

Flawless food

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Many people are nowadays aware of the fact that our environment is more and more polluted every day. Air pollution, water pollution, soil pollution and light pollution – these are the examples of the pollution that effects the community in a great way. However, many people do not know that also the food is ‘polluted’. Coming to the stores, today’s consumers see piles of flawless looking goods. The vegetables and fruits are fresh looking, with beautiful bright colors, with no evidence of insects trying to eat it. The meat is also tasty looking, not talking about all the candy and sweets that are shining with the colors of a rainbow. Other great advantage of a food sold today is its expiration date. Many of the products stay fresh for months. However, have you ever thought what is behind that? How is it possible to trick the nature to provide us with such a big amount of perfect looking, long lasting food? Actually, the majority of food today contains artificial additives such as preservatives, colorings, pesticides and flavoring, these additives are usually toxins and although they make food appear flawless, the reality is that they trigger many diseases and disorders. So, even though the pesticides, preservatives, trans-fats and colorings are known for their positive effects on food appearance or durability; they unfortunately can also have a negative impact on human health and life-quality.

Pesticides are the most health harming particulates found in today’s food. In fact, pesticides are not added to food intentionally during the processing of food. They are remnants from the plants growing process. Farmers use pesticides while growing of plants. They usually spray the plants with these toxins in order to protect the plant from pests. According to Kireeva and Black (2011), authors of “European Food & Feed Law Review”, these so called ‘agrochemicals’ are very effective tool in “animal and plant production in fight against pests and diseases in farm animals and on crops.” Pesticides are used in the agriculture, because thanks to them the food the stores serve is then good looking and what is

more for a good price, because its make the production and distribution easier and more efficient.

However, the way they affect the human well-being is a great problem for today's society. As Kireeva and Black (2011) bring up, European Union states that "Residues of plant protection products, 'PPPs', (pesticides used in crop protection) in food are a very important element of chemical contamination of food that is potentially harmful to human health." In fact, as they add, "PPPs are one of the classes of so-called 'contaminants' in the World Trade Organization's SPS Agreement requiring all food safety measures applied to imports to be 'scientifically justified' and 'non-discriminatory'. They also say that "PPP contamination has become a major issue in trade relations." So it is obvious that pesticides are highly toxic and harmful for consumers. Also the European Union addresses them as one of the biggest threats and an issue of today's trade but they are used because of their contribution to agricultural business. As Carolyn Butler (2010) from The Washington Post explains, "researchers at the University of Montreal and Harvard University looked for organophosphate pesticide metabolites, an indicator of pesticide exposure, in the urine of 1,139 kids ages 8 to 15 and found that close to 95 percent had at least one of these chemical byproducts in their system." These results show that pesticide contamination is a common problem among the youngsters.

Many parents serve their children fruits and vegetable, to make them healthier. But, it is important to choose products that are less likely to be contaminated by pesticides. As Carolyn Butler(2010), then adds, according to the research the ones with the highest levels of chemical byproducts in their systems " were 93 percent more likely to have received an ADHD diagnosis than children with none in their system." Hence, the link between pesticides in food and illness such as ADHD is tight.

To understand how serious troubles may ADHD trigger, the doctors Ramchandani and Jougin (2000) explains, ADHD is "developmental disorder". Children with such a

disorder are often hyperactive and have problems with paying the attention. Also many adults suffer from this disorder. After diagnosed as the children with such a disorder, the disorder is not completely cured and remains with them as adults. ADHD have many negative sides, and influences life of children, teenagers and adults as well. From my personal experience, taking care of a ten years old child suffering from ADHD disorder for a year and also meeting others suffering from the same disorder, I can say that these children, are very impatient, cannot sit still, have to move constantly, do not listen what others say, and what is more, they also have problems to do what they are asked for. Thus they hardly follow the instructions, and sometimes they are so distracted that forget about the task given. Obviously, these problems make it hard for an adult suffering from ADHD to do his or her job efficiently and influence his or her life in a negative way. To summarize, as the study and the examples show, the food containing pesticide remnants not only harm the youngsters' life quality but also have negative effects on health and life of the adults.

Another often used food additive, with similar negative effect on human health, is artificial coloring. The advantages of artificial coloring for food sales are obvious. The food products are additionally colored to appear more tasty and interesting. For example in baking, the icing on cakes is artificially colored to green, yellow, blue and many other unnatural colors in order to appear more fashionable and attractive. Another very good example of artificial coloring are lollipops, reading the cover of these, by children very popular candy, the consumer can see that usually artificial coloring is used. The dyes are not only used in icings and lollipops but they can be “found in everything from cake mixes and yogurts to breakfast cereals” (Dreinsbach, 2009). As he also claims the use of artificial dyes in Europe decreases, but, unfortunately, their usage in the U.S. is on the upswing—it's increased fivefold over the past 30 years.” This means that American producers seem to be less aware of the negative influence the artificial coloring has on human health.

