Unacceptable Ingredients for Food

The following list contains ingredients that Whole Foods Market finds unacceptable in food products.

We reserve the right to change this list at any time. Please note that creating a product with no unacceptable ingredients does not guarantee that Whole Foods Market will sell it. This list is intended for illustrative purposes only. If you are interested in selling your product to Whole Foods Market, please contact a WFM buyer.

- acesulfame-K (acesulfame potassium)
- acetylated esters of mono- and diglycerides
- ammonium chloride
- artificial colors
- artificial flavors
- aspartame
- azodicarbonamide
- benzoates in food
- benzoyl peroxide
- BHA (butylated hydroxyanisole)
- BHT (butylated hydroxytoluene)
- bleached flour
- bromated flour
- brominated vegetable oil (BVO)
- calcium bromate
- calcium disodium EDTA
- calcium peroxide
- calcium propionate
- calcium saccharin
- calcium sorbate
- calcium stearoyl-2-lactylate
- caprocaprylohehenin
- carmine
- certified colors
- cyclamates
- cysteine (L-cysteine), as an additive for bread products
- DATEM (Diacetyl tartaric and fatty acid esters of mono and diglycerides)
- dimethylpolysiloxane
- dioctyl sodium sulfosuccinate (DSS)
- disodium calcium EDTA
- disodium dihydrogen EDTA
- disodium guanylate
- disodium inosinate
- EDTA
- ethyl vanillin
- ethylene oxide
- ethoxyquin
- FD & C colors
- foie gras
- GMP (disodium guanylate)
- hexa-, hepta- and octa-esters of sucrose
- high fructose corn syrup
- hydrogenated fats
- IMP (disodium inosinate)
- irradiated foods
- lactylated esters of mono- and diglyceride
- lead soldered cans
- methyl silicon
- methylparaben
- microparticulated whey protein derived
- monosodium glutamate (MSG)
- natamycin
- nitrates/nitrites
- partially hydrogenated oil
- polydextrose
- potassium benzoate
- potassium bisulfite
- potassium bromate
- potassium metabisulfite
- potassium sorbate
- propionates
- propyl gallate
- propylparaben
- saccharin
- sodium aluminum phosphate
- sodium aluminum sulfate
- sodium benzoate
- sodium bisulfite
- sodium diacetate
- sodium glutamate
- sodium nitrate/nitrite
- sodium propionate
- sodium stearoyl-2-lactylate
- sodium sulfite
- solvent extracted oils, as standalone single- (except grapeseed oil).
- sorbic acid
- sucralose
- sucroglycerides
- sucrose polyester
- sulfites (sulfur dioxide)
- TBHQ (tertiary butylhydroquinone)
- tetrasodium EDTA
- vanillin
# Summary of the Safety of All Additives

## Safe
- ACETIC ACID
- ADIPIC ACID
- ALGINATE
- ALPHA TOCOPHEROL (VITAMIN E)
- AMMONIUM COMPOUNDS
- AMYLASE
- ASCORBIC ACID (VITAMIN C)
- ASCORBYL PALMITATE
- BETA-CAROTENE
- CALCIUM PROPIONATE
- CALCIUM STEAROYL LACTYLATE
- CARBON DIOXIDE (CARBONATED WATER)
- CARBOXYMETHYLCELLULOSE (CMC, CELLULOSE GUM)
- SODIUM CARBOXYMETHYLCELLULOSE, CELLULOSE, AND RELATED COMPOUNDS
- CARRAGEENAN
- CITRIC ACID
- CYSTEINE
- DATEM
- DEXTRIN
- DIACYLGLYCEROL
- EDTA
- ERYTHRORHIC ACID
- FERROUS GLUCONATE
- FOOD-STARCH, MODIFIED
- FUMARIC ACID
- GELATIN
- GINKGO
- GINSENG
- GLUCONIC ACID, GLUCONO
- DELTA-LACTONE, MAGNESIUM
- GLUCONATE, SODIUM
- GLUCONATE, ZINC
- GLUCONATE
- GLYCERIN (GLYCEROL)

## Caution
- ARTIFICIAL COLORINGS: BLUE 1, CITRUS RED 2, RED 40
- BROMINATED VEGETABLE OIL (BVO)
- BUTYLATED HYDOXYTOLUENE (BHT)
- DIACETYL
- HEPTYL PARABEN
- STEVIA/REBIANA

