

WHAT'S fortifying YOUR FOOD?

The lowdown on the newest
healthy-for-you ingredients

Does choosing genuinely healthy food seem to have become wildly complex? I often think so. In my mother's era, there were a handful of choices; now, a dizzying array of healthier-for-you products greets me in every aisle, from antioxidant-rich cereals to plant sterol-infused tortilla chips. Nearly 2,000 foods with functional ingredients have hit the U.S. market since 2003, with 721 debuting in 2008 alone! That doesn't include the thousands of products with more traditional add-ins such as calcium, vitamin D, or folic acid. Cereal bars, pastas, snacks, juices—even coffee—now come with added antioxidants, probiotics, and dozens of other functional ingredients.

Food fortification is nothing new. As far back as the 1920s, companies added iodine to salt to prevent goiter. In the 1930s, the U.S. government mandated vitamin D fortification to combat rickets (a vitamin D-deficiency disease that softens bones, leading to deformity). And in 1998, the Food and Drug Administration (FDA) began requiring folic acid in all enriched flours for birth-defect prevention. But as consumers have become attuned to the nutrition-health link and innovations in food engineering have made it possible to, say, sneak fish oil into juice without making consumers gag, fortification has boomed, with exotic nutrients showing up in unlikely places.

In general, most experts agree that getting nutrients from whole foods is best. But dietitians say functional ingredients have their place and may be particularly important for people on restricted diets due to allergies, diabetes, or digestive problems. And for the rest of us? "There are certain nutrients that are really hard to get enough of, even through healthy eating," says Roseville, California-based dietitian Jeannie Gazzaniga Moloo, PhD, RD, a spokesperson for the American Dietetic Association. Here's a look at some of the best-researched functional ingredients you are likely to spot on labels. ►



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BY DEFINITION

Enrichment

Replacing nutrients stripped out during food processing. For instance, B vitamins and minerals are lost when flour is processed, so companies are required to "enrich" white flour with such nutrients.

Fortification

Adding nutrients to foods that do not naturally contain those nutrients. For instance, milk is fortified with vitamin D to help the body better absorb naturally present calcium.

Functional

A catchall phrase referring to foods and ingredients billed as having specific health benefits.

WHAT'S in YOUR FOOD?

Omega-3s

What are they? Polyunsaturated fatty acids, including eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), and alpha-linolenic acid (ALA). EPA and DHA are found in fatty fish and algae, ALA in walnuts, ground flaxseed, hemp, soybeans, and canola oil.

Recommended amount: 1 gram daily.

Which foods do they fortify?

Orange juice, pasta, bread, dairy products, eggs, margarine spreads, and baby formula.

Why are they good for you?

The strongest health claims relate to heart health, with dozens of studies showing omega-3s' anti-inflammatory and anticlotting effects. Omega-3s can also lower triglyceride and cholesterol levels and slow the thickening of artery walls. One landmark study of 11,324 heart attack patients found those given 1 gram daily of omega-3s had up to a 20 percent reduction in risk of having another heart attack. New research has linked omega-3s to a lower risk of certain cancers, neurological disorders, and depression and to healthy cognitive development in infants.

Consider: Most research has focused on EPA and DHA, so look for fish- or algae-derived forms, says University of Maine food science and nutrition professor Mary Ellen Camire, PhD. Only about 5 percent of ALA can be converted to EPA or DHA, and ALA's overall health benefits are unclear. If you are taking blood thinners, use omega-3s in moderation, since they also thin blood. And if you take weight control products or fiber, eat omega-3s separately, since both may interfere with absorption.

Probiotics

What are they? Beneficial microorganisms that boost health by balancing intestinal flora and keeping harmful bugs in check. Certain strains, such as bifidobacterium and lactobacillus, occur in cultured dairy products.

Recommended amount: Between 100 million and 1 billion colony forming units (CFUs) daily.

Which foods do they fortify?

Functional dairy products, such as yogurt or kefir, with "live and active cultures"; cereals; and snack and energy bars.

