



Food Additives: Friend or Foe?

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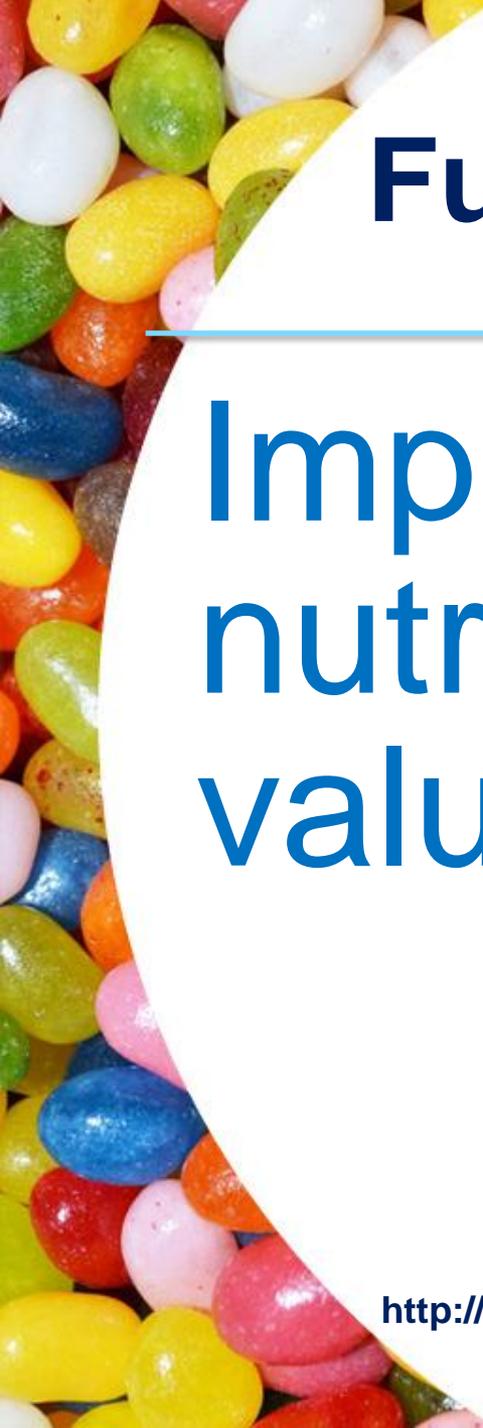
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- At present, there are up to 25,000 food additives being used worldwide.
 - The abuse of food additives and the illegal use of chemical additives can pose negative effects on human health.



Types of additives

1. **Intentional additives** are substances that are purposely added and become parts of a food product like sugar, salt, baking soda, citric acid, and vegetable colouring.
2. **Indirect or unintentional** additives are contaminants that accidentally get into a food product during production, processing, or packaging. Examples of indirect additives are antibiotics, dirt, dust, hair, hormones, and insects.



Functions of food additives

Improve nutritional value

Heat-sensitive nutrients are lost during food processing

Milk, margarine, and cereals are enriched or fortified with additives like vitamins A and D, iron, riboflavin, and folic acid

Food fortification is essential to reduce the occurrence of deficiencies.



Functions of food additives

Prolong shelf life of foods

Antimicrobial agents inhibit the growth of bacteria, yeasts, and mold

For example, sorbic acid, sodium benzoate and potassium benzoate

Commonly used in many kinds of food, such as, marinated fish, fruit-based fillings, jam, and salad cream



Functions of food additives

Delay oxidation

Antioxidants may be added in canned food that contains high fat content

Oils and fats are susceptible to oxidation upon storage

Examples: BHA, BHT, ascorbic acid, and tocopherols



Functions of food additives

Enhance color

The appeal of colour is a major influence on consumer perception and food acceptability and preference

Food colours can be synthetic or obtained from natural sources originating from plants, animals, or minerals.

