FOOD ADDITIVES HANDBOOK

A Simple Guide to Food Additives, Fats and Oils, and Key Terms for a Healthier You

INDEPENDENT™ MEDICAL ALLIANCE

Food Additives

	FOUND IN	SOURCE	NOTES	
Artificial coloring *(Red 3, Red 40, Yellow 5, Yellow 6, Blue 1, etc)*	Candies, drinks, condiments, pickles, yogurt, fresh citrus	Petroleum	Tricks brain to think food has nutrients; known carcinogens; can trigger allergies and hyperactivity	
Artificial sweeteners *(sucralose, aspertame, saccharin, acesulfame)*	"Sugar-free" products, gum, drinks	Chemically produced	Most reported negative side-effects of all food additives; promote weight gain and blood sugar issues	
High fructose corn syrup	Baked goods, bread, drinks, candies, ice cream, syrup	Corn	A cheap form of sugar for food production; promotes weight gain, blood sugar issues, and inflammation	
Hydrogenated oils *(aka trans fat)*	Baked goods, crackers, chips, margarine	Chemically produced	Promote inflammation, cardiovascular issues, weight gain, blood sugar issues	
MSG *(monosodium glutamate)*	Processed and restaurant food, canned soup, Asian food	Fermented sugar	Enhances umami flavor; can trigger nervous system symptoms (migraines, numbness)	
Carrageenan	Dairy & gluten-free products, nut milks	Red seaweed	Thickens & blends food products; appears to promote inflammation, gut issues, and glucose intolerance	
Processed oils *(canola, corn, soy, vegetable, etc)*	Baked goods, dressings, processed & restaurant food	Processed from grains & seeds	Often rancid from heating and bleaching during production; promotes inflammation and cardiovascular issues	
Sodium benzoate	Carbonated drinks, juices, condiments, dressings	Chemically produced	Can trigger hyperactivity; with citric/ascorbic acid, it converts to carcinogenic benzene	
Sodium nitrite	Processed meat	Chemically produced	Antioxidant to prevent bacterial growth & retain pink color in meat; converts to carcinogenic nitrosamine	
Sugar alcohols *(xylitol, erythritol, sorbitol, anything that ends in -itol)*	"Sugar-free" products, gum, drinks	Processed plant sugars	Promote cravings and blood sugar issues; can cause digestive issues in large amounts	
Citric acid	Sweetened drinks, candy, jelly, ice cream, canned fruit	*Aspergillus niger* (black mold)	Flavors and preserves food products; can be inflammatory for some people sensitive to mold	
Food starch *(cornstarch, maltodextrin, corn syrup solids, etc)*	Baked goods, processed food, dairy & gluten-free products	Corn, potato, tapioca, wheat	Blends and thickens food products; GF unless indicated as wheat starch; can be allergenic for some people	
Gums *(guar, xanthan, gellan, tara, carob, etc)*	Dairy and gluten-free products, nut milks	Soy, corn, wheat; legumes	Thickens, blends, and binds food products; feeds gut microbes (for better or worse, depending on the person)	
Lecithin	Chocolate, ice cream, baked goods, supplements	Soy, sunflower, canola, egg	Blends food products; aka as phosphatidylcholine supplement; minimally allergenic if from soy	
Yeast extract	Cheese products, salty foods, canned soup	Yeast	Enhances umami flavor; often used in place of MSG; often found in small amounts	

Significant concern, reduce at all cost

Moderate concern, reduce when possible

Minimal concern, some may need to reduce

Additional Food Additives

	FOUND IN	SOURCE	NOTES	
BHA / BHT	Preservatives used in chips, cereal, and gum.	Petroleum-derived	Disrupt hormones and may increase cancer risk.	
Potassium bromate	Added to improve texture in baked goods	Chemically produced	Banned in many countries due to cancer risk.	
Titanium dioxide	Used to whiten sauces, dressings, and processed snacks	Chemically produced	Banned in the EU due to potential carcinogenic risks.	
Propyl gallate	Often used with BHA/BHT in processed fats and meats	Chemically produced	An antioxidant preservative with estrogen-like effects. May be linked to tumor growth in animal studies.	
TBHQ *(tertiary butylhydroquinone)*	Preservative found in frozen foods and crackers	Petroleum-derived	Linked to immune and behavioral concerns	
Propylene glycol	Salad dressing, flavored drinks, cake mixes	Synthetic alcohol	Also found in antifreeze. Can irritate sensitive individuals	
Polysorbate 80 / 60	Helps blend ice cream and coffee creamers	Synthetic emulsifiers	May impact gut lining and microbiota.	
Aluminum additives	Found in processed cheese and baking powder.	Mineral salts	May accumulate in the brain over time.	
Artificial flavor	Catch-all term for unnamed chemicals	Lab-synthesized	Found in nearly all processed foods.	

