



Fall 2013

For the Heart

Your Newsletter from Saint Luke's Cardiovascular Consultants

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Saint Luke's Cardiovascular Consultants: A World-Class Team You Can Trust with Your Heart

By James H. O'Keefe, M.D.

When people ask me what I do for a living and I tell them I'm a cardiologist, they often ask if I do open heart surgeries. I tell them, "No, I'm not a cardiac surgeon." Then they will say, "So you put the stents in arteries, huh?" I reply, "No, I don't do those either." Then they say, "Do you put in pacemakers?" "Nope," I reply. Finally they ask, "So what exactly do you do then?" I tell them that I strive to heal people and their hearts with diet, lifestyle changes, exercise, stress reduction and medications; and if that fails... I have connections.

Honestly, I may not be the most skilled or talented physician, but I'm surrounded by them. Indeed, my two strongest attributes as a physician are that I care very deeply about my patients (I think of them like my own family or friends), and that I belong to the best cardiology group in the USA—Saint Luke's Cardiovascular Consultants (SLCC) of the Mid America Heart Institute (MAHI) in Kansas City.

In evaluating and treating my patients, I am constantly relying upon my trusted and devoted colleagues. I would entrust my own life and the lives of my family to these



physicians, advanced practice providers, nurses and techs. In fact, over the decades when my family and close friends from around the country have developed heart problems, I have insisted they come to Kansas City to allow us to care for them.

Admittedly, today SLCC is a very large group. By necessity, we take a team approach to delivering care to our patients, thus sometimes you may not always see the same physician. But the upside is that each of us has our own sub-specialized area of expertise. "Jack of all trades, master of none" is the reality of modern day medicine. When mechanical problems arise in your home, rather than

call in a handyman, you are better off relying on an expert; a heating/air conditioning person for your furnace troubles; a plumber for clogged pipes; an electrician for re-wiring your house. SLCC is comprised of a group of 48 bright and dedicated cardiologists with a diverse range of skills. Collectively, we can definitively address virtually any cardiovascular problem that arises. In fact, many of my colleagues here at Saint Luke's are among the top experts in the nation in their sub-specialties. Here is a sampling of just some of my brilliant and talented colleagues:

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A World-Class Team You Can Trust with Your Heart

"Never doubt that a small group of thoughtful committed citizens can change the world; indeed, it's the only thing that ever has." Margaret Mead

♥ Dr. Dmitri Baklanov is one of the most experienced and skilled cardiologists in America at performing coronary angiograms and coronary artery stent placement via the radial artery approach. This involves working through an artery in the wrist to image and open up blocked coronary arteries. The radial approach allows for lower rates of serious bleeding and eliminates the need to lie still after the procedure.



Dr. Baklanov

♥ Dr. Timothy Bateman is perhaps the most widely recognized and respected nuclear cardiologist in the United States. Dr. Bateman is a major driving force in the development of more accurate and safer ways to diagnose and follow heart disease using nuclear imaging.



Dr. Bateman

♥ Nurse practitioner Becky Captain runs our CardioWellness Center. In my opinion, there isn't a better preventive cardiology advanced practice provider in the country. Whether you are wanting to avoid having recurrent heart problems, or you are trying to prevent heart disease before it starts, Becky is the best. If you don't believe me, just ask one of her many patients/fans. By the way, Becky will have her doctorate in May 2014.



Becky Captain

♥ Dr. Adnan Chhatriwalla heads up our percutaneous valve program. This amazing and groundbreaking technology allows us to replace or repair heart valves using catheter-based

systems through the leg arteries or chest, rather than doing open-heart surgery. We are the most experienced TAVR center in the Midwest, with remarkably low complication rates. These procedures are done in close collaboration with our cardiothoracic surgeons.



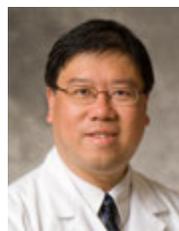
Dr. Chhatriwalla

♥ Dr. Aaron Grantham is just one of our interventional cardiologists who is internationally renowned. He is among the top experts at re-opening coronary arteries that have been chronically blocked—often for years or even decades. In dealing with this vexing problem, Dr. Grantham, using the latest technology, has developed unmatched expertise in re-establishing normal blood flow to coronaries that here-to-fore have been unapproachable with anything other than coronary artery bypass surgery.



