



Buzz, Body & Bites

A newsletter for actively aging adults
Virginia Cooperative Extension Family & Consumer Sciences
February 2022

Atherosclerosis – What it is and why you should care

What is atherosclerosis (ath-er-o-scle-ro-sis)?

Atherosclerosis is a build-up of plaque in the arteries, the blood vessels that carry oxygenated blood in the body. Plaque is made up of cholesterol, fatty substances, calcium, and fibrin (a clotting material in the blood). As plaque builds up, the arteries narrow, blocking blood flow and reducing the oxygen and nutrients reaching the body. A blood clot can form around the narrowed artery, or a piece of the plaque can break off and be carried down the vessel by the bloodstream until it gets stuck. In either case, the artery can be completely blocked cutting off blood flow to that area of the body that it supplies.

How does atherosclerosis start?

Development of atherosclerosis is a slow process that can begin early in life. Damage to the artery's inner wall may be the event that begins the formation of plaque. This damage can be caused by high blood pressure, cigarette smoking, inflammation, or elevated lipids in the blood. Once the inner wall is damaged, blood cells and other substances clump at the injury site, and cholesterol collects forming fatty deposits over time. The resulting plaque grows and hardens, narrowing the artery.

What are potential consequences of atherosclerosis?

Consequences of atherosclerosis depend on the location of arterial plaque and the tissues affected. Plaque may affect arteries of the heart, brain, pelvis, legs, arms, or kidneys. When atherosclerosis narrows the arteries of the heart, it can result in coronary artery disease, chest pain (angina), or a heart attack. If arteries close to the brain are affected it can decrease blood to the brain causing a transient ischemic attack (TIA) or stroke. Peripheral artery disease (PAD) can result if arteries supplying blood to the arms or legs are affected, and atherosclerosis in the blood vessels leading to the kidneys can cause chronic kidney disease.

What are the symptoms?

Symptoms of atherosclerosis do not appear until the arteries become so narrow that blood flow is reduced to the affected organ. The symptoms depend on which arteries are affected. Chest pain or pressure, sudden weakness in the arms or legs, slurred speech, temporary loss of vision, or drooping face muscles, leg pain when walking, and hypertension may be symptoms of atherosclerosis in heart, brain, arms and legs, or kidneys.

Talk to your doctor if you experience any of these symptoms or think you may have atherosclerosis. Early diagnosis and treatment can stop worsening of atherosclerosis and prevent a heart attack, stroke, or other medical emergency.

Author: Carlin Rafie, PhD, RDN

Risk Factors and Prevention of Atherosclerosis

Factors that increase your risk for developing atherosclerosis include:

- High blood pressure
- High cholesterol
- Diabetes
- Obesity
- Smoking and other tobacco use
- An unhealthy diet
- Lack of exercise
- Sleep apnea
- A family history of heart disease

Checklist of lifestyle behaviors recommended for the prevention and treatment of atherosclerosis. How many of these do you practice?

- ✓ If you smoke, QUIT
- ✓ Eat healthy foods
- ✓ Exercise regularly
- ✓ Maintain a healthy weight
- ✓ Regularly check and maintain a healthy blood pressure*
- ✓ Regularly check and maintain healthy cholesterol and blood sugar levels

*See Buzz, Body & Bites February, 2021 issue

Salmon Patties

This is an easy-to-make recipe that can help you meet the dietary recommendation to eat fish 2 to 3 times a week. Salmon is a good source of omega-3 fatty acids that are heart healthy fats too. Makes 8 servings

Ingredients:

- 1 tablespoon canola oil
- 15 ounces canned salmon (preferably low sodium or no salt added)
- 1 bell pepper, diced
- 1 cup whole-wheat bread crumbs
- 2 eggs, beaten
- 1 teaspoon onion powder
- 1/8 teaspoon ground black pepper

Instructions:

1. Heat oil in a skillet to medium heat.
2. While the skillet is heating, add salmon to a mixing bowl. Use a fork to crumble salmon into very small pieces.
3. Add bell pepper, bread crumbs, eggs, onion powder, and ground black pepper to the mixing bowl and combine with salmon.
4. Mix thoroughly and shape into patties.
5. Add the patties to the skillet and cook until both sides are nicely browned, about 5 minutes on each side.

Stretch Band Exercises

Beginning in the March issue, we will present a series of exercises that use a resistance (stretch) band. Resistance band exercises are a great way to strengthen your muscles.

They are inexpensive, light weight, portable, and can be used with both standing and sitting.

They come in different sizes, strengths, and lengths. Some resistance bands have handles, some are looped in a circle, and some come in a roll for you to cut to your desired length.

You can purchase resistance bands online through Amazon, eBay, or any store that offers fitness equipment. A simple browser search will give you some results.

Consider purchasing a stretch band for the next issue, so you can practice our featured stretch band exercises.

Solve the Maze

Heart Health Word Scramble:

Test your puzzle skills by unscrambling these heart health-related words!

1. CLSROEEHOTL _____

2. ERHTA _____

3. YOGNEX _____

4. RRATYE _____

5. AELPUQ _____

6. ODBOL _____

7. ISBTDEEA _____

8. MSIGNOK _____

9. ODCKELBE _____

10. NEAYUSRM _____

Answer Key:

1. cholesterol 2. heart 3. oxygen 4. artery 5. plaque 6. blood 7. diabetes 8. smoking

9. blocked 10. aneurysm

Resources

American Heart Association

Atherosclerosis - <https://www.heart.org/en/health-topics/cholesterol/about-cholesterol/atherosclerosis>

Cardiovascular Media Library - <https://watchlearnlive.heart.org/>

Help! I Want to Quit Smoking! - <https://www.heart.org/en/healthy-living/healthy-lifestyle/quit-smoking-tobacco/help-i-want-to-quit-smoking>

Arteriosclerosis/atherosclerosis - Symptoms and Causes - Mayo Clinic <https://www.mayoclinic.org/diseases-conditions/arteriosclerosis-atherosclerosis/symptoms-causes/syc-20350569>

Editors: April Payne, MS; Carlin Rafie, PhD, RD; and Vanessa Santiago, MBA

Peer reviewers: Jane Henderson, MEd; Susan Prillaman, MS; Aisha Salazar, MS, and Pegi Wright, MEd

Subscribe at: <mailto:buzzbodybites-g@vt.edu>

Visit Virginia Cooperative Extension: ext.vt.edu

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and local governments. Its programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, military status, or any other basis protected by law.

2022

HNFE-1010NP-A