WHAT'S IN OUR FOOD:

Understanding Common Food Ingredients

We enjoy a food supply that is safe, convenient, healthful, flavorful and affordable. Food ingredients – both those that have been used for centuries, as well as those developed more recently – help to make that possible.

Food ingredients such as those found in the ingredient list on food labels are some of the most studied areas of the food supply. Food ingredients are carefully regulated by the U.S. Food and Drug Administration (FDA) to ensure that foods containing them are safe to eat and are accurately labeled.

Each food ingredient serves a function in our food supply. It may not always be obvious, but it is nevertheless important.

Why Are Ingredients Added to Food?

Food ingredients perform a variety of important functions in foods:

1. **To maintain or improve safety and freshness.** Preservatives help prevent spoilage and can significantly reduce the risk of foodborne illness.
2. **To improve taste.** Natural and artificial flavors, spices, and sweeteners can enhance the taste of foods that have been reformulated to contain less calories, fat, and sugar.
3. **To provide texture.** The addition of food ingredients such as leavening agents, emulsifiers, stabilizers, and thickeners give foods light, airy or smooth textures.
4. **To improve appearance.** Naturally colorless foods such as yogurts, cheeses, and juices, may be enhanced with natural and artificial food colors.

Why do food ingredients sometimes have long names that are hard to pronounce?

The FDA requires that the proper scientific term be used to identify food ingredients, even though they may be unfamiliar to consumers. The long "chemical" sounding names of ingredients are simply the scientific names, and are no different than other chemical compounds we are familiar with, such as sodium chloride (NaCl), which is table salt, and dihydrogen oxide (H2O, or water). Just like salt and water, many ingredients in foods are readily found in nature, including, fructose (found in fruits), steviol glycosides (also known as stevia, found in the stevia plant), and thiamine mononitrate (ordinary vitamin B1). Some food ingredients may also be associated with certain health benefits such as beta carotene, which is found in carrots. Approved and GRAS food ingredients have been confirmed by research and experts to be safe and effective for their intended uses. (*See sidebar, What is GRAS?*)

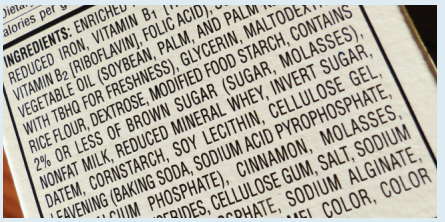
Ingredients Commonly Found in Foods

Many ingredients have been safely used in foods and beverages for decades and serve unique functions in foods. Without these ingredients, some foods may not be edible or meet consumers' standards for healthfulness, freshness, taste, texture, cost, or appearance.

What is GRAS?

Food ingredients permitted for use in the U.S. fall into one of two main categories: Food and color additives or Generally Recognized as Safe (GRAS) ingredients.

Both food additives and GRAS ingredients must be shown through scientific research to be safe and not to cause adverse health effects when consumed by the general public. Both must meet strict safety standards before being permitted for use in foods and beverages.



GRAS ingredients must have:

1) An established history of safe use and a significant number of people who consumed the ingredient prior to 1958 (when the GRAS law was passed); or
2) Scientific information about the safety and use of the ingredient that is widely known and publicly available and agreement among scientific experts that the ingredient is safe for its intended use.

A manufacturer may submit scientific research and other evidence that shows a food ingredient to be GRAS to FDA through a process called GRAS Notification. Although it is a voluntary process, all producers must ensure the safety of their ingredients, and FDA can choose to review or remove an ingredient from the food supply at any time, if it feels there is a safety or public health concern.

http://www.foodinsight.org

QUICK REFERENCE GUIDE to What's in Our Food

ANTI-CAKING AGENTS

For example: Calcium Silicate, Iron, Ammonium Citrate

Purpose: Absorb extra moisture; allow ingredients to mix easily so clumps do not form

Commonly found in: salt, baking powder, confectioner's sugar

ARTIFICIAL & NATURAL FLAVORS

For example: Butter Flavoring, Vanilla Extract

Purpose: Add desired flavor

Other examples: salt, ascorbic and citric acid, vanillin, methyl salicylate (wintergreen)

Commonly found in: yogurts, cereals, breads, desserts, dressings, soft drinks

For example: Caffeine

Purpose: Provide a bitter flavor that neutralizes other sour and sweet flavors in beverages

