



CHRIS TAYLOR, PA-C
Cardiology Physician
Assistant and Electronic
Medical Record Champion





Join Us Virtually for Mended Hearts

Mended Hearts of the Triangle at WakeMed offers support, education and activities for cardiac survivors, their family and medical professionals.

Starting in July, we'll begin meeting virtually on the third Monday of each month from 1 to 1:40 pm. For more information and a link to the meetings, contact Hazel Covington by email at hcovington@wakemed.org or via telephone at (919) 350-6888.

Chris Taylor, MHS, PA-C, joined WakeMed in 2004 and serves as a physician assistant caring for cardiology patients in the hospital. In her role, she also works to enhance the way WakeMed's Heart & Vascular team uses electronic medical records to enhance patient care and quality. Here, we get to know Chris as she shares her perspectives on her career, electronic medical records and summer.

Q: Explain the role of a WakeMed Heart & Vascular physician assistant.

Physician assistants (PAs) are part of a larger team of medical professionals known as 'advanced practice providers' (APPs), which also encompasses nurse practitioners (NPs), nurse midwives and other licensed healthcare specialists.

Physician assistants are healthcare professionals who can do much of what a physician does by taking a patient's history, ordering tests, reaching a diagnosis, and creating a treatment plan. In our group, we work together with physicians; while they spend more time performing procedures and rounding, PAs and NPs do admissions and consults, manage patients before and after procedures, supervise cardiac stress tests, and discharge patients who are ready to go home from the hospital. In addition, we are available to manage emergencies, and answer questions and provide updates to patients and their families, as needed.

Q: Why did you choose to become an advanced practice provider?

Being a PA allows for a fantastic work-life balance. I have a challenging career, work with a great team, and can dedicate the time I want to caring for my son.

Q: How have electronic medical records transformed patient care?

In many ways, electronic medical record (EMR) technology makes things easier. I can often find information on a patient quickly, even on nights and weekends, instead of waiting until an office opens. This allows for more effective patient care, 24 hours a day.

I'm passionate about my role as the cardiology 'champion' for our medical records system (Epic). I use my skills as both a healthcare provider and a technical professional to translate cardiology-specific needs to WakeMed's Information Services team. This improves how we use technology to enhance patient care and improve efficiency. I continually try to find ways in Epic to help us work smarter, not harder – while putting quality care and patient safety above all else.

Q: What do you love about working in cardiology?

I enjoy cardiology because I can visualize and explain complex concepts to patients and families in a way that makes it easier to understand and less frightening. Whether it's a patient having a heart attack or his or her family member by their side, they're afraid and need information. The most rewarding and humbling part of this job is the ability support someone when they need it most, often on the worst day of their life.

Q: Summer is here – what are some of your favorite activities in the dog days of summer?

Spending time with family and friends is important and I'm hoping to get back to that once COVID-19 is behind us. I hope to travel to Maine to (finally!) spend some time with my family and enjoy the great outdoors. I love spending time with my son, kayaking, paddleboarding, hiking, camping, yoga, preparing healthy meals (and treats!), and reading.

Heart to Heart

SUMMER 2021

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EDITOR

Caroline Youngblood Director, WakeMed Marketing & Communications

CONTRIBUTOR Coleen Smith

DESIGN Julie Schmidt

PHOTOGRAPHY Brian Strickland Dan Sanford

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Heart Care

Plus

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New Check-In Desk Streamlines Heart Center's Cardiology Office Visits



For patients visiting the WakeMed Heart & Vascular - Cardiology office at the WakeMed Heart Center, a new, dedicated check-in desk is open to reduce wait times and streamline your visit. When you arrive for a cardiology visit, simply check in at the Heart Center's Reception desk for a quick temperature scan and then check in at our Cardiology office's new window. We'll get you back to see your provider as quickly as possible.

First in North Carolina – WakeMed Heart & Vascular Physicians Perform Innovative Shockwave Therapy Treatment for Complex Coronary Artery Disease

Minimally-invasive IntraVascular Lithotripsy Procedure Breaks Up Calcium in Blocked Arteries for Stent Placement in High-Risk Patients

For high-risk patients with complex coronary artery disease, treatment options are often limited. That's because undergoing surgery for many patients with a variety of health concerns simply isn't an option – the risk of complications during and following surgery is just too high. Fortunately, minimally-invasive techniques continue to evolve, allowing cardiologists to help restore quality of life for many chronically-ill patients suffering from cardiovascular disease.

