RESTORING THE HEART’S RHYTHM WITH ABLATION p. 3

How Eating Fresh Can HELP YOUR HEART p. 4

Are You a HEART-HEALTH WHIZ? p. 6
Dear Friends,

SUMMERTIME in central Pennsylvania means an abundance of farm-fresh produce, and eating fresh foods helps hearts stay healthy. That’s why this issue of Straight from the Heart from PinnacleHealth CardioVascular Institute provides tips on adding fruits and vegetables to your summer menus. Eating fresh helps keep your heart-health numbers—like cholesterol and body mass index—in target range.

In other heart-health news, on page 3, Harrisburg resident Ruth Wolgemuth shares the story of her battle with a common heart rhythm disorder, atrial fibrillation. According to the American Heart Association, Ruth is one of 2.7 million Americans afflicted with atrial fibrillation.

Fruits and vegetables aren’t the only things growing in our region. Five new cardiologists are joining our stellar team—one that has been nationally recognized over and over again. Most recently, PinnacleHealth has been honored for excellence in quality and care with a Gold Performance Achievement Award for heart failure and a Silver Plus Quality Achievement Award for stroke by the American Heart Association’s Get With the Guidelines program. The team has also been recognized by the Society of Thoracic Surgeons with the highest, elite rating of three stars for excellent outcomes.

We hope you are enjoying all the good things about summer, and we hope that this issue of our magazine helps you on your path to heart health.

Yours in good health,

MICHAEL A. YOUNG
PRESIDENT & CEO, PINNACLEHEALTH

SUMMARY

- About 15 to 20 percent of people who have strokes also have A-FIB, a type of heart rhythm disorder.
- An estimated 2.7 million Americans are living with atrial fibrillation, or A-FIB.

STRAIGHT FROM THE HEART
SUMMER 2015

To learn more about A-fib and to read a patient success story, see Page 3.
A Smooth and Steady Beat

With the help of a minimally invasive, outpatient procedure available at PinnacleHealth, retired Harrisburg resident Ruth Wolgemuth has taken control of her debilitating atrial fibrillation symptoms.

A VERY COMMON type of arrhythmia, atrial fibrillation is also known as irregular heartbeat. Symptoms of atrial fibrillation include:

- Chest pain
- Fatigue
- Shortness of breath
- Rapid heartbeat or fluttering in chest
- Light-headedness

In the winter of 2014, Ruth was taking four different combinations of medications to keep her atrial fibrillation, or A-fib, in check. Due to frequent and recurrent episodes of A-fib, Ruth’s regular PinnacleHealth CardioVascular Institute cardiologist, Ira Sackman, MD, referred her to Chinmay Patel, MD, FACC, a cardiac electrophysiologist with PinnacleHealth CardioVascular Institute. Dr. Patel recommended that she undergo catheter ablation of A-fib, a procedure that eliminates the abnormal electrical impulses that cause A-fib episodes.

A STEADY HEART

Dr. Patel performed Ruth’s catheter ablation in February 2014 using a leading-edge procedure.

“At PinnacleHealth, we use radiofrequency for catheter ablation, which reduces the risk of phrenic nerve injury when compared to other methods,” Dr. Patel says. “While this type of ablation is relatively new and upcoming, it’s been shown in several clinical trials to be highly effective for patients who do not respond to medication. Pills can suppress the symptoms at times, but catheter ablation can play a role in actually changing the disease process. Ruth was able to have the procedure in the morning and go home after an uneventful overnight stay in the hospital.”

While Ruth was nervous about the procedure at first, it has enabled her to get back to her daily life—including traveling and spending time with family—without worrying about her heart.

“I was apprehensive, because I didn’t know anything about the procedure,” Ruth says. “Now I wish I had done it sooner, because everything steadied out after that. I sleep better because I’m not worried about having a heart attack or stroke. I have peace of mind.”

If you are suffering from a heart-rhythm disturbance, ask your doctor if you should see a cardiologist at PinnacleHealth CardioVascular Institute.

