 4 STARS IN THE CITY OF OHRID

Republic of Macedonia, especially the city of Ohrid, is a particularly interesting area for analysis of the impact of genetically modified foods on the tourist attractiveness of a hotel. Some facts which are typical for this city and at the same time make it better of the rest of the region, is the received protection from UNESCO, in terms of its natural beauty and wealth. All this has affected the tourist attraction of the place and thus the economic benefit which in turn receives the city budget. Based on the above, knowing the specifics of tourism, in terms of quality food which is offered in a variety of hotels can be invaluable to further increase the number

³⁰¹ McCabe, H., & Butler, D. (2004). European Union tightens GMO regulations. Genetically modified organisms. London: GMS Consulting, pg. 34-39

³⁰² Dano, E. (2007): Potential socio-economic, cultural and ethical impacts of GMOs: prospects for socio-economic impact assessment in Europe. Third World Network. Berlin, pg. 116-119

of visitors - tourists. In fact, all this is particularly so if the hotel is concerned with the production of food with natural origin or fully organic food than the application of GMO foods.

The purpose of the conducted empirical research in this paper is to show that genetically modified foods need to be well known to the hotel staff, especially the restaurant staff in order to avoid using the same. If there is insufficient knowledge of this terminology by the employee staff, in this case it is necessary to organize additional training for promoting awareness of genetically modified foods and for its avoidance in use. All this is important because this hotel can be further promoted as environmentally friendly, which will contribute to attracting tourists who appreciate natural beauty and values, as well as a boon to eat healthy food.

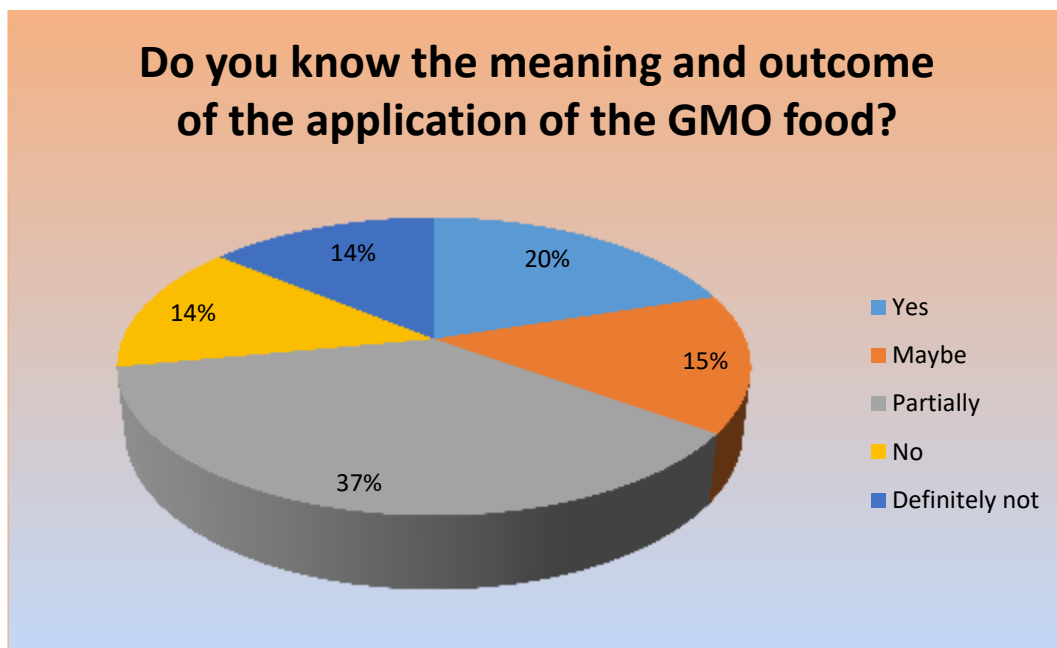
The survey covered a target group of six hotels with four stars, with 100 respondents. It is about the elite hotels on Ohrid Riviera (Hotel Bellevue, Hotel Millennium, Hotel Royal View, Hotel Sileks, Hotel Tino and Hotel Flamingo). The data is summarized based on the answers of the survey and are selected in order to demonstrate the special main hypothesis. In order not to burden the labor market, in answers to questions not included testing of variables and the demographic data, but the distribution is considered in relation to the total number of respondents.

Specific hypothesis which will be tested in this paper is: "If the staff of the hotel is thoroughly familiar with the specifics of GMO food, then expect to make a smart choice in serving the tourist, according to his preferences." The hypothesis is tested through answers the questions:

- Question number 15 Questionnaire 1: Do you know the meaning and outcome of the application of the GMO food?
- Questionnaire number 18 Questionnaire 1: Whether the GMO findings you will make a change in your menu to avoid these "GMO" products as raw material or takeout?

