

Eat Your Way to Heart Health

February is American Heart Month, which means that we are supposed to be especially aware of the status of our hearts. Perhaps some of us will have our cholesterol, C-reactive protein and blood pressure tested, others will add some cardiovascular exercise to their routines, and yet others will change their style of eating to include more heart-healthy foods and fewer heart-damaging foods. I hope you will do all three, since a healthful lifestyle is your best defense against developing heart disease. In recognition of heart month, I want to give you some tips on dietary and lifestyle practices that will help prevent heart disease and improve the overall health of your heart.

Heart disease kills more Americans each year than all cancers combined, but to a great extent it is a preventable condition. Many of the risk factors for heart disease are believed to cause, or result from, chronic low grade inflammation (see box below). Inflammation can set off a cascade of events, such as the rupturing of arterial plaque (deposited by LDL (“bad”) cholesterol), that can lead to a heart attack or a stroke. Many health professionals believe that preventing or quelling inflammation is the key to preventing heart disease and strokes. There is a test for inflammation called “high sensitivity C-reactive protein”



(CRP), which is a good indicator of dangerous inflammation in the arteries. The next time you have your cholesterol tested, you may want to ask to have your CRP tested, too. Studies have indicated that many people have cholesterol levels in the healthy range but have high CRP, which puts them at a 45% higher risk of having a heart attack or dying of heart disease than if they had an acceptable CRP level.

Eating an anti-inflammatory diet should be a priority if you want to prevent heart disease and stroke—as well as cancer, diabetes and Alzheimer’s disease—and improve these conditions if you already have them. What you eat is obviously important to your overall health and weight, but it can also help you modify many of the preventable risk factors for heart disease, such as high blood pressure and excess abdominal fat.

The way I see things, there are two categories of foods: those that damage health and those that promote health. In order to combat inflammation, you need to first remove the harmful, pro-inflammatory foods from your diet and then add in the anti-inflammatory foods.

Inflammation Promoters

Pro-inflammatory foods are mainly unhealthy fats, refined carbohydrates, processed foods and fast food.

Unhealthy Fats

There is strong evidence that foods containing trans fats, also called partially hydrogenated fats, lead to high LDL (“bad”) cholesterol, low HDL (“good”) cholesterol and arterial plaque. People who eat a lot of trans fats are three times more likely to develop heart disease than people who avoid it. Eating these fats also encourages

Preventable Risk Factors for Heart Disease

- High cholesterol
- High blood pressure
- Excess abdominal fat
- Inactivity
- Diabetes
- Smoking
- Periodontal disease
- Chronic stress
- Poor diet



Gelson's registered dietitian, Jessica Siegel, has a Masters in Public Health. However, she is not a doctor and her nutritional recommendations are not tailored to specific health problems. Consult your physician before beginning any nutritional program. To contact Jessica, please call her at 1-800-GELSONS.

in this issue...

Eat Your Way to Heart Health
Nutrient of the Month: Copper

the accumulation of belly fat, which is what promotes the chronic inflammation that damages arteries around the heart and the brain. Always read ingredient lists on packaged foods and avoid eating foods that contain the words “partially hydrogenated,” which is the ingredient term for trans fat. Beware of fried foods, margarine, snack foods, cookies, cakes, muffins and fast foods, as they are all likely to contain this dangerous fat. Trans fats should be avoided completely.

Unbalanced Fats

Saturated fats, omega-6 fatty acids and omega-3 fatty acids are all essential to cell formation and brain function. However, saturated fats or those containing a high amount of polyunsaturated omega-6 fatty acids can contribute to inflammation. It is estimated that the current ratio of omega-3 fats to omega-6 fats in the American diet is 1:10 or greater. Ideally, we want to keep the ratio at 1:2, eating just twice the amount of omega-6 as we do omega-3 fatty acids. The anti-inflammatory action of omega-3s helps reduce blood levels of CRP. These fats are also important for helping you lose abdominal fat and lower your triglycerides. Even if you eat fish twice a week, consider taking a daily high-quality omega-3 supplement of at least 1000–2000 milligrams of EPA and DHA total. Saturated fats are found in red meat, fatty dairy products, butter, coconut oil and palm oil and should be limited to 12–17 grams a day from all sources, though not eliminated completely.