Dr. Grantham

♥ Dr. Andrew Kao is a preeminent expert in caring for patients with heart failure, and heads our Cardiac Transplant Team. His remarkably dedicated and knowledgeable team of physicians and nurses are among the best in the world—both in number of patients who receive transplanted hearts each year, and how well those patients do in the long run. Our patients have short waiting times for a new heart and outstanding survival after transplantation.



Dr. Kao

♥ Dr. Steve Laster is a top expert in vascular procedures performed

through the arteries. For example, the traditional surgery to repair an abdominal aortic aneurysm requires a large incision in the abdomen and carries a high rate of serious complications such as heart attack. Dr. Laster, working with surgeons at Saint Luke's, can repair these aneurysms using catheters and covered stents placed via the arteries in the groin. This paradigm-changing procedure allows for repair of this potentially lethal condition with much less pain, fewer complications and shorter recovery periods.



Dr. Laster

♥ Dr. Anthony Magalski is a top expert in caring for adolescents and adults who were born with heart defects. He is also a national leader in sports cardiology and heads up our deep and strong heart failure team.



Dr. Magalski

♥ Dr. Michael Main is a national leader in the field of echocardiography. He is an internationally recognized expert in the use of echo contrast to improve the diagnostic accuracy of echocardiography.



Dr. Main

♥ Dr. Barry Rutherford, along with Dr. Geoff Hartzler, over 30 years ago performed the first ever balloon angioplasty during a heart attack to re-open the blocked artery, restoring blood flow to jeopardized heart



Dr. Rutherford

muscle. This approach—angioplasty and stenting for myocardial infarction is among the most important advancements in the history of cardiology. Dr. Rutherford is still at the top of his field, and is revered the world over for his technical expertise and skill in the cardiac catheterization laboratory.

♥ Dr. Brian Ramza is one of our five world-class electrophysiologists; he and his colleagues are the electricians in the group. They take care of people with rhythm abnormalities like ventricular tachycardia and atrial fibrillation and put in pacemakers and defibrillators. Dr. Ramza is a brilliant and gifted doctor who is very devoted to his patients. By the way, I insist my mother, who lives in North Dakota, come all the way to Kansas City to see Dr. Ramza twice each year.



Dr. Ramza

♥ Dr. Ibrahim Saeed is a genius in the field of cardiac MRI—a powerful

imaging technique that is evolving into a unique and indispensable tool for imaging the heart and blood vessels.

♥ Dr. John Spertus, Dr. Paul Chan and Dr. David Cohen are internationally recognized experts in assessing outcomes of various procedures. Their research measures health care quality, and uses information technology to guide medical decision-making so that treatments can be safer, less expensive and more effective. In short, Drs. Spertus, Chan and Cohen develop scientific strategies so we can continually improve the quality of care we deliver



Dr. Saeed



Dr. Spertus



Dr. Chan

to our patients. Dr. Cohen also has a busy practice in interventional cardiology with expertise in catheter-based treatment of patients with valvular heart disease.

♥ Dr. Tracy Stevens is a nationally recognized leader in women's heart care and is the director for our Muriel I. Kauffman Women's Heart Center.



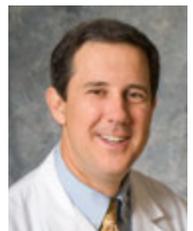
Dr. Cohen



Dr. Stevens

♥ Dr. Randy Thompson is a national expert in cardiac CT imaging of the heart and blood vessels.

♥ In all, there are currently 48 cardiologists here at Saint Luke's, and they are all excellent physicians. Dr. Ken Huber is President and CEO of SLCC and Co-Medical Director of the Mid America Heart Institute. In addition to being a superb clinical and interventional cardiologist, he is an astute and experienced administrator.



Dr. Thompson

As admiral of the SLCC ship, Dr. Huber has empowered us with the right people, tools and programs so we can deliver top quality cardiovascular care. The new Mid America Heart Institute was recently built under his leadership. This is one of the most technically advanced and physically impressive cardiac hospitals in the nation.



