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The monthly Navigator is your way of reading about the national health subject of the month and "navigating" your way through what you should know to get and stay healthy. Enjoy!



# Navigator

## February is Heart Awareness Month

## February 2025

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Author: Dr. Paul J. Pavlik, Head of Education, AHWA



### Introduction

Each February, the National Heart, Lung, and Blood Institute (NHLBI) marks American Heart Month by raising awareness about heart health and urging Americans to reduce their risk for developing heart disease. This is a time to reflect on the sobering fact that heart disease remains the number one killer of both women and men in the United States. The GOOD news is you have the power to protect and improve your heart health.

Heart-healthy living involves understanding your risk, making healthy choices, and taking steps to reduce your chances of getting heart disease, including coronary heart disease, the most common type. By taking preventive measures, you can lower your risk of developing heart disease that could lead to a heart attack. You can also improve your overall health and well-being.

Since optimizing cardiovascular health is a leading concern for many adults, maintaining healthy cholesterol levels, LDL particle size, glucose regulation and inflammatory balance are some of the most important targets of integrative therapies.

**Risk Factors for Heart Disease.** The first step toward heart health is understanding your risk of heart disease. Your risk depends on many factors, some of which are changeable and others that are not. Risk factors are conditions or habits that make a person more likely to develop a disease. These risk factors may be different for each person. Preventing heart disease starts with knowing what your risks factors are and what you can do to lower them. Risk factors for heart disease include:

- High blood pressure
- High blood cholesterol
- Overweight or obesity
- Prediabetes or diabetes
- Smoking
- Low regular physical activity lifestyle
- Family history of early heart disease (father/brother diagnosed before 55, or mother/sister before age 65)
- History of preeclampsia (sudden rise in blood pressure and too much protein in the urine during pregnancy)
- Unhealthy eating behaviors
- Age 55 or older for women or age 45 or older for men



The more risks you have, the higher your overall risk. Some risk factors cannot be changed including age, sex, and a family history of early heart disease. Many others, however, can be modified, e.g., being more physically active and eating healthier.

# Risk Factors - Detailed

## • Blood Pressure (BP) Levels.

○ Symptoms from high blood pressure don't usually occur until it causes serious health problems. About 1 in 3 U.S. adults with high blood pressure aren't even aware they have it and are not being treated to control it. That's why it is important to have your blood pressure checked at least once a year. Regular monitoring using home blood pressure is also recommended.

Blood Pressure Category	Systolic and Diastolic Pressure (mm Hg)
Normal	Less than 120 systolic pressure AND Less than 80 diastolic pressure
Elevated	120 to 129 systolic pressure AND Less than 80 diastolic pressure
High Blood Pressure Stage 1	130 to 139 systolic pressure OR 80 to 89 diastolic pressure
High Blood Pressure Stage 2	140 or higher systolic pressure OR 90 or higher diastolic pressure
Hypertensive Crisis	Higher than 180 systolic pressure OR Higher than 120 diastolic pressure <i>Contact your provider immediately.</i>

- To control or lower high BP, your doctor may recommend you adopt a heart-healthy lifestyle that includes:
- Choosing a heart-healthy dietary pattern and foods
  - Being physically active and reducing sedentary behavior
  - Losing weight for people with overweight or obesity problems
  - Quitting smoking
  - Reducing stress
  - Getting enough good-quality sleep
- Controlling your blood pressure can help prevent or delay several serious health problems such as chronic kidney disease, heart attack, heart failure, stroke, and possibly vascular dementia.



• **Blood Cholesterol.** Cholesterol is a fat-like substance that your body needs for good health, but in the right amounts. Lipoproteins are small, round particles made of lipids (fats) and proteins. These particles carry cholesterol in your blood and throughout your body. Two types of lipoproteins include:

- Low-density lipoprotein (LDL), sometimes called “bad” cholesterol
  - High-density lipoprotein (HDL), sometimes called “good” cholesterol
- High levels of “bad” LDL cholesterol may create a buildup of plaque (fatty deposits) in your arteries. This can lead to a heart attack, stroke, or other problems. High levels of “good” HDL cholesterol may lower your risk. HDL cholesterol carries bad cholesterol and plaque to the liver to be flushed out of the body.
- The genes you inherit and your lifestyle habits play a major role in your cholesterol levels.
- Routine blood tests can show whether your cholesterol levels are healthy or unhealthy. To help get your cholesterol levels into the healthy range, you may need heart-healthy lifestyle changes or medicines.