IN ADDITION TO THE CATHETER ABLATION PROCEDURE DETAILED HERE, PINNACLEHEALTH IS ONE OF 25 HOSPITALS IN THE U.S. AND EUROPE TESTING HYBRID CARDIAC ABLATION IN A CLINICAL TRIAL CALLED DEEP. THE TRIAL STUDIES RESULTS IN PATIENTS WHO HAVE A SURGICAL ABLATION PROCEDURE FOLLOWED BY A CATHETER ABLATION PROCEDURE. EARLIER THIS YEAR, PINNACLEHEALTH ENROLLED AND TREATED THE FIRST TWO PATIENTS IN THE WORLD IN THIS TRIAL.
Go Fresh FOR YOUR HEART

Farm-fresh foods, which can help protect your heart and blood vessels from heart disease, could provide just the boost your diet needs.

MORE THAN 85 MILLION AMERICANS suffer from some form of cardiovascular disease, the nation’s No.1 cause of death among both men and women. If you’re one of them—or would like to avoid joining their ranks—a diet rich in fresh foods could be a great step toward better health.

“Patients with heart concerns should maintain general overall good health, and one way to do that is by eating well,” says Kim Fowler, MSN, RN, CNS-BC, CHFN, Heart Failure Program manager with PinnacleHealth. “A diet rich in fresh fruits and vegetables can help maintain good blood pressure and cholesterol, as well as a healthy body mass index (BMI).”

Consider the health benefits of these fresh and flavorful foods—just three examples of the many summer produce offerings available in our area:

BLUEBERRIES

- Just a handful of blueberries can contain your daily recommended levels of dietary fiber, which reduces your risk of heart disease.
- Blueberries contain high amounts of manganese, which helps your body process cholesterol.
- Blueberries are low in sodium, which means they won’t raise your blood pressure.

SPINACH

- Much like blueberries, spinach is high in manganese, with a single cup supplying 84 percent of your recommended daily intake.
- Spinach is also a good source of omega-3 fatty acids, which decrease your risk of arrhythmia, or abnormal heartbeat, and have been shown to lower blood pressure.
- Fiber makes an appearance in spinach as well, helping reduce your heart-disease risk.

BEANS

- Snap beans and lima beans are in season in Pennsylvania during the summer, and both are high in fiber.
- Beans help you feel more full for longer after a meal, which is good for reducing your caloric intake.
- Beans are low in saturated fat and have been shown to reduce cholesterol.

THE NUMBERS TO KNOW

Cholesterol, body mass index (BMI) and blood pressure are often referred to as “need-to-know” numbers related to heart health.

“Having high blood pressure, high cholesterol or an unhealthy BMI can impact a heart patient’s condition,” says Kim Fowler, MSN, RN, CNS-BC, CHFN, Heart Failure Program manager with PinnacleHealth. “Having regular medical follow-ups is good, because it allows patients to know what their numbers are and what they need to do to maintain the appropriate levels.”

Ideal numbers:

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<tr>
<td>Cholesterol</td>
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<tr>
<td>BMI</td>
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</tr>
<tr>
<td>Blood Pressure</td>
<td>120/80 mmHg or less</td>
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</table>

NEED HELP REDUCING YOUR BMI? OUR WEIGHT LOSS CLINIC OFFERS BOTH MEDICAL WEIGHT MANAGEMENT AND SURGICAL WEIGHT-LOSS OPTIONS. CALL US TODAY AT (717) 909-0290 FOR MORE INFORMATION.
More Nutrients, No Additives

Eating fresh fruits and vegetables can benefit your health in many ways. When fruits and vegetables are processed, they often end up containing added sugar, sodium and preservatives. Fresh versions, on the other hand, contain only their naturally occurring nutrients.

“We encourage patients to eat fresh foods, particularly bright-colored foods that contain lots of vitamins and minerals,” says Kim Fowler, MSN, RN, CNS-BC, CHFN, Heart Failure Program manager with PinnacleHealth.

Essential vitamins, minerals and fiber are often lost during processing, so eating fresh (or fresh frozen) means that you benefit from more of those nutrients. This is especially good for you, as many of these protect against not only heart disease but also conditions such as cancer and Type 2 diabetes.

