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# EAT TO BEAT EMFS

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*Top 21 Super Foods to  
Fortify your System*

*Ann Louise Gittleman  
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*Ann Louise™*

## MEET THE AUTHOR!

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Continually breaking new ground in traditional and holistic health, Ann Louise Gittleman is a top nutritionist who was years before Paleo, Paleo Plus, and Keto. She is internationally recognized as a pioneer in dietary, environmental, and women's health issues. She is an award-winning New York Times bestselling author of over 30 books on health and nutrition including diet, detox, women's health, men's health, perimenopause, menopause, beauty and the environment.

As one of the world's foremost experts in functional and integrative medicine, Ann Louise holds an M.S. in Nutrition Education from Columbia University, has the title of Certified Nutrition Specialist (C.N.S.) from the American College of Nutrition and a Ph.D. in Holistic Nutrition. She has also served as the Chief Nutritionist of Pediatric Clinic at Bellevue Hospital and is the former Director of Nutrition at the Pritikin Longevity Center in Santa Monica, CA. She has won numerous awards, including The American Medical Writers Association Award for Excellence.

The Cancer Control Society said it best when they awarded Ann Louise their Humanitarian Award in 2016:

*"From the time of your graduation from Columbia University to the second decade of the 21st Century, your impact on the nutrition and health of society spans over 40 years. As a visionary, you saw new directions necessary to restore and maintain health years before they were recognized by the academic world. As a health advocate and pioneer, you were at the forefront of efforts to educate patients in new ways of thinking.*

*Your efforts, through your books, public presentations and media appearances, have organized and transformed the way we view diets and how the body utilizes hormones. Your advocacy for freedom of choice in health matters made major contributions in the options available to all of us today. For your passion and dedication to health and nutrition, we recognize your outstanding achievements in the field of health, nutrition and especially health education. We salute you and extend our gratitude to you as Humanitarian Extraordinaire!"*

Connect with her at [annlouise.com](http://annlouise.com) and be sure to sign up for her blogs and cutting-edge health updates!



## 1. ARTICHOKE

One cup of cooked artichoke hearts has an antioxidant capacity that earns it the number-one spot on the USDA's vegetable list. It also contains cynarin and silymarin, phytonutrients (plant chemicals) that studies show protect the liver from toxins in part by stabilizing liver cell membranes. These same chemicals are found in the herb milk thistle (artichokes are also part of the thistle family), which is used in Europe as an antidote to poisonous mushrooms. But what's important for EMF protection is that silymarin, which is ten times as potent an antioxidant as vitamin E, also increases the body's production of glutathione and SOD, the liver's premier antioxidant and key enzyme diminished by EMF exposure. One study found that silymarin boosted glutathione by 50 percent. It also appears to calm inflammation and aid in cell repair—both vital if you're exposed to EMFs.

***Serving suggestions:** Aim for a serving (1 cup or one large artichoke) or two a week. Artichokes are available frozen and jarred year-round, but don't be daunted by the fresh version, which appears in supermarkets in season March through May.*

To prepare a fresh medium to large artichoke, wash under cold running water. Trim the edible stem to about one inch (it's attached to that yummy heart, so you don't want to remove all of it). Cut off about a quarter of the artichoke top. You can use scissors to trim off the thorns from the petals, although they're also edible. You can then boil, steam, grill, roast, microwave, or braise artichokes. An Italian study found that artichokes retain high levels of antioxidants whether steamed or boiled. To eat, peel off a petal, dip in melted butter with lemon, and scrape the artichoke meat off with your teeth.

You can also buy baby artichokes, which are simply a smaller variety that don't have the fuzzy center. Peel off the outer bottom leaves, trim the stems, the dark green base, and the top half inch. You can cook baby artichokes the same way you do larger ones. You can serve them with dips, in omelets, filled with seasoned breadcrumbs or cold salads, or in pasta dishes, risottos, casseroles, quiches, and stir-fries.

