

**ASPECTS REGARDING FOOD SECURITY. WHY WE ARE ALL
ESTING SO MANY E-NUMBERS?**

Abstract:	<p><i>Twenty-first century citizenship has become more demanding than ever as both the concept and the social behavior reflecting it have developed impressively. More and more people are becoming aware of the interconnected world around them with its positive and negative aspects. One aspect of social consciousness, which must be represented by the security culture, should become a priority at the present moment. Security culture and social responsibility should go hand in hand, as the whole social system has been changing a lot lately and not for the better.</i></p> <p><i>Food security represents one basic aspect of contemporary society and the basis for the future process of development. Everybody seems to know about E-numbers but the question is connected to their effect. How safe are they? More and more people discover every day the negative effects that many of these substances have on our health.</i></p> <p><i>Mr. Wonka's factory, an innocent dream filled with humor, has been multiplied all over the world, producing more and more synthetic food for those who are in a hurry to avoid meeting themselves. The social satire has become a nightmare. From a utopian project, it has been revealing itself as a dystopian reality.</i></p>
Keywords:	Social responsibility; security culture; healthy food; poison; E-numbers; genocide; moral values
Contact details of the authors:	E-mail: emilia.tomescu@ulbsibiu.ro
Institutional affiliation of the authors:	Lucian Blaga University Sibiu, Department of International Relations, Security Studies and Political Science
Institutions address:	550324 Sibiu, Romania, Calea Dumbrăvii nr. 34 Tel./Fax: +40-269-422169

We intend to start this article with a quote from a novel written in 1947 by the French writer Georges Bernanos who is trying to help us wake up from ignorance, at the same time, warning us all that obedience and submission could be fatal: "I've been thinking that if, one day, the most efficient method of destruction finally generates the extinction of our species from the planet, it won't be cruelty

that will be responsible for our extinction and, of course, still less will be the indignation caused by cruelty...but the obedience, the lack of responsibility of modern man, the shameful and servile acceptance of the smallest public decree. The horrors that we have witnessed and the even more abominable horrors that we are going to witness don't show that the rebels, the disobedient and reluctant people are becoming more numerous in this world, but rather that there are more and more obedient and submissive humans"¹.

Contemporary mass-media are insisting in programming our mind to behave in a certain way: to eat certain foods, to drink certain drinks, to wear certain items and so on, all being the most visible and well-advertised trade-marks. Regarding the particular case of our daily food, we are made to believe that we really need and like the products presented on the screen. By successfully programming our mind to really believe that we should prefer a certain thing, the advertising agencies are among the most insolent and premeditated instigators/inciters of mind viruses². The idea that units of culture may act as a virus controlling some of the perceptions and actions of individuals has been the subject of considerable controversy since proposed by evolutionary biologist Richard Dawkins³.

This is happening because present negotiations do not belong to states or are not at state level but at that level which is represented by the biggest 200 private transnational corporations, controlling together more than a quarter of the world G.N. P.. This conclusion was present already in a report from June 15th 2000-written after an inquest ordered by the sub-commission for the promotion of human rights of the United Nations Organization: the World Health Organization is almost entirely in the hands of private transcontinental societies⁴.

It is a cynical reality, isn't it? Yes, indeed, because "if you control the world's food you can dictate prices, terms and conditions and, equally, the political framework. Global population growth may have caught up with our capacity to produce food, it is said but the real problem is the unequal access to healthy food as the rich get richer and the poor go hungry. A growing segment of the population suspect that food control is being used as a weapon of mass destruction to effectively depopulate the earth⁵. How did we end up here? People in despair try to find solutions to eat affordable healthy food, and suspect that big companies endanger their lives through GMOs production. What a change from traditional home made food... to unhealthy fast food! How can we protect ourselves? By

¹Georges Bernanos, *La France contre les robots*, pp.193-194, [https://ebooks-bnr.com/ebooks.pdf5>bernanos,\(03.03.2021](https://ebooks-bnr.com/ebooks.pdf5>bernanos,(03.03.2021))

² Richard Brodie, *Virusul minții*, Paralela 45, Pitești, 2010, p.13

³ Lloyd Robertson Hawkeye, *The infected self: Revisiting the metaphor of the mind virus*, [https://www.researchgate.net/publication/314223457_The_infected_self_Revisiting_the_metaphor_of_the_mind_virus,\(12.03.2021](https://www.researchgate.net/publication/314223457_The_infected_self_Revisiting_the_metaphor_of_the_mind_virus,(12.03.2021))