## Cut Back
- CORN SYRUP
- DEXTROSE (CORN SUGAR, GLUCOSE)
- FRUCTOSE
- HIGH-FRUCTOSE CORN SYRUP
- HYDROGENATED STARCH
- HYDROLYSATE
- INVERT SUGAR
- LACTITOL
- MALTITOL
- MANNITOL
- POLYDEXTROSE
- SALATRIM
- SALT
- SORBITOL
- SUGAR
- TAGATOSE
- XYLITOL

## Avoid
- ACESULFAME-K
- ARTIFICIAL COLORINGS: BLUE 2, GREEN 3, ORANGE B, RED 3, YELLOW 5, YELLOW 6
- ASPARTAME (NUTRASWEET)
- BUTYLATED HYDOXYANISOLE (BHA)
- CARAMEL COLORING
- CYCLAMATE (NOT LEGAL IN U.S.)
- OLEOSTRA (OLEAN)
- PARTIALLY HYDROGENATED VEGETABLE OIL (TRANS FAT)
- POTASSIUM BROMATE
- PROPYL GALLATE
- SACCHARIN
- SODIUM NITRATE
- SODIUM NITRITE

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http://www.cspinet.org/templates/article_chem_chart.html  

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GUANOSINE MONOPHOSPHATE (GMP, DISODIUM GUANYLATE)
GUMS: FURCELLERAN, GHATTI, GUAR, KARAYA, LOCUST BEAN, XANTHAN
HELIUM
HIGH MALTOSE CORN SYRUP
INOSINE MONOPHOSPHATE (IMP, DISODIUM INOSINATE)
INULIN
ISOLATED SOY PROTEIN, TEXTURED VEGETABLE PROTEIN
ISOMALT
LACTIC ACID
LECITHIN
MAGNESIUM COMPOUNDS
MALIC ACID
MALTODEXTRIN
MONO- AND DIGLYCERIDES
NATAMYCIN (PIMARCYN)
NEOTAME
NIACIN (VITAMIN B3)
NITROUS OXIDE

TAURINE
THIAMIN
MONONITRATE
TRIACETIN (GLYCEROL TRIACETATE)
VANILLIN, ETHYL VANILLIN
VEGETABLE OIL STEROLS
VITAMIN B2 (RIBOFLAVIN)
VITAMIN B6 (PYRIDOXINE)
VITAMIN E (ALPHA TOCOPHEROL)
VITAMIN D (D3)

BENZOIC ACID
CAFFEINE
CARMINE/OCHINEAL
CASEIN
GUARANA
GUM ARABIC (ACACIA)
GUM TRAGACANTH
HVP (HYDROLYZED VEGETABLE PROTEIN)
LACTOSE
MSG (MONOSODIUM GLUTAMATE)
MYCOPROTEIN/GUORN
QUININE

Yes, Bob, I'll try The Weird Things They Put in 'Hot Dogs' for $500, please.
‘All-natural’ craze drives double-digit growth for natural preservatives

By Elaine Watson, 25-May-2011

Related topics: Cereals and bakery preparations, Cultures, enzymes, yeast, Meat, fish and savory ingredients, Preservatives and acidulants, Financial & Industry

Continued pressure on manufacturers to oust synthetic anti-oxidants and anti-microbials from food labels has helped drive double-digit growth in natural preservatives for Danisco in the US, bosses have revealed.

Danisco global business director for bioprotection Nathalie Brosse was speaking to FoodNavigator-USA.com after the Refrigerated Food Association (RFA) warned about the food safety implications of using exclusively natural preservatives in chilled food.

While some beverages and meat products still presented a challenge to firms looking to avoid synthetic preservatives, natural alternatives were increasingly matching synthetics in terms of efficiency and cost in use, claimed Brosse.

"We’re seeing double-digit growth here and all the evidence suggests we can sustain that for the immediate future. Surveys show something like 70 percent of consumers in the US want products with natural preservatives."

Unacceptable ingredients?

While retailers such as Whole Foods Market had led the trend by adding a whole raft of legal preservatives including BHA, BHT, calcium sorbate, potassium benzoate, potassium sorbate, sodium benzoate and sorbic acid on its list of ‘unacceptable ingredients’, many leading manufacturers were now following suit, she said.

“All of our customers are looking for natural products where possible. It has really become the mainstream now.”

But customers were not just buying natural anti-microbials to ‘clean up’ labels, she added. "Some natural mold inhibitors such as Natamax deliver a much cleaner, fresher flavor and a longer shelf-life in products such as bread and tortillas than foods using sorbate for example. You can really smell sorbate in pan bread."