## 2. ASPARAGUS

This harbinger of spring contains more glutathione than any other food. Avocado comes in second and watermelon third, but you'd have to eat at least two pounds of them to get the same amount of glutathione you'll get in five asparagus spears. Glutathione is a potent scavenger of free radicals, those rogue molecules that damage cellular DNA. It can help repair damaged DNA too, as well as binding to carcinogens and removing them from the body. Glutathione also activates other antioxidants, such as vitamin C and folic acid. As a bonus, increasing your intake of glutathione can help you detox from heavy metals, pesticides, and other noxious chemicals you encounter in the environment.

Asparagus is also a significant source of the phytochemical rutin, which strengthens capillary walls. It's also a good source of selenium and zinc, which each play a role in EMF protection. Your body needs selenium to make glutathione. In a Turkish study, rats given zinc supplements and then exposed to EMFs for five minutes a day, every other day for six months, had higher levels of the antioxidant glutathione and less evidence of free radical damage than rats who didn't have zinc supplementation.

***Serving suggestions:** Aim for one or two servings a week. Steam, roast, or sauté fresh or frozen asparagus lightly to retain its crispness, flavor, and nutrients. Serve cold, tossed with an olive-oil or walnut vinaigrette, or warm either glistening with a little olive oil or tossed with walnut pieces and bleu or feta cheese.*

### 3. BLUEBERRIES

With an ORAC score of 6552, one cup of blueberries can take care of your minimum daily recommendation of antioxidants and then some. Unfortunately, wild blueberries—the tiny ones found in your frozen food section—were not on the 2007 ORAC list, but traditionally they have scored even higher. Other berries are also good substitutes, especially blackberries (5347 per cup), raspberries (4882 per cup), and strawberries (3577 per cup).

Blueberries' secret is the level of antioxidant compounds called antho-cyanins, which give them their dark color (studies show they have 38 percent more than red wine). Blueberries are also high in the antioxidant vitamin C (more than a third of the recommended daily allowance in a cup) and contain kaempferol, a phytochemical that, when it's abundant in the diet, can reduce the risk of ovarian cancer by 40 percent.

*Serving suggestions: Aim for a cup or two of blueberries or other berries every day. A handful makes a delicious snack, a cup a wonderful dessert, especially when mixed with yogurt. You can bake them into your favorite whole grain muffins or bread, toss them into smoothies, or make them into refreshing cold summer soups.*

### 4. CINNAMON

Just a half teaspoonful can help you lower the blood sugar-boosting effect of a high-carb food. Studies also show it can help diabetics improve their ability to respond to insulin. Since there's also evidence that EMF exposure may raise blood sugar, using a little cinnamon each day may help yours remain stable, especially if your exposure is sometimes out of your control, as it often is at work. As a bonus, cinnamon is also a powerful antioxidant.

*Serving Suggestions: Aim for one half teaspoon per day. Sprinkle a half teaspoon or so daily on hot cereal, toast, cooked squash, sweet potatoes, lamb, or in curries. Cinnamon is also delicious in chicken dishes made in the Moroccan style with rice, raisins, eggplant, artichoke hearts, and garbanzo beans.*

### 5. CRANBERRIES

Cranberries are high on the ORAC list, as one cup of whole cranberries has a total antioxidant capacity of 9584. That's one powerful free radical scavenger. There's good evidence that they can prevent the growth of tumors, increase good cholesterol while lowering the bad (there aren't even any drugs that can do that), kill the H. pylori bacteria that causes some ulcers and stomach cancer, quash the formation of dental plaque (which can lead to inflammatory gum disease), and prevent urinary tract infections. Animal studies have found that cranberries can protect brain cells from free radical damage and may prevent the kind of cognitive and even motor losses we see in the aging brain.

You can actually boost the antioxidant capacity of cranberries by pairing them with apples. Apples are high in caffeic acid, which has been shown in animal studies to reduce the brain effects of EMFs from cell phones.