⁴Claire Severac, *Codex Alimentarius, adevăruri ascunse. Complotul mondial împotriva sănătății*, Lucman, București, 2010, p.26

⁵Joachim Hagopian, *The Evils of Big Pharma exposed*, [https://www.globalresearch.ca/the-evils-of-big-pharma-exposed/5425382?pdf=5425382,\(12.03.2021](https://www.globalresearch.ca/the-evils-of-big-pharma-exposed/5425382?pdf=5425382,(12.03.2021))

changing diet? By returning to subsistence economy? Can we trust our government's food policy? Is hypermarket food still safe? Such questions and many more cause a lot of pressure and stress on our lives. Do we really know what we eat?"¹

European Union member states have taken measures to protect the interests of their consumers who have a fundamental economic and political role in society². From the '70s, the European Union has tried to harmonize these measures in order to guarantee the European citizens the same level of protection in the common market³. The EU existing legislation on **flavourings** sets limits on the presence of undesirable compounds, while for the chemically defined flavouring substances a vast safety evaluation programme is ongoing. Only substances for which the outcome of the evaluation is favourable will be authorised for use in foodstuffs by means of a future positive list⁴.

The European policy regarding the protection of the consumers aims at protecting the health, security/safety and economic interests of the consumers, being based on article 169 from the Treaty on the Functioning of the European Union⁵. This policy promotes the right of the consumers to be informed, educated and organized in order to protect/safeguard their interests⁶.

According to the European Parliamentary Research Service and the European Commission, the use of genetically modified organisms (GMOs) remains controversial, which is why the EU has very strict rules and complex authorization procedures concerning their cultivation and commercialization. Since April 2015, EU countries are able to ban the cultivation of GMOs on their territory,

¹ Sultana Avram, *Aspects Concerning Population Food Control for Profit - from Prostration to Resignation*, in Dumitru Cătălin Rogojanu, Gherghina Boda (eds.), "Istorie, Cultură, Cercetare", Cetatea de Scaun, Târgoviște, 2016, p. 343

² *Consolidated version of the Treaty on the Functioning of the Eu-Part Three-Union Policies and Internal Actions, Title XV-Consumer Protection, Article 169*, https://eur-lex.europa.eu/data.europa.eu/eli/treaty/tfeu_2016/art_169/ro, (14.02.2021)

³ European Parliamentary Research Service and the European Commission, *Eight things you should know about GMOs*, <https://www.europarl.europa.eu/news/headlines/society>, (24. 02. 2021)

⁴ European Commission, *Chemical Safety*, https://ec.europa.eu/food/safety/chemical-safety_en, (16.11.2021)

⁵ European Parliamentary Research Service and the European Commission, *Eight things you should know about GMOs*, <https://www.europarl.europa.eu/news/headlines/society>, (24. 02. 2021)

⁶ *Consolidated version of the Treaty on the Functioning of the EU-Part Three-Union Policies and Internal Actions, Title XV-Consumer Protection, Article 169*, https://eur-lex.europa.eu/data.europa.eu/eli/treaty/tfeu_2016/art_169/ro, (14.02.2021)

but should they have the same power regarding their commercialization? MEPs voted against national bans on 28 October¹.

What are GMOs? "GMO stands for genetically modified organism. They are organisms whose genetic material has been artificially modified in order to give it a new property...to resist a disease (for a plant), insects or drought or to increase crop activity. Main crops involved are: maize, cotton, soy bean, oilseed rape, sugar beet. GMOs can only be cultivated or sold for consumption in the EU after they have been authorized at the EU level"².

Together with the genetically modified organisms, there is another source of worry when referring to food at the present moment. E-numbers or food additives. From the perspective of the European Food Safety Authority which offers scientific advice helping to protect consumers, animals and the environment from food-related risks these "food additives are substances added intentionally to food stuffs to perform certain technological functions, for example to color, to sweeten or to help preserve foods"³. The term food additives is a regulatory term that encompasses "any functional substance that is normally neither consumed as a food itself, but is intentionally added to food (usually in small quantities) to augment its processing or to improve aroma, color, consistency, taste, texture, or shelf life"⁴.