In March, WakeMed Heart & Vascular Physicians interventional cardiologists Drs. Frances Wood and Saroj Neupane performed the first case in North Carolina using IntraVascular Lithotripsy (Shockwave) therapy. This new treatment delivers sonic pressure waves to crack calcium in blocked arteries, allowing for full expansion of the stent for better blood flow and outcomes. This type of procedure has been highly effective for breaking up kidney stones for decades, but is new to the cardiovascular field.



WakeMed Heart & Vascular team members performed the first case of intravascular lithotripsy on March 3. (L to R) Cardiovascular Specialist Donna Crane, Dr. Frances Wood and Dr. Saroj Neupane.



WakeMed Heart & Vascular physicians' multidisciplinary approach to treating patients with highly complex disease using the most advanced percutaneous coronary care techniques available."

"This case highlights

FRANCES WOOD, MD, FACC WakeMed Heart & Vascular

During WakeMed's first case, the shockwave therapy was used in conjunction with a percutaneous left ventricular assist device and rotational atherectomy – which allowed the intervention team to help a 58-year-old dialysis patient who was too high-risk for open heart surgery.

These complex procedures are part of WakeMed Heart & Vascular's Complex Higher-Risk & Indicated Patients (CHIP) and Chronic Total Occlusions (CTO) program – which uses highly-advanced techniques to help highrisk patients who need revascularization (the process of unblocking blood vessels to restore bloodflow to the heart).

WakeMed's CHIP/CTO program is led by physicians with advanced training in complex coronary interventions including Dr. Neupane and Dr. Wood. "This case highlights WakeMed Heart & Vascular physicians' multidisciplinary approach to treating

"Helping patients get back to their lives by improving symptoms and quality of life is so rewarding... We are pleased to offer a wide range of complex interventions that allows patients to improve their overall health and feel better."



SAROJ NEUPANE, MD WakeMed Heart & Vascular

patients with highly complex disease using the most advanced percutaneous coronary care techniques available," explains Dr. Frances Wood, director of WakeMed Heart & Vascular's Structural Heart program.

"Helping patients get back to their lives by improving symptoms and quality of life is so rewarding," explains Dr. Saroj Neupane. "Many of these patients have been seen by other cardiologists and told that medical therapy is their only option. We are pleased to offer a wide range of complex interventions that can allow patients to improve their overall health and feel better."

FitBit + Perfect Care App Offers Peace of Mind for Heart Surgery Patients

WakeMed is pleased to have recently introduced a new pilot program designed to support our heart surgery patients through their recovery with the use of a wearable health tracker device (FitBit Inspire HR activity tracker). The program, funded by The Duke Endowment, is known as Perfect Care. Using mobile app technology, it supports recent heart surgery patients for 90 days after their procedure by tracking their resting heart rate, steps, sleep, blood pressure and weight, and by facilitating weekly video visits to check in. The goal is to help our care team keep a close watch on surgery patients' physical, mental and social health throughout recovery. It also allows patients to message their WakeMed Heart & Vascular care team through the app.

As simple as wearing a watch and downloading an app, this program offers peace of mind for recent surgery patients following this major life event. Patients will also need to weigh themselves daily, upload photos of their surgical incision, and complete routine assessment surveys using the app. The WakeMed Heart & Vascular team is available to support patients in getting set up with the program, and learning how to use the technology.





"When the team told me I needed to wear a FitBit after surgery, I was reluctant, "explains triple bypass surgery patient Quentin Kenney. "I thought 'this is not my gig, but I guess I'll give it a try.' A month after surgery, Quentin and his wife, Ann, are very thankful for the technology. "Perfect Care saved us at least one trip to urgent care, and maybe more. By messaging our care team, we were able to get Quentin put on Lasix to reduce swelling after surgery, and to get antibiotics to help prevent infection of his incision all without leaving the comfort of home," Ann relates.

Quentin concludes: "While I was hesitant about the technology, it's been helpful. Seeing a provider over the computer and getting the medications we needed remotely sure beats going into the office when you're recovering from surgery."

NEW + NOTEWORTHY



Dr. Joshua Vega is a general cardiologist who specializes in the management of coronary artery disease, valvular heart disease, cardiac arrhythmia, congestive heart failure and the medical management of vascular disease, and has clinical interest in health disparities. He is board certified in cardiovascular

disease and internal medicine, with certifications in echocardiography, nuclear cardiology and vascular interpretation. Dr. Vega attended medical school at the University of Rochester School of Medicine and Dentistry in Rochester, NY, and completed his residency in internal medicine at Strong Memorial Hospital in Rochester. He completed fellowship training in cardiovascular medicine at UNC Hospitals. He enjoys connecting with his patients, and believes healthcare should take into consideration the intricate, variable interactions of biological, psychological and social factors that contribute to illness. Dr. Vega currently sees patients in the Raleigh Campus Heart Center office.



