

## Superfoods vs. Heart Disease

### Eating Colorful Fruits & Veggies Plus Whole Grains Helps Fight America's No.1 Killer

While all foods provide calories and some nutrition, scientists in recent years have identified some "superfoods" which appear to do much more. These foods not only nourish you, but they work with your body to improve your health and prevent common diseases, including heart disease. Superfoods harness the power of phytochemicals in fruits, vegetables, beans and whole grains.

#### Fruits & Vegetables

Fruits and vegetables are great for heart health, which we now know is affected by some of the same oxidation processes involved in aging and cancer. If you thought heart disease was only about cholesterol, you are behind the times.

A 2003 report from the UCLA School of Medicine showed that the phytochemical Lutein, which helps prevent blindness, also reduces the process of Atherosclerosis, or narrowing of the arteries, by about 15%. Lutein-rich spinach is also a good source of folic acid, which has been shown to reduce the risk of heart disease when homocysteine (amino acid) levels are high – common in individuals who have a family history of heart disease.

Garlic is another superfood. Eating one or two cloves a day in foods can help you manage high cholesterol levels. It has been known for centuries to be good for blood pressure and the heart as well as a powerful antioxidant, which helps protect the body against harmful molecules produced when breaking down food.

To get the phytochemicals you need, eat one fruit or vegetable from each of seven color groups every day:

<b>Red:</b>	Tomatoes, Tomato Juice, Tomato Soup, Watermelon, Pink Grapefruit
<b>Green:</b>	Broccoli, Brussels Sprouts, Cabbage
<b>Yellow/Green:</b>	Spinach, Avocado, Kale, Collard Greens
<b>Orange:</b>	Carrots, Butternut Squash, Pumpkin
<b>Yellow/Orange:</b>	Oranges, Pineapple, Banana, Cantaloupe
<b>Purple/Red:</b>	Blueberries, Strawberries, Raspberries, Red Wine
<b>White/Green:</b>	Garlic, Onions, Chives

Each color provides unique substances; eating one from each group every day makes the most of their protective, nutritional properties. Another benefit: *fruits and vegetables fill you up on fewer calories!*



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#### Whole Grains

If you have slightly high cholesterol – a reading of 200 to 240 – then you have company. About 57 million Americans have high cholesterol. Foods with soluble fibers, including whole grains such as oatmeal and soy cereals, can bring cholesterol numbers down.

Your body wants 25 - 35 grams of fiber per day, but most Americans manage to eat just 10 - 15 grams. Whole grains, along with fruits and vegetables, help you reach the desired goal. Fiber reduces cholesterol, fills you up and helps you maintain your weight.

#### Protein

The next superfoods are rich sources of protein, especially soy. While all proteins have amino acids as their building blocks, some protein foods, such as red meat, are very high in fat and calories. Soy, including soy meat substitutes, is a better choice for the same quality of protein. Soy foods are low in fat and rich in phytochemicals called Isoflavones. Soy protein with naturally occurring Isoflavones may help prevent heart disease and cancer.

### QuickTakes

#### DO YOU KNOW YOUR CHOLESTEROL LEVELS?

- **Total Cholesterol:** Cholesterol includes your LDL, HDL and all other lipoproteins. A desirable level is less than 200 mg/dL.
- **Low-Density Lipoprotein (LDL):** LDL is considered the "bad" cholesterol because it transports cholesterol through the body and can build up in the artery walls. An optimal LDL reading is less than 100 mg/dL (less than 70 if you already have heart disease or are at very high risk). The higher your LDL count, the greater your risk of heart attack and stroke.
- **High-Density Lipoprotein (HDL):** HDL is considered the "good" cholesterol because it can reduce your risk of heart disease by transporting cholesterol away from arteries and to the liver, where it becomes harmless. A desired level is 40 mg/dL for men and 50 mg/dL for women. Having HDL cholesterol above 60 mg/dL gives some protection against heart disease.
- **Triglyceride:** Triglycerides are another type of fat in the blood. Hormones regulate the release of these fats to meet the body's energy needs between meals. High levels can increase your risk for heart disease. A desirable level is less than 150 mg/dL.