The "E-number" commonly found today as ingredients in our packaged foods are used to replace the chemicals or the common names of particular food additives that are supposed to "enhance" the quality of what we buy and eat. In the 1960s, official regulators decided to make a standardized list of these additives⁵. Some of these amendments were adopted in response to an immediate need for legislation to fill a gap in the law⁶.

In Europe, they are referred to as E numbers, the E standing for Europe. In Australia, they just use their code number. So, vitamin C would be called E300 in

¹European Parliamentary Research Service and the European Commission, *Eight things you should know about GMOs*, <https://www.europarl.europa.eu/news/headlines/society>, (24.02.2021)

²The European Parliament Web on EU Affairs, *Eight Things You Should Know About GMOs*, https://www.huffingtonpost.co.uk/european-parliament-web-team/eight-things-you-should-know_b_8293066.html, (4.03.2021)

³EFSA Journal, <https://www.efsa.europa.eu/en/topics/topic/food-additives>,Efsaj-Food additives-topics/, (08.03.2021)

⁴Peter Pressman, Roger Clemens, Wally Hayes s.a., *A review of toxicological and regulatory issues*, <https://journals.sagepub.com/Food>, (01.03.2021)

⁵The Conversation, *What are E numbers and should you avoid them in your diet?*, <https://theconversation.com/explainer-what-are-e-numbers-and-should-you-avoid-them-in-your-diet-43908>, (10.03.2020)

⁶ Alan Kaplan, *The Color Additive Amendments of 1960 Revisited-Seven Years of Feast of Famine*, p. 553 <https://www.jstor.org/stable/26656307>, (14.02.2021)

Europe while in Australia it can be found on labels with the code number 300, such as food acid 300, ascorbic acid (300) or vitamin C (300)¹.

A full list of additives in the EU is published by the Food Standards Agency (United Kingdom)². A similar list for Australia and New Zealand is published by the New Zealand Food Safety Association³.

According to the official regulating list, there is a clear correlation between a certain group of numbers and the corresponding groups of additives. As a consequence, the groups go as follows⁴:

- from 100 to 199- food colours, example-aluminium (173);
- from 200 to 299- preservatives, example-sodium benzoate (211);
- from 300 to 399-antioxidants, example-vitamin C- (300);
- from 400 to 499-thickeners, emulsifiers and stabilisers, example-cellulose (460)
- from 500 to 599-acidity regulators, anti-caking agents, example- calcium chloride (509);
- from 600 to 799- flavor enhancers, example - MSG-(621);
- from 700 to 999- sweeteners, foaming, gases -example- aspartame (951);

Not all additive types fall solely into the given numeric range as many have a variety of purposes. And also, not all additives are chemical or dangerous. For example, saffron, which is the food coloring additive 164 in Australia, is E164 in Europe. Other spices used quite often for food coloring are turmeric (E100) and paprika (E160c); vitamin C (300) is an antioxidant; sodium bicarbonate (E500) is known as baking soda and used to regulate acidity. Some E numbers are natural substances, such as vitamin B1 (E101) or oxygen (E948). They fall into the category of "normal" additives.

The problems appear when chemicals, more or less dangerous, used "in small quantities"⁵ but so very often that, in time, accumulate, producing health damages which are ignored or even denied by so many people, from both sides- producers and consumers. There are voices, even from respectable sources, who claim that most E numbers are good; the leading causes of food allergies and intolerances are entirely natural; every single food or drink on the planet, whether it contains E numbers or not, is toxic at some levels; just because a food is organic does not necessarily make it better; Es make food healthier, safer, better tasting and more attractive⁶.

¹The Conversation, *What are E numbers and should you avoid them in your diet?*, <https://theconversation.com/explainer-what-are-e-numbers-and-should-you-avoid-them-in-your-diet-43908>, (10.03.2020)

² Food Standards Agency, <https://www.food.gov.uk>, (12.10.2021)

³ New Zealand Food Safety Science&Research Centre, <https://www.nzfssrc.org.nz>, (12.10.2021)

⁴ The Conversation, *What are E numbers and should you avoid them in your diet?*, <https://theconversation.com/explainer-what-are-e-numbers-and-should-you-avoid-them-in-your-diet-43908>, (10.03.2020)

⁵*Ibidem*

⁶ Stefan Gates, *E Numbers- an Edible Adventure*, <https://bbc.co.uk>, (10.03.2021)

It seems that one element which determines manipulating people to buy and eat so much unhealthy food is dishonesty, accompanied by greed for both money and power, as well as disrespect for any form of life, from human beings, animals, plants to the big environmental implications.

