

Heart TALK

Heart-healthy and Stroke-free Living with Dr. Amy L. Doneen, DNP, ARNP

February 2020



*Thoughts from
Dr. Amy*

Is Targeting Brain Inflammation the Key to Preventing Alzheimer's and Stroke?



For decades, cholesterol was demonized as the No. 1 threat to heart, brain and arterial health. Then a growing body of evidence began to zero in on another villain. “The four horsemen of the medical apocalypse — coronary artery disease, diabetes, cancer, and Alzheimer’s — may be riding the same steed: inflammation,” a Harvard paper theorized in 2006. Since then, recent landmark studies have shown that chronic systemic inflammation, which we call “fire,” is both a cause of heart attacks and strokes and an important treatment target to help prevent them.

In 2017, the CANTOS trial generated worldwide headlines by reporting that therapies to lower inflammation — without lowering cholesterol — reduced risk for cardiovascular events and cancer by up to 50 percent. An even newer landmark study by 24 of the world’s top experts on Alzheimer’s disease (AD) and other forms of dementia, published in *Lancet*, was the first to report that these memory-robbing brain disorders may be preventable with strategies that include reducing brain inflammation. Here is a look at the latest discoveries and how to use them to keep your brain healthy and your memory sharp.

What is chronic inflammation and why is it so dangerous?

Inflammation is a normally protective response to injury and infection. If you stepped on a rusty nail, cells in the affected area would mobilize immune system troops to battle the invading bacteria. Called “the inflammatory cascade,” this call to arms involves more than 20 proteins that blast the invaders with toxins to kill them.

Chronic inflammation harms rather than heals because the immune system attack never stops. The result is like being shot by “friendly fire” in an endless war raging within the body. In 2012, two

landmark studies published in *Lancet* were the first to show that chronic inflammation actually causes cardiovascular disease (CVD), the leading killer of Americans. This fiery process has been linked to so many other deadly or debilitating conditions that some scientists call it “the root of all diseases.”

Heart attacks and strokes are triggered when a diseased artery becomes so inflamed that it can no longer contain the plaque smoldering inside. Like a volcano spewing molten lava, inflammation causes a breach in the artery wall, leading to the formation of a

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Women and Heart Attacks — Get the Lifesaving Facts!



More than two-thirds of Americans don't know that heart disease is the leading cause of death in women, according to a new survey by the Cleveland Clinic. Most respondents were also dangerously ignorant about how and when to get checked for this disorder, which kills one U.S. woman every 80 seconds. That is more than the toll from all forms of cancer combined.

Another scary statistic: Younger women (those under age 55) are suffering heart attacks at a higher rate now than they did 20 years ago, while the opposite is true among U.S. men in this age group, a 2019 study revealed. Why is this happening — and what do women of all ages need to know to protect their cardiovascular health? Here are the facts you need to know and the best ways to be screened for heart risks.

WHY ARE HEART ATTACKS ON THE RISE AMONG YOUNGER WOMEN?

Part of the problem is unequal care and treatment. [A study of young heart attack survivors](#) ages 18 to 55 found that almost all of them had at least one of these modifiable risk factors: high blood pressure, smoking, obesity, diabetes and high cholesterol. Yet only 53 percent knew they were at risk before the event and even fewer had discussed their risks or how to reduce them with their medical providers.

The study also found that that women were 11% less likely to be informed of their cardiac danger and 16% less likely to be counseled on risk factor modification, such as lifestyle changes, than men of the same age. An accompanying editorial stated that, "the rising epidemic of [cardiovascular disease] in

younger women may be attributable in part to a lack of risk assessment and preventive therapy."

Another issue is that most women — and some medical providers — don't know the right age to start screening for cardiovascular disease (CVD). [A recent survey by Orlando Health](#) found that 92 percent of women thought, on average, that the right age to begin these crucial heart checkups was 41. Actually, the American Heart Association (AHA) recommends beginning screening for cardiovascular risk at age 20.