Dr. Huber

The hospital rooms are luxurious, comfortable and spacious with commanding views of the Country Club Plaza, so much so that when it's time to discharge our patients from the hospital, they often tell us they want to delay their "check out" time for another day or two.

Standing on the Shoulders of Giants

Our mission at Saint Luke's Cardiovascular Consultants is making sure your cardiovascular system is healthy. Caring for you and your heart is our passion. It motivates our research and drives our innovations. This is a legacy passed down to us from our founding cardiologists including Drs. James Crockett, David McConahay, and Warren Johnson, who all stressed excellence in clinical cardiology.

Sadly, three of our beloved and enlightened leaders passed away recently: Dr. Ben McCallister was the visionary behind the Mid America Heart Institute—the first dedicated heart hospital to open in America. Dr. Geoff Hartzler was the undisputed pioneer and global leader in interventional cardiology during its formative years between 1980 and 1993. Dr. Robert Conn was a legendary teacher and clinical cardiologist.

The founding physicians of SLCC set sky-high standards for themselves and their colleagues, and many of us were attracted to Kansas City for the privilege of working with these icons of cardiology.

"If I have seen further, it is by standing on the shoulders of giants."

Sir Isaac Newton

Hard Hearted or Kind Hearted? It's Up to You

Down through the millennia cultures from around the world all mistakenly assumed that emotions like love, hate, fear and anger arise in the heart. Emotions emanate from the brain of course, but they instantaneously register loud and clear in the heart and blood vessels. Over time, the negative thoughts and toxic emotions running through your head can crystallize into disease anywhere in your body, but especially in your cardiovascular system.



On the other hand, positive emotions like gratitude, kindness, love and connectedness will soothe and heal your heart, blood vessels and brain. Being emotionally healthy is essential if you want to be vigorous and enjoy a long and

healthy life; and your connections with others are vital in this regard. In this section you will find four articles on the topic, one by me and the other three by enlightened friends and colleagues from around the U.S. I hope you enjoy them and take the messages to heart.



James H. O'Keefe, M.D.

How Social Ties Can Save Your Life: a Cardiologist Explains

By Joel Kahn, M.D.

Since my days in medical school over 30 years ago, the town of Framingham, Massachusetts has taught thousands of physicians about heart disease and how to prevent it.

The long-term study of over 6,000 residents of Framingham began in the late 1940s and continues to this day. In the 1960s, scientists used their decades of observations to report that smoking, elevated cholesterol, diabetes mellitus, high blood pressure, and family members with early heart disease could predict the development of heart problems. The Framingham Risk Score (FRS) served as an icon of preventive

cardiology—by inserting just a few numbers into an online calculator, you knew all you needed to know about a person's heart risk. The science was accepted and the case was closed.

Nearby, however, a very different community was beginning to question whether the FRS had the final word on heart disease prediction.

Roseto (population: 1,600) is a town in Eastern Pennsylvania, settled by immigrants from southern Italy in the 1880s. For decades, the people of Roseto were able to protect their traditions and lifestyles from the old country. In the 1950s, the town began to gain notoriety when it was reported that deaths due to heart disease were dramatically lower than neighboring towns that were more typically "American."

For example, in the nearby town of Bangor (population: 5,000), there were 79 heart attacks from 1935-1944, compared to just nine in nearby Roseto. Although the two towns are just a mile apart, they continued to show the same dramatic disparity in congestive heart failure and overall death rates for the next few decades.

However, as the data continued to be gathered, from 1965 to the present day, heart disease began to climb in Roseto and the so-called "Roseto Effect" began to disappear.

What did researchers observe to explain decades of almost complete freedom from heart events in Roseto?



Scientists could not explain it using the FRS. Roseto residents smoked cigars, worked in foundries, fried their meatballs, and ate cheese and salami with abandon. What they found was that life in Roseto was much different than surrounding areas.

Grandparents lived with grandchildren and many households had three or four generations under the same roof. Strong ties brought community-wide celebrations for life cycle events and religious ceremonies. No one was ever alone, no one was ever lonely, no one was ever without overwhelming support and friendships. There was no crime, no locked doors, and no need for social welfare activities by the government as people took care of their own.

Beginning around the mid-1960s, traditions began to crumble.