"E number restrictions vary between countries, depending on how the local regulatory authorities interpret the product's toxicity results"¹. Following the adoption of Regulation 1333/2008, the European Commission was tasked with transferring the existing food additives authorizations in the food additives legislation being phased out and populating Annex II of mentioned Commission Regulation².

Some additives are banned in one part of the world and permitted somewhere else. Thus, from this point of view, there are differences between Australia, the United States of America and Europe. An example is the amaranth (E123), "used to give a dark-red color to foods, which is permitted for use in foods at concentrations of up to 30mg/kg in Australia and the European Union but banned in the US due to concerns it causes cancer (Food and Drug Administration in USA)"³. The same source provides another example is the tartrazine (E102), one of the Southampton six, which is considered non-toxic and safe for consumption by FSANZ (Food Standards Australia New Zealand) that did admit uncertainty, though, about its effects on hypersensitivity. In the US and EU products containing E102 must carry a warning that they may cause allergic-type reactions to people who are sensitive to it. Avoiding E102 can help control asthma.

But again, other interests than public health dictate the official conclusions, as with the vaccines, that some people may have sensitivities, so they may benefit from carefully reading food labels to avoid certain E numbers, but most people will be able to consume these additives without any side effects. Personally, I consider such words, coming from specialists, to be driven by something else than professionalism (including professional ethic). They represent the conclusion of the 2007 Southampton study saying that genetic differences may make some people sensitive to the effects of food additives⁴.

And such conclusions, with their impact on the population, come in spite of the fact that, for many decades now, the negative effects of certain additives are known all over the world and that there are proves that some of them clearly

¹ *What are E numbers and should you avoid them in your diet?*, <https://theconversation.com/explainer-what-are-e-numbers-and-should-you-avoid-them-in-your-diet-43908>, (10.03.2020)

² Food Standards Agency, *Food Additives Legislation Guidance to Compliance, October 2015*, <https://www.food.gov.uk/sites/default/files/media/document/food-additives-legislation-guidance-to-compliance.pdf>, (14.02.2021)

³ *What are E numbers and should you avoid them in your diet?*, <https://theconversation.com/explainer-what-are-e-numbers-and-should-you-avoid-them-in-your-diet-43908>, (10.03.2020)

⁴ *Ibidem*

generate illnesses¹. Thus, there are some especially controversial food additives which can take a serious toll on our bodies. That's because food *additives* just aren't real *food*. While they alter the taste, texture, and shelf-life of packaged foods, they don't provide any nutritional value. One of those reasons is because they contain SO many controversial food additives! Plus, many controversial food additives used in the U.S. are actually *banned* in other countries...²

One of the most controversial additive, which is present in incredibly numerous food products, is the MSG (E621), the famous Monosodium Glutamate. As a sad element to prove this is its presence in supermarkets in Romania with the label: base for cooking! Everybody is thus invited to use this additive that enhances taste, giving also addiction, causing obesity and diabetes, among other problems³.

Monosodium Glutamate was patented for use in food in 1909 by the Ajinomoto corporation of Japan⁴. During World War II, it was added to the rations of the Japanese troops. After the war it was introduced to America at the Chicago Food Symposium of 1950. Restaurateurs such Colonel Sanders and Food Manufacturers like Kraft, Heinz and Campbell's soon discovered that adding MSG to food was an inexpensive way to make it taste better, and it had the advantage of making people eat more. The consequences of the introduction of this additive have been impressive. "Since 1950, the MSG use in the United States and countries with a westernized diet has grown dramatically. During the last six decades the occurrence of obesity, diabetes and Autism Spectrum Disorder has also increased"⁵. Those who pretend to know nothing we could say that the medical research community as well as the food producers has known about MSG's side effects for decades. As we all know, pre-packaged food meals and soups, as well as snacks and fast food, for example, have brought huge quantities of money.