THE BEST TESTS TO CHECK FOR CARDIOVASCULAR DANGER

ALL women are at potential risk for CVD, which often causes no symptoms until it becomes severe enough to trigger a heart attack or stroke. Arterial disease can start to develop when women are in their 20s or even teens. Early detection and treatment, however, can stop the disease in its tracks.

Since heart attacks can occur in young, seemingly healthy people with few — or none — of the traditional risk factors, the BaleDoneen Method does not rely solely on risk-factor analysis. We also use laboratory and imaging tests to directly check each patient for

hidden signs of CVD and increased risk for developing it.

Two [peer-reviewed studies](#) have shown [that the BaleDoneen Method can prevent, stabilize or even reverse CVD](#). Our precision-medicine approach includes personalized steps to help women of all ages achieve a health span that matches their lifespan and live well without fear of heart attacks and strokes. Tests we use to check for cardiovascular peril include the following:

Blood pressure

Nearly half of American adults (46%) have high blood pressure under [new guidelines](#) from the AHA — and many are undiagnosed or don't have their condition under control. Often called "the silent killer," hypertension typically causes few or no symptoms as it wreaks slow mayhem on your blood vessels and organs, such as your heart, brain and kidneys. If untreated, it is the leading risk for stroke and a major contributor to heart attacks.

The new numbers to know: Normal blood pressure is now defined as a reading below 120/80. If even one of your numbers is above that, work with your provider to reduce it. Treatments include weight loss, lifestyle changes

February Recipe • A Proven Recipe for Optimal Cardiovascular Health

What can you do now to reduce your risk for heart attack and stroke? Here is our science-based recipe with ten “ingredients” to keep your heart, brain and the more than 60,000 miles of blood vessels in your body healthy:



1. GET EDUCATED

With optimal medical care, all heart attacks and strokes are potentially preventable. To detect this disease at the earliest, most treatable stage, the [BaleDoneen Method](#) uses advanced lab and imaging tests to check for arterial plaque (disease) and [Red Flags](#) for increased risk for developing it.



2. MOVE MORE

Exercise has such powerful benefits that it’s been called “the ultimate wonder drug.” Aim for at least 150 minutes of moderate physical activity a week, such as walking, biking, or swimming. Check with your medical provider before starting a new workout to make sure it’s right for you.



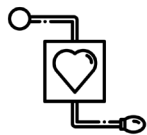
3. HEALTHY LIFESTYLE

An optimal lifestyle [reduces CVD and stroke risk by up to 90%](#)! That includes watching your weight and eating a heart-healthy diet. A high-sugar diet [triples risk for fatal CVD](#), while a diet that’s high in fruit and vegetables has the opposite effect.



4. NO NICOTINE

Nicotine use and exposure shortens your life expectancy by 10 years.



5. HAVE YOUR BLOOD PRESSURE CHECKED

Know your numbers and aim for a reading of 115/75.



6. GET CHECKED FOR ALL FORMS OF HARMFUL CHOLESTEROL

Ask your medical provider to check your levels of apolipoprotein B-100 (ApoB). Wider use of this \$20 blood test, which can be done at the same time as the standard test, could prevent 500,000 heart attacks and strokes over the next ten years, [a recent study found](#). Also get a one-time \$20 test to check for elevated levels of lipoprotein (a) [an inherited cholesterol disorder that triples risk for heart attacks](#).



7. GET CHECKED FOR PREDIABETES

Also known as “insulin resistance,” this disorder is [the underlying cause of 70% of heart attacks](#). We recommend the two-hour oral glucose tolerance test as the most accurate blood sugar test.



8. SEE YOUR DENTAL PROVIDER

[A landmark BaleDoneen study](#) was the first to identify high-risk oral bacteria as a contributing CAUSE of CVD. Regular cleanings are vital to remove harmful bacteria from your system. Taking [excellent care of your teeth](#) has also been linked to a longer, healthier life!