• **Overweight or Obesity.** Being overweight and obesity are caused by factors including eating behaviors, lack of sleep or physical activity, and some medicines, as well as genetics and family history. Obesity is a chronic health condition that raises the risk for heart disease, the leading cause of death in the United States, and is linked to many other health problems, including type 2 diabetes and cancer. Nearly 3 in 4 adults ages 20 or older are either overweight or obese. Nearly 1 in 5 children and teens ages 2 to 19 years are obese. Overweight and obesity can lead to serious health issues for people of all ages. Some people find that their weight goes up when they start taking medicine for another health condition such as diabetes, depression, or high blood pressure. Talk to your provider before you consider stopping any medicine you are taking for another condition that you think is also impacting your weight.

\*American Thyroid Association. <https://www.thyroid.org/media-main/press-room/> - ~:~:text=An estimated 20 million Americans,thyroid disorder during her lifetime.

## Risk Factors - Detailed (continued)

- Healthcare providers use body mass index (BMI) to screen for overweight and obesity in adults. BMI is a measure of body fat based on your weight and height. (It is important to know that body mass index is a screening tool and does not necessarily diagnose body fatness.) For example,
  - Healthy weight is a BMI between the 5th and the 85th percentile.
  - Overweight is a BMI between the 85th percentile and the 95th percentile.
  - Obesity is a BMI in or above the 95th percentile.
- You may have a normal BMI but if you have a large waist circumference, you may have more fat in your abdomen than elsewhere. For example,
  - For men, an unhealthy waist circumference is greater than 40 inches.
  - For women, an unhealthy waist circumference is greater than 35 inches.
- Sometimes other medical conditions or medicines that you take may lead to overweight and obesity. These conditions or medicines may disrupt the delicate balance of hormones that control how we use and store energy. Your provider may order blood tests to rule out one of these conditions.
- Lifestyle changes that can reduce weight include following a heart-healthy eating plan lower in calories and unhealthy saturated fats and increasing physical activity. The Food and Drug Administration (FDA) has also approved medicines (**ask your doctor about the highly effective weight loss programs using GLP-1 drugs such as semaglutide, for example, Ozempic, Wegovy, etc.**) and other treatments for weight loss. Surgery may also be a treatment option but is not available for everyone. Examples of other causes of being overweight or obese are:
  - Cushing's syndrome happens when your body makes too much of the stress hormone cortisol.
  - Hypothyroidism is a condition in which your body does not produce enough thyroid hormone. This slows down your body's use of energy (food), called metabolism.
  - Polycystic ovary syndrome (PCOS) is a condition that affects the ovaries and results in hormone imbalance. PCOS can also be ruled out using ultrasound, a test where sound waves are used to create images of organs.



- **Prediabetes or Diabetes.** Diabetes is a disease that occurs when your blood glucose, also called blood sugar, is too high. Glucose is your body's main source of energy. Your body can make glucose, but glucose also comes from the food you eat. Insulin is a hormone made by the pancreas that helps glucose get into your cells to be used for energy. If you have diabetes, your body doesn't make enough—or any—insulin, or doesn't use insulin properly. Glucose then stays in your blood and doesn't reach your cells.
  - Diabetes raises the risk for damage to the eyes, kidneys, nerves, and heart and is also linked to cancer. Taking steps to prevent or manage diabetes may lower your risk of developing heart problems.
  - The most common types of diabetes are type 1, type 2, and gestational diabetes.
    - **Type 1 diabetes.** Your body makes little or no insulin. Your immune system destroys cells in your pancreas that make insulin. It is usually diagnosed in children and young adults, although it can appear at any age. People with type 1 diabetes need to take insulin every day to stay alive.
    - **Type 2 diabetes.** Your body doesn't use insulin properly. It is the most common type of diabetes. You develop type 2 diabetes if you have risk factors such as being overweight or obese, and a family history of the disease. You can develop type 2 diabetes at any age, even during childhood.
    - **Gestational diabetes.** Can develop during pregnancy. This typically goes away after the baby is born.