Children began to move away, attend university, marry outside the community, bring meals in paper bags, and embrace American suburban life. The introduction of a Western lifestyle with long hours of work and social isolation, increased stress, and a processed food diet produced a quick jump in heart attacks and deaths due to atherosclerosis. Since then, Roseto has joined the melting pot of America and now suffers all of its chronic diseases.

Sadly, even today, it's rare to see a medical student who has learned to inquire about a patient's social support, circle of friends, family ties and feeling of security. There is no Roseto Risk Score or anything quite like it to easily quantify and describe someone's loneliness or connections.

What Roseto taught us is that we humans are social animals who fare best when we're not alone or isolated. The price of modern society on our diet, our stress levels, our exposure to toxins, and also our loneliness has been high.

I have an admission to make. My favorite part of a yoga practice is when the yogi asks us to join hands with the person on the mat to our right and our left, even if we're strangers. As we sway back and forth, whether chanting in Sanskrit to Girish or singing Let It Be, we build a community and protect our hearts from isolation.

Of course we shouldn't smoke and we should eat plant-based diets, exercise regularly, and have a knowledge of our numbers (blood pressure, blood glucose, cholesterol and others). Beyond that, for our health and for our heart, make it a point today to share a smile, give a hug, help someone resolve an issue, and take a moment to appreciate a family member or co-worker by building a bond that fights loneliness.

If they wonder why you did it, just say you're sharing the Roseto Effect and that they should pass it on.

Dr. Kahn is a Clinical Professor of Medicine at Wayne State University School of Medicine and Director of Cardiac Wellness, Michigan Healthcare Professionals PC. He also writes for Readers Digest Magazine as the Holistic Heart Doc and his first book, The Holistic Heart Bible, will be published by Readers Digest in January 2014.



Beautiful Practice

By Frank Forencich

Editor's Note: My friend Frank Forencich, a renowned exercise scientist and author, explains a whole new approach to training your heart—by practicing kindness and extending love to everyone and everything in the world around you.

All systems in the mind-body adapt according to how they're used, every cell and tissue constantly regenerating itself to meet the challenges of life. The nervous system is the most conspicuous example of our plasticity, but it's now possible to generalize this principle to the entire range of human capability.

We develop our body's work capacity by, well, working. We train longer and harder, gradually increasing the depth and breadth of our physicality. Over the course of weeks and months, our capability grows, setting us up for increased skill development.

We also have a very real love capacity, a plastic, trainable ability to extend, receive and experience love in our lives. This capacity is like every other human aptitude, physical or otherwise; we can increase its depth and breadth through effort, practice and experience.

The vagus nerve, otherwise known as the tenth cranial nerve, is a powerful player in our health and experience because it links the brain-mind with the heart, lungs and other major organs. It is a primary driver of the "rest and digest" response, otherwise known as "feed and breed." The vagus nerve slows heart rate, enhances digestion, increases insulin production and decreases inflammation. It stimulates healing, recovery and anabolic processes that are

"You learn to speak by speaking, to study by studying, to run by running, to work by working; in just the same way, you learn to love by loving."

Anatole France

essential to all the good things we want to do. Researchers measure the activity of the vagus nerve by tracking heart rate in conjunction with breathing; the result

is a measure of "vagal tone." Studies have shown that people with high levels of vagal tone tend to exhibit greater psychophysical health, higher mental and motor functioning, and more adaptive behavioral and social performance than those with lower vagal activity. In other words, high vagal tone is a very good thing for body, mind and relationships. In fact, building our vagal tone and love capacity may even contribute to our work capacity; calm and healing bodies are capable of greater physicality.

The really good news is that the vagus nerve is plastic and trainable, just like muscle. By working with sets and reps of loving thought and imagery, we can enhance its power. Fredrickson's research focused on loving-kindness meditation commonly practiced by Buddhist monks; study participants were assigned at



random to participate in a modest amount of meditation each week.

"Within a matter of months, their vagus nerves began to respond more readily to the rhythms of

their breathing, emitting more of that healthy arrhythmia that is the fingerprint of high vagal tone. Breath by breath—moment by moment—their capacity for positivity resonance matured."

This ability to increase our love capacity may well come as a surprise. After all, most of us are used to believing that love is an exceptional bolt of lightning that strikes us out of the blue; we think of love as a random, special event, not a skill or capability. But we're wrong. Developing a healthy, loving relationship with the world is something that we can learn. It is a practice.