FROM THE GARDEN

PinnacleHealth’s Heart Failure Center is preparing for a second fruitful season in its on-site produce garden. Maintained by the Heart Failure Center’s nurse navigators, the garden provides seasonal fresh fruits, vegetables and herbs to heart failure patients who may not otherwise have access to diet-boosting fresh produce.

Other sources of fresh produce in our area include:

- Strites’ Orchard—stritesorchard.com
- Spiral Path Farm—spiralpathfarm.com
- Paulus Orchards—paulusorchards.com

To find other farmers markets in our area, visit search.ams.usda.gov/farmersmarkets.

SPINACH, RASPBERRY AND BLUEBERRY SALAD

INGREDIENTS

10 to 12 ounces fresh baby spinach, washed and dried
1/3 cup sliced almonds, toasted
1 pint fresh blueberries, washed
1 pint fresh raspberries, washed
1 medium fresh cucumber, peeled and diced
1/2 lemon, juiced
2 tablespoons white wine vinegar
1/3 cup sugar
1 tablespoon vegetable oil
1 teaspoon poppy seeds

INSTRUCTIONS

1. In a large bowl, toss together spinach, almonds, blueberries, raspberries and cucumber.
2. In a separate, smaller bowl, whisk together lemon juice, vinegar, sugar, oil and poppy seeds.
3. Use mixture to dress salad immediately before serving.

Nutrition Information

Per Serving

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<tr>
<td>Total Carbohydrates: 42.1g</td>
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<tr>
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Test Your **Heart-health** Knowledge

Beating about 100,000 times per day, the heart supplies our bodies with life-sustaining blood. Do you know how to keep yours in top shape?

**True or false?: Drinking red wine is good for your heart.**

**Correct answer:** Potentially true, but with caveats

“There have been numerous studies on alcohol and how it affects the heart and the entire vascular system,” says Jason Stuck, MD, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “The results are somewhat mixed.

“Two compounds found in red wine — one of which is a class called flavonoids and the other named resveratrol — set it apart from other types of alcohol. Studies suggest that these compounds can potentially hinder the development of atherosclerosis (the process by which blockages of the arteries of the heart form) and could therefore slow the progression of coronary artery disease.

“It is clear, though, that if there is any benefit from alcohol consumption from a cardiac standpoint, it is from consuming a low to moderate amount. Women should not consume more than one drink per day, and men should limit themselves to no more than two per day. If you are not a drinker, we would certainly not recommend that you start consuming alcohol for a health benefit.”

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**In which of the following situations should you see a cardiologist?**

A. If you smoke
B. If you have a family history of heart disease
C. If you are pregnant
D. Any time a health professional has concerns related to your heart

**Correct answer:** D

“Anyone with questions or concerns about their heart should be able to discuss these issues with a health professional,” says Gouthami Boga, MD, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “Smokers and those with a family history of heart disease are at increased risk for cardiac disease. They should certainly be followed closely by a family physician, and any concerns related to the heart should prompt an appointment with a cardiologist. Heart disease can occur during pregnancy, and any woman with a cardiac condition should be followed by a cardiologist while pregnant, as well.”

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**True or false?: Taking birth control pills is dangerous for your heart.**

**Correct answer:** False

“This answer comes with some caveats,” says Alex Garton, MD, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “Taking birth control pills containing estrogen has been shown to increase the risk of heart attack and stroke. However, the increased risk—amounting to about 10 to 20 ‘extra’ strokes or heart attacks per 100,000 women per year—is minimal and acceptable when compared to the overall benefits for women wishing to take them.

“Some women should definitely avoid birth control pills, however. Women who smoke should not use hormonal contraceptives, as there is a risk of forming blood clots with the combination. Women with high blood pressure should avoid them as well, as they are also at higher risk.”

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For more information about heart health or to find a PinnacleHealth cardiologist, visit heart.pinnaclehealth.org.
True or false?: Diet soda is better for your heart than regular soda.