Junk Food

Highly refined carbohydrates, like bread, cookies, cakes, candies, other snack foods and soft drinks should also be avoided. These foods are converted to sugar very quickly and can ultimately lead to cellular damage and inflammation, and also raise triglycerides and lower HDL cholesterol, further contributing to inflammation. Highly processed foods and fast food are primarily made of unhealthy fats and refined carbohydrates, so they can be



inflammatory double-whammies. Try to only eat these foods on rare occasions.

As I mentioned earlier, the first step in eating a heart-healthy diet is to remove pro-inflammatory foods. Once these items are removed, any excess weight you are carrying around your midsection should slowly start to come off and inflammation should begin to quiet down, as will high cholesterol, blood pressure or blood sugar. See the chart at the end of this article for details about specific foods that are considered pro-inflammatory.

Inflammation Fighters

Now for the fun part: it's time to add in all of the heart-healthy foods that taste great and make you feel even better. Anti-inflammatory foods are minimally processed whole foods that are naturally rich in antioxidants, vitamins, minerals and healthful fats. They should form the basis of your heart-healthy eating plan. Plant foods in general are excellent inflammation fighters.

Plant Foods

Colorful vegetables and fruits contain phytonutrients, which are potent antioxidants that occur in complex combinations in plants. Inflammation is often provoked by free radical reactions, like LDL cholesterol oxidation inside our arteries; since antioxidants help prevent these free radical reactions, foods high in phytonutrients and vitamins C and E should be emphasized. Additionally, produce tends to be high in fiber, which can bind to pro-inflammatory substances in our bodies and sweep them out of our systems. The benefits of these plant nutrients can't be replicated in supplements or processed foods, so you should aim to eat at least six servings of vegetables and three servings of fruit a day. Be sure to

include dark green leafy vegetables daily (such as kale, chard, turnip greens, collard greens, beet greens, cabbage, escarole, spinach and arugula). Also emphasize deep blue and purple food, such as blueberries, blackberries, raspberries and pomegranates, to keep your blood vessels and arteries supple, improve blood flow to your heart and regulate blood sugar levels.

Healthful Fats

Certain fats are anti-inflammatory, as well. Forget low-fat diets for heart health; following a more Mediterranean style of eating, which includes liberal amounts of olive oil, has been shown repeatedly to do the most good for your heart. Monounsaturated fats from extra virgin olive oil, olives, nuts, seeds and avocados, as well as omega-3 fatty acids from fish are an integral part of a heart-healthy diet. Extra virgin first cold pressed olive oil is rich in phytonutrients that are believed to protect the heart and brain, lower blood pressure, quell inflammation and lower triglycerides and raise HDL cholesterol.

You should replace most of the polyunsaturated, saturated and trans fats in your diet with monounsaturated and omega-3 fats. Achieve this goal by minimizing processed foods and meat-centered meals and instead cooking more of your own meals at home with an emphasis on fresh produce, healthful fats, fish and plant sources of protein (like beans). Try to make at least half of your plate vegetables and fruit, a quarter of it lean protein or fatty fish, with the remaining quarter being a whole intact grain (like barley or brown rice) or a starchy vegetable (like winter squash or sweet potatoes) and try to cook exclusively with extra virgin first cold press olive oil (preferably organic).

Lifestyle Factors

In addition to eating optimally, there are other lifestyle factors that are important for heart health.

Smoking

Not smoking (and avoiding second-hand smoke) is perhaps the most anti-inflammatory step you can take to protect your heart. Smoking and health—especially heart health—are not compatible.