Dr. Peter Chan is an interventional cardiologist with clinical interests in coronary artery disease, acute coronary syndrome, and complex percutaneous coronary interventions. Dr. Chan also has a particular interest in management of peripheral arterial and venous disease. He earned his medical degree from

Weill Medical College of Cornell University in New York, NY, and completed his residency at Beth Israel Deaconess Medical Center in Boston, Mass.

Welcome, New Physicians

WakeMed Heart & Vascular welcomes three new cardiologists to our growing team.

Dr. Chan completed fellowships in cardiovascular medicine, interventional cardiology, and structural heart and peripheral interventions at Boston Medical Center and Brigham and Women's Hospital in Boston, Mass. Dr. Chan feels it's important to educate his patients so they can be active participants in healthcare decision-making, and he encourages them to ask questions. Dr. Chan sees patients at the Six Forks and Cary offices.



Dr. Oomer Aziem is a board-certified cardiovascular physician with clinical interests in noninvasive imaging, including nuclear medicine and transesophageal echocardiogram (TEE), and preventive cardiovascular medicine. He earned his medical degree from the Osteopathic School of

Medicine at the University of Medicine and Dentistry of New Jersey (UMDNJ-SOM) in Stratford, NJ. Dr. Aziem is fellowship trained from Deborah Heart & Lung Center in Browns Mills, NJ, and completed his residency at UMASS Memorial Medical Center in Worcester, Mass. He brings more than a decade of diverse experience in cardiovascular medicine to WakeMed.

Dr. Aziem believes in treating the whole patient, including their bio-psycho-social needs, as it pertains to their disease and diagnosis. He feels that treating the whole patient brings about better outcomes and is a necessary component for the patient and physician relationship. Dr. Aziem sees patients in the Raleigh Campus Heart Center and the North Hospital Physician Office Pavilion locations.

PRC Award Winners for Patient Satisfaction & Excellence

Congratulations to our Heart & Vascular practices and providers recently recognized with

PRC Excellence in Healthcare Awards.

These offices and individuals are recognized as going above and beyond to achieve excellence for their patients.



Top Performer Awards (100th Percentile)

- Mobile Critical Care
- Heart & Vascular Advanced Heart Failure
- Stuart Russell, MD Cardiology

Department 5-Star Awards (90th Percentile)

- Cardiac Rehabilitation Cary Hospital
- CV & Thoracic Surgery Cary & Raleigh Campus offices
- · Cardiology Apex & Raleigh Campus
- Complex Arrhythmia
- Pediatric Cardiology Apex, Clayton, North & Raleigh Campus
- Vascular Surgery Midtown & Raleigh Campus

Providers 5-Star Awards (90th Percentile)

- Mark Englehardt, MD Cardiology
- Brian Go, MD Cardiology
- Jason Haag, MD Cardiology
- · George Hamrick, MD Cardiology
- John Kelley, MD Cardiology
- Siva Ketha, MD Cardiology
- Jimmy Locklear, MD Cardiology
- Mary McNeely, PA-C Cardiology
- Ashish Patel, MD Cardiology
- Marc Silver, MD Cardiology
- John Sinden, MD Cardiology
- · Charles Harr, MD Cardiovascular & Thoracic Surgery
- Alden Parsons, MD Cardiovascular & Thoracic Surgery
- Trevor Upham, MD Cardiovascular & Thoracic Surgery
- Judson Williams, MD Cardiovascular & Thoracic Surgery
- Jason Ho, MD Pediatric Cardiology
- Blair Robinson, MD Pediatric Cardiology



New Cardiology Office Opens This Month!

A new WakeMed Heart & Vascular office opens on July 26 near Raleigh's iconic Village District shopping center. Located at 505 Oberlin Road in Raleigh, the practice will offer general cardiology services five days a week. Dr. Matt White, who has been working in our Clayton office for nearly a decade, and Dr. Damien Marycz from the North Cardiology office will be caring for patients in this office. To learn more or to make an appointment, visit wakemed.org/find-a-location or call (919) 350-WMHV.

WakeMed Earns **Top Honors for Heart** Attack & Chest Pain Care





Both WakeMed Raleigh Campus and Cary Hospital earned top honors from the American College of Cardiology for its excellence in caring for patients suffering from a heart attack. These awards signify both hospitals' adherence to aggressive treatment standards, clinical guidelines and ongoing quality improvement efforts – all designed to enhance the overall quality of care provided to heart attack patients. Cary Hospital was one of only 60 hospitals in the nation to earn the gold performance honor, and the Raleigh Campus was one of only 212 hospitals to earn the platinum performance honor.