Of course, human capability is not all upside. Just as we have a love capacity, we also have a "hate capacity" that is equally plastic and trainable. We develop this capability with sets and reps of bile, contempt and negative judgment. Over the course

of years and decades, we can even become “hate athletes.”

But hate is bad for our health, both personally and socially. Hostile thoughts and images sustain our stress response and over time, poison our tissue and our relationships. Hatred also primes our brains for increased vigilance and hostility. As the amygdala becomes sensitized to stress hormones, we become increasingly defensive, anxious and isolated, which in turn breeds increasing stress and fear. In this way, hatred ultimately turns upon its author and becomes an act of self-destruction.

Unfortunately, this is an easy trap to fall into. Our world is rich with evidence for any judgments we might care to adopt and we can make a case for almost anything. Not only that, the human mind appears to have an inherent bias toward negativity. Our bodies and our brains evolved in a highly exposed, often dangerous environment and we are naturally attentive to danger. In fact, numerous studies have shown that when it comes to capturing our attention, “the bad is stronger than the good.” Nevertheless, negativity and hatred are not inevitable; all we have to do is change the nature of our practice.

So how do we build our love capacity and become more proficient love athletes? As William James famously put it, “If you want a quality, act as if you have that quality.” In other words, lead with action and an authentic doing. If we challenge the body to develop a particular characteristic, our tissue will do its best to follow along with precise adaptations. If we challenge the mind-body-spirit to love the world more completely, it will figure out a way to do so.

Just as with our physical and athletic training, the practice consists

of high quality sets and reps. We practice loving kindness by repeatedly wishing good fortune, healing, prosperity and happiness on other people. They may be people we know and care about, or they can be people chosen at random; the specifics aren’t particularly important. In meditation, we might concentrate our attention on “love targets,” or on the experience of loving kindness in general. Of course, this experience has nothing to do with desire, lust, attachment or the receiving of love. Rather, it is about embrace and merger, of dissolving the separateness and duality between ourselves and the world.

Outside of meditation, we practice and build our love capacity with observations and conversations about gratitude, beauty, appreciation and the wonders of our lives. We list the things that we enjoy and appreciate about others, about events and about relationships. This is the polar opposite of complaining; it’s a celebration of the beauties of life and the people around us.

In addition to meditations on loving kindness, it’s also important to track our attention through the day. What kind of sets and reps are we doing from moment-to-moment? Are we building our hate capacity with endless complaining, drive-by hostility and negative judgment? Or are we building our love capacity with kindness and well-wishing? At every moment in our life, it’s a choice.

Of course, it’s easy to focus on love and kindness when conditions are good. When the people around us are friendly and the weather is mild, it’s easy to concentrate our attention on the beauty and wonders of the human experience. But that’s not enough. To make real changes in our mind-body-spirit, we need to practice when times are tough. Just

as the truly committed athlete does his laps in the rain, so too will the love athlete practice his meditations under the duress of social chaos and despair. Even when challenged by trying circumstances, annoying people, unrelenting stress and overt hostility, he returns his focus to love, kindness and the beauty of the world. Just as with physical training, the payoff comes when we persevere in the face of adversity.

In the end, we begin to see that there’s a lot more to love than just getting lucky. What’s true for physical athletics is also true for building an extended sense of loving kindness; we can be sure that no athlete ever lucked his or her way into greater stamina, strength or work capacity. In both cases, the process requires sustained effort and high-quality reps over the course of weeks, months and years.

A Native American parable puts it perfectly:

A boy was talking with his grandfather. “What do you think about the world situation?” he asked. His grandfather replied, “I feel like wolves are fighting in my heart. One is full of anger and hatred; the other is full of love, forgiveness and peace.” “Which one will win?” asked the boy. To which the grandfather replied, “The one I feed.”

Feed the right wolf.



“We Will Love Whoever You Love”

By James H. O’Keefe, M.D.

The other day, a long-time patient of mine came in for her annual check-up. Her second husband had just died after an extended battle with cancer. She faithfully sat by his side until he took his last breath.

“Sometimes Dr. O’Keefe, I felt as though my heart might literally break in two,” she confided in me. “That’s a common emotion,” I reassured her. “But how are you feeling now?” I asked.

