

Health Insights

February 2023

Smoking can be Damaging to the Heart

"It is well known that smoking causes blocked arteries, leading to coronary heart disease and stroke," said study author Dr. Eva Holt of Herlev and Gentofte Hospital, Copenhagen, Denmark. "Our study shows that smoking also leads to thicker, weaker hearts. Smokers have a smaller volume of blood in the left heart chamber and less power to pump it out to the rest of the body. The more you smoke, the worse your heart function becomes. The heart can recuperate to some degree with smoking cessation, so it is never too late to quit."

According to the World Health Organization, tobacco kills more than eight million people each year. Cigarette smoking is responsible for 50% of all avoidable deaths in tobacco users, with half of these due to atherosclerotic cardiovascular diseases such as heart attack and stroke. Studies have also shown that smoking is associated with a higher risk of heart failure, where the heart muscle does not pump blood around the body as well as it should. This means that the body does not receive the oxygen and nutrients it needs to work normally. The study explored whether smoking was related to changes in the structure and function of the heart in people without cardiovascular disease, and the effect of changing smoking habits.

This study used data from the 5th Copenhagen City Heart Study which investigated cardiovascular risk factors and diseases in the general population. A total of 3,874 participants aged 20 to 99 years without heart disease were enrolled. A questionnaire was used to obtain information on smoking history and to estimate pack-years, which is the number of cigarettes smoked through life.

Participants had an ultrasound of the heart, which provides information about its structure and how well it functions. The researchers compared the echocardiography measures of current smokers versus never-smokers after adjusting for age, sex, body mass index, hypertension, high cholesterol, diabetes, and lung function.

The average age of participants was 56 years and 43% were women. Nearly one in five participants were current smokers (18.6%), while 40.9% were former smokers and 40.5% had never smoked. Compared to never-smokers, current smokers had thicker, weaker and heavier hearts. Increasing pack-years were associated with pumping less blood. The study found current smoking and accumulated pack-years were associated with worsening of the structure and function of the left heart chamber - the most important part of the heart. Over a 10-year period, those who continued smoking developed thicker, heavier and weaker hearts that were less able to pump blood compared to never-smokers and those who quit during that time. The study indicates that smoking not only damages the blood vessels but also directly harms the heart. The good news is that some of the damage is reversible by giving up smoking.

European Society of Cardiology. "Smoking is even more damaging to the heart than previously thought." ScienceDaily. ScienceDaily, 25 August 2022. <www.sciencedaily.com/releases/2022/08/220825104813.htm>



Your Health and Hypertension

What is Hypertension?

High blood pressure, or hypertension, is blood pressure that is higher than normal. The higher your blood pressure levels, the higher your risk of other health problems - such as heart disease, heart attack and stroke. This condition is prevalent in the United States. Nearly 1 out of every 2 adults have hypertension, and of those 108 million American adults, only about 1 in 4 have their condition under control.

What Are the Causes?

Risk factors that can increase your risk of high blood pressure include health conditions, your lifestyle and your family history. Hypertension can also be caused by a preexisting condition, such as a heart condition or kidney abnormality.

How Can You Address It?

High blood pressure usually has no symptoms, so the only way to know if you have it is to get your blood pressure measured by a health care professional. However, there are practices that you can do every day to lower blood pressure. Some of these include:

- **Maintaining a healthy weight** - Strive for a body mass index between 18.5 and 24.9.
- **Eating healthier** - Eat a lot of fruit, vegetables and low-fat dairy.
- **Getting active** - Try to get at least 90 to 150 minutes of aerobic or dynamic resistance exercise per week. Three sessions of isometric resistance exercises per week can also help.
- **Limiting alcohol use** - Drink no more than one to two drinks a day.

If you're concerned about hypertension, contact your doctor to have your levels checked, and discuss how to control your blood pressure and lower your risk for other health problems.

Mental Health Moment

The Impact of Sleep on Mental Health

Not only is your physical health affected when you don't get enough sleep, but it also takes a toll on your mental health. In fact, mental health and sleep are so closely related that a lack of sleep can often lead to issues such as anxiety or depression.

Side Effects of Lack of Sleep

According to the American Academy of Sleep Medicine, you should get at least seven to eight hours of sleep per night. Lack of sleep or poor-quality sleep can increase the risk of mental health disorders. Depression and anxiety are some of the most common mental health issues linked to lack of sleep. Depression is a depressed mood or loss of interest in activities, causing significant impairment in daily life.

According to the Anxiety and Depression Association of America, nearly 50% of people with depression are also diagnosed with an anxiety disorder. Anxiety refers to feelings of tension, worried thoughts, and sometimes even physical changes such as increased blood pressure or heart rate. Generally, these or other types of symptoms are recurring with anxiety.

Tips For A Better Night's Sleep

Consider the following tips for better sleep:

- Avoid consuming alcohol before bedtime.
- Keep a consistent sleep schedule.
- Establish a bedtime routine.
- Exercise regularly.
- Maintain a healthy diet.
- Set a bedtime.
- Go to bed only when you're tired.
- Make your bedroom quiet and relaxing.
- Limit exposure to bright light in the evenings.
- Turn off electronic devices at least 30 minutes before bedtime.