WakeMed Receives Three Stars from the Society for Vascular Surgery

WakeMed's Raleigh Campus and Cary Hospital recently received top recognition from the Society for Vascular Surgery Vascular Quality Initiative. Both hospitals received three-star Participation Awards, which is the highest recognition available. The awards recognize the importance of active participation in the Vascular Quality Initiative as a critical component of quality improvement efforts. Stars are awarded based on a hospital's participation in quality improvement activities, physician and staff participation in regional quality group meetings and participation in quality registries.

Boost Your Mood for Better Heart Health



Most people know that negative feelings such as stress aren't good for your heart, but did you know there's a growing body of evidence that indicates positive feelings can actually lead to better heart and brain health? That's right, a sunny disposition can do more than just keep you smiling – it can actually have a real impact on your physical health. A recently issued scientific statement published by the American Heart Association highlights the numerous ways your mental health can impact your physical health – specifically your heart and brain health.

How negative emotions impact your body

"It's important to understand the strength and power that emotional responses can have on our physical health," explains Dr. Jessica Tomasula, PhD, WakeMed health psychologist and manager of Outpatient Behavioral Health services.



JESSICA TOMASULA, PhD WakeMed Outpatient Behavioral Health

That's because strong negative emotions like stress, anxiety, depression or anger can activate certain portions of the brain that trigger the release of hormones such as cortisol and adrenaline. These hormones make your heart beat faster and can increase your blood pressure – neither of which are good for people with a heart condition. At the same time, extended periods of stress can affect coagulation, which can lead to the formation of

blood clots that can cause a heart attack or stroke. Lastly, over time, stress leads to inflammation and can negatively impact your body's immune system function. Studies have also shown that people who have a negative outlook and/or a hostile attitude are at an increased risk of heart disease, may suffer from poorer cognitive health, and could have more trouble recovering from a cardiovascular event such as a heart attack.

"While negative emotions over time can be harmful, it's important not to avoid your feelings," Dr. Tomasula continues. "Instead, feelings need to be managed in the

same way we control blood pressure or other vital signs that can wreak havoc on our health. If you're not managing your mood, it's likely your overall health isn't adequately managed, either. It is helpful to determine what coping strategies you can routinely use to manage stress and enlist the support of others when needed."

East Carolina University professor and cardiac psychologist Dr. Sam Sears further explains the connection between physical and mental health. For decades, Dr. Sears has studied and worked with cardiovascular patients to determine the psychological impact of various cardiovascular conditions, events and treatments – and how to combat those effects for better mental health.

"Not only can chronic stress cause physical problems, it can make patients less likely to practice good self-care. For example, those who are feeling depressed, overly stressed or anxious may avoid exercise, or indulge in unhealthy foods, excess alcohol or substance abuse. Others may avoid seeing their physician or stop taking medications as prescribed. All of these things can aggravate existing health problems and lead to poorer outcomes."

How a positive attitude can improve health

On the other hand, experts say that positive feelings can help lower stress and affect brain circuitry – in essence, rewiring the brain. Research shows that optimism, gratitude, happiness and a sense of purpose have been associated with favorable heart health. At the same time, the absence of stress can help reduce the volume of cortisol that goes through the body, which can keep your blood pressure and heart rate down. Finally, patients who feel better mentally are more likely to exercise, eat healthy, and follow their medical treatment plan.

5 Tips for Managing Your Mood (and Heart Health!)

While it's not easy to change the way you think, with time and a concerted effort, it is possible. Here are some tips from the experts in behavioral psychology.

1

Surround yourself with positive people.

Much like negativity, positive energy is contagious. That's why it's important to choose the people you spend your time with wisely. A 2016 study published in *Health Psychology* indicates that having a happy spouse or partner can improve your overall health, leading to more healthy behaviors such as physical activity. Evaluating your relationships and focusing on those that bring you joy and positive feelings can have an impact on your mental and physical health. Dr. Tomasula reminds us that when it comes to relationships, quality is more important than quantity.



Practice optimism.

While some people are naturally more cheerful than others, that doesn't mean it's a skill that can't be learned. Dr. Tomasula suggests positive self-talk. "It's important to recognize that feelings are not facts. I tell my patients that depression and anxiety are liars that can lead to thoughts such as 'Nothing I ever do makes any difference on my health or heart condition,' or 'I'm never going to feel better or have the energy to play with my kids or grandkids.'" Recognizing that feelings are just feelings and that you can control them by grounding yourself in reality brings a sense of power back to the patient.