Based on the above issues, was obtained following statistical processing of answers:

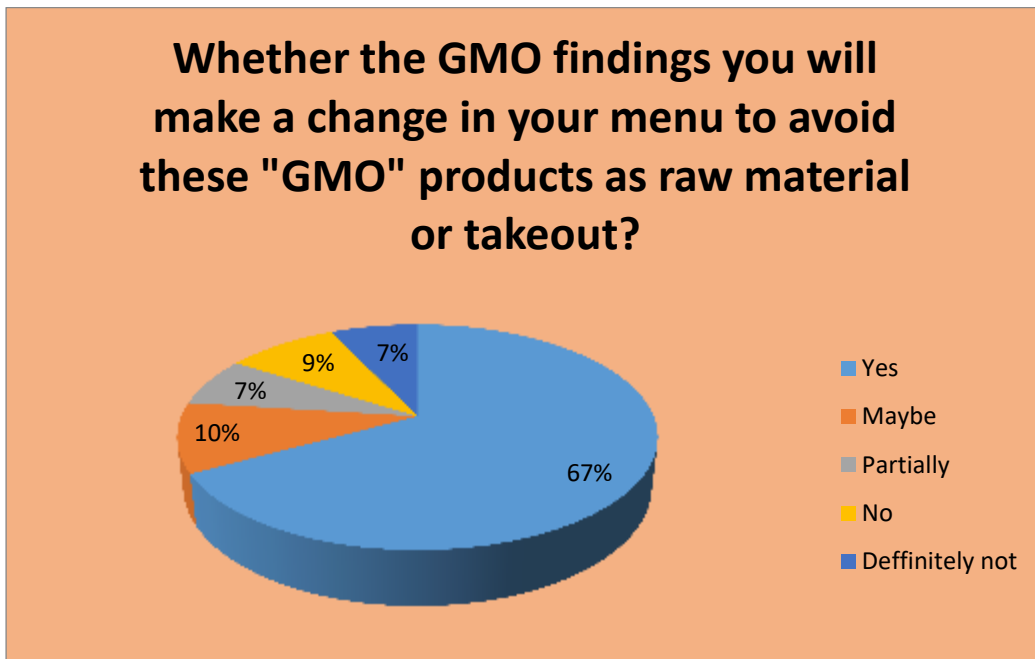
Figure 1: Do you know the meaning and outcome of the application of the GMO food?



Source: Author's own research

According to the available information, there is a high level of ignorance of the true meaning of GMO (category "yes" and "maybe" with a total rate of 35%), the highest percentage has the partial knowledge of the specifics of the GMO (category "partially: 37%) and negative response represented with 28% (categories "no" and "definitely not"). Consequently, there is need for further education of the staff of the hotels in order to create awareness about the negative aspects of the GMO food, which can be used as a positive benefit in the preparation and supply of food for tourists.

Figure 2: Whether the GMO findings you will make a change in your menu to avoid these "GMO" products as raw material or takeout?



Source: Author's own research

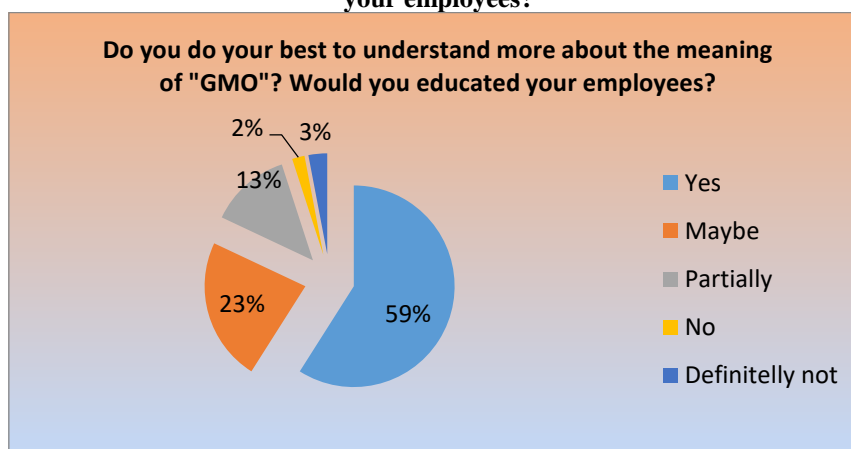
According to the available information, there is a high percentage of support of respondents in terms of changing the menu, not to be held GMO foods, with 77% (categories "yes" and "maybe"), with "partial" answer 7% of the respondents and a negative response have followed by 16% (categories "no" and "definitely not"). Based on the above, the hotel staff is ready to improve the real situation and offer healthy food without GMO product range, which will attract more tourists.

The general hypothesis of the paper states: "The more attentive to training of staff of the hotel to the merits of GM food by the experts, the more they can expect construction of a common strategy to promote the hotel in order to increase tourist attractiveness. The hypothesis is tested through answers the questions:

- Do you do your best to understand more about the meaning of "GMO"? Would you educated your employees?

Based on the above issues, was obtained following statistical processing of answers:

Figure 3: Do you do your best to understand more about the meaning of "GMO"? Would you educated your employees?



Source: Author's own research

According to the presented data in Figure 3 it is recognized that among business hotels there is a positive mood managers to further educate employees about GMO food. The support is set at 82% of the total number of respondents. Consequently, hotels in Ohrid are fully prepared for creating a further opportunity to encourage the tourist attractiveness of the hotels that will serve healthy food without the presence of GMO ingredients in it.

CONCLUSION

GMO food occupies a large part of the menu, such as at home and within the catering facilities (hotels and restaurants). It is important to point out that the legislation is highlighted in each country in terms of support or non-support of the presence of GMO products in society. The survey which was conducted in this paper refers to Macedonia, respectively the city of Ohrid. Consequently, the paper is presented in the European framework regulation, a path that Macedonia must tread. It also gives a clear description of the role and importance of GMO challenge tourist waters.

The end result of the research indicates that among the hotels with four stars in the city of Ohrid also a major tourist destination in the country, there is a positive mood for further education about GMO food, in terms of taking advantage of the benefits of discharge of GMO food from the use and concentration of healthy, organic food as a positive asset for attracting more tourists. Consequently, it is necessary to continuously monitor the country's legislation in this domain and to educate staff in order to keep abreast of all news, as the world of GMO and in the world of healthy food.

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