Significant concern, reduce at all cost

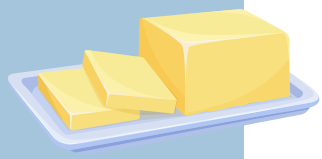
Moderate concern, reduce when possible

Fat & Oil Guide

HIGH HEAT

SATURATED
=
SOLID
=
SAFE TO HEAT

- Coconut oil
- Butter
- Ghee
- Red palm oil
- Duck fat
- Goose fat
- Lard
- Beef tallow
- Lamb tallow



LOW HEAT

MONOUNSATURATED
=
MODERATE HEAT

- Olive oil*
- Avocado oil*
- Sesame oil
- Macadamia oil

*If of high quality, these can withstand higher heat due to their protective polyphenol content.

DO NOT HEAT

POLYUNSATURATED
=
PROTECT FRAGILITY

- Almond oil
- Flaxseed oil
- Pumpkin seed oil
- Grapeseed oil
- Hemp oil
- Walnut oil
- Fish & cod liver oil
- Any omegas

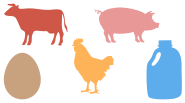
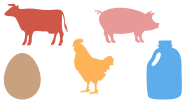
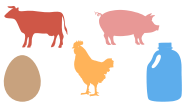
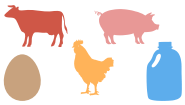
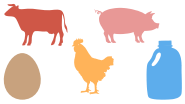
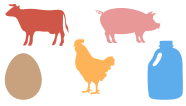
PLEASE DO NOT CONSUME

DAMAGED
INFLAMMATORY
RANCID
TOXIC

- Canola oil
- Corn oil
- Soybean oil
- Rapeseed oil
- Sunflower oil
- Safflower oil
- Vegetable oil
- Hydrogenated oils

Meat, Dairy, & Egg Guide

Numerous factors influence the production, regulation, marketing, and consumer perception of animal foods. The confusion created by various marketing terms adds to the complexity of food choices. By grasping what these terms signify (and what they do not), you can make informed decisions when selecting these products.

TERM	PRODUCTS	DEFINITION	PROS	CONS
CONVENTIONAL *(not indicated on label)*		Standard production, animals typically fed grain in CAFO/feedlots or barns	• More time and cost-efficient • Grain-fed cattle yield higher quality meat, featuring younger age and increased marbling	There are several concerns regarding animal welfare, sustainability, and environmental effects.
ORGANIC		Animals fed organic grain (no pesticides or GMOs), raised without hormones or antibiotics	• Reduced toxin levels in the final product • Typically involves more environmentally friendly practices • Offers slight nutritional advantages	• Fails to specify the methods or locations of animal raising • Higher cost
ALL-NATURAL		Loosely regulated term, does not mean much in regards to animal products	• Is free from artificial or synthetic ingredients	• Mainly a marketing concept • May create misconceptions when applied to processed foods
ANTIBIOTIC-FREE		No antibiotics in final food product (standard for all meat/eggs/dairy)	Given for two main reasons: • To encourage growth • To address infection	• Misnomer term (as it applies universally to all food; antibiotics are still frequently used in early life) • Possibility of antibiotic resistance
HORMONE-FREE *rbST/rbGH-free*		Hormone injections standard in beef/dairy, not approved in pork/ poultry	• Increase growth & milk production • Final hormone levels in beef meat are negligible	• rbST contributes to a higher incidence of infections in dairy cows, leading to increased antibiotic usage. • Elevated levels of IGF-1 in milk could potentially encourage cancer development in humans.
CAGE-FREE		Chickens not raised in cages, have ~1 sq ft indoors	• Standard for chicken meat • Cage-free eggs from chickens with more space to move around (vs cage)	Limited access to outdoor spaces
FREE-RANGE		Chickens have an optional ~2 sq ft outdoors	• Allows some outdoor access	May not venture outside (where vegetation might be absent)
PASTURE-RAISED		Chickens have 108+ sq ft outside, cows/pigs raised in pasture	• Most outdoor access • Better nutritional content in eggs (more omega-3, vit D, vit E, beta-carotene)	• More expensive • Beef and dairy: pasture-raised ≠ grass-fed (may be confusing on label)
GRASS-FED		Beef/dairy cows fed some grass (does not apply to chickens/pigs, who need grain)	• Fed some grass, usually early in life	• May be finished on grain • Cows may have been raised in feedlot (hay-based feed can be considered grass)
GRASS-FINISHED/ 100% GRASS-FED		Beef/dairy cows fed only grass their whole life	• Better nutritional content (less saturated fat, better omega 3:6 ratio, higher vit A & E, higher antioxidants)	• More expensive • Different milk taste & meat marbling (some consumers may not prefer)
REGENERATIVE/ BIODYNAMIC		Focus on agricultural practices that promote soil health, biodiversity, water conservation, etc	• Promotes sustainability, health of plants and animals in context of ecosystem	• Difficult to implement on large scale in current system, (best on smaller, diversified farms)