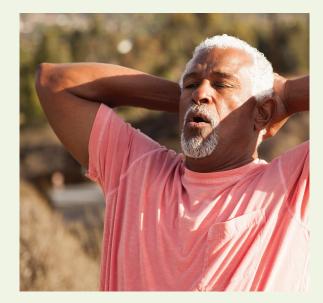
Develop healthy coping mechanisms.

Everyone will experience stress at some point, but what's important is how you handle it. Avoiding behaviors such as overeating, drinking, smoking, or being overly sedentary can help you stay healthier through difficult times. Instead, practice mindfulness, or turn to humor to lighten your mood. Meditation, yoga, tai chi, reading, or deep breathing techniques are healthy ways to help you overcome feelings of stress or anxiety.



Stay active.

Cardiovascular exercise can boost your mood in as little as five minutes, due to the endorphins that are released during physical activity. Research also suggests that being active can prevent or treat depression. According to the American Psychological Association, cardiovascular exercise can actually help treat and alleviate long-term depression, and also prevent relapse. If that's not enough, cardiovascular exercise can reduce blood pressure, blood fats and bad cholesterol, while strengthening the heart – reducing the risk of heart attack, stroke or other traumatic cardiac events.





Don't be afraid to seek professional support.

Just as you would seek help for a cardiac arrhythmia or high cholesterol, getting professional help for your mental health is important for your overall physical wellbeing. For patients with heart disease, there are health psychologists who can help you manage the feelings and stress that comes along with a chronic health condition. These professionals have studied the relationship between physical and mental health, and can help identify strategies to keep you feeling your best. If you have negative feelings that are impacting your life, talk to your cardiologist, and/or seek help from a qualified mental health provider.

Now that you know how a positive outlook can impact your overall health and wellbeing, what steps will you take today to improve your mood?





Farewell and Happy Retirement, Dr. Sinden!

In 1992, a young Dr. John Sinden joined one of the Triangle's most innovative cardiology practices when he became the sixth cardiologist to join what was then known as Raleigh Cardiology. Nearly thirty years later, Dr. Sinden is the last of the original six to depart the group as he transitions into retirement this summer.

Over the years, the Raleigh Cardiology team continued to innovate and grow into one of the largest cardiology practices in the state, while the WakeMed Heart Center established itself as the top destination in the region for cardiovascular care. What's known today as WakeMed Heart & Vascular physicians has expanded into a multi-specialty cardiovascular practice with more than 20 physicians and 40+ providers operating in nearly a dozen cardiology offices throughout the area. In spite of all this growth, Dr. Sinden says what he appreciates most is the team's unwavering commitment to putting the needs of the patient above all else.

"As a young physician out of cardiology fellowship, I had no idea how fortunate I was to join the likes of Drs. Amarendra Reddy, Ray Cheely, Charlie Mangano and Virgil Wynia," recalls Dr. Sinden. "Nearly everything I know today I learned from these great doctors, but most importantly, they taught me how to advocate for my patients. If you ever heard Dr. Reddy raise his voice (which wasn't very often),

it was never about something he wanted. It was always him advocating for his patients to get the care they needed, or to get the tools or technology required to do what's best for the health of this community."

As any of his colleagues today can affirm, Dr. Sinden has continued to uphold the group's legacy over the years. His advice to the next generation of WakeMed Heart & Vascular physicians reiterates this philosophy. "The work we do every day is a blessing and a privilege. Always put the patient first, advocate for them relentlessly, and acknowledge the good work of everyone around you. Lastly, enjoy the work. It's a long haul what we do, but I've been so fortunate to work with such an incredible team, for such a truly unique organization, and it's been an honor to serve my patients."

In retirement, Dr. Sinden hopes to enjoy some of life's slower moments and to spend a lot of time in the great outdoors and with his grandchildren. Best of luck, Dr. Sinden and happy retirement!



And Farewell to Dr. Noneman!

In December, Dr. Jack Noneman retired after 37 years of practicing cardiology. Dr. Noneman came to WakeMed in 2011 when private practice Carolina Cardiology joined WakeMed Heart & Vascular. Dr. Noneman brought vast experience in percutaneous coronary angioplasty to the team, and performed thousands of procedures throughout his career.

We hope you are enjoying your retirement, Dr. Noneman!