There are hundreds of studies around the world about the way scientists create obese mice and rats to be used in diet or diabetes test studies. Non-animal methods are often cheaper, quicker and more affective⁶. "No strain of rat or mice is

¹ John E. Erb, *A Report on the Toxic Effects of the Food Additive Monosodium Glutamate*, <https://www.scribd.com/document/26518406/Revised-Erb-Report-on-MSG-to-the-WHO>, (08.03.2020)

² Nadia Sheikh, *8 Controversial Food Additives to avoid*, <https://mindovermunch.com/blog/controversial-food-additives/>, (16.11.2021)

³ John E. Erb, *A Report on the Toxic Effects of the Food Additive Monosodium Glutamate*, <https://www.scribd.com/document/26518406/Revised-Erb-Report-on-MSG-to-the-WHO>, (8.03.2020)

⁴ John E. Erb, *Report on Monosodium Glutamate, 9609150*, <https://www.goodreads.com>, (10.03.2021)

⁵ *Ibidem*

⁶ Cruelty Free International, *Alternatives to animal testing*, <https://www.crueltyfreeinternational.org/why-we-do-it/alternatives-animal-testing>, (14.02.2021)

naturally obese, so the scientists have to create them. They make these morbidity obese creatures by injecting them with MSG when they are first born. The MSG triples the amount of insulin the pancreas creates, causing rats (and humans) to become obese. They even have a title for the fat rodents they create: MSG-Treated Rats"¹.

John Erb, the author of the "Report on the Toxic Effects of the Food Additive Monosodium Glutamate", presented it in front of the Joint FAO and WHO Expert Committee on Food Additives in August 2006². In 2008, Erb published a book based on the Report. This report gathers together published medical studies to determine what ailments MSG (Monosodium Glutamate) can be linked to. The evidence shows that Glutamate can be linked to a wide variety of ailments such as epilepsy, CNS and brain damage, eye cell damage, triggering obesity, diabetes, liver damage, adult-onset olivopontocerebellar degeneration, amyotrophic lateral sclerosis (ALS) and Autism.

John Edward Erb, a former health researcher at the University of Waterloo, Ontario, Canada, who spent years working for the government, wrote his report and books on additives and health problems caused by these additives (glutamate, aspartame, fluoride) in the light of overwhelming evidence, resuming hundreds of studies focused on the effects of excitotoxins, showing their poisonous effects. He requested that the Joint Food and Agriculture Committee and the World Health Organization Expert Committee on Food Additives, the United States Food and Drug Agency, the United Kingdom Food Standards Agency, and the European Food Safety Agency remove Monosodium Glutamate as well as the artificial ingredients that contain it from the allowable additives list of their respective countries, and the Codex Alimentarius and have Glutamate banned from vaccines as well. John E. Erb insisted on this additive because he considers that there are few chemicals that we as people are exposed to that have as many far reaching physiological effects on living beings as the MSG³.

One conclusion of the mentioned Report is that MSG enters our bodies in huge amounts, without limits. The consequences are numerous and quite serious. Children eat it everywhere: at home, in school cafeterias, restaurants, hospitals, getting used to eating it for the rest of their lives because there is no escape. Most processed food we buy and eat from supermarket contains additives. Consulting the List of Foods Approved for MSG Addition would be clear enough; the same

¹ John E. Erb, *Report on Monosodium Glutamate*, 9609150, <https://www.goodreads.com>, (10.03.2021)

² World Health Organization Expert Committee on Food additives, *The Slow Poisoning of Mankind: A Report on the Toxic Effects of the Food Additive Monosodium Glutamate*, <https://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=2257>, (16.11.2021)

³ *Ibidem*

with the List of Ingredients Involving MSG¹. No surprise with the List of Vaccines Involving MSG. We can go on for a long time consulting these lists and others, and each item included. We started talking about food and got to vaccines...If we knew the ingredients they contain. Would we accept them anymore? What about cosmetics? And so on... The road toward truth is difficult but worthwhile. But the many paths which lead us toward so much manipulation, so many lies, so much hypocrisy reveal what? That our leaders are dominated by greed and power and have no moral value at all? No responsibility for anything? What a sad world we are living in!

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¹ John E. Erb, *The Slow Poisoning of Mankind: A Report on the Toxic Effects of the Food Additive Monosodium Glutamate*, <https://www.goodreads.com/book/show/9609150-the-slow-poisoning-of-mankind>, (05.03.2021)

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