

# Heart TALK

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

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## ARE YOU GETTING THE RIGHT DOSE OF YOUR MEDICATION?

**If you're one of the 226 million Americans** who take prescription drugs to treat heart disease or other conditions, a new genetic test called MyPGt can help your healthcare provider personalize your care, so you get the safest and most effective medications at the right dose. Soon to be available at the Heart Attack & Stroke Prevention Center, the test checks for gene variants that affect your response to hundreds of commonly prescribed medications. Not only can your results help you avoid drugs that don't work, or are likely to cause side effects, but the one-time saliva test can also offer guidance on medications that may be prescribed in the future, thus enabling your provider to fine-tune your medical care throughout your life, based on your unique DNA. Here's a closer look at MyPGt and why the Bale-Donneen Method recommends it as part of our precision-medicine approach to heart attack and stroke prevention.



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*Thoughts from Dr. Amy*

### WHAT IS PRECISION MEDICINE?

Instead of using a "one-size-fits-all" approach to healthcare, precision medicine, also known as "personalized medicine," is a leading-edge approach, long used by the dynamic BaleDoneen Method, that bases treatment and disease prevention on each person's unique genes, lifestyle and environment. Pharmacogenetics (PGt) is the study of how a person's genes affect his or her response to medications.

**BaleDoneen takeaway:** What works for one patient may not work for another, so all treatments must be personalized for each unique individual, instead of basing decisions about which medication to prescribe on the average results from a large clinical trial.

### HOW DOES THE MYPGT TEST WORK?

Your healthcare provider collects a sample of your DNA, using a simple oral-rinse method, and sends it to the MyGenetx laboratory for analysis. You will also be asked for a list of your current medications, so a personalized report can be sent to your provider. The test covers many genes that determine how your body processes a wide range of common medications, including those often prescribed for heart disease, high blood pressure, chronic pain, depression and other disorders.

**BaleDoneen takeaway:** What's exciting about this one-time test is that the results are available forever, since your genes don't change. As new medications are considered for heart attack and stroke prevention, all can be filtered through this matrix before prescribing to make sure there are no adverse effects or drug interactions for that patient.

### WHAT COULD I LEARN FROM THIS TEST TO IMPROVE MY HEALTHCARE?

Here's an example of how MyPGt testing could be helpful, says Dave Vigerust, PhD, chief science officer of MyGenetx Clinical Laboratory. "Let's say you need a statin to lower your cholesterol. The traditional approach is to prescribe a low dose and gradually adjust it up or down, trying to find the sweet spot. However, you might have a gene variant that makes that statin ineffective for you or increases the risk for side effects, such as severe muscle pain. Without this test, it could take weeks or even months of trial-and-error, and many medical visits, to find the right statin and the most appropriate dose."

In addition, adds Vigerust, some patients have genes that cause them to metabolize certain drugs faster than average, so they need a higher dose, while others process those drugs more slowly and need a lower dose to avoid adverse reactions.

**BaleDoneen takeaway:** Results from the test take the guesswork out of choosing the right prescription drugs and dosages for each individual, which could lead to faster and safer medical care to protect and enhance your arterial health.

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## A Dangerous Heart Attack, Stroke and Diabetes Risk You Can **DIAGNOSE YOURSELF**

**E**ighty-five percent of Americans have never heard of metabolic syndrome or don't know it's a cluster of risk factors for heart attack, stroke and type 2 diabetes, a national health survey reported. And of the nearly 250,000 people polled, only 0.6% thought they had this pre-diabetic condition themselves. While that may make it sound as if metabolic syndrome is very rare, actually it affects 26% of adults — nearly 50 million Americans.

**Here's why you need to know if you have metabolic syndrome:** it triples your risk for heart attack and stroke, and quadruples it for type 2 diabetes. This cluster of cardiovascular risk factors that often strike in tandem is so easy to detect that you can even diagnose yourself, using a few basic numbers that every patient should know. And if you do have metabolic syndrome, all of the risk factors are highly treatable, with simple steps advised by the BaleDoneen Method.

### A GANG OF FIVE **CARDIOVASCULAR VILLAINS**

Do you have metabolic syndrome? Making the call is a bit like baseball: three strikes and you're out. If you have three or more of these diagnostic criteria then you have metabolic syndrome — and therefore, you also have insulin resistance, the root cause of 70% of heart attacks and almost all cases of type 2 diabetes.



#### A LARGE WAIST

Fifty-three percent of people with the syndrome are saddled with excessive belly fat, a study by the Centers for Disease Control found. A waist measurement above 35 inches for a woman, or above 40 inches for a man, is one "strike" for most people. However, for Asians, the abnormal numbers are 31 inches and 35 inches respectively for women and men.

