

Adulterants Used in Food Products and their Harmful Effects on the Human Body

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Abstract: *Food is essential for every living thing of this earth. All the living thing eat food and get energy for their different type of activities or metabolic activities of daily routine. No doubt all the creatures of this earth organised need food for not only their growth their work repair of the body but also maintain to life process in full life. As need of different types of people various types of Vegetarian and Non-vegetarian food available the Earth. Every living things require food to their survive. But be sorry to say that in present time eating food is dangerous due to its adulteration. Now Food Adulteration is very major causes in all types of disease in mankind. Generally there is no doubt that Food Adulteration is most harmful causes for human body in whole world. Hear the simple meaning of adulteration is a legal term meaning that a illegal food to consume to people, in simple word in short. In present era it is a common process of contaminating food or adding to the food components is a common phenomenon in developing countries.*

Keywords: adulteration, adulterating, daily routine, foreign substance, increasing the quantity of food, non-vegetarian, life process, contaminating food, coloring agents, Colour Enhancement, Adulteration with no Intentional, chemical residues, Metallic Adulteration, immune system

Introduction

At present for all vegetarian on non-vegetarian living being Food are consuming to get energy for his everyday life, mental & biological growth, and to get nutritional aims for her or his body. Here, in simple words Food adulteration is made for profit & gain with intention or non-intention. It also be called food fraud for mankind.

These type of wrong activities in food products may be very harmful for mankind for his whole body.

Food Adulteration Categories

Here we are discuss various types of Food adulteration. It makes certain involves intentionally adding, removing, or substituting any other or foreign element and substances to lower quality and increase volume for their profit, alongside accidental contamination. Common types or categories include adding fillers (sand in food article, water in milk), hazardous coloring agents in food items and chemical residues. No doubt It poses serious health risks to mankind like toxic effects, digestive issues various types of diseases in human.

Main Types of Food Adulteration:

1. Food Adulteration (Intentional)

Addition Substance in food : Addition mixing inferior materials in food products as : small stone, sand, marbles, chalk powder, soapstone (into food like spices or grains to increase weight and get more profit.

- **Dilution (water mixing):** More adding water to milk or oils to increase volume to get more profit.
- **Substitution (replace):** Here, replacing more expensive ingredients with lost cost, inferior ones such as palm oil in olive oil.
- **Colour Enhancement:** Using various types of synthetic, often banned different dyes improve appearance.
- **Artificial Ripening:** It is very dangerous to using chemicals like calcium carbide on fruits as papaya, mango & banana etc

2. Incidental Adulteration (Accidental or Adulteration with no Intentional):

These types of adulteration made by no intention or in simple words its happens during handling, transport, or processing due to negligence.

Examples: Various or harmful Pesticide residues in food, rodent droppings in food items, larvae in food grains, or bacterial contamination.

3. Metallic Adulteration or Contamination:

These types of adulteration made by intention and no intention. There are some type of metallic adulteration are as:

- Mixing of harmful metals from pesticides, waste, or packaging.

Examples:

- Lead from water or cans,
- mercury in fish,
- arsenic from pesticides.

4. Packaging Problems in Food items

- Mixing or adding of harmful chemicals from plastic or metal packaging in human food.

5. Wrong Labelling or Misbranding of popular brands :

- Misbranding or wrong information labelling on food products, such as changing expiry dates or listing ingredients incorrectly.

Food Items	Adulterant	Harmful Effects on Mankind
Pulses	clay, stone, Dyes & chemical	stomach Pain and disorders
Milk	Water, urea, extraction of fat & starch powder	Stomach disorders & many more health problem
Tea	Artificial odd one article, dye colour	Liver problem & many more problems
salt	White powder & stone powder	stomach disorders & many more problems
sugar	White Powder & soda	Stomach problem, kidney failure & many more problems
butter	Margarine & starch	Food poisoning & lever problrms
Oils	castor oil & many more artificial colours.	Heart disease, skin infection and
ghee	Artificial Ghee essence, vanaspati oil, sweet potato & many more	Cancer, acute renal failure
Turmeric Powder	Pesticide, Lead.	Carcinogenic

See food	Mercury & Arsenic	Stomach and brain disorder and many more problems
Grains	Pebbles, Stones, Straw, weed seeds,	Liver disorders, & Stomach disorders

Conclusion

To avoid this type of adulteration and to protect the health of every people of earth along with their various types of rights be the main object. According this type in our so called civilized human society & its food industry facing many challenge and issues like preventing food fraud and wrong practices for more economic gain. Due to that the every food consumer must take a part with 100% intention to control that danger of food adulteration or mixing or adding in their eatable item. In the other hand it is very essential to every consumer that they should always be aware

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