

## FOOD ADDITIVES

Food additives play a vital role in today's bountiful and nutritious food supply. They allow our growing urban population to enjoy a variety of safe, wholesome and tasty foods year-round.

Food additives are substances added intentionally to foodstuffs to perform certain technological functions, for example to colour, to sweeten or to preserve. Food additives are defined in Community legislation as "any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food whether or not it has nutritive value, the intentional addition of which to food for a technological purpose ... results ... in it or its by-products becoming directly or indirectly a component of such foods."

The Community legislation on food additives is based on the principle that only those additives that are explicitly authorised may be used. Most food additives may only be used in limited quantities in certain foodstuffs. If no quantitative limits are foreseen for the use of a food additive, it must be used according to good manufacturing practice, i.e. only as much as necessary to achieve the desired technological effect.

*Food additives may only be authorised if:*  
there is a technological need for their use,  
they do not mislead the consumer,  
they present no hazard to the health of the consumer.

### Common Uses of Additives

Additive Functions/Examples	Foods Where Likely Used
<i>Impart/Maintained Desired Consistency</i>	
Alginates, Lecithin, Mono- & Diglycerides, Methyl Cellulose, Carrageenan, Glyceride, Pectin, Guar Gum, Sodium Aluminosilicate	Baked Goods, Cake Mixes, Salad dressings, Ice cream, Process Cheese, Coconut, Table Salt
<i>Improve/Maintain Nutritive Value</i>	
Vitamins A and D, Thiamine, Niacin, Riboflavin, Pyridoxine, Folic Acid, Ascorbic Acid, Calcium Carbonate, Zinc Oxide, Iron	Flour, Bread, Biscuits, Breakfast Cereals, Pasta, Margarine, Milk, Iodized Salt, Gelatin Desserts
<i>Maintain Palatability and Wholesomeness</i>	
Propionic Acid & its Salts, Ascorbic Acid, Butylated Hydroxy anisole (BHA), Butylated Hydroxytoluene (BHT), Benzoates, Sodium Nitrite, Citric Acid	Bread, Cheese, Crackers, Frozen & Dried Fruit, Margarine, Lard, Potato Chips, Cake Mixes, Meat
<i>Produce Light Texture; Control Acidity/Alkalinity</i>	
Yeast, Sodium Bicarbonate, Citric Acid, Fumaric Acid, Phosphoric Acid, Lactic Acid, Tartrates	Cakes, Cookies, Quick Breads, Crackers, Butter, Chocolates, Soft Drinks
<i>Enhance Flavor or Impart Desired Color</i>	
Cloves, Ginger, Fructose, Aspartame, Saccharin, FD&C Red No.40, Monosodium Glutamate, Caramel, Annatto, Limonene, Turmeric	Spice Cake, Gingerbread, Soft Drinks, Yogurt, Soup, Confections, Baked Goods, Cheeses, Jams, Gum

#### **Purpose of Analysis:**

To comply with regulatory requirements.

#### **Methodology:**

Analytical methods employed at Consolidated Laboratory have been adopted from recognized official sources and validated internally.

#### **Instrumentations:**

Real Time PCR, LC-MS-MS, GC-MS, Humidity Chamber, HPLC, UV-VIS Spectrophotometer, GC, AAS, ICP-OES, and etc.

*With the above state-of-the-art modern technologies and more importantly the highly qualified and experience laboratory analysts and supporting staff, we in Consolab could offer you the above testing solution. For enquiries kindly contact us.*

**Your One Stop Testing Solution**