Correct answer: False

“Despite diet soft drinks having a lower calorie content, some studies suggest that individuals who consume diet soft drinks are actually at increased risk for weight gain when compared with people who drink regular soft drinks,” says Kevin McHale, DO, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “A low-calorie natural beverage, like club soda or water, is a far healthier option than a soft drink, whether diet or regular.”

GOUTHAMI BOGA, MD, NONINVASIVE CARDIOLOGIST

Before completing a fellowship in cardiovascular disease at Geisinger Medical Center in Danville, Dr. Boga completed her residency at PinnacleHealth. She is board certified in internal medicine and cardiovascular disease and specializes in imaging modalities such as 3-D echocardiography and cardiac CT. In her spare time, she enjoys reading, listening to music and watching sports.

ALEX GARTON, MD, NONINVASIVE CARDIOLOGIST

Dr. Garton is a graduate of the Creighton University School of Medicine in Nebraska. He completed his residency at Lehigh Valley Health in Allentown and his cardiovascular fellowship at Lankenau Medical Center in Philadelphia. Board certified in internal medicine, Dr. Garton has interests in sports cardiology and hemodynamics. He enjoys spending time with his family and following sports for fun.

KEVIN MCHALE, DO, NONINVASIVE CARDIOLOGIST

Following medical school and residency at the Philadelphia College of Osteopathic Medicine, Dr. McHale completed a fellowship in cardiology at Deborah Heart and Lung Center in New Jersey. Dr. McHale is board certified in internal medicine. An avid outdoorsman, Dr. McHale enjoys fly-fishing, snowboarding and scuba diving.

SUNIL PATEL, MD, PEDIATRIC CARDIOLOGIST

Dr. Patel is a graduate of the pediatric cardiology fellowship program at the Penn State Milton S. Hershey Medical Center. Board certified in general pediatrics, he completed his residency in pediatric medicine at the Brookdale University Hospital and Medical Center in Brooklyn, New York. Dr. Patel is interested in fetal echocardiography, pediatric lipid disorders, and management of congenital and acquired heart disease in the adult and pediatric populations. His hobbies include swimming and table tennis.

JASON STUCK, MD, NONINVASIVE CARDIOLOGIST

Prior to finishing a cardiology fellowship at the Penn State Milton S. Hershey Medical Center, Dr. Stuck completed a fellowship in nuclear cardiology and exercise stress testing at Columbia University and a residency at North Shore University Hospital in New York. He is board certified in internal medicine. Dr. Stuck enjoys spending time with his wife and two children. He and his wife are expecting their third child in late 2015.
**KEEP THE BEAT**

Join us for an in-depth look at atrial fibrillation, a common heart rhythm disorder, along with treatment options available at PinnacleHealth, with Michael Link, MD, cardiologist with PinnacleHealth CardioVascular Institute.

- **Camp Hill:** GIANT Super Food Store, 3301 E. Trindle Road, Tuesday, Sept. 15, 7 p.m.

**BEHIND THE SCENES OF A CARDIAC CATHETERIZATION LAB**

Curious about what takes place beyond the waiting room? Michael Bosak, MD, interventional cardiologist with PinnacleHealth CardioVascular Institute, gives an overview of the procedures available in PinnacleHealth’s cardiac catheterization lab and shows some of the devices he uses every day.

- **Newport:** PinnacleHealth Medical Professional Center, 300 Bretz Court, Thursday, Oct. 15, 6 p.m.

**LEAKY PLUMBING AND RUSTED PIPES: COMMON HEART CONDITIONS AND THE LATEST TREATMENTS**

Learn about minimally invasive heart surgery, including robotic heart bypass, surgery for atrial fibrillation and valve surgery, from Mubashir Mumtaz, MD, chief of cardiothoracic surgery at PinnacleHealth.

- **Burnham:** Quality Inn and Suites, 13015 Ferguson Valley Road, Thursday, Oct. 22, 6:30 p.m.
- **Chambersburg:** The Orchards Restaurant, 1580 Orchard Drive, Thursday, Nov. 5, 6:30 p.m.
- **Camp Hill:** GIANT Super Food Store, 3301 E. Trindle Road, Tuesday, Nov. 10, 6:30 p.m.