#### **BALEDONEEN RECOMMENDATION**

Combine aerobic exercise, such as walking, jogging, cycling or swimming, with muscle strengthening activities, such as lifting weights or resistance training. Both types of exercise [help dieters avoid regaining belly fat after weight loss](#), suggesting that regular workouts are essential for maintaining a healthy weight — and waistline. We advise at least 30 minutes of exercise daily. Check with your healthcare provider before starting a new fitness regime to make sure it's right for you.



#### HIGH BLOOD PRESSURE

Also called hypertension, high blood pressure affects one in three Americans and ranks as the leading risk factor for stroke. If your pressure is 130/85 mmHg or higher, you have a strike. Decades of data show this level of pressure (or higher) damages arteries, raising your risk for heart attacks, strokes and kidney failure.

#### **BALEDONEEN RECOMMENDATION**

Have your blood pressure checked regularly and talk to your healthcare provider if even one of your numbers is abnormal (a reading of 120/80 or higher). Treatments for high blood pressure typically include lifestyle and dietary changes and in many cases, medication.



#### LOW HDL CHOLESTEROL

HDL (high-density lipoprotein) is the "good" cholesterol. A HDL level below 50 mg/dL for women, and under 40 mg/dL for men, is another strike for metabolic syndrome. Many people who are headed for arterial disease and diabetes will run low HDL

levels. If you are being treated for low HDL, you have a strike even if the levels are above 50 and 40 mg/dL.

#### **BALEDONEEN RECOMMENDATION**

If you use tobacco in any form, here's yet another reason to kick this deadly habit: Several studies link quitting to a rise in HDL levels. Eating oily fish (such as salmon, tuna and sardines) or other foods that are high in omega-3 fatty acids helps boost levels of good cholesterol, while reducing inflammation.



#### HIGH TRIGLYCERIDES

Like cholesterol, triglycerides are a type of fat (lipid) found in your blood. If your triglyceride level is 150 mg/dL or above, you have acquired another strike. If you are being treated for high triglycerides, it is a strike even if the level is below 150 mg/dL.

#### **BALEDONEEN RECOMMENDATION**

If you're overweight, losing 5% to 10% of your body weight (10 to 20 pounds if you weigh 200) can lower your triglycerides by 20%, according to [a scientific statement from the American Heart Association](#). Limiting or avoiding sugar, and increasing the fiber in your diet, also are helpful.

#### HIGH FASTING BLOOD SUGAR



Fasting means you have not consumed anything with calories for at least ten hours. A level of 100 mg/dL or higher counts as a strike. Fasting blood sugar levels of 100 mg/dL to 125 mg/dL indicate that you're prediabetic, while a level above 125 mg/dL indicates diabetes.

#### **BALEDONEEN RECOMMENDATION**

To prevent or reverse prediabetes, the treatment that trumps all others is regular exercise. Working out 30 minutes daily, five or more times a week, has been proven to prevent prediabetes from progressing to full-blown diabetes 60% of the time, while the success rate rises to 70% if regular exercise is combined with moderate weight loss (5% to 7% of your body weight), large studies report.

## • November Recipe •

### Curried Turkey Carrot Soup



This quick, easy, tasty recipe is a great way to enjoy leftover turkey. An excellent source of heart-healthy vitamins and minerals, turkey can help lower cholesterol and keep insulin levels stable, research suggests. A diet high in fresh fruit and vegetables lowers risk for stroke. For a vegetarian option, replace turkey with tofurkey or tofu and use vegetable broth.

#### INGREDIENTS

- 2 tablespoons unsalted butter
- 2 cups minced onion
- 2 garlic cloves, minced
- 1 cup chopped celery
- 2 cups chopped carrots
- 4 teaspoons curry powder
- 2 tablespoons white flour
- 4 cups of chicken or turkey broth
- 2 bay leaves
- 2 green apples, cored, peeled and chopped
- 1/4 teaspoon black pepper
- 4 cups of cooked turkey, chopped
- Chopped chives or parsley for garnish
- Plain yogurt for garnish (optional)

Melt butter in large, thick-bottom pot. Sauté onions, garlic, celery and carrots over low heat until softened, about 5 to 7 minutes, stirring frequently. Add curry powder and cook for one minute. Add flour and cook 2 minutes. Add broth, bay leaves, apples and pepper. Bring to a simmer. Cook for 10 minutes until mixture starts to thicken. Add turkey and return to a simmer. Garnish with chives or parsley, and serve with a dollop of yogurt in each bowl, if desired. Serves six.

Adapted from [simplyrecipes.com](http://simplyrecipes.com) and [myrecipes.com](http://myrecipes.com).