However the artificial food colors have negative effects and really can “induce adverse behavioral effects in children behavior. (Weiss,2012) This fact is supported by very strong evidence. As the article written by a behavior expert and doctor David Schab (2008) states, the study conducted on 297 kids, shows that artificial food coloring has a negative effect on the children’s behavior. Those children were asked to have a drink “containing one of two mixes that contained artificial food coloring or a placebo”. These children were observed by parents, teachers, and trained observers for six weeks. The study then unveiled that children who received the drink with placebo were way less hyperactive than the children having food coloring in their drinks. Hence, there is an obvious connection between the artificial food coloring and ADHD – the negative impact of ADHD, as explained in the previous text, is generally very disturbing not only for children but also for the adults suffering from this disorder. That makes artificial coloring one of the other food additives that not only make food attractive for consumers, but also harmful fur human life-quality.

Not only pesticides and food coloring, but also preservatives in food can hurt the human health and cause diseases. Preservatives are used in order to preserve the good food quality longer. In other words they help stop food from spoiling. That is the reason why most of today’s food products such as bread, fruit juices, vegetables, even the dried fruits stay fresh and tasty looking for a longer time than they would naturally do. According Parke and Lewis (2009) “the use of food preservatives, such as benzoic acid, nitrites, and sulphates ... has probably changed food production patterns and eating habits more than has the use of any other class of food additive.” The food is persevered for a long time, it is also more persistent so it can be therefore shipped for a long distances. What is more, they make life easier, because the customers do not need to go shopping every day. The food products they buy in store can be stored for many days and then consumed, still fresh and tasty. However, these are just the slight advantages of the preservatives compared with the disadvantages their

consumption brings to human health.

Some of the preservative are natural and not harmful for human health, but many others can cause very serious diseases. Scientists and doctors are concerned about the safety of some of these preservatives, “including the possibility of allergies from benzoic acid and sulphates, the formation of carcinogenic nitrosamines from nitrites, and the possible rodent carcinogenicity of BHA and BHT” (Parke and Lewis). Various types of preservative used in food production today are know for their harmful effects. According Jordan (2001), “nitrates and nitrites are used to preserve meats such as ham and bacon, but are known to cause asthma, nausea, vomiting, and headaches in some people.” He also adds, that what is worse, “Sodium nitrite in some foods is capable of being converted to nitrous acid when ingested by humans. While animal testing showed that nitrous acid caused high rates of cancer, it is still in use.” Also the other of preservative “benzoic acid aka sodium benzoate is added to margarine, fruit juices, and carbonated beverages. It can produce severe allergic reaction and even death in some people.” So the preservatives may have a great advantages but the diseases they triggers are very serious and can lead to death in some cases, what makes this food additive one of the most dangerous ones.

Other, the least known unhealthy additive to food products are trans fats. People often do not know that they consume trans fats in many of their favorite meals. However by consuming big amounts of trans fats in their meals, people put themselves in harm. Trans fats, also known as unsaturated fatty acids, are created during the partial hydrogenation of vegetable oils. That is a “process that converts vegetable oils into semisolid fats for use in margarines, commercial cooking, and manufacturing processes.” These trans fats are attractive for producers, thanks to their “long shelf life”, persistence and “stability during deep- frying, and semi solidity,” what also makes them very useful for baking and producing sweets (Mozaffarian et al., 2006). As Nicholas Freudenberg and Sandro Galea (2008), both

successful doctors and leading editors explain. Artificial trans fats are added into food in order to “enhance the crispness, stability, and flavor of many processed foods.” So the food is more tasty and attractive for consumers with this additive. However, in the early 1995 the information about, how harmful are these trans fats for human health, was released. In that time 40% of US supermarket goods contained trans fats. Unfortunately, trans fats can be still found in our food nowadays. Many of consumers are not aware of the negative effects they have on human body. Article in “Parenting School Years” (2009) warns, “This is one bad fat that deserves to be on the zero-tolerance list.” The article then explains, these types of fats, when consumed often may trigger heart disease and other health problems. A research conducted in 1994, in US, showed that when healthier oils are used in food preparation instead of trans fat, it could prevent 30.000-100.000 premature cardiovascular deaths in the United States each year. Also, as suggested by researchers, this action could also reduce the incidence of Type 2 diabetes in United States by more than 40% (Fraudenberg, Galea).

The examples of the food containing trans fats, according to the Channing Laboratory, Department of Medicine of Harvard Medical School, are “deep-fried foods, bakery products, packaged snack food, margarines, and crackers. Naturally occurring trans fats are consumed...in meats and dairy products(Mozaffarian et al., 2006).” All these types of foods are well known favorite foods for many consumers, thanks to their good taste and in case of margarines usage in baking. However, the attractive features of these products are presented due to trans fats that they contain. So although the numerous food products are attractive for consumers, they may contain trans fats which triggers heart diseases and in this way have negative impact on human health.

To summarize, the food produced by today’s modern society has many advantages, it is long lasting, colorful and without any spots from insects. Simply, today’s food appears to be flawless. Pesticides and additives in food make food production and distribution easier and

cheaper and food itself more consumers attractive. However, all the advantages of today's food have some cost. The cost we pay is in the form of human health and life-quality that is diminished by pesticides and food additives, such as food coloring, preservatives and trans fats. Pesticides and food coloring may trigger ADHD, a development disorder, the negative effects of preservatives may range from asthma to cancer and trans fats may cause health diseases. So today society should be aware of the great disadvantages these food additives bring, and strictly fight against it, because there is nothing more precious than health.

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