## Risk Factors - Detailed (continued)

- **Prediabetics** have blood glucose levels higher than normal but not high enough to be diagnosed as type 2 diabetes. This gives you a higher risk of developing type 2 diabetes and heart disease in the future.
- **Other types of Diabetes.** A less common type of diabetes, called monogenic diabetes, is caused by a change in a single gene. Diabetes can also come from having surgery to remove the pancreas, or from damage to the pancreas due to conditions such as cystic fibrosis or pancreatitis.
- **Women and Heart Disease.** Women generally get heart disease about 10 years later than men do, but it's still women's #1 killer. After menopause, women are more likely to get heart disease, in part because estrogen hormone levels drop. Women who have gone through early menopause, either naturally or because they have had a hysterectomy, are twice as likely to develop heart disease as women who have not gone through menopause. Middle age is also a time when women tend to develop other risk factors for heart disease, such as high blood pressure. Preeclampsia, which is high blood pressure during pregnancy, raises your risk of developing coronary heart disease later in life. It is a risk factor that you can't control. However, if you've had the condition, you should monitor your blood pressure and try to lower other heart disease risk factors.

## Your Healthcare Provider and Blood Testing

Risk factors such as high blood pressure or high cholesterol generally don't have obvious signs or symptoms. A crucial step in determining your risk is to see your provider for a thorough checkup and risk assessment. Your provider may use a risk calculator to estimate your risk of having a heart attack, having a stroke, or dying from a heart or blood vessel disease in the next 10 years or throughout your life. The risk calculator will also evaluate your risk factors based on your cholesterol levels, age, sex, race, and blood pressure. It also factors in whether you smoke or take medicines to manage your high blood pressure or cholesterol. Your doctor may recommend that you wear a heart monitor to evaluate your heart rhythm to monitor whether you may have issues such as atrial fibrillation (A-Fib), etc.



Ask your provider about your risk for heart disease at your annual checkup. Since your risk can change over time, keep asking each year.

**Blood Tests for Heart Health.** Your doctor may order cardiac blood tests if you have a family history of heart disease, high cholesterol and/or high triglycerides, or heart disease, etc. Examples include:

- **Lipid profile:** Measures levels of different types of cholesterol and triglycerides in your blood. High levels of LDL ("bad" cholesterol) and triglycerides can increase your risk of heart disease.
- **Lipoprotein (a):** Measures level of this type of LDL cholesterol in your blood. High levels may indicate a genetic predisposition toward heart disease.
- **C-reactive protein (CRP):** Checks for a protein linked to inflammation of the arteries.
- **Homocysteine:** Too much homocysteine may increase your risk of heart disease and stroke.
- **BNP (B-type natriuretic peptides):** Level of a hormone in blood; if elevated, can be a sign of heart failure.
- **Cardiac enzyme:** Help diagnose or rule out a heart attack.
- **Clotting screen:** Measures how quickly your blood clots. Increases may help predict stroke possibilities.
- **Plasma ceramides:** Measures levels of ceramides in blood, which are linked to atherosclerosis.
- **Troponin T:** Is a protein found in heart muscle. A high-sensitivity troponin T test helps health care professionals diagnose a heart attack and the risk of heart disease.\*

\*Mayo Clinic Staff, Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/heart-disease/in-depth/heart-disease/art-20049357>



## Symptoms of a Heart Attack

A heart attack can cause a number of symptoms, including chest pain, shortness of breath, and pain in other parts of the body.