*Serving suggestions: drink 64 ounces per day of Cranwater (56 ounces of water and 8 ounces of 100 percent unsweetened cranberry juice, not cocktail!). Be aware this is a powerful diuretic and cellulite reducer, as followers of my Fat Flush diet have discovered.*

## 6. CRUCIFEROUS VEGETABLES

High in antioxidants and vitamin C, veggies such as broccoli, cauliflower, cabbage, kale, and brussels sprouts also contain sulfur, which will boost your body's production of glutathione, the antioxidant whose production is diminished by EMFs. They're also good sources of zinc (another EMF protectant) and selenium, and as a bonus, they're also relatively high in caffeic acid, which has been shown in animal studies to reduce the damaging effects of cell phone use.

There's also strong evidence that the superstar of all phyto chemicals, sulforaphane, the cancer fighter that was first isolated from broccoli, increases both the levels and activity of SOD in the body. The act of chewing a sprig of broccoli or a cauliflower floret helps activate a phytochemical called indole-3-carbinol (I3C), which helps kick-start the activity of glutathione, one of the body's cancer fighters. If you're crazy about crucifers, do eat them cooked rather than raw. When eaten raw, they can depress thyroid function in people who have hypothyroidism—too little thyroid hormone.

***Serving suggestions:** Aim for a minimum of three to four one-cup servings per week. Cook cruciferous vegetables until tender, as lightly as possible. Longer cooking can rob them of their vital nutrients. That smell that pervades the house when you're cooking them is those valuable sulfur compounds being released. The crunchiest of the crucifers make great crudités. With a low-calorie dip, they're a perfect snack. You can steam or sauté any of the crucifers (kale with olive oil and garlic is a wonderful side dish). Add chopped kale or cabbage to your favorite salad or soup.*

## 7. CUMIN

This peppery-citrusy spice is an important part of my Fat Flush detox plan, and it plays a vital role in my zapped regimen as well. A powerful free radical scavenger, cumin also enhances your liver's detox antioxidant, including glutathione. In one study, it increased the activity of the glutathione enzyme by 78 percent! Other research has found that the essential oils of cumin, when exposed to microwave and gamma radiation (a form of ionizing radiation), actually have more antioxidant power, which suggests it could be one of your body's chief defenders against lower levels of nonionizing radiation.

***Serving suggestions:** Aim for three servings of about 1/2 teaspoon per week. Cumin's perfect partner is beans, specifically red beans, another zapped superfood. Cumin is used along with chili powder in most chili recipes. It's truly an international spice, found in Mexican, Indian, Greek, and Middle Eastern dishes. Use it in curry (including vegetable curry, so you can pair it with the healing cruciferous vegetables) or as part of a rub or marinade (garlic, lemon, and olive oil) for grilled or broiled grass-fed beef steak or chicken.*

## 8. GARLIC

An anti-inflammatory food, there's also some evidence that garlic can help control blood sugar, which may rise when you're exposed to EMFs. It's also high in sulfur-containing compounds, which play a role in the production of glutathione. Interestingly, these are the reason garlic is called the stinking rose—they're responsible for its pungent odor.

You've probably heard that garlic can reduce the risk of cardiovascular disease. It works in many ways to protect your heart, including inhibiting calcification (the layering of calcium) in coronary arteries, a precursor to the hardened plaque associated with poor blood flow and clotting which can lead to heart attack and stroke. Studies have also found that garlic can reduce free radicals in the bloodstream, which is probably what contributes to what other researchers have found: garlic inhibits plaque formation by up to 40 percent, likely because these hardened chunks of cholesterol and other bloodstream debris are created when cholesterol is oxidized by free radicals. A free radical scavenger like garlic can nip the entire

plaque process in the bud. I usually recommend 1/4 teaspoon to 1/2 teaspoon of aged garlic extract per day, which is equal to one to two capsules at 300 mg each.

