

# Heart TALK

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

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## Thoughts from Dr. Amy

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A painless 15-minute test can reveal hidden heart attack and stroke risk!

Did you know that an ultrasound exam of your neck arteries is one of the best ways to check for atherosclerosis (plaque in the artery wall that can lead to a heart attack or stroke)? As I discuss [in this Fox Health News article](#), this FDA-approved screening, carotid intima media thickness (cIMT), can uncover hidden risk for these events in seemingly healthy people.

For example, when Wayne Williams consulted me four years ago, he had normal cholesterol and blood pressure, ate a healthy diet, and felt fine. Yet a 15-minute cIMT test showed that the then 48-year-old was at moderate-to-high risk for a heart attack or stroke in the next ten years. "I learned then that [atherosclerosis] was a silent killer," he says.

This disease can be missed if medical providers only check traditional risk factors.

Nearly 75% of heart attacks occur in people with "normal" levels of LDL (bad) cholesterol, according to [a study of 136,905 people](#). What's more, 50% of the heart attack patients studied had "optimal" LDL

levels.

Another scary fact: Nearly 70% of heart attacks strike people who have never been diagnosed with heart disease, highlighting the value of being screened for potentially lethal plaque, so it can be treated in time to prevent a heart attack or stroke. Had Wayne gone undiagnosed and untreated, there was an 83% risk that he would have suffered one of these events by age 58.

While an ultrasound of the neck may seem like a surprising way to tell if you might be headed for a heart attack or stroke, the carotid arteries, which lie just below the surface of the skin on each side of your neck, offer an easily accessible "window" to blood-vessel health, without exposure to X-rays. CIMT measures the thickness of the two inner layers--called the intima and the media -- of these arteries.


Most important, this screening can detect atherosclerosis lurking in the artery wall, which we call "the cat in the gutter." As Dr. Bradley Bale and I report in our book, [Beat the Heart Attack Gene](#), these deposits are like a hidden predator waiting to pounce on its unsuspecting prey -- by leaping out and causing a heart attack or stroke. CIMT can also be used to find out how "old" your arteries are, compared to your chronological age. Having arteries that are eight or more years "older" than you are signals future risk for coronary heart disease (CHD), while finding plaque means you already have it.

A recent study of more than 10,000 people found that adding intima-media thickness and the presence of plaque to traditional risk factors dramatically boosted the accuracy of 10-year predictions of heart attack and

stroke risk. In fact, 22% of the patients were reclassified as being at higher or lower risk when cIMT and plaque were taken into account. The study compared initial predictions with the patients' actual rate of cardiovascular events over a decade.

Who should be screened with cIMT? I served on the Society of Atherosclerosis Imaging and Prevention's expert committee that developed these recommendations for appropriate use of cIMT:

- Screening patients whose 10-year risk for CHD is moderate (6 to 20%)
- Screening patients ages 30 or older with metabolic syndrome
- Screening patients with diabetes or a family history of early CHD
- Screening people with two or more of these risk factors: low HDL (good) cholesterol or high LDL, diabetes, age (being over 45 for a man or over 55 for a woman), and a family history of CHD.

More 

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## 15-Minute Test | Do You Have the Heart Attack Gene?

If cIMT reveals plaque, as happened with Wayne, treatment may include lifestyle changes, medication and supplements. Today, the plaque in Wayne's arteries is completely stabilized and calcified. That means the "cat" has been captured and caged, enabling Wayne to live well without fear of a heart attack or stroke.

*To Your Health ~ Dr. Amy*

### Do You Have the Heart Attack Gene?

More than 50% of Americans carry one or more gene variants that dramatically raise their risk for heart attacks and strokes. The good news, however, is that even people with high-risk genes can avoid cardiovascular (CV) events by following the right personalized prevention plan. Not only can genetic testing reveal CV threats that may be lurking in your DNA, but it can also reveal the best strategies to treat them.

Here's a look at 3 newly available blood or saliva genetic tests I recommend to all of my patients and the results can help optimize CV health, as the experiences of my patient, Wayne Williams, highlight.