- **Chest pain**

- Pain or discomfort in the center or left side of the chest
- Pain that feels like pressure, squeezing, fullness, or aching
- Pain that lasts for more than a few minutes or that goes away and comes back

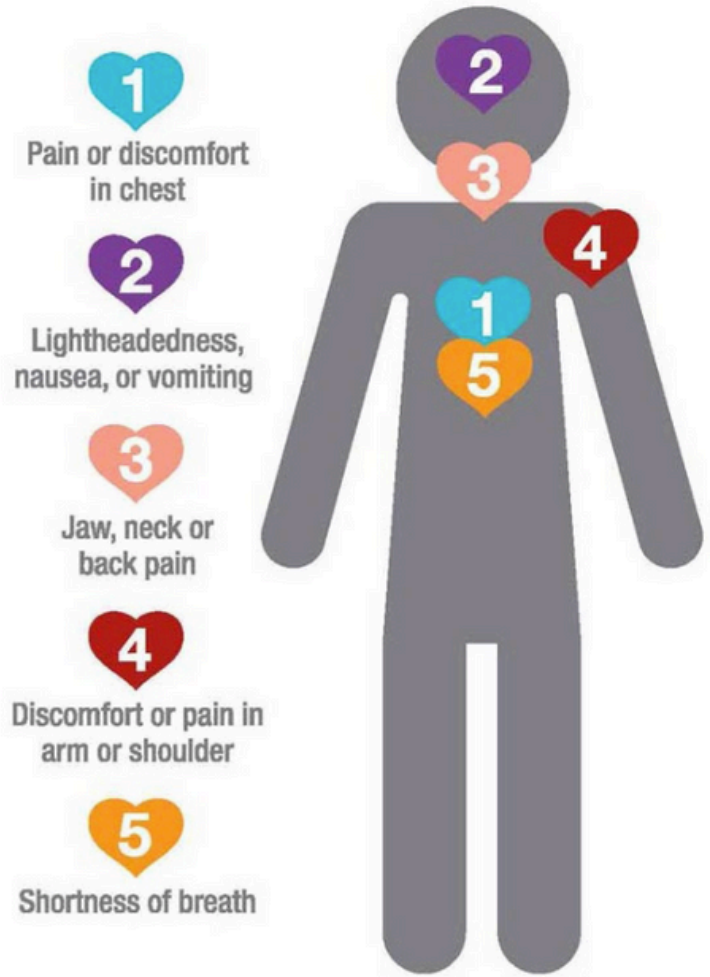
- **Pain in other parts of the body**

- Pain in the jaw, neck, or back
- Pain in one or both arms or shoulders
- Pain that spreads from the chest to other parts of the body

- **Other symptoms**

- Shortness of breath, with or without chest discomfort
- Feeling weak, light-headed, or faint
- Breaking out in a cold sweat (clammy)
- Feeling sick (nausea) or being sick (vomiting)
- An overwhelming feeling of anxiety (similar to a panic attack)
- Coughing or wheezing

## The Five Signs of Heart Attack:



\* American Heart Association, Inc.

**Don't wait to get help – call 911 if you experience any of these heart attack warning signs. This is almost always the fastest way to get lifesaving treatment.**



\* American Heart Association, Inc.

# The Role of Chiropractic Care in Cardiovascular Disease

## How Chiropractic Care Helps Your Heart

Chiropractic care can significantly help with heart health. It can help lower blood pressure, reduce chest pain, and improve heart rate variability. Chiropractic care can also help prevent heart attacks.

The heart and blood vessels are connected to the central nervous system by millions of tiny connections. Major attachments include the vagus nerve (which comes from the brain) and the autonomic nervous system (which has input into the entire body). These nerves control heart rate and blood pressure. Since chiropractic care positively impacts these nerves, benefits to the heart can be significant.