“I’m doing much better,” she said. “I know it’s only been a few months since my husband’s death, but I’ve found a new friend and I’m getting on with my life.” “That’s great!” I told her.

“I wish everyone felt like you do,” she added. “My daughter thinks I’m moving on too quickly, and has refused to meet him. She doesn’t know what it’s like to come home to an empty house every day. I’m not good at being alone.”

I had to agree, most of us aren’t. There’s little argument that loving and being loved are good for your heart. But when our friends and family don’t accept our choice of partner, regardless of age, color or sexual orientation, it can be a heart-breaker. Wouldn’t we all be better off if we could adopt the attitude, “We will love whoever you love?”

Kin Selection

Kin selection—the survival of the fittest group—is not about an isolated fit individual. Homo sapiens are among the most social of all species on Earth. One person can’t survive for long alone; there is strength and safety in numbers. It was as true for the cave people 10,000 years



ago as it is today—our well-being and even viability depend upon us emotionally bonding and uniting as a clan, band or tribe.

So, among humans survival of the fittest is best characterized not only as a struggle for existence, but also a “snuggle for existence.” In a very real sense, an ability and aptitude to cooperate with our family and in-group makes us “fit” and improves the likelihood that together, we will survive and that our offspring will flourish.

Happy, Happy, Happy

Watch an episode of the popular reality show *Duck Dynasty*, and you’ll hear family patriarch Phil say, “Happy, happy, happy,” time and again. Of course, Phil has a lot to be happy about—a hit TV show, a popular line of duck calls, and some pretty big checks to cash.

But he also has kin selection on his side—an extended family that includes an eccentric brother, a wife who’ll cook up anything he catches, and sons, daughters-in-law and grandchildren. Though they don’t always agree, at the end of the day, Phil has the right idea—he accepts and loves them all.

Think: Glass Half Full

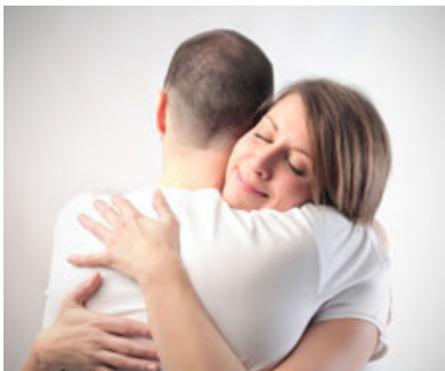
According to a new study in the *American Journal of Cardiology*, having a cheerful disposition and outlook on life, like Phil’s, could protect you from heart attack.

The study included 1,483 healthy people with siblings who had experienced some sort of coronary event (including heart attack and sudden cardiac death) before age 60. The study participants, who were part of the NIH-sponsored Genetic Study of Atherosclerosis Risk, were followed for 25 years and filled out surveys about their emotional well-being, life satisfaction, relaxation levels, anxiety levels, cheerful mood and level of health concern.

After following the participants for 12 years, the researchers found that even after taking into account heart risk factors, having a positive emotional well-being was linked with a one-third reduction in coronary events. Importantly, among people who were at the highest risk for heart disease, having a positive well-being was associated with a 50 percent reduction in coronary events.

Chronic emotional stress can wreak havoc on our heart and blood vessels. When we feel threatened our body dumps stress hormones like adrenaline (raising heart rate and blood pressure) and cortisol (elevating our blood sugar and increasing blood clotting tendencies) into our bloodstream. This gives us a boost in strength and speed temporarily, and thereby improves our ability to fight or flee from physical danger, but these hormones suppress the immune system, disrupt the digestive tract, and stress the heart and brain.

A recent study found that elevated cortisol levels, signifying prolonged stress, may be among the most reliable markers of future cardiovascular disease. Having even a few close personal relationships can shield us from the toxic effects of chronic stress. A common attitude found among many people who live to be 100 years old appears to be a contentment and overall satisfaction with life.



Vive la Différence

The United States is a patchwork quilt of humanity—we are a nation of immigrants from far-flung continents. Our vibrant diversity bestows upon us a collective strength, adaptability and tolerance. Individually, being open-minded and accepting makes us happier and stronger.