Exercise

Cardiovascular exercise is another important factor. If you are sedentary or hate to exercise, then good news has been emerging for you. It doesn't take much time or effort to reap the benefits of exercise. Just two and a half hours of moderate exercise or 75 minutes of vigorous exercise a week can

Omega-3 Sources	Omega-6 Sources
Fatty fish	Soybean oil
Flax seeds	Sunflower oil
Walnuts	Safflower oil
Expeller-pressed canola oil	Corn oil
Omega-3 supplements	Sesame oil
	Peanut oil
	Margarine
	Processed foods

reduce your risk of heart disease, stroke, high blood pressure and diabetes. That works out to about 22 minutes seven days a week or 30 minutes five days a week. Moderate exercise is considered brisk walking, taking the stairs, ballroom dancing or gardening. Perhaps even more encouraging is that these activities can be broken up into small bouts throughout the day—three-minute brisk walks done ten times a day are as effective as one thirty minute stint for reducing heart disease risk.

Oral Hygiene

Good oral hygiene is a surprising but important factor in heart health. Periodontal disease involves chronic inflammation of the gums, which is reflected in inflammation elsewhere in your body, including your heart. Aim to floss your teeth daily and get regular dental cleanings to keep your heart healthy.

Chronic Stress

Finally, and not surprisingly, chronic stress is a major controllable factor in heart disease. Chronic stress alone can double your risk of having a heart attack. It might not feel like something you can control, but there are many measures you can take to make sure that your stress level does not harm your heart. Consider exercise, yoga, meditation, laughter and deep breathing to help you cope with stress more effectively.

Sleep

Getting adequate sleep seems to better equip you for dealing with stress, so aim for seven or eight hours a night.

The following are lists of pro-inflammatory and anti-inflammatory foods. The pro-inflammatory foods are items that you should work to exclude or eat infrequently. Replace the pro-inflammatory foods with the anti-inflammatory foods, which are listed by food group, and work to include these heart-healthy foods in your diet frequently. Generally, all vegetables and whole intact grains are anti-inflammatory. Remember that variety and moderation are key when it comes to eating all foods, even healthful ones.

Anti-Inflammatory Foods

VEGETABLES		INTACT WHOLE GRAINS
Artichokes	Kiwifruit	Barley
Asian mushrooms	Mangoes	Brown rice
Asparagus	Nectarines	Bulgur
Beets	Oranges	Kasha
Bell peppers	Other citrus fruits	Oats
Bok Choy	Peaches	Quinoa
Broccoli	Pears	Wheat berries
Brussels sprouts	Plums	Wild rice
Cabbage	Pomegranates	FATS
Carrots	Prunes	Expeller pressed organic canola oil
Cauliflower	Raisins	Extra virgin first cold pressed olive oil
Chili peppers	Red grapefruit	Hazelnut oil
Cooking greens	Red grapes	Walnut oil
Cucumber	Strawberries	PROTEINS, BEANS & NUTS
Dark green leafy vegetables	PROTEINS, BEANS & NUTS	SPICES
Garlic	Almonds	Basil
Onions	Black cod	Bay leaves
Orange sweet potatoes	Cashews	Black pepper
Peas	Ground flax seeds	Cayenne pepper
Salad greens	Halibut	Cinnamon
Spinach	Herring	Curry
Tomatoes	Mackerel	Ginger
Tomato products	Omega-3 enriched eggs	Mint
Winter squash	Pecans	Mustard
Zucchini	Pistachios	Nutmeg
FRUITS	Pumpkin seeds	Oregano
Apples	Rainbow trout	Rosemary
Apricots	Salmon (preferably wild)	Sage
Avocado	Sardines	Thyme
Blackberries	Soy beans	Turmeric
Black raspberries	Soy milk	MISCELLANEOUS
Blueberries	Sunflower seeds	Cocoa (non-alkalized)
Cantaloupe	Tofu	Dark chocolate
Cherries	Tuna	Green tea
Cranberries	Walnuts	Plain unsweetened nonfat or low-fat yogurt
	Whitefish	Red wine