One specific chiropractic treatment modality includes adjusting the Atlas vertebra. Unlike other vertebrae, which interlock one to the next, the Atlas (also known as C-1) relies solely upon soft tissue (muscles and ligaments) to maintain alignment; therefore, it is uniquely vulnerable to displacement. Displacement of C-1 can occur without pain and thus, often goes undetected and untreated. Why is this important? Realigning the Atlas vertebra (C-1) can help reduce and maintain lower blood pressure.\*

## Heart Health Benefits With Chiropractic Treatments

- 1. Lowers blood pressure.** Studies show a significant improvement in high blood pressure, a major heart attack risk, when chiropractors adjust the 1st vertebra, called the Atlas.
- 2. Improves nerve function of the heart.** This is called the autonomic tone, and it impacts the heart, lungs, gastrointestinal tract, kidneys, bladder, sex organs and just about every other part of the body.
- 3. Decreases blood markers of inflammation.** The more you have inflammation, the greater your risk of cardiovascular events.
- 4. Improves heart rate variability.** Heart rate variability (HRV) is a measure of how much your heart rate fluctuates. Chiropractic can help with heart rate variability.
- 5. Decreases chest pain.** Chest pain is often musculoskeletal in nature and may not be related to heart disease. Most patients can be quickly assessed, and once a doctor determines that the heart is not involved, curative chiropractic therapy can proceed. Non-cardiac chest pain may also include costochondritis, rib misalignment, or thoracic vertebrae subluxation.
- 6. Improves lung function.** Chiropractic care has been proven effective in patients with asthma and emphysema, and poor lung function has been linked to heart failure.
- 7. Improves blood flow.** Chiropractic adjustments can help improve blood flow and circulation, which can help the heart.\*\*



\* Bakris, George, MD. University of Chicago Medical Center.

\*\* Wolfson, Jack, MD and Waldron Chiropractic. February 15, 2020. <https://waldronchiropractic.com/the-role-of-chiropractic-care-in-cardiovascular-disease/>

# Vitamins and Supplements

Some vitamins and supplements that are commonly promoted for heart health include:

- **Omega-3 fatty acids.** Fatty acids are found in fish and marine algae and may help prevent heart disease and strokes.
- **Magnesium.** This mineral helps regulate muscle function, including the heartbeat, and may also lower blood pressure and improve blood flow.
- **Coenzyme Q10 (CoQ10).** Some research suggests that CoQ10 may help lower blood pressure and improve cholesterol levels and may replace the body's natural CoQ10 if the patient is taking statins.
- **Vitamin D.** This nutrient may help reduce the risk of heart failure, and also strengthens bones and supports the immune system.
- **Folate (folic acid).** Some studies suggest that folic acid may reduce the risk of ischemic stroke and other cardiovascular events.
- **Fiber.** Fiber supplements may help lower LDL (bad) cholesterol and increase HDL (good) cholesterol.
- **Vitamin E.** This may support cellular functions in the heart, and may also boost the immune system.



**It is important to note**, however, that Johns Hopkins and the National Institute of Health researchers reviewed clinical trials involving hundreds of thousands of subjects; some were given vitamins and others a placebo. They found no evidence of benefits to cardiovascular disease for those subjects using vitamins and/or supplements to prevent cardiovascular disease. The review concluded that supplements are unnecessary. One possible exception is omega-3 or fish oil capsules. This type of fatty acid, found in fish and marine algae, can help the heart. Two servings of fatty fish per week provides enough for most people. For those who don't get enough omega-3 in their diet, supplements may be helpful.\*

With this information from Johns Hopkins and the NIH, it is highly recommended that patients check with their healthcare providers for their recommendations before taking vitamins or supplements.

## When to Seek Emergency Help.

**If you are concerned you are having a heart attack, you should seek emergency help immediately or call 911.**

**See Page 8 for additional important information to know!!!**



\*Miller, Edgar, MD. Johns Hopkins Medicine. <https://www.hopkinsmedicine.org/health/wellness-and-prevention/the-truth-about-heart-vitamins-and-supplements>

Sunkara, Anusha and Raizner, Albert. Houston Methodist Hospital. National Institute of Health. <https://pmc.ncbi.nlm.nih.gov/articles/PMC6822653/>