Cost competitive

As for cost, natural protective solutions were generally more expensive per kilo, but could prove surprisingly cost competitive on a cost-in-use basis because they could often be used at very low dosages, she claimed.

"Natamax [a natural antimicrobial containing natamycin used on the surface of neutral pH products such as baked goods, cheeses and sausages to tackle mold] is a good example, you can use it in very small dosages and achieve good results."

Meat and drink...

As for refrigerated foods, NovaGARD natural anti-microbial blends and MicroGARD fermentates (labeled as cultured dextrose) were “very efficient” at controlling pathogens from Listeria monocytogenes, E. coli 0157, Salmonella and Staphylococcus in everything from deli salads to fresh soups and cooked meats, she claimed.

“There are still challenges replacing synthetic preservatives in some meats and beverages, but we have actually made a lot of progress matching the performance of benzoate [used in acidic foods such as salad dressings, carbonated drinks and fruit juices] and sorbate [which prevents the growth of mold, yeast, and fungi] with natural alternatives.”

Bacterial fermentates such as nisin were highly effective against gram-positive pathogens such as Listeria monocytogenes and Clostridium botulinum said Brosse, and ideal for preserving ‘delicate’ products such as liquid egg, while plant-based antioxidants such as rosemary extracts, tocopherols and green tea extracts were established alternatives to synthetics such as BHA and BHT.

"We’re also planning to launch new fermentates for dairy and culinary applications later this year.”
Marine-based anti-microbials

Meanwhile, R&D teams at Danisco were investing a lot of money into screening new fermentates, fruit extracts, plant extracts and essential oils to assess their efficacy as anti-microbials or anti-oxidants, she added.

"Marine based anti-microbial ingredients are also looking very promising, but we're only at the preliminary stages of research in this area."

Responding to concerns raised by RFA technical director Marty Mitchell about the limitations of natural preservatives, testing on a case-by-case basis to determine shelf-life was something manufacturers should be doing for all of their products, regardless of the source of the protection agents used, she stressed.

"Such agents have different effects in a different food matrix, with a different pH or water content. Whether you are testing synthetic or natural preservatives, you have to do challenge testing on a case-by-case basis."

Meanwhile, preservatives of any description were not a failsafe guarantee of safety, which was also contingent upon other factors such as good temperate controls, GMPs and HACCP, she added.

Purac: Natural solution to control yeast and mold in beverages in pipeline

Rival Purac, which is also doing a roaring trade in natural protection solutions in the US, agreed with Brosse's analysis, but said it understood the RFA's concerns.

Category manager for food preservation Ivo van der Linden said: "I agree [with the RFA] that there can be a risk when retailers blacklist preservatives that have been used for years - but also expect suppliers to use lower salt, all-natural ingredients and make "less-processed" products - but still expect the same shelf-life. All of these things can raise microbiological issues if you don't know what you are doing, and it is a concern, especially in chilled food.

"But we are working on more solutions for tackling salmonella, clostridium botulinum and E.coli in refrigerated foods."

Purac was also working on a new natural solution to control yeast and mold in beverages, he revealed: "We will be bringing this out next year."

While a lot of money was being invested in screening natural agents to assess their anti-microbial potential, it was important to consider sustainability, health and cost before taking any of them into the development phase, he stressed.

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Reasons to Color

The ability of color to influence taste perception can be experienced, if one has ever tasted products where coloring was "out of sync" with expectations, such as a strawberry-flavored, orange-colored drink or an orange-flavored, blue candy. Reactions can range from the belief that the food or beverage's flavor is actually that represented by the color; to the perception that something is "off" with the product; to general amusement at having been fooled.

Colorings remain a fundamental category in formulators' tool chests, ranging from function to fun. A list of reasons as to why colorings are used is provided by Wikipedia (http://en.wikipedia.org/wiki/Food_coloring):

- Offsetting color loss due to light, air, extremes of temperature, moisture and storage conditions.
- Masking natural variations in color.
- Enhancing naturally occurring colors.
- Providing identity to foods.
- Protecting flavors and vitamins from damage by light.
- Decorative or artistic purposes, such as cake icing.
- Birthdays and other celebrations.

Certain coloring categories are predicted to experience strong growth. According to Global Industry Analysts' "Carotenoids--A Global Strategic Business Report," the world's carotenoids market is predicted to reach $1.2 billion by 2016, from an estimated $1.07 billion value in 2010. Growth is being driven by increased consumer awareness of the health benefits offered by some carotenoids and an interest in natural food products. Additionally, the rising demand for functional and processed food products will increase the food industry's use of these ingredients.