Pro-Inflammatory Foods

Partially hydrogenated fats	Peanut oil	Flour	Candies	Fast food
Fractionated oils	Coconut oil	Refined grains	Cookies	Frozen dinners
Margarine	Palm or palm kernel oil	High fructose corn syrup	Crackers	Rice mixes
Corn oil	Beef fat	Sugar	Chips	Stuffing mixes
Cottonseed oil	Chicken fat	Energy bars with coatings	Doughnuts	Frozen desserts
Sunflower oil	Shortening	Protein bars with coatings	Muffins	Snack foods
Safflower oil	Cream	Breads	Pastries	Soft drinks
Soybean oil	Butter	Cakes	Fried foods	Highly processed foods

Nutrient of the Month: Copper



This year I am beginning a new series in this newsletter about nutrients you didn't know you needed. There are a lot of nutrients, especially trace minerals (which are essential nutrients that you require in minute quantities), that you may be surprised to learn are essential to your health. For instance, who knew that copper, a metal and this month's featured nutrient, is critical to your overall wellbeing?

Yes, I'm referring to the stuff that pennies used to be made of and plumbing pipes should be made of. Research shows that this trace mineral plays an important role in metabolic reactions and immune responses in the body.

Copper, for example, aids in the production of hemoglobin (red blood cells) and collagen, which is important in the formation of bones, connective tissue and in wound healing. It is also a factor in maintaining bone health, as indicated by a study in dieting women who seemed to retain more bone calcium when their diets contained higher levels of copper.

Copper is also necessary for certain antioxidant reactions to take place in the body. It aids in the destruction of free radicals that could otherwise lead to cancer and accelerated aging. There is evidence that people with low dietary copper intakes are at higher risk for lung cancer.

Scientists are finding that copper plays an important role in heart health, as well, with an adequate dietary intake being associated with lower triglycerides, overall cholesterol and blood pressure. People with the highest dietary intake of copper seem to also have lower levels of C-reactive protein (CRP), an important marker of inflammation (see previous article for more information on inflammation and CRP).

Since copper is a trace mineral, very little is needed in order to reap its health benefits. Deficiencies are very rare in this country, as are toxicities from consuming too much. Nonetheless, there is a healthy range of copper that we should aim to consume in our diets. Adults should aim to have between 1.5 and 3 milligrams per day. Copper supplements should not be necessary for meeting this goal.

Copper is found in a variety of foods, and even in some drinking water that runs through copper pipes. The best dietary sources of copper, ranked in approximate order are: pacific oysters (cooked), lobster, Alaskan king crab, barley, soybeans, lentils, shiitake mushrooms, cashews, almonds, walnuts, pistachios, clams, shrimp, sunflower seeds, pumpkin seeds, dried fruit, sweet potatoes, potatoes, cooking greens, cocoa and dark chocolate. This month, try my recipes for Quick Minestrone Soup and Heart-Healthy Arugula Salad.

Jessica's Store Appearances Body Fat Testing

Jessica will be offering complimentary body fat testing and answering your questions about weight loss, food and nutrition.

West Hollywood

Tuesday, February 17, 5:00pm

Pacific Palisades

Thursday, February 19, 4:00pm

West Hollywood

Friday, February 20, 12:00pm

Northridge

Saturday, February 21, 11:00am

Newport Beach

Monday, February 23, 3:30pm

Valley Village/North Hollywood

Tuesday, February 24, 1:00pm

Mayfair Hollywood

Tuesday, February 24, 5:00pm

Century City

Thursday, February 26, 12:00pm

Marina del Rey

Thursday, February 26, 5:00pm

Encino

Friday, February 27, 12:00pm

Sherman Oaks

Friday, February 27, 4:00pm

* Testing method is Bioelectrical Impedance and is not appropriate for people with pacemakers or osteoporosis, pregnant women or children. Be well-hydrated for most accurate results.