Garlic also contains antioxidant vitamins C and E as well as selenium, an important cofactor mineral in the production of glutathione. And it works in an interesting fashion against one particular carcinogenic pathway: the cancer-causing chemicals produced when you grill meat or cook them at high temperatures. One of those carcinogens, called PhIP, may be one reason for the high rate of breast cancer among women who eat large quantities of meat. One of garlic's organic sulfur compounds prevents PhIP from becoming carcinogenic. That same compound also triggers the genes that produce SOD and glutathione, which may help protect you from those cancer-causing chemicals—and EMFs.

***Serving suggestions:** Aim for one serving (one-half to one clove) a day. Chopping or crushing garlic causes the compound alliin to transform into allicin, to which much of garlic's health benefits have been attributed. Wait several minutes before eating or cooking garlic for that process to take place. Cook lightly—after 10 minutes of heat, garlic will lose its phytonutrient power. You can use garlic as an ingredient in salad dressings and marinades (especially for grilled meats), as flavoring for vegetables, or mixed with garbanzo beans, tahini, olive oil, and lemon to make hummus. For those who can't handle the taste of garlic (or the breath afterwards), garlic extract is a good alternative.*

## 9. GRASS-FED BEEF

If you eat beef, grass-fed is a must. It is an excellent source of glutathione, zinc, and selenium—all nutrients reduced by EMF exposure. And there are some great bonuses. Compared to grain-fed beef, which contains 40 percent saturated fat, cattle that graze on pasture grass have only 10 percent of the heart-threatening fat. Grass-fed beef is also higher in nutrients, including beta carotene and vitamin E, and has more hearthealthy, anti-inflammatory omega-3 fatty acids and conjugated linoleic acid (CLA), a critical fatty acid that studies suggest may help lower your risk of cancer, heart disease, diabetes, and love handles (in some research, CLA helps reduce body fat).

Buy beef products marked with the logo of the American Grassfed Association (AGA), which certifies the animals have been raised on nothing but mother's milk and forage—not corn or other grain which is often used to promote quick weight gain. The AGA seal guarantees that producers did not keep cattle confined nor use antibiotics or hormones. (On a personal note, I order all of my beef from [www.ranchfoodsdirect.com](http://www.ranchfoodsdirect.com), which provides grass-fed beef and uses a proprietary method known as “rinse and chill” to clean the beef. See resources for more information.)

***Serving suggestions:** Aim for at least two 3 to 4-ounce servings per week. Grass-fed beef comes in all cuts and can be used in any of your favorite recipes. You will find the ranch Foods direct beef unusually tender, unlike other grass-fed beef, but it is still best to avoid overcooking to preserve taste, texture, and glutathione in the meat, which are all diminished by cooking.*

## 10. MUSHROOMS

Mushrooms, particularly Asian varieties such as shiitake, maitake, crimini, oyster, and king oyster mushrooms, contain high concentrations of a powerful antioxidant that could help protect your cellular DNA from free radical damage and can help slow the development of chronic degenerative diseases associated with aging. In fact, Asian mushrooms contain twenty times more of the antioxidant L-ergothioneine than do wheat germ and chicken livers, the other most abundant sources. But even white button mushrooms have fifteen times more L-ergothioneine than those two foods.

Mushrooms also contain lentinan, an immune-system booster, which reduced the development and size of tumors in lab animals injected with human colon cancer cells. Mushrooms are also an excellent source of selenium and copper, and a good source of zinc. Selenium contributes to the body's production of glutathione, copper is an important cofactor in SOD production, and zinc has been found to protect against free radical damage in animals exposed to 900 MHz radio waves from a cell phone. Zinc is also a vital immune-system booster and lowers blood sugar, which are both affected by EMFs.