# The Stress / Heart Connection

*When you think of the stereotypical heart attack candidate, you may well picture an over achieving executive who's always on the go, furiously barking orders at subordinates. But does chronic stress really cause cardiac episodes? Is the average person who's overworked, overscheduled and sometimes emotionally overwhelmed at risk for cardiovascular disease? Find out how stress may be affecting your heart and what you can do to manage it.*

## Effects Of Stress

Certainly, as anyone who has ever over slept an alarm knows, a stressful experience can get your chest pounding. "Stress can have damaging effects to your heart and blood vessels," says Lori Mosca, M.D., Ph.D, author of *Heart to Heart: A Personal Plan for Creating a Heart-Healthy Family*. "Your body releases hormones in response to stress and increases your heart rate; such demand on your heart can constrict your blood vessels."

But the long-term effects of a stressful lifestyle are still being examined. "The American Heart Association and other agencies have not yet designated stress or emotional issues as major risk factors for heart disease because the studies have not shown to be conclusive thus far," points out Gerald Fletcher, M.D., cardiologist at the Mayo Clinic in Jacksonville, Florida. In research, it's difficult to isolate stress from its attendant, unhealthy behaviors. "The stressed person is often times also a person who has other risk factors for heart disease," explains Dr. Fletcher. In other words, that executive's behavior (three-martini lunches, chain-smoking and unused gym membership) might put him at risk for heart disease, so it's hard to know the specific effects of his high-stress lifestyle.

## Negative Emotions & The Heart

Gradually, scientists are piecing together clues about the demonstrated links between stress and heart disease. A 2004 Duke University study of coronary artery disease patients found a link between exposure to negative emotions and the body's ability to control heart rate. Researchers tracked the electrical activity of individuals for two days with portable electrocardiogram machines. "Monitors showed that during periods of mental stress and negative emotions, the hearts showed a reduced capacity to respond," said Duke researcher Dr. Simon Bacon. This study could potentially explain how chronic stress, left unchecked, contributes to the risk of developing heart disease.

So, your fast-paced job is not a proven health hazard. However, if you're concerned about maintaining a healthy heart, stress management is clearly an important part of the big picture. Now, how do you get started? First, look at what's stressing you out, and think about how you might lighten the load. "I believe we can actually prevent a lot of the stress that we have in our lives," declares Dr. Mosca. "We underestimate a lot of the control that we do have over our lives and our schedule." Adjusting your attitude might mean the difference between hyperventilating when something goes wrong and just laughing it off.

Of course, as Dr. Fletcher says, "we will never be able to totally rid ourselves of the stress of American society." But by becoming aware of your own responses to stress, you can control stress rather than letting it control you.

## Lemon-Broiled Salmon & Lentils

Makes: 4 servings | 30-60 minutes

*Salmon with lentils is a French bistro standard. It's also one the heart-healthiest combinations we know.*

### Ingredients:

- ¾ cup green or brown lentils
- 2 teaspoons olive oil, plus more for brushing
- 1 small onion, chopped
- 1 carrot, peeled and cut diced
- 3 cups low-sodium vegetable or chicken broth
- 2 tablespoons Mirin (Japanese seasoning wine), sweet vermouth or orange juice
- ½ teaspoon salt
- Freshly ground black pepper
- 4 small center-cut pieces salmon fillet (about 4 ounces each)
- 1 lemon, cut into wedges

**Nutritional Information (per serving):** 326 Calories; 10g Fat; 1.7g Saturated Fat; 30g Protein; 36g Carbohydrates

### Preparation:

1. Pick over and remove any small stones or broken lentils.
2. Heat olive oil in a large saucepan over medium heat. Cook onion and carrot until soft, about 5 minutes. Add broth, Mirin (or vermouth or orange juice), salt and a grinding of pepper. Bring the liquid to a boil and stir in the lentils. Cover and cook until the lentils are tender, about 20 minutes.
3. While the lentils are cooking, preheat the broiler. Brush the broiler pan with olive oil. Place salmon fillets on the pan and brush them with a little olive oil. Squeeze 1 or 2 of the lemon wedges over the fillets and season with a generous grinding of pepper. Broil fish for 8 to 10 minutes, until cooked through.



**Make Ahead Tip:** *The lentils may be prepared 2 days in advance then stored and covered in the refrigerator.*