Among your family and friends, someone will likely select someone for their partner you aren't crazy about, but they are. You don't have to be married to them or live with them, just accept them and try to appreciate their good qualities. Isn't it better to trust their judgment and love whoever they love? And what's better for your heart—to be controlling and resentful, or happy, happy, happy? No question here. If you accept people and love them for their differences, you, your heart, and your relationships, will be all the better for it.

Quotes From the Heart

Luigi, DiMartino, my dear friend who lives in Positano, Italy, says: "You will only ever have one unconditional love in your life—your mother. If you are looking for another one who will love you no matter what—get a dog! If you don't believe me, try locking your wife and your dog in the trunk of your car; then see which one is still happy to see you when you open the trunk an hour later."



I asked my patient Bob, who turned 100 this month, what his secret was to living for an entire century in vigorous health. He laughed and said with a twinkle in his eye, "I don't inhale when I smoke my cigarettes."

Perhaps more importantly, his favorite foods are almonds and walnuts, baked fish and sweet potatoes. He has walked three miles a day for decades, loves the outdoors, and has an irrepressibly good-natured outlook on life.



Byron told me that the key to his remarkable success in life was that he has tried to live by his father's advice to him as a teenager: "Work like it all depends upon you. Pray like it all depends upon God."



Al told me that to keep his mind sharp and youthful, he tries to do these three things at least once a week: 1. Take a different route to work 2. Brush his teeth with his non-dominant hand, and 3. Make a new friend.



Paul, a healthy 82 years old, told Ethel, his 84-year-old friend, "At our age, we are all living on borrowed time." Ethel replied, "There is no such thing as borrowed time. We are all living on God's time, and when he wants us, he will call us home."



"Each of us is responsible for our own happiness."

Leatrice O'Keefe



"Every creature on earth has approximately two billion heartbeats to spend in a lifetime. You can spend them slowly, like a tortoise (with a heart rate of eight beats per minute), and live to be 200 years old; or you can spend them fast, like a hummingbird (with a heart rate of 1,300 beats per minute), and live to be two years old."

Brian Doyle



"Only as a warrior can one withstand life's difficulties. A warrior cannot complain or regret anything. His life is an endless challenge and challenges cannot possibly be good or bad. Challenges are simply challenges. The basic difference between an ordinary man and a warrior is that the warrior takes everything as a challenge, while an ordinary man takes everything as a blessing or a curse."

Don Juan



The Secrets to Living with Heart and Soul

By Shelly Bullard, M.F.T.

There are some people who just have it. You know, that thing. . . They illuminate a room. Eyes follow them. The spotlight naturally and effortlessly is drawn to them.

What's their secret? I know, and I'm going to tell you. It's called soul.

People who embody soul are irresistible. Seriously irresistible. Like, I-can't-take-my-eyes-off-you irresistible. Uh huh, it's that good.

Soulful individuals are always being pursued. People flock to them. They look good, they feel good; they've got that thing.

Guess what? You can have that thing, too. In fact, you already have it. You just have to tap in and let it shine. That's what this article is going to teach you to do.

Here are four easy steps to embody your soul and light up a room. Get ready to turn some heads.

1. Center

The quality of being centered is strong and peaceful; assured and graceful; aligned and free.

It feels heavenly to be around centered people because these qualities are so desirable to us. They also aren't the norm.

We live in a fast-paced, frazzled world, so being a pillar of peace is an oasis in a very dry desert. If you flow with grace and ease, no doubt people will be drawn to flow with you.



Embody your soul by getting your gratitude on. Relish all the beautiful things you encounter during your day, feel it before you go to sleep, and be thankful whenever possible. This practice will greatly increase your personal magnetism, guaranteed.

3. Live Your Truth

People with that thing have confidence. Not inflated confidence; not narcissism. It's a deep confidence. Faith.

They know what they want, and they know that they're going to get it. This type of unwavering conviction is extremely attractive to us because it's what we all want, too.

We all want to know. We all want to be certain. We all want to believe. Therefore, those who live in this manner are utterly irresistible to us.

When someone speaks with conviction, we listen. We may not like what they're saying, but we'll listen. Conviction draws a crowd.

Guess what? You have conviction, too. You may not be aware of it, but you do. It comes in the form of your intuition, your higher self, your truth.

