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## **Editorial**

## Consumer perspectives of GMO

As probably never before, the topic of consumer perspectives on food, resulting from genetically modified organisms (GMOs), is extremely important and timely, but is also characterized by confusion and contradictions. The dialogue is often hard due to different positions of stakeholders: both on consumer perspectives (above all, from a health point of view) and on environmental consequences, effects of new biotechnological products, patents, national and worldwide regulations, businesses reactions and competitiveness.

Transgenic foods could be considered as daily conventional foods that carry various kinds of well-known genetic modifications and sometimes they are also able to perform a particular function. They are products that outwardly are the same as conventional ones but have features that can also be quite different. These foods could help improve the well-being of our society, especially for the fringe of the population with chronic diseases related to allergy phenomena or food intolerance or a deficiency/excess of certain nutritional factors. The presence of novel foods on the market could improve their diet and, consequently, their well-being.

However, it is also needed to consider that transgenic foods are obviously different from conventional ones and, therefore, their consumption requires awareness to prevent undesired uses or uses which could be affected by misleading or deceptive communications. In addition, several surveys show that the novel foods are not accepted unconditionally by consumers. Therefore, by definition, a biotechnological food is not completely identical to a conventional food; and then, we need to understand if our daily diet can be carried on unchanged, or it needs adjustments in relation to the presence of a genetically modified food that eventually brings other nutritional effects.

In the end, we have to understand definitively whether, when consumers will be able to use functional transgenic food for daily feeding, the probability of giving rise to a balanced diet with the contribution of basic nutrients will possibly increase. To understand these issues, it is needed to boost research in this area to clarify the uncertainties related to the consumption of these novel foods – uncertainties that could also lead to their hasty rejection by consumers.

Of course, the prerequisite is food safety, so it is always necessary to guarantee each individual a choice of aware consumption through clear separation of the distribution chain of these enriched products by conventional ones (physical separation and specific labeling). Only in this way, we will be sure about the introduction of a functional innovation to fulfill real needs of specific consumers, thus, to adequately protect those who simply do not wish to purchase them.

Furthermore, there may be inconsistencies in the use of labeling, which theoretically should be one tool to protect consumer. For example, some recent news pieces say that labeling of GMOs in the USA has just been introduced only in Vermont, and many companies decided to add labels on their products containing some kind of genetically modified component. This is the decision of companies wishing to be transparent to consumers; however, there is still no scientific basis in declaring whether a food item contains a GMO. GMOs supporters are providing their opinions and this shows the significance of the problem. Few details that might help finding an agreement include

labeling even derivatives from animals fed with GMOs or to include in the labeling enzymes from GMOs (thus beer, bread and even soap and detergents should be labeled).

So in this journal, it is very interesting to assist to such a large range of submissions both referring to their content and to fields of research variety. Moreover, each author offers a different way to approach this particular argument, through own work experience, studies and researches and investigations resulting from years of specialized and multidisciplinary scientific analysis. Therefore, in this special issue it has been possible to consider several kinds of works, each attempting to clarify a particular aspect, both through quantitative and qualitative investigations from the methodological point of view: common errors relating to GMOs; positions in different macroeconomic areas, proposing comparisons; specific legal issues; consumer attitude toward novel foods and their acceptance; impact of modern biotechnology research; and company's attitude toward GM crops.

In conclusion, my personal and truthful hope is that every reader enjoys the present special journal edition and, moreover, can take inspiration to understand this important topic in depth and contribute in the near future via debates in a constructive manner.

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