9. SLEEP WELL

Six to eight hours a night is the sweet spot to help keep your heart healthy.

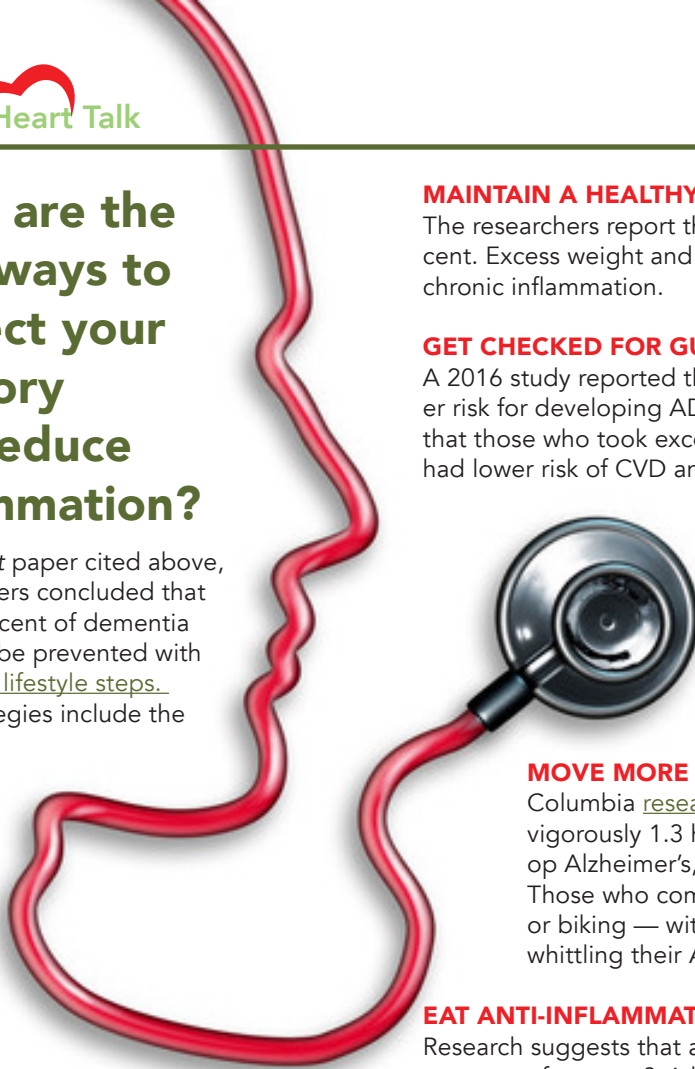


10. SAVE A LIFE

Tell a friend and teach a friend this recipe. You could save a life!

What are the best ways to protect your memory and reduce inflammation?

In the *Lancet* paper cited above, the researchers concluded that up to 35 percent of dementia cases could be prevented with [nine healthy lifestyle steps](#). Proven strategies include the following:



MAINTAIN A HEALTHY WEIGHT

The researchers report that obesity raises dementia risk by up to 92 percent. Excess weight and belly fat also greatly increase risk for developing chronic inflammation.

GET CHECKED FOR GUM DISEASE

A 2016 study reported that people with severe PD have a 70 percent higher risk for developing AD. Conversely, a large study of older adults found that those who took excellent care of their teeth and gums lived longer and had lower risk of CVD and other fatal diseases.

GET DEPRESSION TREATED

The *Lancet* researchers report that it's "biologically plausible" that depression could be a dementia risk because it "affects stress hormones, neuronal growth factors, and [brain] volume." Recent [studies](#) also show that chronic inflammation plays a major role in depression.

MOVE MORE

Columbia [researchers reported](#) that older adults who exercised vigorously 1.3 hours a week were 33 percent less likely to develop Alzheimer's, compared to couch potatoes of the same age. Those who combined physical activity — such as jogging, hiking, or biking — with the Mediterranean diet got even greater benefit, whittling their AD risk by 60 percent over the 5½-year study.