*Many thanks to the Centers for Disease Control (CDC), Cleveland Clinic, the Mayo Clinic, Johns Hopkins Medicine, The National Institute of Health, The American Heart Association, Dr. Jack Wolfson, MD, Waldron Chiropractic, Dr. George Bakris, MD, Dr. Edgar Miller, MD, Drs. Anusha Sunkara, MD and Albert Raizner, MD, The Houston Methodist Hospital, and Heart.org Newsroom for providing some of the documentation and images for the this month's information relating to Cardiovascular Health.*



# IMPORTANT - Cardiac Arrest vs. Heart Attack -

## Do You Know the Difference? (see infographic below)

People often use the terms **Cardiac Arrest** and **Heart Attack** interchangeably, *but they are not the same.*

- **CARDIAC ARREST** occurs when the heart malfunctions and stops beating unexpectedly. Cardiac arrest is an “ELECTRICAL” problem.
- A **HEART ATTACK** occurs when blood flow to the heart is blocked. It is a “CIRCULATION” problem.

It’s important to catch them early and call 911 immediately for help. The sooner medical treatment begins, the better the chances of survival and preventing irreversible heart damage.\*

### CARDIAC ARREST VS. HEART ATTACK

People often use these terms interchangeably, but they are not the same.

#### WHAT IS CARDIAC ARREST?

**CARDIAC ARREST** occurs when the heart malfunctions and stops beating unexpectedly.

Cardiac arrest is triggered by an electrical malfunction in the heart that causes an irregular heartbeat (arrhythmia). With its pumping action disrupted, the heart cannot pump blood to the brain, lungs and other organs.

**Cardiac arrest is an “ELECTRICAL” problem.**

#### WHAT IS A HEART ATTACK?

**A HEART ATTACK** occurs when blood flow to the heart is blocked.

A blocked artery prevents oxygen-rich blood from reaching a section of the heart. If the blocked artery is not reopened quickly, the part of the heart normally nourished by that artery begins to die.

**A heart attack is a “CIRCULATION” problem.**

#### WHAT HAPPENS

Seconds later, a person becomes unresponsive, is not breathing or is only gasping. **Death occurs quickly if the person does not receive immediate CPR.**

Symptoms of a heart attack may be immediate and may include intense discomfort in the chest or other areas of the upper body, shortness of breath, cold sweats, and/or nausea/vomiting. More often, though, symptoms start slowly and persist for hours, days or weeks before a heart attack. Unlike with cardiac arrest, the heart usually does not stop beating during a heart attack. **The longer the person goes without treatment, the greater the damage.**

#### WHAT TO DO

A person’s chance of surviving cardiac arrest can be doubled or tripled if CPR is provided immediately. First, call your local emergency number and start CPR right away. Then, if an Automated External Defibrillator (AED) is available, use it as soon as possible. If two people are available to help, one should begin CPR immediately while the other calls your local emergency number and finds an AED—there is a 10% drop in survival each minute, which is why CPR is so important. EMS staff are also trained to revive someone whose heart has stopped.

**The heart attack symptoms in women can be different than men (shortness of breath, nausea/vomiting, and back or jaw pain).**

#### WHAT IS THE LINK?

Most heart attacks do not lead to cardiac arrest. But when cardiac arrest occurs, heart attack is a common cause. Other conditions may also disrupt the heart’s rhythm and lead to cardiac arrest.

**Even if you’re not sure it’s a heart attack, call your local emergency number. Every minute matters! It’s best to call your local emergency number to get to the emergency room right away. Emergency medical services (EMS) staff can begin treatment when they arrive. Patients with chest pain who arrive by ambulance usually receive faster treatment at the hospital, too.**

**CARDIAC ARREST is a LEADING CAUSE OF DEATH.**

Cardiac arrest affects thousands of people annually with about 75% of them occurring in the home.

**Fast action can save lives.**

For more information on American Heart Association CPR training classes in your area go to [heart.org/cpr](https://heart.org/cpr).

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• Heart.org Newsroom. February 1, 2025. <https://newsroom.heart.org/events/february-is-american-heart-month-national-wear-red-day-black-history-month-and-more>