

Nowadays the food adulteration: its consequences and ways to prevent it.

Robert Bautista*

Department of Health Communication, University of Texas at Austin, Austin, USA.

Abstract

Food adulteration is a term that refers to the practice of intentionally adding harmful or low-quality substances to food products with the intent to increase their quantity or make them appear more attractive to consumers. This practice is not only unethical but also poses significant health risks to consumers, often leading to serious health problems or even death. In this article, we will delve into the practice of food adulteration, its consequences, and ways to prevent it.

Keywords: Clastogenic, Food, Genotoxic.

Introduction

Food defilement alludes to the modification of food quality that happens purposely. It incorporates the expansion of fixings to change various properties of food items for financial benefit. Variety, appearance, taste, weight, volume, and timeframe of realistic usability are such food properties. Replacement of food or its dietary substance is likewise achieved to start the clear quality. Replacement with species, protein content, fat substance, or plant fixings are significant types of food replacement. Beginning distortion of food is frequently polished to build the market interest of food. Natural and engineered compounds are added to guarantee a fast impact on the human body. Tainted food items are answerable for gentle to extreme wellbeing influences as well as monetary harm. The runs, sickness, unfavourably susceptible response, diabetes, cardiovascular infection, and so on, are habitually noticed diseases upon utilization of tainted food. A few debasements have shown cancer-causing, lactogenic, and genotoxic properties [1].

Types of Food Adulteration

There are many types of food adulteration, and they vary depending on the substance added to the food product. Some common examples of food adulteration include:

Addition of Water: Adding water to milk, fruit juices, and other beverages is a common form of adulteration. This practice is done to increase the volume of the product and make more profit.

Addition of Chemicals: Adding chemicals such as formalin, urea, and other preservatives to food products is another common form of adulteration. These chemicals can cause serious health problems such as kidney damage, cancer, and even death.

Addition of Artificial Colors: Adding artificial colors to food products such as spices, sweets, and snacks is done to make

them look more attractive. These colors can cause allergies, hyperactivity, and other health problems [2].

Addition of Substandard Ingredients: Using substandard ingredients such as inferior quality flour, sugar, or oil to prepare food products is another form of adulteration. These ingredients can cause health problems such as obesity, diabetes, and heart disease.

Consequences of Food Adulteration

Food adulteration can have serious consequences for consumers, ranging from minor health problems to death. Some common consequences of food adulteration include:

Food Poisoning: Consumption of adulterated food can cause food poisoning, which can result in diarrhea, vomiting, abdominal pain, and dehydration.

Allergies: Addition of artificial colors, flavors, and preservatives can cause allergic reactions in some people, ranging from mild to severe.

Kidney Damage: Consumption of food adulterated with chemicals such as formalin and urea can cause kidney damage, leading to renal failure.

Cancer: Some chemicals added to food products, such as lead and arsenic, are carcinogenic and can cause cancer.

Death: Consumption of highly adulterated food products can result in death, especially in cases where the added substance is highly toxic or poisonous [3].

Prevention of Food Adulteration

Preventing food adulteration requires a concerted effort from all stakeholders, including the government, manufacturers, consumers, and other interested parties. Some ways to prevent food adulteration include:

Enforcement of Regulations: Governments should enforce regulations that prohibit food adulteration and impose stiff

*Correspondence to: Robert Bautista, Department of Health Communication, University of Texas at Austin, Austin, USA. Email- Robertbautista@gmail.com

Received: 30-Mar-2023, Manuscript No. AAJFNH-23-97664; Editor assigned: 03-Apr-2023, Pre QC No. AAJFNH-23-97664(PQ); Reviewed: 17-Apr-2023, QC No. AAJFNH-23-97664;

Revised: 21-Apr-2023, Manuscript No. AAJFNH-23-97664(R); Published: 27-Apr-2023, DOI: 10.35841/aaajfnh-6.2.143

penalties on offenders. This will deter manufacturers from engaging in the practice and protect consumers from harmful substances.

Educating Consumers: Consumers should be educated on how to identify adulterated food products and how to report cases of food adulteration. This will enable them to make informed decisions when purchasing food products and hold manufacturers accountable for their actions.

Monitoring of Food Products: Food products should be monitored regularly to ensure that they meet the required standards and are free from harmful substances. This will help to identify cases of food adulteration early and prevent their consumption by consumers [4].

Encouraging Good Manufacturing Practices: Manufacturers should be encouraged to adopt good manufacturing practices that prioritize the quality and safety of their products. This will ensure that food products are free from harmful substances and meet the required standards.

Promoting Organic Farming: Promoting organic farming practices will reduce the use of chemicals in food [5].

Conclusion

Food adulteration is a serious problem that affects the health and well-being of consumers. It is the act of intentionally adding, removing, or altering substances in food products to increase

profits or make them look more attractive. Adulteration can occur at any stage of the food production process, from raw materials to finished products. Food adulteration includes adding water to milk, adding chemicals to spices, adding artificial colours to fruits and vegetables, and using lower quality or counterfeit ingredients in processed foods. These practices can result in serious health consequences, such as food poisoning, allergies, and other diseases.

References

1. Song S. Xu C. Immunoaffinity removal and immunoassay for rhodamine B in chilli powder. *Int J Food Sci. Technol.* 2010;45:2589-95.
2. Xu H. Sudan azo dyes and Para Red degradation By prevalent bacteria of the human gastrointestinal tract. *Anaerobe.* 2010;16:114-19.
3. Xu H. Anaerobic metabolism of 1-amino-2-naphthol-based azo dyes (Sudan dyes) by human intestinal microflora. *Appl Environ Microbiol.* 2007;73:7759-62.
4. Das M. Edible oil adulterants, argemone oil and butter yellow, as aetiological factors for gall bladder cancer. *Eur J Cancer.* 2012;48:2075-85.
5. Haughey SA. The application of near-infrared reflectance spectroscopy (NIRS) to detect melamine adulteration of soya bean meal. *Food Chem.* 2013;136:1557-61.