Kale & Red Quinoa Soup

Ingredient List:

- 1 can (14.5-ounce) no-salt-added whole tomatoes, undrained
- 1 can (14.5-ounce) no-salt-added Great Northern beans, rinsed, drained
- 4 cups coarsely chopped kale (about ½ of a 5-ounce bunch), discard large stems
- 2 cups fat-free, low-sodium vegetable broth
- ½ cup red quinoa, rinsed
- 1 medium carrot, cut into ½-inch slices (about ½ cup)
- 1 medium rib of celery, cut into ½-inch slices (about ½ cup)
- ½ cup chopped red onion
- 1 Tbsp olive oil
- 2 medium minced garlic cloves
- ¾ tsp dried herbes de Provence or dried thyme, crumbled
- ½ tsp crushed red pepper flakes
- ½ tsp smoked paprika (sweet or hot)
- ¼ tsp salt
- ¼ tsp pepper

Instructions:

Combine all the ingredients in the slow cooker. Cook while covered on low for 6 to 8 hours or on high for 2 to 3 hours, until the vegetables and quinoa are tender.

Serving size: 1 1/2 cups.

Calories: 245, Carbohydrates: 40g, Protein: 10g, Total Fat: 6g, Sodium: 294mg

American Heart Association . (n.d.). Kale and Red Quinoa Soup. recipes.heart.org. Retrieved January 5, 2023, from <https://recipes.heart.org/en/recipes/kale-and-red-quinoa-soup>

February Quiz

Smoking Can be Damaging to the Heart

1. Which of the following is a harmful effect of smoking?
 - a. Coronary heart disease
 - b. Weaker heart
 - c. Increased chance of stroke
 - d. All of the above
2. The heart can recuperate to some degree with smoking cessation, so it is:

Your Health and Hypertension

3. Which of these is NOT a way to lower blood pressure?
 - a. Eating healthier
 - b. Increasing sodium intake
 - c. Limiting alcohol use
 - d. Getting active
4. How common is hypertension in the United States?
 - a. 1 out of 2 adults
 - b. 1 out of 5 adults
 - c. 1 out of 10 adults
 - d. Everyone experiences it

The Impacts of Sleep on Mental Health

5. What is one tip you could use to improve your sleep?

See page 4 for quiz answers

Healthy Habits Calendar

February 2023 - Heart Health

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Welcome to February! Start the Walking Challenge today.	2 Groundhog Day	3 Fitness Friday: Go for a walk with a family member or friend.	4
5	6 Motivation Monday: Listen to a guided meditation & write down 20 things you're grateful for.	7	8 Wellness Wednesday: Make a meal plan for the upcoming week.	9	10 Challenge Check-in: How many minutes have you spent walking this week?	11
12 Sunday Sleep Habits: Eating late at night can affect sleep. Avoid snacking a before bed.	13	14 Valentine's Day	15 Wellness Wednesday: Do one thing today to benefit your mental health.	16	17	18 Social Saturday: Enjoy breakfast or brunch with friends.
19	20 President's Day	21 Tuesday's Health Tip: Improve your sleep by creating a more restful environment.	22 Ash Wednesday	23 Thoughtful Thursday: Express gratitude to a co-worker.	24	25
26 Sunday Sleep Habits: Meditate or journal before bed.	27	28 Thirsty Tuesday: Try replacing soda with flavored water.				

Answers to Quiz:

- Q1: d. All of the above
- Q2: Never too late to quit
- Q3: b. Increasing sodium intake
- Q4: a. 1 out of 2 adults
- Q5: Keep a consistent sleep schedule / Set a bedtime / Only go to bed when you're tired / Establish a bedtime routine

4 Week Challenge:

Walking for Heart Health

Regular physical activity can help you keep your heart healthy. 30 minutes a day of brisk walking or other forms of cardiovascular exercise can help your heart in the following ways:

- Improving blood circulation, which reduces the risk of heart disease
- Keeping weight under control
- Helping in the battle to quit smoking
- Lowering blood cholesterol levels
- Managing or preventing high blood pressure
- Contributing to stress management
- Reducing coronary heart disease in women by 30-40%
- Reducing risk of stroke by 20% in moderately active people and 27% in highly active people
- Establishing good heart-healthy habits in children which counters the conditions (i.e., obesity, high blood pressure, poor cholesterol levels, poor lifestyle habits, etc.) that lead to heart attack and stroke later in life.

Try to accumulate 150 minutes of brisk walking or a similar form of cardiovascular exercise each week. Record the number of minutes under each day. If you are not currently physically active, start slowly and increase the length of your activity over time.

American Heart Association - Physical Activity Improves Quality of Life.

	<i>Week 1</i>	<i>Week 2</i>	<i>Week 3</i>	<i>Week 4</i>
	Minutes of Activity	Minutes of Activity	Minutes of Activity	Minutes of Activity
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				
Monday				
Tuesday				
Weekly Total				