

Food Additives: A Quick Guide



What is a food additive?

Ingredients added to a food during processing to help maintain or improve:

- nutritional value
- food safety & freshness
- taste, texture, and/or appearance^{1,2}




Without food additives, we would likely have:

- shorter shelf life of packaged products
- higher food waste
- increased prevalence of malnutrition
- lower quality products (taste, texture, etc.)
- increased foodborne illnesses^{1,3}



In the U.S, the Food and Drug Administration (FDA) tracks all food additives in a database and evaluates their safety. FDA regulations also indicates what types of foods certain ingredients can be used in, how much can be used, and how they must be labeled.⁴

Examples of Food Additives to Maintain and/or Improve:





NUTRITION

INGREDIENT <small>What is listed on the label³</small>	FUNCTION <small>What they are³</small>	PURPOSE <small>What they do³</small>	PRODUCT EXAMPLES <small>Where they are found³</small>
<ul style="list-style-type: none"> • Thiamin hydrochloride • Riboflavin • Niacin/Niacinamide • Folate/Folic acid • Beta carotene • Potassium iodide • Ferrous sulfate • Tocopherol • Ascorbic acid 	Vitamins & minerals	Replace vitamins/minerals lost during processing (enrichment) OR Add nutrients lacking in the diet (fortification)	Cereals, baking mixes, pasta, rice 
<ul style="list-style-type: none"> • Sucralose • Aspartame • Acesulfame potassium • Saccharin • Stevia leaf extract • Monk fruit extract • Neotame • Thaumatin 	Low calorie sweeteners	Act as sugar substitute to provide sweetness with few or no additional calories ⁵	Beverages, confectionary, desserts 
<ul style="list-style-type: none"> • Psyllium husk • Cellulose • Guar gum • Pectin • Inulin • Locust bean gum 	Dietary fibers	Increase fiber content (must be identified by FDA to provide a health benefit) ⁶	High fiber products (cereal, snack bars, etc.) 

SAFETY / FRESHNESS

INGREDIENT What is listed on the label ³	FUNCTION What they are ³	PURPOSE What they do ³	PRODUCT EXAMPLES Where they are found ³
<ul style="list-style-type: none"> Sodium benzoate Sodium nitrite Propionic acid Sorbic acid Potassium sulfite Potassium benzoate 	Preservatives (antimicrobial)	Extend shelf-life by stopping or slowing growth of bacteria or microorganisms	Beverages & cured meats 
<ul style="list-style-type: none"> BHA BHT Propyl gallate Tocopherol Ascorbic acid 	Preservatives (antioxidant)	Prevent or delay undesirable changes in color, flavor, texture, or odors	Cereals, baked goods, beverages 

TASTE, TEXTURE, OR APPEARANCE

INGREDIENT What is listed on the label ³	FUNCTION What they are ³	PURPOSE What they do ³	PRODUCT EXAMPLES Where they are found ³
<ul style="list-style-type: none"> Sodium bicarbonate Monocalcium phosphate Sodium aluminum phosphate Calcium carbonate 	Leavening agents	Promote rising in baked goods	Pancake & baking mixes 
<ul style="list-style-type: none"> Silicon dioxide Calcium silicate Aluminum silicate 	Anti-caking agents	Prevent clumping, especially in powder or granule form	Powdered drink mixes 
<ul style="list-style-type: none"> Gelatin Lecithin Casein Mono- and diglycerides Polysorbate Sorbitan monostearate 	Emulsifiers	Prevents separation of oil and water mixtures	Protein shakes, sauces, chocolate 
<ul style="list-style-type: none"> Agar Pectin Gum arabic Gelatin Whey Xanthan gum 	Stabilizers, thickeners, binders, & texturizers	Provide uniform texture & improve mouth-feel	Pudding mixes, sauces, frozen desserts 

For more information on food additive categories and ingredients, visit FDA's [Food Ingredients & Packaging webpage](#).

References:

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