Listen to Your Body: Molly Anderson Shares Her Open-Heart Surgery Journey

At age 44, Molly Anderson was seemingly in good health. She had no risk factors for heart disease, lived an active life, and was happily running her own thriving jewelry business, mollybeads. As she prepared for an out-of-town jewelry trunk show in the fall of 2018, Molly didn't feel quite like herself. She developed a variety of odd symptoms, including the feeling of something stuck in her throat, a mild headache, earache and some intermittent pain in her left arm. Eager to participate in the jewelry show, Molly brushed it off and headed out of town, taking ibuprofen as needed throughout the weekend.

When she returned home, she was tired and headed to bed early only to wake up feeling like there was an elephant on her chest. At first, she worried it was a heart attack, but after Googling her symptoms, she convinced herself it was just anxiety and went back to bed.

The next morning, Molly woke to find her symptoms hadn't subsided, and her breathing was becoming labored. She called her primary care doctor who had her come in immediately for an EKG. Her results didn't show anything alarming, but they decided to consult a cardiologist who promptly admitted her to the WakeMed Chest Pain Center. After a wide range of tests, nothing seemed to provide any answers. There was no evidence of a heart attack, so they ordered a CT Scan.

While waiting for her results, Molly fell asleep only to wake to alarms and monitors sounding off as her blood pressure went through the roof. "By this point, I was fearful of dying – not knowing what was wrong with me, which was so scary," Molly recalls.

Shortly thereafter, Molly got the news – she had an ascending aortic aneurysm (AAA), which is a rare and life-threatening condition that occurs when the wall of the aorta weakens and forms a bulge. Because the aorta is the largest artery in the body, an AAA is very dangerous and can cause sudden death if it ruptures.

Nearly three-quarters of patients with an AAA will have no symptoms, so Molly was extremely fortunate that her body alerted her that something was wrong. Today, she's passionate about encouraging women NOT to do what she did – which is to ignore her body before seeking medical attention. "I am so blessed that I got the care I needed before it was too late, but many women aren't so lucky," Molly explains.



At Molly's one-year post-surgery appointment, she gifted Dr. Williams with a needlepoint depiction of an anatomical heart as a token of her gratitude. He keeps the heart proudly displayed on his office wall.

Next, Molly was introduced to WakeMed Heart & Vascular cardiovascular surgeon Dr. Judson Williams, who instantly put her at ease. He explained that she'd need to have a major open heart procedure – quickly – in order to repair her aorta. This procedure is designed to prevent the risk of rupture, restore good bloodflow and relieve symptoms.

"At first, I was terrified at the thought of having open heart surgery. I'd watched my dad undergo two similar procedures and I knew how difficult recovery could be," Molly recalls.

The day of Molly's procedure, Dr. Williams was surprised to find that she also suffered from severe aortitis, which is very rare and often leads to poor outcomes in AAA patients. Due to the aortitis, Molly's aorta had adhered to her esophagus, which explained the odd feeling she had in her throat.

"This degree of aortic inflammation is something I don't see very often, and it's very dangerous because it can signify rupture or dissention of the aorta, which can lead to sudden death," said Dr. Williams. "Molly was extremely fortunate that her symptoms led her to seek care."

Despite Molly's fears about the surgery, everything went well and she was in the hospital for four days, followed by a smooth recovery. That's due to in part to Molly's youth combined with ERAS, which stands for Enhanced Recovery After Surgery. This process includes approximately 20 standards of care that, when used together, lead to less pain, fewer complications and faster recovery for patients.

"My experience at WakeMed and throughout my recovery was so incredible – everyone from the amazing Dr. Williams to the excellent nurses who cared for me. I can't say enough good things about WakeMed Heart & Vascular."

Molly is now a volunteer and community ambassador for the WakeMed Foundation, WakeMed's philanthropic partner, helping raise awareness and funds to support WakeMed's mission.

Foods, Supplements, Medications and Potential Interactions (Oh My!)

Many heart patients take medications daily to control risk factors such as cholesterol, blood pressure, diabetes as well as those to address certain conditions such as heart failure, rhythm problems and the like.

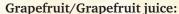
With so many medications and conditions to balance, it's important to remember that certain foods and beverages as well as select herbal and dietary supplements may interact with or impact the concentration of certain medications. Some can even interfere with lab tests and lead to a missed diagnosis in the event of a heart attack.

That's why it's so important to communicate regularly with your cardiologist and your pharmacist. While you should have these important discussions on a regular basis, here are some specific considerations for cardiovascular patients as it relates to potential interactions.