Why are they good for you?

Different strains offer unique benefits: Some have been shown to fend off gastrointestinal problems such as loose stools and nausea. One recent review of 18 studies found that treatment with probiotics significantly shortened the duration of diarrhea in children. Other strains modulate the immune system, helping to control or reduce allergies and to fight off infection. And some have been shown to reduce cholesterol.

Consider: If you are taking probiotics for a specific health purpose, consult a knowledgeable health care provider or educate yourself about which strains are appropriate for you. If your immunity is compromised due to chemotherapy or illness, check with your doctor before taking probiotics.

Fiber

What is it? Plant fibers that occur naturally in whole grains, fruits, and vegetables and pass undigested through the digestive tract. There are two kinds: Insoluble fiber, which does not dissolve in water, and soluble fiber, which dissolves in water to form a gel-like consistency.

Recommended amount: 14 grams for every 1,000 calories consumed, or 21–38 grams daily.

Which foods does it fortify? Cereals, snack bars, yogurt, and baking mixes.

Why is it good for you? Fiber has been shown to improve bowel movements, quell appetite, moderate blood sugar levels, and promote gastrointestinal health by providing food (prebiotics) to probiotics. Studies suggest fiber can also reduce total and bad LDL cholesterol by interfering with fat absorption. One recent analysis found that cardiovascular disease risk was 10 percent to 30 percent lower for each 10 grams per day of fiber that men and women ate.

Consider: For elimination regularity, look for insoluble cereal fibers like bran. For digestive health and enhanced calcium absorption, look for inulin, a prebiotic derived from chicory root. For cholesterol-lowering effects, research shows that soluble gooey fibers like those in oatmeal and barley work best. Note: Too much fiber can lead to gas, bloating, and diarrhea, so spread your intake out over the day and drink sufficient water.

Plant stanols and sterols

What are they? Components of fruit and vegetable plant membranes shown to lower cholesterol. New food-processing techniques have made it possible to extract and infuse them into products.

Recommended amount: 1.3–3.4 grams daily, over two meals.

Which foods do they fortify? Spreads, salad dressings, breads, and potato chips.

Why are they good for you? Stanols are believed to compete with cholesterol and keep it from being absorbed into the bloodstream. Studies have shown that consuming 1.8–2.8 grams of sterols or stanols per day for four weeks to three months can reduce total cholesterol by 7 percent to 11 percent.

Consider: Be sure you get enough. Spreading mayo with stanols on your sandwich or eating a bag of stanol-rich potato chips won't likely make a significant impact. Two cups of fortified orange juice or 2 tablespoons of fortified margarine supply an adequate amount.

For more about these ingredients and other food terms, go to deliciousliving.com/glossary.

Antioxidants

What are they? Natural compounds in fruits, vegetables, and whole grains that fight free-radical damage from sun, age, and environmental toxins. Examples include vitamins A, C, and E; beta-carotene; lutein; and lycopene. Colorful foods like carrots, cherries, bell peppers, blueberries, grapes, pomegranates, and tomatoes are rich in antioxidants.

Recommended amount: 2 grams per day from all sources combined.

Which foods do they fortify? Juices, cereals, and chocolate snacks.

Why are they good for you? Specific antioxidants have been linked to specific physical benefits. For instance, lutein boosts eye health; lycopene may lower prostate cancer risk; and increasing evidence suggests antioxidants in grapes, cocoa, blueberries, and teas may reduce your chances of developing cardiovascular or Alzheimer's disease.

Consider: Antioxidants have a synergistic effect, so it's best to eat them together, as they occur in whole foods. Excess of some can have side effects: Too much vitamin E can lead to fatigue and intestinal cramping, and high-dose vitamin C can cause diarrhea. Overdoing it on antioxidants in whole foods is unlikely, but the National Academy of Sciences recommends no more than 2,000 mg per day of vitamin C from food and supplements, and 1,000 mg per day of vitamin E (alpha-tocopherol). "You don't have to have a lot to have an impact," says Camire. ■

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