*Serving suggestions: Aim for two to three 1-cup servings a week. don't wash mushrooms—their skins are so porous, they'll drink in the fluid. Clean by wiping with a damp cloth, and then sauté with garlic to serve with meat or over vegetables such as asparagus or broccoli, or add to pasta sauce and omelets. Make your own veggie burgers by tossing a variety of sautéed mushrooms with some beans (black or red) and sautéed onions in the food processor for a few pulses (you don't want to puree them). Add your favorite seasoning and enough whole wheat bread crumbs, cooked bulgur, or brown rice so you can form patties. Grill or pan fry.*

## 11. OLIVE OIL

At first researchers were baffled by the conundrum (also called the French Paradox): how could Mediterranean people who ate more fat than Americans be so much healthier? As it turned out, it's not about how much but what kind of fat you eat. Studies suggest that relying only on olive oil can cut your risk of heart disease almost in half and your chances of dying prematurely by a full 50 percent. But what's important for our purposes is that olive oil is a potent antioxidant that boosts levels (to higher than normal!) of the two forms of glutathione—reductase and peroxidase—that can protect you against free radical cellular damage.

Choose extra virgin olive oil (the least processed) for its oleic acid, which is anti-inflammatory and may help reduce arthritis and asthma symptoms and preserve bone density. In one study, in fact, four tablespoons of olive oil produced a pain-relieving effect that was equivalent to about 10 percent of the typical adult dose of ibuprofen. It also helps control blood sugar, which can be affected by exposure to RF.

*Serving suggestions: Aim for at least 1 tablespoon a day. Except in baking, whenever a recipe calls for oil, use extra virgin olive oil. You can toss whole wheat or gluten-free pasta or rice with olive oil, parmesan cheese, and garlic; use it in place of butter or margarine on bread and vegetables, and when cooking meat (it reduces the production of carcinogenic compounds in cooked meat, particularly when you combine it with rosemary). Make sure you keep your olive oil in the dark. Light quickly reduces its potency. In one Italian study, after just two months of exposure to a supermarket light, olive oil lost 30 percent of its vitamin E and carotenoids, and had high levels of free radicals (which, when it comes to oil, means it's becoming rancid). Tinted glass bottles are best for storage.*

## 12. POMEGRANATE JUICE

Red wine takes a nutritional backseat to this relatively new and ultra popular drink with an ORAC value of 2341 for about 2 ounces. A study at the University of California at Davis found that the antioxidant activity of commercial pomegranate juice is three times higher than that of red wine and green tea. In fact, the fruit juice neutralized 54 percent more free radicals than the much-heralded wine. People who drank about 2 ounces a day had an average increase by 9 percent in antioxidant activity, according to another study. In other research, pomegranate juice was better able to prevent oxidation of LDL (bad) cholesterol. Oxidation is what triggers cholesterol to clump and stick to artery walls. The juice also increased blood flow to the heart in forty-five people with heart disease who drank eight ounces a day for three months.

*Serving suggestions: Aim for two or three 8-ounce servings of juice per week (which I would dilute half and half with water to reduce the concentration). Studies have focused primarily on the juice rather than the fruit, so you can use pomegranate juice as a foundation for healthy smoothies, or in cooking as a marinade. There is even a pomegranate wine from Rimon Winery in Israel.*

### 13. PRUNES (DRIED PLUMS)

With an ORAC rating of 6552 for 3.5 ounces, prunes (now called dried plums for public relations reasons) contain unique killer antioxidants. They're especially effective against a very dangerous free radical called superoxide anion radical—the main target of SOD. They prevent free radicals from causing damage to fats, which are essential to cell membrane and brain cells; they also protect against peroxidation, the harmful effects of oxygen on cholesterol, which can trigger the cascade of events leading to plaque formation and atherosclerosis, a risk factor for heart attack and stroke. Prunes are also a significant source of vitamin A (as beta carotene), another antioxidant that protects the integrity of cell membranes and is also an anti-inflammatory. Because they contain soluble fiber, prunes can also help you keep your blood sugar—which is affected by low-level radiation—on an even keel.