EAT ANTI-INFLAMMATORY FOODS

Research suggests that a diet high in fruit and vegetables, with moderate amounts of omega-3 rich oily fish (such as salmon, tuna or herring), and low in red meat and sweets, helps lower risk for dementia, heart attacks, strokes, and diabetes. For the best cardiovascular protection, we recommend [a diet based on your DNA](#).

ASK YOUR MEDICAL PROVIDER FOR INFLAMMATION TESTING.

Testing patients for inflammation and treating those who have this dangerous disorder have been key parts of the BaleDoneen Method for more than a decade. We use inexpensive, widely available blood and urine tests to check for this fiery process.

CONTINUED FROM PAGE 1

clot. If the clot blocks blood flow to the brain, the result is an ischemic (clot-induced) stroke. If the clot obstructs flow in a coronary artery, the result is a heart attack.

WHO IS AT GREATEST RISK FOR DEVELOPING CHRONIC INFLAMMATION?

Chronic inflammation is fueled by such lifestyle-related disorders as obesity or having a large waistline, smoking, stress, lack of exercise, an unhealthy diet, insulin resistance and poor oral health. A landmark, [peer-reviewed BaleDoneen study](#), published in *Postgraduate Medical Journal*, was the first

to identify high-risk oral bacteria from periodontal disease (PD) — and the systemic inflammation they cause — as a contributing cause of arterial disease.

Also known as "gum disease," PD is a chronic oral infection that affects the majority of Americans over age 30, many of whom are undiagnosed and unaware of their cardiovascular danger. A [2016 analysis that pooled results from studies of more than 7,000 people](#) found that those with infected gums were 2½ times more likely to suffer heart attacks as those with healthy gums — and other studies have found similar links with heightened risk for stroke.

HOW DOES BRAIN INFLAMMATION CONTRIBUTE TO ALZHEIMER'S DISEASE?

Inflammation and oxidative stress have also been linked to the buildup of brain deposits of beta-amyloid. Many scientists believe that accumulation of this sticky compound in the brain is the primary cause of AD, with the buildup initially disrupting communication between neurons and ultimately killing them.

According to this theory, known as "[the amyloid hypothesis](#)," the development of the amyloid plaques that are the hallmark of AD activates immune cells, leading to inflammation that eventually destroys brain cells.



Watch Dr. Amy Doneen's Free Webinar on Heart Disease and Stroke Prevention for Women

February 12, 2020

5:30 p.m.PST/8:30 p.m. EST

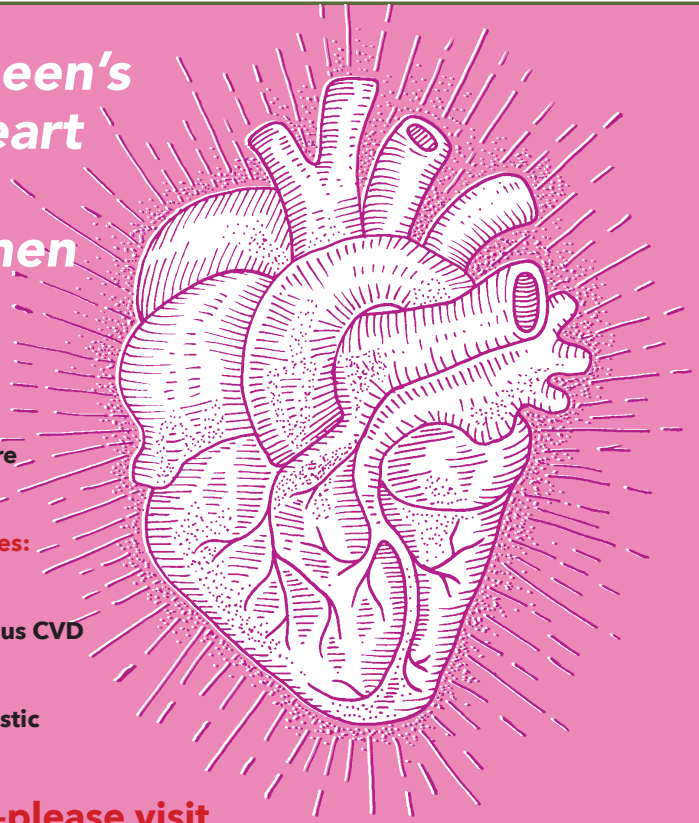
You are invited to a special event for the public and healthcare providers, "Learn how to STOP Women's Heart Disease in its Tracks!" All are welcome to join - invite a friend or colleague!