These colourants must meet certain legal criteria for specifications and purity



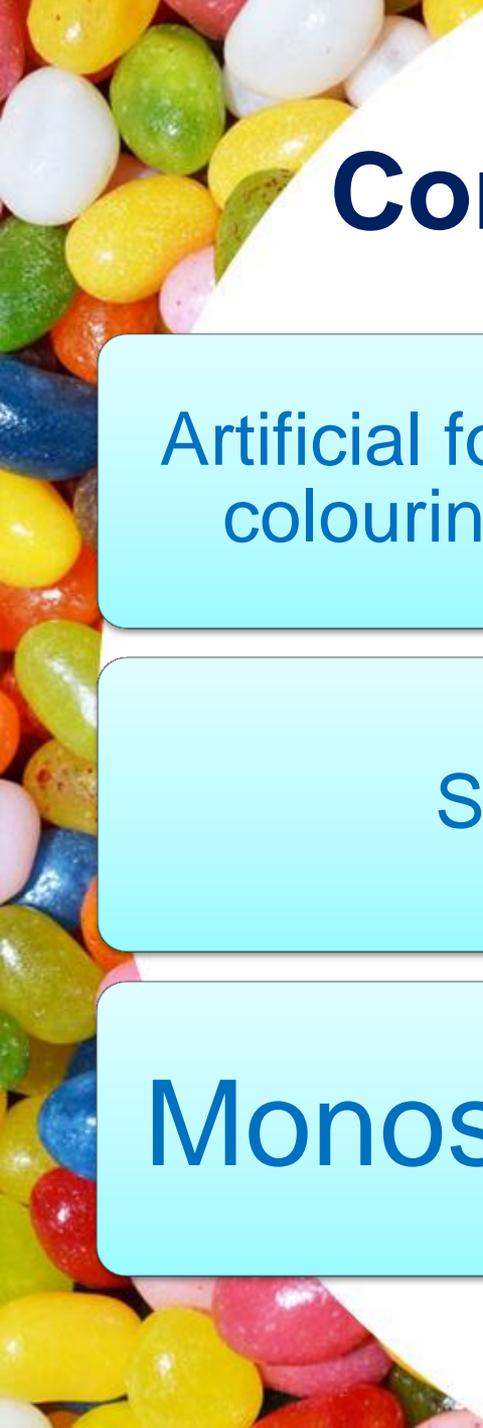
Functions of food additives

Improve flavour

Natural essential oils from plants (e.g. herbs and spices)

Synthetic flavourings

Flavour enhancer:
Monosodium glutamate (MSG)



Controversial food additives

Artificial food
colouring

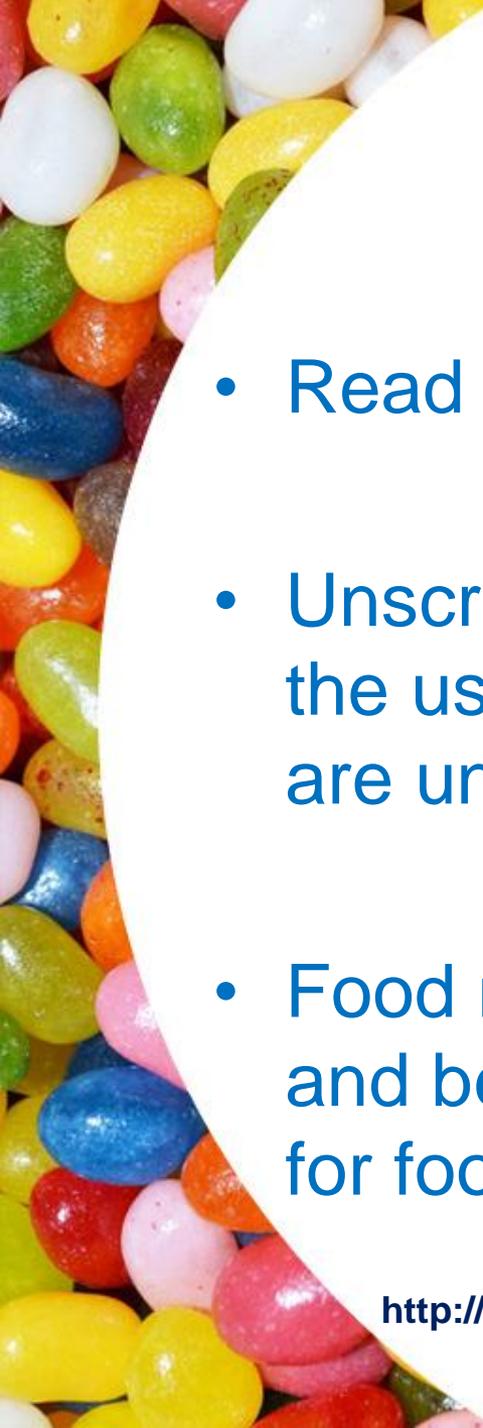
Trans Fat

Sodium
benzoate

Sodium nitrite

**High-
Fructose
Corn Syrup**

Monosodium glutamate (MSG)



The bottom line

- Read the ingredient labels.
- Unscrupulous food manufacturers who violate the use of food additives to deceive and disguise are unacceptable.
- Food manufacturers should abide with the law and be ethical in choosing the right food additive for food production and the right amount.