*Serving suggestions: Aim for two to three servings (a serving is two medium-size prunes) a week. Stuffed with an almond or walnut, prunes make a delicious snack that's as satisfying as candy, especially for children. The dried fruit will soak up any marinade, so add it to Middle Eastern chicken and beef dishes or desserts. Of course, pureed prunes make a wonderful nutrient-rich sugar substitute in baking.*

### 14. RED BEANS

Red beans, including small red, red kidney, and pinto beans, came up tops (with a rating of 8459) in a 2007 study of antioxidant absorption of foods done at the USDA's Arkansas Children's Nutrition Center in Little rock. That's important because, while other foods may have higher antioxidant capacity, they're not as readily absorbed as beans. The darker the better: their color reflects their content of phenol and anthocyanin antioxidants. A great source of protein, especially on healthy vegetarian diets, beans are high in fiber (one cup gives you about 45 percent of your daily fiber needs) and low on the glycemic index. Their soluble fiber actually helps stabilize blood sugar and, because beans are so high in thiamin, a co factor in the production of the memory-linked brain chemical acetylcholine, they can also protect your brain cells.

*Serving suggestions: Aim for three cups a week. Beans need to be cooked for a long time, which does leach out some of their nutrients. But that also means that dried and canned beans have about the same nutritional value, so you don't need to go through all that soaking and cooking yourself. Canned beans are fine—just rinse thoroughly to remove all the sodium. You can use red beans in ethnic dishes such as chili, enchiladas, and burritos; as a base for veggie burgers; or cold, tossed with other beans, garlic, and other zap-proof seasonings like rosemary in three-bean salad for multiple EMF protection.*

### 15. ROSEMARY

In studies looking at the damage caused by gamma radiation, Indian researchers found that rosemary protects cellular DNA from damage in several ways, including acting as an antioxidant. Rosemary-treated groups of mice exposed to radiation had an increase in the number of disease-fighting white blood cells called leukocytes. They also showed a significant decrease in oxidative degradation of blood fats—called peroxidation, a major marker of cardiovascular disease—and an increased level of glutathione. That's

important protection because radiation causes an increase in free radical damage to lipids and drops glutathione levels. rosemary also gives vitamin E a boost so it can continue scavenging free radicals over and over again, something rosemary can do without any help. It's such an effective antioxidant, the food industry uses rosemary components as a food preservative. As a bonus, studies also show that it can reduce heterocyclic amines, carcinogenic compounds that form when meat is cooked at high temperatures.

**Serving suggestions:** Aim for two to three 1-tablespoon servings a week. rosemary gives flavor and oomph to meats, egg dishes, and salad dressings. It's also a perfect seasoning for pasta sauces.

## 16. SEA VEGETABLES (SEAWEEDS)

McGill University researchers found that alginic acid, which is found in brown algae like kelp and alaria, reduced the amount of strontium 90—one of the most common radioactive materials in the environment—absorbed through the intestinal wall.<sup>25</sup> Because it is so widely dispersed these days, in part from residual fallout from worldwide nuclear testing, most of us are exposed to strontium 90 in food or water or in the dust we inhale. Other sea vegetables (like nori, hijiki, arame, kombu, sea palms, and wakame) are also rich in iodine, which can keep your thyroid—a target of radiation, including EMFs—healthy. Sold in natural food stores throughout the country, these sea veggies are packaged in a dried form with serving suggestions on the package.

**Serving suggestions:** Straight from the package or slightly toasted in the oven, nori can be tossed and crumbled over a variety of dishes. It is delicious over vegetables, whole grain pasta, or fish. Hijiki can be added to soups or salads and tastes great sautéed with carrots and fresh ginger. Wakame adds to soups, on top of fish, or in dressings. It also makes a great marinated salad with cucumber and apple cider vinegar. Kombu can be toasted in the oven for snacks, added to beans (aids digestion), and cut into strips to be added to soups.