Registration is required for all events. Light refreshments will be served. Please call the PHoneLine at (717) 231-8900 or toll-free at 1-877-499-3299 to register.
True or False? Drinking soda can put your heart health at risk.

Correct answer: True

“Drinking regular soda, which contains a large amount of sugars and calories, on a regular basis can lead to weight gain and subsequent diabetes,” says Alex Garton, MD, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “Diabetes is a well-known risk factor for heart disease.

“That being said, just having a soda itself may put someone at risk, as well. Drinking just one soda a day is associated with increasing a person’s risk of cardiovascular disease by 30 percent—no matter how many total calories they eat or how much they weigh—according to one large study. Other studies show an association between drinking sweetened beverages and other cardiovascular risk factors, such as hypertension, inflammation and abnormal lipid profiles.”

True or False?: Getting proper amounts of sleep can lower your heart-attack risk.

Correct answer: True

“Sleep deprivation can lead to a number of associated health conditions, such as high blood pressure,” says Kevin McHale, DO, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “This can in turn raise your risk for having a cardiovascular event like a heart attack. Being sleep deprived can also raise stress hormone levels and increase the likelihood that you will have poor cardiovascular health.”

Which of the following is a warning sign of a heart attack?

A. Shortness of breath
B. Jaw pain
C. Nausea
D. All of the above

Correct answer: D

“While many individuals who have heart attacks often have ‘classic’ symptoms such as chest pain and shortness of breath, different people may present with varied symptoms,” says Jason Stuck, MD, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “We often see people present with atypical or general symptoms such as nausea, fatigue or what they describe as a heartburn-type pain. Women and people with diabetes are most likely to experience these types of symptoms.

“Because subtle warning signs may exist before a heart attack occurs, it is important to pay close attention to any change in your overall functional status, such as your ability to walk long distances comfortably. If you experience chest pain, fatigue or shortness of breath, talk with your doctor.”

True or False?: Controlling or avoiding diabetes can decrease your risk for a heart attack.

Correct answer: True

“Diabetes is a well-recognized risk factor for coronary heart disease,” says Gouthami Boga, MD, noninvasive cardiologist at PinnacleHealth CardioVascular Institute. “People with coronary heart disease are at increased risk for having a heart attack.”

True or False?: Kids are not at risk for developing heart disease.

Correct answer: False

“Heart disease is not a major cause of death in young children and adolescents, but certain risk factors such as high blood pressure, high cholesterol, obesity and physical inactivity have a major impact on overall cardiovascular health,” says Sunil Patel, MD, pediatric cardiologist at PinnacleHealth CardioVascular Institute. “In fact, the presence of these risk factors during childhood increases the chances of developing heart disease later in life. For example, high cholesterol has been associated with the development of atherosclerosis (hardening of the arteries) in children and young adults.”

A GROWING PROGRAM FOR PINNACLEHEALTH HEART PATIENTS

[Pages 4 & 5—Blog Content]

One of my favorite parts of the project: It was—and still is—funded entirely by volunteer efforts. This allows us to make fresh fruits, vegetables and herbs available to our heart failure patients who may not otherwise have access due to financial or other reasons. We also have a low-sodium pantry, stocked by voluntary donations, to provide low-sodium and salt-free staples such as canned goods and proteins such as tuna and peanut butter.

COOL CROPS

Last summer, the vegetable crop consisted of peppers, tomatoes, onions, red beets and a variety of greens. The herb section of the garden boasted parsley, thyme, rosemary, basil, oregano and chives to give heart failure patients fresh seasoning alternatives for their food, allowing them to reduce sodium intake without giving up flavor.

We had a kickoff class to highlight the contents of our gardens last summer, and we hosted our second annual garden event on June 16, 2015. It’s wonderful to hand out fruits, vegetables and herbs and know we’re helping our patients and their families make a difference in their nutrition habits.