**9P21 Genotype: Identifies Carriers of the Heart Attack Gene.** This test checks for the 9P21 gene, often called "the heart attack gene," because it independently predicts risk even when family history, diabetes, high blood pressure and obesity are taken into account. About 25% of Caucasians and Asians are homozygous for 9P21, meaning they've inherited the gene from both their mother and father. This genetic profile more than doubles risk for having a heart attack or developing heart disease at a young age, and hikes risk for abdominal aortic aneurysm (AAA) 74%, compared to non-carriers of this gene. Fifty percent of Caucasians and Asians are heterozygous for 9P21. With only have one copy of the gene, their risk for these disorders is halved.

*How the results can be used to protect arterial health:* If you're a 9P21 carrier, reduce your heart attack risk with the genetically guided 7-step prevention plan in Chapter 10 of my book, [Beat the Heart Attack Gene](#). We also advise carriers to be screened for AAA at age 40, with an ultrasound test discussed in the book. If the results are normal, the test should be repeated every five

years, while abnormal results require more frequent follow-up.

**KIF6 Genotype: Predicts Statin Response and Heart Attack Risk.** This test checks for a KIF6 gene variant that raises risk for heart attack, stroke and death from CV causes by up to 55% in untreated carriers, compared to untreated non-carriers. Your KIF6 genotype also predicts whether or not you'll benefit from the statins most likely to be prescribed for heart attack prevention.

*How the results can be used to protect arterial health:* If you're on Lipitor--the world's most commonly prescribed statin--or Pravachol as your sole therapy, there is a 40% chance you are getting no CV protection at all, even if your cholesterol levels look great. Three large studies show that these drugs only reduce risk in the 60% of patients with the KIF6 variant, such as Wayne, while failing to prevent CV events in the 40% of patients without it. It's vital for medical providers to know your KIF6 status to make sure the statin they prescribe will effectively lower heart attack risk.

**Apo E Genotype: Predicts Heart Disease and the Best Diet to Avoid It.** Apo E genotype influences lifetime risk for heart disease and Alzheimer's, as well as how your body metabolizes nutrients in your diet, including fats and carbs. The Apo E gene has three variants (E2, E3 and E4), resulting in six possible genotypes, Apo E 2/2, Apo E 2/3, Apo E 2/4, Apo E 3/3, Apo E 3/4 and Apo E 4/4.

*How the results can be used to protect arterial health:* Some Apo E genotypes make foods that are healthy for people with other Apo E genotypes harmful. For example, the 25% of the population with the Apo E 3/4 or 4/4 genotypes, which are linked to the highest heart disease and Alzheimer's risk, should follow a very low-fat diet (no more than 20% fat) and limit or avoid alcohol, while those with the 2/4 or 3/3 genotypes (found in 60% of people) benefit most from the Mediterranean diet that is often advised for lowering heart attack and stroke risk. Wayne's diet should contain about 25% fat. To learn more about the best diet-and-exercise plan for your DNA, read chapter 12 of [Beat the Heart Attack Gene](#), now available in paperback and Kindle editions on Amazon.



### Grilled Tuna Salade Nicosie

This light, heart-healthy dish is perfect for a summer brunch or al fresco family dinner.

#### Ingredients - Serves Four

Canola oil cooking spray  
 3/4 pound small red potatoes, diced  
 1/2 pound green beans, trimmed  
 2 tablespoons olive oil  
 2 tablespoons red wine vinegar  
 1 tablespoon water  
 1/8 teaspoon salt (optional)  
 1/2 medium clove garlic, minced  
 1/8 teaspoon dried red pepper flakes  
 1 tablespoon chopped fresh oregano leaves  
 4 tuna steaks  
 4 cups (2 oz) baby spinach leaves  
 16 pitted kalamata olives, chopped

Steam potatoes and beans 6 minutes until just tender. Drain and rinse with cold water, shaking off excess liquid. Combine olive oil, vinegar, water, salt, garlic, red pepper flakes and oregano in small jar to make vinaigrette. Cover tightly and shake well to blend. Set aside 1/4 cup vinaigrette and brush the rest (1 tablespoon) over fish.

Coat a grill pan with cooking spray and heat over medium-high flame until hot. Grill tuna over high heat 3 minutes on each side or until medium-rare or to desired doneness. Divide spinach on four serving plates. Arrange potatoes, green beans, and olives over greens. Drizzle one tablespoon vinaigrette on each salad. Top with tuna and enjoy!

Adapted from the National Cancer Institute [Wellness Challenge website](#). Each serving contains 345 calories, 14 grams of fat, 29 g protein, 5 g of fiber, and 26 g carbohydrates.