

Chemicals in Food

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Abstract

Food is an important commodity to ensure our lives to survive regularly and attend day today activities. Food preparation and consumption is part of human activity from the centuries to meet other daily developmental process of lives. In modern food production methods have opened major avenues of exposure to environmental pollution and other dangerous chemical compounds mixing in our food by way of adopting advanced technologies in food production, knowingly and unknowingly we are involving and causing other animals and creatures disappearing or death at present situations. Pesticides sprayed on crops, antibiotics used on poultry, and hormones given to cattle expose consumers involuntarily to contaminants that become part of our bodies and some of these exposures may increase of health risks and even deaths with unidentified diseases. In some ways, our ancestors had better health conditions, because they did not have chemically treated food and chemically enhanced kitchenware, their diets and cooking practices exposed those free toxic hazards and cultivated ecofriendly nature farm of food preparations.

Introduction

Food contains nutrients essential for health, but it may also include chemicals that can increase risk of diseases. These chemicals can include pesticides, herbicides, fertilizers, preservatives, artificial colors and flavors and industrially produced fats and sweeteners. All these substances may appear on different food products.

The Government authorities and Food & Drug Administrative departments should be enforced certain guidelines and rules and regulations on chemical application on food commodities [1].

Food Classification

Chemical substances can play an important role in food production and preservation, and have a variety of toxicological properties, some of which might cause effects in humans and animals. Usually, these are not harmful unless we exposed to them for long along time and at high levels. Scientists studied and advised to decision makers who regulate the use of chemicals in food or seek limit their presence in the food chain. Most of us assumes that the industrial chemicals used in the united states have been tested for safety. But sadly, this is not the case. Under current law, the Toxic Substances Control Act (TSCA), the Environmental Protection Agency (EPA) has only been able to require safety testing for a small fraction of the over 85,000 chemicals in commerce today. Even worse, the EPA has banned or restricted only 5 chemicals, and despite enormous advances in our scientific understanding of the connection between chemicals and disease (TSCA statistical data of 1976) [2,3]. Results of this study found consistent evidence of serious health risks such as cancer, nervous system disease and reproductive problems in people exposed and consumption of chemical applied food. Similar research has licked exposures to pesticides to increased presence of neurological disorders, Parkinson's disease, childhood leukemia, lymphoma, asthma and more [4].

Food Research Administration

Today many Scientists and Research study centers have deeply concerned about the increasing rates of breast cancers and other diseases linked to chemical exposures are having on our society. Because we believe the U.S needs new standards to regulate chemicals free food supply and urge you to support meaningful reform of our nation's chemical law. The Congress has the opportunity and responsibility to pass legislation to update the Toxic Substances Control Act (TSCA)

and stop the chemical industry from exposing the general public and vulnerable populations to a host of untested and unsafe chemicals through our consumer products and our air, water and soil. Parents, policy makers, and people everywhere have a long been calling for meaningful reform of TSCA [5].

Chemical pesticides are known to pollution the environment, while studies shown that chemical pesticides linger in the atmosphere, the ground and in our waterways song after the job is over. Chemical have been used on fields across the world for most 100 years, creating a buildup of adverse pollution in our environment, which continues to grow with every application and move within soil too, contamination surface water and groundwater, effects and injury of non-target species, including humans.

Organizations like the Organic Material Review Institute (OMRI) have been taking initiatives in recent years to develop standards for these alternative products, the private non-profit group is in charge of determining and approved organic product must pass a set of rigorous standards to comply with USDA organic regulations and certified products are put in place to reduce negative effects to people, animals, and the environment. Directs the EPA to clearly prioritize public health over industry's bottom line, EPA's regulation of chemicals should be based on improving public health as opposed to what is most "cost-effective" for industry.

Fruits and vegetables that contain pesticides residues can be a health risk for people of all ages. Research by scientists at the Harvard University, School of Public Health published in "Pediatrics" in June 2010 discovered exposure to organophosphates may contribute to the prevalence of attention deficit hyperactivity disorder in children and increase risks of Parkinson's disease, especially in young people,

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according to research by scientists of the University of California in Berkeley published in the "American Journal of Epidemiology" [6].

Artificial colors increase consumer appeal but may also increase your risk of disease. The Center for Science in the Public Interest, a consumer advocacy group, report that caramel coloring used in many popular cola soft drinks contains two chemicals called 2-methylimidazole and 4-methylimidazole that cause cancers of the lungs, liver and thyroid and leukemia. Food colorings such as Yellow No. 5, 6 and 10 and Red No. 40 can increase the risk of or exacerbate hyperactive behavior in children [7].

Food is necessary to everyone, but it should be free from any kind of contamination or polluted. Present trend of food is attracting and fashion to eat what so ever, no one questioning or knowledgeable over on food preparation and serving. The existing trend has to be changed to think and act what they eat every day and authoritative agencies (FDA) should impose a strict rules and regulations over chemical applications on food products. The Government agencies also should restrict and made modifications to promote eco-friendly agricultural practices and chemical free food [8].

Conclusion

However, the Food & Drug Administrative Departments should implement a controlled agency to monitor the system regularly and organize practical trainings and exposure visits to the fields where the food products are produced and stored for selective executives and farming community. The Government and other social organizations like OMRI, GMO, should organize practical trainings and promote awareness on chemicals in food, how it's affecting to our health, create a kind of attention not to eat those chemically identified food products. As well as represent on behalf of public to raise the voice and submit the regular monitoring case study reports to Government and FDAD's and other research institutions to take necessary action and strict enforcement by law to avoid further damages and deaths due to chemical food poison. Many aspects of the food response need to be addressed for consumers to benefit from the concept. What we can learn from the food concept in action today is that food manufacturers are already using some form of food labeling to differentiate their

products. In GI-exposed markets such as Australia and the United Kingdom, consumer understanding and awareness is not a barrier to influencing buying decisions. However, food manufacturers may be cautious about further product development of the food concept because of many factors, including the perception that 1. global legislative advice is inconsistent, 2. global labeling advice is inconsistent, 3. testing is expensive and testing facilities (commercial scale) are lacking, 4. a consensus scientific position concerning the food index or carbohydrate management in healthy populations is lacking. In the post-Atkins era, food manufacturers are looking for sustainable health positioning, not fads. Improved satiety (related to GI) seems to be an approach that the industry favors currently and that they feel they can use with some confidence on packaging, "slow carbs" or "helps you feel fuller longer."

It seems that the motivation for interest in the food concept for consumers goes beyond weight loss. It is more about the entire family eating healthily for improved longer-term health benefits, including reducing the risk of diabetes and heart disease, by cutting down on refined and highly processed foods. The implications for manufacturers and retailers from this summary are that simple, trustworthy, and consistent information and labeling systems are key to building consumer interest.

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