Leafy greens: Greens like spinach and kale are high in Vitamin K. While Vitamin K has many great health benefits, it can affect your INR (International Normalized Ratio). Your INR is the measurement of how long it takes your blood to clot. For patients taking blood thinners (ie. Coumadin or warfarin), leafy greens can lower your INR. The good news is that patients on these medications are monitored regularly to check their INR, so you can absolutely continue to eat leafy greens (they are great for your heart!), but it's best to keep your intake of them consistent. Whether you prefer to eat them once a day or several times a week, just try to eat about the same amount each week. This will allow your cardiologist and pharmacist to keep you on a consistent dosage. So, please consistently, eat your greens.





Medication interactions with grapefruit and grapefruit juice are common across a wide range of drugs. For heart patients, the most common are cholesterol-reducing drugs (statins such as Crestor/Lipitor) and those that treat high cholesterol, but there are numerous other specific drugs that treat problems such as heart failure, and certain rhythm and/or vascular problems, as well as many non-cardiovascular drugs such as those designed to treat anxiety, pain, cough/allergy, erectile dysfunction, among others.



Caffeine: While caffeine doesn't cause drug interactions, per se, it can increase your heart rate. This may negate or counter the effects of certain medications, such as those designed to lower your blood pressure. In these cases, it can cause an opposing effect to the medication. While some caffeine is fine for most, you may want to talk with your cardiologist or pharmacist about the appropriate amount based on your individual disease state.



Alcohol: Alcohol is naturally a blood thinner and can cause damage to the liver – which means for patients taking blood thinners or statins (or any medication that can cause liver damage), it's important to talk to your doctor or pharmacist about alcohol intake and what's safe for you.

Herbal & Dietary Supplements

While many herbal and dietary supplements offer health benefits, there's a common misconception that they can't cause medication interactions or side effects. This simply isn't true – they can cause dangerous side effects just like medications, so it's important for heart patients to consult with their cardiologist before starting any new supplements. Here are a few specific examples to be aware of.



Garlic, ginger, ginseng, ginkgo: These supplements can increase the risk of bleeding in patients who take blood thinners. That's because each of these products also thin the blood, so the combination can be dangerous for certain patients.



St. John's Wort: Often taken as a supplement to help improve mood or symptoms of depression, this supplement brings a wide range of potential interactions. Specifically, it can affect the concentration of medications such as blood thinners and statins, reducing their efficacy.



Vitamin E: While vitamin E offers some positive antioxidant benefits, it can interact with both blood thinners and anti-platelet drugs, as well as statins. For patients on a blood-thinner or anti-platelet medication, using vitamin E can increase the risk of bleeding. Taking vitamin E with statins or niacin may reduce the medication's effects.



Biotin/vitamin B7: Often used in beauty products to improve hair and nail growth, biotin can also be found in smaller amounts in multi-vitamins and prenatal vitamins, and may be used in high doses to treat certain patients with multiple sclerosis. In extremely high doses, biotin can interfere with certain lab tests designed to check troponin levels. Troponin is a cardiac marker that is used to determine whether a patient is having or has recently suffered from a heart attack. In some cases, biotin can cause falsely low results, which could lead to a missed diagnosis and the avoidance of critical treatment needed in the event of a heart attack. It's important to note that these complications are typically reported in patients who take a mega-dose (100 to 300 mg), or amounts that far exceed the recommended daily intake of biotin.

Janna Beavers, PharmD, BCPS-AQ Cardiology, BCCP, a WakeMed cardiology clinical pharmacist, reminds heart patients to keep an accurate list of all current medications and supplements to ensure you don't forget anything when consulting with your cardiologist or physician. "Oftentimes, patients forget to tell us about herbal or dietary supplements they're taking – thinking that they're completely harmless."

"Due to the number of potential complications,
I always urge patients to tell us about

everything they're taking to ensure there

are no safety concerns."



JANNA BEAVERS, PHARMD, BCPS-AQ CARDIOLOGY, BCCP WakeMed Cardiology Clinical Pharmacist



It wouldn't be summer in North Carolina without sweet, summer corn to brighten up your diet. Native to North Carolina, corn (also known as maize) grows here primarily in the coastal plains where the rich soil is ideal. It's typically planted in April, and is harvested during the summer months – making it the perfect addition to any cookout menu. While the starchy vegetable is often a key ingredient in many processed foods, in its purest, fresh form, corn can bring a variety of health benefits.

High in fiber, corn aids with digestion and contains both vitamin C as well as important B vitamins that support a number of important functions in the body. It's also rich in several essential minerals, including zinc, magnesium, iron, copper and manganese. Featuring antioxidants such as carotenoids, lutein and zeaxanthin, a diet rich in corn can support good eye health.

