

A study on food toxicology

Carl K Winter*

Winter K C. A study on food toxicology. *Clin Pharmacol Toxicol Res* 2021;4(4):07.

This study provides a brief overview of food toxicology and resources concerning food science. Some topics are included food additives, pesticide

residues, food allergies, environmental contaminants, and natural toxins many links and evaluative material are providing within each topic region.

Key Words: *Food toxicology, Chemicals, Food science*

INTRODUCTION

Toxicology delivers critical evidence and knowledge that can be used by monitoring actions, decision-makers, and others to put platforms and policies in place to perimeter our exposures to these substances, thereby avoiding or reducing the possibility that an illness or other negative health effect would occur. Food toxicology is the study of the environment, properties, effects, and exposure of toxic substances in food and their illness form in humans [1]. Food and nutritious toxicologists deal with toxicants in food, the health effects of high nutrient consumption, and the interactions between toxicants and nutrients. Food toxicology is an essential concern as the food supply chain is becoming more transnational in origin and any impurity or toxic manifestation may cause thoughtful widespread adversarial health effects.

There are two, unlike related parts in the dimension of toxicants and toxicity in food actual capacities of the things of toxicants in different models extending from in vitro biochemical classifications, cell-based in vitro systems, and animal in vivo representations to clinical settings examining systemic or organ-precise [2].

Food toxicology is apprehensive with considering the damaging effects on living systems of substances existing in foods. It is important that scholars of food science, as well as environmental toxicology, are accustomed to the basic chemical and biological characteristics of the injurious elements present in foods [3].

Substances that are added to food to sustain or improve the freshness, safety, texture, taste, or appearance of food are recognized as food additives [4]. Some food additives are dangerous, to replace them with the subsidiary products are natural food additives which can add natural color, freshness, taste to the food.

Pesticide excess refers to the pesticides that may endure on or in food after they are applied to food crops. Obstinate chemicals can be expanded through the food chain and have been detected in products ranging from poultry, meat, and fish, to vegetable oils, and various nuts, fruits, and vegetables.

Food allergy is a resistant system reaction that happens soon after intake of certain food [5]. Even a tiny amount of the allergy-affecting food can trigger ciphers and symptoms such as digestive problems, hives, or puffy airways.

Sources of environmental toxins in human foods, in certain cases, the source of toxins may be the atmosphere. This is the situation for metals such as mercury and lead, and polychlorinated biphenyls (PCBs), dioxins. The agricultural procedure of pesticides may lead to food infection.

The above-mentioned are can be studied and identified by the food toxicologist only with help of food science and food toxicology. They will identify the harmful and dangerous components in the food [6]. They test the samples of the food products and give the approval to launch in the market if they found any harmful chemicals in the food products, approval of the product to launch in the market will be rejected.

CONCLUSION

In this study, we come to know about food science, toxicology, food toxicology, and different topics which fall under food toxicology. How food toxicology is useful to study the food product components that are dangerous, how they act on human health and how to identify them are studied.

REFERENCES

1. Marín Sillué S, Ramos Girona AJ, Cano Sancho G, et al. Occurrence, toxicology, and exposure assessment. *Food Chem Toxicol*, 2013, 60(1), 218-237.
2. Wu F, Groopman JD, Pestka JJ. Public health impacts of foodborne mycotoxins. *Annu Rev Food Sci. Technol.* 2014;5:351-72.
3. El-Temsah YS, Joner EJ. Impact of Fe and Ag nanoparticles on seed germination and differences in bioavailability during exposure in aqueous suspension and soil. *Environ Toxicol.* 2012;27(1):42-9.
4. Ben-Davies ME, Kinlaw A, Del Campo YE, et al. Risk factors associated with the presence and severity of food insecurity in rural Honduras. *Public Health Nutr.* 2014 ;17(1):5-13.
5. Johns CB, Savage JH. Access to health care and food in children with food allergy. *J Allergy Clin Immunol.* 2014;133(2):582-5.
6. Andjelković U, Šrajer Gajdošik M, Gašo-Sokač D, et al. Foodomics and food safety: Where we are. *Food Technol Biotechnol.* 2017;55(3): 290-307.

Department of Food Science and Technology, University of California, Davis, CA 95616, USA

*Correspondence: Department of Food Science and Technology, University of California, Davis, CA 95616, USA, E-mail : ckwinter@ucdavis.edu

Received date: July 02, 2021; Accepted date: July 16, 2021; Published date: July 23, 2021



This open-access article is distributed under the terms of the Creative Commons Attribution Non-Commercial License (CC BY-NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits reuse, distribution and reproduction of the article, provided that the original work is properly cited and the reuse is restricted to noncommercial purposes. For commercial reuse, contact reprints@pulsus.com