The ideal scenario would involve sourcing these foods from a reliable local producer who is open to discussing their production methods.

Phytonutrient Guide

	SOURCE/TYPE	CONSUME	NOTES	
CRUCIFERS *(broccoli, cabbage, kale, etc)*	Fresh as possible	Raw > light steam or sauté	Time after harvest degrades nutrients	
BANANAS	Personal preference	Green = more prebiotics Ripe = more sugars	Digestibility/glycemic impact (not nutrients) change with ripening	
CITRUS	Large, bright; eat pulp and membranes	Fresh or juice "from concentrate"	Membranes, pulp, concentrate juice high in nutrients	
PEAS & EDAMAME	Fresh in pod	Fresh>frozen>canned	Heat/canning decreases nutrients	
LETTUCE & GREENS	Dark, loose leaves; fresh as possible	Fresh, torn apart	Tearing triggers phytonutrient release	
STONE FRUITS *(peach, nectarine, plum, etc)*	Red>white>yellow flesh	Fresh or dried	Dried with sulfur have most nutrients	
GRAPES	Small, dark	Fresh, juice, or dried	Dried with sulfur (golden grapes) have most nutrients	
APPLES	Sour green>uniformly red>patchy red	Fresh, cloudy juice, or cooked	Skin high in nutrients	
ONIONS	Shallots or pungent varieties	Bake, sauté, roast, or fry	Heat increases quercetin content	
CARROTS	Eat skin (if organic); pair with fat	Roasted whole	Fat improves carotenoid absorption; roasting whole retains nutrients	
BEETS & SWEET POTATOES	Eat skin (if organic); pair with fat	Bake, sauté, roast, or fry	Skin high in nutrients; fat improves carotenoid absorption	
POTATOES	Eat skin (if organic); pair with fat/protein	Cooked whole, then cooled	Skin high in nutrients; fat/protein, cooling lowers glycemic impact	
TOMATOES	Eat skin and seeds; smaller (cherry>roma>steak)	Cooked or processed (sauce or paste)	Heat deactivates lectins & increases lycopene	
SPINACH	Fresh as possible	Lightly steamed/sautéed	Wilting denatures oxalates, improves iron availability	
BERRIES	Frozen, wild, dark	Heated>frozen>fresh; thaw in microwave	Nutrients locked in when harvested ripe & flash-frozen	
GARLIC	Fresh or freeze-dried	Mince/crush & let rest for 10 min before heating	Pressing and resting enzymatically activates allicin	
CORN	Darker varieties (blue>yellow>white)	Canned > fresh/frozen; steam or roast (vs boiling)	Canning improves nutrients; boiling pulls nutrients out	
GRAINS	Whole, processed	Soaked/sprouted/fermented	Soaking/sprouting improves digestibility and increases nutrients	
BEANS & LENTILS	Processed	Canned>pressure-cooked>simmered>raw	Canning/soaking improves digestibility and increases nutrients	