## 17. TART CHERRIES

Montmorency cherries, the most common tart cherries produced in the United States, contain significant quantities of melatonin, the antioxidant hormone produced by the pineal gland that is targeted by EMFs. In fact, they contain even more than is normally found in the blood. That was the surprising discovery made recently by the University of Texas Health Science Center's Dr. Russel Reiter, who has been studying melatonin for more than thirty years. Studies have confirmed that melatonin is radioprotective, a substance that either lessens or prevents the health effects of radiation, largely by preventing damage caused by free radicals.

Melatonin plays a role in the production of the body's own potent free radical scavengers, glutathione and SOD. It also rules our circadian rhythms, which supply us with chemicals that allow us to sleep and

**Serving suggestions:** Aim for two to three servings a week of 8 ounces of cherry juice or 3.5 ounces of dried cherries, more if you're not taking melatonin supplements. I would dilute the juice half and half with water. Tart cherries are often used in pies, but that's not the healthiest delivery system for a food that can protect you from the effects of EMFs. They're also sold dried, which makes a handy, right-from-the-bag snack that's actually higher in melatonin than fresh cherries. Consider dried cherries as an addition to healthy morning muffins, gluten-free cereal, oatmeal, gluten-free pancakes, salads, well as rice, rice pasta, buckwheat, amaranth, and quinoa. Mix a bit of tart cherry juice (regular or concentrated) with water, particularly when you're exercising. One study found that it may reduce joint inflammation caused by physical activity. If you don't like or don't want to eat cherries, there are several other foods that contain small amounts of melatonin, including bananas, onions, corn, oats, and rice.

encourage us to wake up. Sleep experts confirm that most Americans, even those who don't travel, are effectively suffering from jet lag, a sleep deficit so severe it may be contributing to a variety of illnesses, including frequent colds and viral infections, obesity, diabetes, and heart disease. Cherries are also anti-inflammatory and relatively low on the glycemic index.

## 18. TURMERIC

This spice, used to color and flavor the mustard you slather on your ballpark hot dog as well as Indian curry, has been linked to lower risk of leukemia—because it inhibits radiation-induced chromosome damage!<sup>28</sup> Turmeric, whose chief phytochemical is called curcumin, also protects against damage caused by other environmental pollutants as well as the carcinogens in cooked meat. In test tube studies, it halted the proliferation of leukemia cells. It also has been shown to boost the detoxing ability of the liver enzymes, including glutathione, as well as blocking free radical damage on its own. Turmeric has an ORAC value of 2117 per 3.5 ounces.

Neurodegenerative diseases have been linked to EMF exposure, and turmeric, which crosses the blood-brain barrier, shows powerful promise in fighting them. In studies it slowed the progression of an Alzheimer's-like disease in animals, boosted the production of other antioxidants, and helped prevent the formation of so-called amyloid plaques that are the hallmark of Alzheimer's, while it also cleared existing plaques from the brain. As an anti-inflammatory, turmeric has outperformed prescription and over-the-counter drugs. Interestingly, research has also found that turmeric makes cruciferous vegetables even more potent anticarcinogens. Alone, neither curcumin nor the phytochemical phenethyl isothiocyanate—from cabbage, broccoli, and the like—exerted any effect on prostate tumor cells; together, they stopped them dead.

***Serving suggestions:** Aim for at least 1 tablespoon per day. Use real turmeric rather than curry powder, which doesn't contain enough of the spice to be physiologically active. Add a teaspoon or so of turmeric to your favorite bean dishes, salad dressings, curries, and absolutely on cruciferous vegetables—it's especially good on cauliflower, which you already know if you're a fan of Indian food. Combine it with cinnamon, cumin, and other spices to coat chicken or fish. Mix your own cruciferous veggie dip using plain Greek yogurt spiced with turmeric, lemon juice, and a little dried minced onion and garlic powder, and even a little horseradish sauce for heat. The turmeric will give it a lovely yellow color. Add some chutney for a delicious sauce for meat, chicken or fish.*