However, it's higher in starch than most vegetables, which can raise your blood sugar – so it's best to keep your portion size small, particularly for people with diabetes.

Tips for Incorporating Corn into a Heart-Healthy Diet

Corn is delicious by itself, and tastes great boiled, broiled, roasted, steamed or grilled. It's ideal for incorporating into a wide variety of side dishes, and can be used in just about any type of cuisine – from Southern style cooking to Southwestern meals.

If you need some inspiration, here are some creative and healthy suggestions for incorporating corn into your summer menu.



Toss in a salad or salsa. The crunch and color of sweet corn make it a great addition to a summer salad or salsa. It pairs well with salad greens, tomatoes, avocado, black beans and red onion.



Spice it up! Corn's mild flavor can be kicked up a notch with any blend of herbs and spices. Options such as paprika, cumin, chili powder and parsley are popular favorites – and can serve as a good substitute for salt for patients with high blood pressure.



Pair it with protein. Since corn is fairly high in carbohydrates, it's best to use in moderation – and pairing it with a protein can help balance blood sugar and keep you feeling full for longer. Consider serving with black beans or a lean protein such as chicken or fish.



Brighten up your soup. Corn is a perfect addition to a tasty summer soup, adding color and texture. Try incorporating sweet corn into any vegetable soup, chowder, or even in a light chicken chili.



Get it on the grill. Corn is bold enough to stand on its own as a tasty and healthy side dish. Grilling corn on the cob is easy, and brings out its sweet flavor. Avoid slathering with high-fat butter or mayonnaise and instead use cooking spray and opt for a blend of spices before grilling. A squeeze of lime juice + honey, low-fat sour cream + garlic, or a sprinkle of low-fat cheese make for tasty and healthy toppings once it's off the grill.



SERVES 18 Corn & Black Bean Summer Salsa

INGREDIENTS

- 2 c. low sodium canned black beans, drained and rinsed
- 2 Tbsp. red onion, diced
- 1 Tbsp. Serrano chili pepper, minced (can be replaced with jalapeno or bell pepper for milder flavor)

½ c. chopped cilantro ½ tsp. salt (pinch)

- 1 tsp. black pepper
- ½ c. tomatoes, diced
- 1 Tbsp. lime juice
- 2 c. corn kernels (frozen, defrosted)
- 1 Tbsp. canola oil

INSTRUCTIONS

- 1 Drain and rinse the beans and add to large bowl.
- Chop the onion, tomatoes, cilantro and Serrano pepper.
 Add to black beans.
- Add defrosted frozen corn, salt, pepper, oil and lime juice.
- Toss together, cover and refrigerate for at least 30 minutes to allow blending of flavors.
- Serve on top of chicken or fish, or with your favorite tortilla chips.
 Enjoy!

NUTRITIONAL INFORMATION PER SERVING: Calories: 73; Total fat: 1.3 g (.1 g Saturated fat); Cholesterol: 0; Carbohydrates: 12.2 g; Fiber: 4.5 g; Sugars: 1.4 g; Protein: 3.9 g; Sodium: 160.2 mg



SERVES 4

Zesty Grilled Corn on the Cob

INGREDIENTS

4 ears shucked corn on the cob

1/8 tsp. salt

1/4 tsp. black pepper

½ tsp. chili powder

- 4 Tbsp. shredded Parmesan cheese
- 2 Tbsp. chopped parsley Cooking spray

Optional garnish:

Lime wedge, sliced radish, quartered cherry tomatoes, sriracha sauce

INSTRUCTIONS

- Blend salt, pepper and chili powder into a small bowl. Set aside.
- 2 Spray each ear of corn lightly with cooking spray on all sides.
- Sprinkle with seasoning blend.
- Grill for about 10 minutes over medium heat, turning frequently to avoid burning.
- Top with cheese and parsley.
 Garnish with lime wedge, sliced radish, tomatoes and a squeeze of sriracha sauce. Enjoy!

NUTRITIONAL INFORMATION PER SERVING: Calories: 110; Total fat: 3.4 g (1.8 g Saturated fat); Cholesterol: 6 mg; Carbohydrates: 20 g; Fiber: 4 g; Sugars: 5 g; Protein: 4.5 g; Sodium: 45 mg

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... you're tired. Fatigued. You feel like you ate too much. You're nauseous. Becoming more and more anxious. The pressure in your chest continues to intensify, making it difficult to breathe. You may have back pain, jaw pain or pain running down your arms. Fortunately, you have the presence of mind to call 911. Good choice. Learn more about yet another good choice at **wakemed.org**. After all, it is your heart.