Best FRESH: Heat/processing decreases nutrients

Best COOKED: Heat increases nutrients

Best with SPECIAL PREP: Certain processing increases nutrients

High in pesticides = prioritize organic

Spice Flavor Guide

allspice	beef | chicken | curry | fruit | ginger | onion | pumpkin | winter squash
basil	cheese | chicken | eggs | fish | garlic | lemon | olive oil | tomato | zucchini
bay leaf	beans | broth | fish | meat | parsley | rice | soup | stew | thyme | tomato
cardamom	chicken | cinnamon | coffee | dates | ginger | lamb | orange | rice | tea
chili powder	beans | cilantro | coconut | cumin | curry | garlic | ginger | lime | tomato
chives	cheese | eggs | parsley | potato | soup | sour cream | tarragon | vegetables
cilantro	avocado | citrus | chile pepper | coconut | cumin | ginger | rice | salad | salsa
cinnamon	apple | banana | chocolate | ginger | honey | nuts | warm drinks | vanilla
cloves	apple | chocolate | cinnamon | ginger | ham | lemon | nutmeg | orange | pork
coriander	chicken | citrus | cumin | curry | fish | garlic | lentils | black pepper | pork
cumin	beans | chickpeas | coriander | curry | lentils | potato | sausage | tomato
dill	beet | cabbage | carrot | cucumber | eggs | fish | potato | tomato | yogurt
fenugreek	cardamom | chicken | curry | garlic | lamb | potato | rice | vegetables
garlic	cheese | lemon | meat | mushrooms | olive oil | onion | salt | tomato | vinegar
ginger	cream | curry | fish | honey | lime | scallions | soy sauce | turmeric | vinegar
marjoram	cheese | eggs | fish | meat | mushrooms | oregano | green salad | vegetables
mint	beans | chocolate | cream | cucumbers | fruit | lamb | salad | tea | yogurt
mustard	meat | cabbage | cumin | cheese | fish | fruit | honey | potato | vegetables
nutmeg	apple | cheese | cloves | cream | fruit | ginger | meat | mace | rice | spinach
onion	butter | cheese | herbs | meat | nutmeg | soup | thyme | vinegar | vegetables
oregano	beans | bell peppers | fish | lemon | meat | salad | soup | tomato | zucchini
paprika	beans | beef | chicken | chickpeas | eggs | fish | garlic | pork | potato
parsley	carrot | meat | clams | eggs | garlic | lemon | mint | soup | tomato | vegetables
black pepper	beef & steak | citrus | eggs | red meat | strawberries | turmeric | warm spices
rosemary	beans | fish | garlic | lamb | meat | poultry | olive oil | onion | potato | tomato
sage	beans | cheese | chicken | onions | pork | root vegetables | stew | walnuts
tarragon	chicken | eggs | fish | citrus | melon | parsley | shellfish | tomato | vinegar
thyme	goat cheese | fish | meat | mushrooms | onion | potato | rosemary | soup
turmeric	black pepper | chicken | cumin | curry | fish | garlic | ginger | mustard | rice

HOW TO READ
Food Labels

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per serving

Calories 230

	% Daily Value*
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 240mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

The serving size represents a typical amount of consumption, rather than a recommended quantity.

Calorie counts don't provide a complete picture of a product's overall health; prioritize the ingredients instead.

Fat content should focus on quality rather than quantity, emphasizing the need to minimize trans fats and processed seed oils.

Dietary cholesterol has minimal effect on the cholesterol levels in your body, so there's no need to be overly concerned about this measurement.

Sodium isn't bad — it's essential. Your body needs it to regulate fluids, nerves, and muscles. But too much, especially from ultra-processed foods, can strain your health. Focus on whole food sources and overall diet quality — when you do, your kidneys usually manage sodium just fine.

Total carbohydrate equals fiber + sugar

Fiber will balance the impact of other sugars, improve gut regularity, and nourish your microbiome

Added sugar is one of the most important things to look at (and minimize)

Extra nutrient content is great, but most micronutrients should come from whole foods that have no label

INGREDIENTS: Whole Grain Oats, Corn Syrup, Rapeseed Oil, Rice Puffs (Rice Flour, Salt), Dried Cranberries, Honey, Salt, Soy Lecithin, Maltodextrin, Natural Flavors
CONTAINS SOY; MAY CONTAIN TRACE AMOUNTS OF PEANUTS OR WHEAT

- Always start by reading the ingredients list; if you don't recognize an item, your body likely won't either.
- Aim for products with fewer than six ingredients.
- Ingredients should be listed in descending order by weight.
- Be aware that manufacturers often use multiple forms of sugar to make them appear lower on the list.
- Parentheses can alter the perception of certain ingredients, making them seem more or less significant.
- Exercise caution with vague terms like "natural flavors" or "spices."
- Note that gluten is not categorized as a top allergen.

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