Commonly found in: carbonated beverages, energy drinks; also found naturally in coffee, tea, cocoa and chocolate

DOUGH STRENGTHENERS AND CONDITIONERS

For example: Ammonium Sulfate

Purpose: Add stability to dough and prevent crumbling

Commonly found in: breads and other baked goods

EMULSIFIERS

For example: Soy Lecithin

Purpose: Enhance smooth texture; aid dissolving; prevent separation of ingredients

Other examples: cellulose, mono- and diglycerides

Commonly found in: dressings, peanut butter, chocolate, margarine, frozen desserts

ENZYMES

For example: Rennet (naturally found in cheese)

Purpose: Added to impact the rate of reactions between ingredients (ex. curdling milk to make cheese)

Other examples: lactase (naturally found in milk), papain (naturally found in papaya)

Commonly found in: cheese, dairy products, meat tenderizers

FOR MORE INFORMATION ON FOOD INGREDIENTS, USE YOUR DIGITAL PHONE TO SCAN THIS CODE

FATS & OILS

For example: Canola Oil, Soybean Oil

Purpose: Add taste, aroma and texture

Other examples: olive, corn, safflower, and sunflower oils; partially or fully hydrogenated oil; non-hydrogenated oil

Commonly found in: vegetable shortening, baked goods, margarine, peanut butter

FAT REPLACERS

For example: Modified Food Starch, Xanthan gum

Purpose: Provide creamy texture in reduced-fat foods

Other examples: alginate, carrageenan, polydextrose, Olestra

Commonly found in: baked goods, dressings, frozen desserts, candies, dessert mixes, dairy products, savory snacks

FLAVOR ENHANCERS

For example: Monosodium Glutamate (MSG)

Purpose: Enhance flavors of foods without imparting a separate flavor

Other examples: hydrolyzed soy protein, hydrolyzed vegetable protein

Commonly found in: soups, flavored rice, bouillon cubes, cured meats

FOOD COLORS

For example: Caramel Coloring, FD&C Yellow No. 5

Purpose: Offset color loss due to exposure to light, changes in temperature and/or storage conditions; enhance colors that occur naturally

Other examples: annatto extract, beta-carotene, FD&C Blue No. 1, Red No. 40

Commonly found in: beverages, candies, snack foods, yogurts, cheese, fruit spreads, pudding

LEAVENING AGENTS

For example: Sodium Bicarbonate (baking soda)

Purpose: Promote rising of baked goods

Other examples: calcium carbonate, yeast, baking powder

Commonly found in: breads and other baked goods

INTERNATIONAL FOOD INFORMATION COUNCIL FOUNDATION

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LOW-CALORIE SWEETENERS

For example: Aspartame, Stevia Leaf Extract, Sucralose

Purpose: Add sweetness to foods without adding significant calories

Other examples: acesulfame potassium (Ace-K), neotame, saccharin

Commonly found in: beverages, desserts, tabletop sweeteners, syrups, chewing gum, candies

POLYOLS (SUGAR ALCOHOLS)

For example: Erythritol, Mannitol, Xylitol

Purpose: Add sweet taste, body, and smooth texture

Other examples: sorbitol, maltitol, hydrogenated starch hydrolysates

Commonly found in: sugar-free candies, chewing gums, chocolate, ice cream, tabletop sweeteners

PRESERVATIVES

For example: Ascorbic Acid

Purpose: Maintain freshness and prevent or slow food spoilage

Other examples: nitrates, nitrites, butylated hydroxytoluene (BHT), citric acid, hydrogenated oils, sodium benzoate

Commonly found in: beverages, dressings, baked goods, cured meats, oils, margarine, cheese, cereals

STABILIZERS, THICKENERS, BINDERS, AND TEXTURIZERS

For example: Carrageenan, Gelatin

Purpose: Produce uniform texture and maintain consistency in food

Other examples: cellulose, hydrogenated oils, xanthan gum, whey

Commonly found in: frozen desserts, dairy products, pudding and gelatin mixes, baked goods, sauces

SWEETENERS

For example: High Fructose Corn Syrup, Sucrose (table sugar)

Purpose: Add sweetness to foods and beverages while maintaining desired texture

Other examples: agave nectar, honey

Commonly found in: beverages, maple syrup, molasses, juice concentrates, cereals, desserts, dressings

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