## 19. WILD ALASKAN SALMON

Along with other coldwater fatty fish, salmon is rich in anti-inflammatory omega-3 fatty acids. Omega-3s boost liver function to burn fat and detoxify the body, reset healthy levels of the brain's neurotransmitters that regulate appetite, and strengthen cell membranes while optimizing cell function so cells keep flushing out waste and taking in nutrients. They also exert a protective, even healing effect on the brain. Studies have found that children with learning and behavior problems show improvement after fish oil supplementation. Animal studies have suggested that omega-3s may also help prevent neurological disorders such as Parkinson's and Alzheimer's diseases. I recommend wild Alaskan salmon specifically because it contains fewer pollutants than other kinds of salmon. Canned salmon is usually wild salmon.

Other safe and eco-friendly fish alternatives: Pacific sardines, light tuna, rainbow trout; Northern, Japanese, or European anchovies; and Pacific halibut. If you don't like fish, choose other high omega-3 foods, such as walnuts, chia seeds, Perilla oil, or flax seeds. (An omega-3 powerhouse, flax seeds are rich in its precursor, alpha-linolenic acid. Flax seed oil contains a more concentrated source.)

*Serving suggestions: Aim for one to two fatty fish meals a week, with salmon as at least one of them. Use canned salmon in salads (mix with a little light mayo and dill for a fabulous lunch) or grill, poach, broil, or bake salmon fillets or steaks. Consider supplementing with 2 to 4 grams of fish oil capsules daily.*

## 20. WALNUTS

Make walnuts your protein snack of choice. They're the only nut that supplies significant amounts of omega-3 fatty acids, a natural anti-inflammatory, through alpha-linolenic acid, which becomes an omega-3 in the body. They are also high in glutathione—they're actually the only nut that contains this vital antioxidant.

A USDA study now under way is looking at the potential of walnuts to protect nerve cells in the brain that degenerate with aging and in disorders such as Alzheimer's and Parkinson's diseases, which have been linked to EMF exposure. Walnuts have a total ORAC rating of 13,541 per 3.5-ounce serving (pecans are higher, and are a good substitute, though you'll be missing out on the omega-3s), which may be responsible for their heart-protective properties.

*Serving suggestions: Aim for a handful of walnuts a day. Toss them into your favorite salad, tuck a walnut half into a prune for a terrific snack, add them to stir-fries, or use them to make pesto (with basil, parmesan, and olive oil, and maybe a little yogurt to make a creamy sauce, or in my Walnut rosemary Pesto.*

## 21. YOGURT

One theory explaining the symptoms of electrosensitivity and radio wave sickness is that they are caused by the loss of calcium ions due to EMF exposure. Since these ions hold the membranes together, the cell is more vulnerable to damage. Dr. Andrew Goldsworthy was the first to notice the similarity between electrosensitivity symptoms and those of hypocalcemia, a deficit of calcium in the blood. He theorized that if someone already had low blood calcium, EMF exposure, which leaches calcium from the cells, might "push them over the edge. The treatment: calcium. However, calcium must be in balance with magnesium for proper absorption. The ideal ratio should be at least 1:1 or even 2:1 in favor of magnesium.

When it comes to calcium, food is your best source. I like yogurt because it's easily digestible, less likely to cause allergic reactions, can be safely eaten by those who are lactose intolerant, and contains probiotics—beneficial bacteria—that are vital to a healthy digestive and immune systems. Yogurt is also an unexpected source of iodine, which can help promote better thyroid function. (Animal studies have found that radiation can reduce levels of the thyroid-stimulating hormone.)

*Serving suggestions: Mix your high-ORAC fruits with organic yogurt as a breakfast food, part of a smoothie, or a delicious dessert. Yogurt is a fabulous base for dips (for those cruciferous vegetables you're eating and even fresh strawberries), salad dressings, sauces, and in place of milk in your favorite recipes. Mix with frozen berries (like açai, available in health food stores) for a refreshing treat.*