Presented by Dr. Amy Doneen, the one-hour webinar discusses:

- Red Flags for heart attack and stroke risk
- Are heart attacks different for women than men?
- Which tests women MUST get to check for hidden, dangerous CVD
- Why inflammation is the key to risk
- Surprising root causes of CVD and inflammation
- A 5-step action plan to make sure YOU don't become a statistic
- The latest science of heart attack and stroke prevention

To learn more—and access the webinar—please visit

baledoneen.com/attend/about-preceptorship/free-webinar-on-heart-attack-and-stroke-prevention-for-women/



CONTINUED FROM PAGE 2

and, in many cases, medications. A large study found that for each 10-point drop in systolic blood pressure (the top number), heart attack risk fell by 50%!

Inflammation

Detecting and treating inflammation have been at the heart of our method for more than a decade. We use a "fire panel" of inexpensive blood and urine biomarker tests to check for this condition, which has been shown to be the spark that can ignite heart attacks in people with diseased arteries. In 2017, the landmark CANTOS trial found that anti-inflammatory therapies reduce risk for heart attack, stroke, other cardiovascular events and cancer by up to 50%. We also recommend [natural ways to "fireproof" your arteries](#).

Cholesterol

Most patients assume that the standard cholesterol test, known as "a lipid profile" or "coronary risk panel," checks for all forms of dangerous cholesterol. However, most doctors don't test patients for a common inherited-cholesterol disorder: [elevated levels of lipoprotein \(a\), a type of cholesterol that triples risk for heart attacks](#). Statins don't work well for this disorder, but it can be treated with niacin (vitamin B) and other therapies. We also recommend having a \$20 blood test to check your levels of another lipid, [apolipoprotein B-100 \(ApoB\)](#).

Blood sugar

It's very common for people to be diagnosed with diabetes or insulin resistance (IR), a pre-diabetic condition, shortly after they suffer a heart attack. While these conditions may sound

unrelated, [IR is the root cause of 70 percent of heart attacks](#). BaleDoneen and other studies show that the most accurate test for IR and diabetes is the 2-hour oral glucose tolerance test. In the time it would take you to watch a movie, you can find out if you have IR, which can often be treated or reversed with lifestyle changes.

Waist measurement

A waistline wider than 35 inches for a woman is one of the leading indicators of [metabolic syndrome](#) (a dangerous cluster of heart attack risks). Talk to your medical provider about the best exercise-and-weight-loss plan to trim your waist – and reduce risk for heart attack, stroke and diabetes.

Carotid intima-media thickness (cIMT)

This [noninvasive 15-minute, FDA-approved test](#) uses ultrasound to measure the thickness of the lining of the largest artery in your neck – and can also detect arterial plaque (disease). A study of 13,000 people found that adding carotid thickness and plaque to traditional heart risk factors significantly improved the accuracy of 10-year risk predictions for heart attack and stroke.

Genetic testing

About 50% of Americans carry genes that raise risk for heart attacks. If you have a family history of heart disease, discuss genetic testing with your medical provider. In addition, your DNA can also help guide [the best diet-and-exercise plan](#) to optimize your heart health, as discussed more fully in the BaleDoneen book, *Beat the Heart Attack Gene: The Revolutionary Plan to Prevent Heart Disease, Stroke and Diabetes*.