There's a voice that lives inside you; it's not in your head, it's in your heart. When you listen to this voice you'll be guided in the direction you're supposed to go. And as life unfolds the way you want as a result of listening to this voice, you'll have found your truth.

So how do you do it? Easy. You practice. Whether it's meditation (focus on your breath), mindfulness (focus on the now), or just paying attention to what is happening in the present moment, these practices will lead you to embody a sense of calm and ease.

People will take note. It's a slight shift with a big impact. Train yourself to be here now and watch how others respond to your aura of grace.

2. Be Grateful

The reason gratitude is paramount in attracting others is because it aligns you with a state of abundance. Abundance overflows – it wants to share. When you're overflowing with good vibes, others will flock by your side.

Think about it. How does it feel to be around people who are grateful; people who are happy, free-spirited, and gracious? Pretty nice, right?

Gratitude overflows. It's light, joyful and yummy. When you feel grateful, you become one with this delectable energy; it's an absolute people magnet!

There's nothing more captivating than a person on their path. Listen to what the real you has to say, then follow through. People will always be drawn to you as a result of being true to yourself.

4. LOVE

Love. Just love. Love your city. Love your home. Love your food. Love your dreams. Love your people. Love.

Love the things that are easy to love, and stretch to love the things that aren't.

When you love fearlessly, you beam. You're a light in the storm. You're a smile in the crowd. You're a breath of fresh air.

Love is that thing. Involve your heart in all that you do and people won't be able to take their eyes off you.

Make a commitment right now to embody your soul—to be the most irresistible version of you. Center, feel grateful, live your truth and love your heart out, and you will, without a shadow of a doubt, become a magnet to everyone who has the privilege of basking in your light.

Shelly Bullard is a licensed marriage and family therapist turned love coach. She believes romantic relationships are the way in which we spiritually transform. Our most profound growth comes from evolving through issues that arise in relationships, leading us to a deeper sense of joy, connection, and fulfillment in love. She can be contacted via her website: shellybullard.com.



Guidelines on Sodium Restrictions: Take Them with a Grain of Salt

By James H. O'Keefe, M.D., and James J. DiNicolantonio, Pharm.D.

Good news for you salt-lovers: we are discovering that severely restricting your intake of sodium is not only unnecessary, it may be counterproductive to health and well-being.



So you can stop feeling guilty about indulging in an occasional salty treat; in fact some high-sodium foods such as sauerkraut, salted nuts, sardines and dill pickles may be among the healthiest things you can eat.

Let me be clear, we're not giving you permission to go out and binge on salty foods like French fries, potato chips, and nachos with cheese. Sodium generally comes from these highly processed foods; however, this should not vilify sodium as the only culprit for the increased cardiovascular risk associated with the modern diet. It's still controversial whether sodium increases blood pressure (depending upon the individual being "salt-sensitive" and how much potassium and magnesium are ingested in one's diet).

The latest and greatest scientific studies show that getting overzealous about cutting salt out of the diet may not be ideal for one's health and longevity. So it really should come as no surprise to learn that a moderate intake turns out to be the "sweet spot" for salt too. Several recent large and impressive studies have independently found that severely restricting salt intake is not all that effective in lowering blood pressure or reducing risk of heart attack or stroke.

Moreover, a very low-sodium diet may contribute to elevations in blood sugar, lipids and stress hormones that can increase heart rate. There is even some evidence to suggest that severely restricting salt intake might increase risks for premature death due to cardiovascular and other causes. An ideal diet should include modest serving sizes of fish and seafood, lean meats, skinless poultry and dairy, all of which are moderate in sodium.

Sea salt recently has become popular in restaurants and supermarket aisles across the country. Though it's touted as "all-natural," and isn't processed like table salt, both are about 40 percent sodium, and too much of this mineral can cause excess fluid retention, which in turn leads to swelling and elevations in blood pressure.

Also, sea salt contains less iodine than table salt; people who meticulously avoid table salt can become deficient in iodine—which often leads to an underactive thyroid (hypothyroidism).

Bottom line: shoot for a moderate consumption of sodium—about 2,300 to 3,000 mg. per day. Either too much salt or too little salt may perhaps lead to health problems.

James DiNicolantonio, Pharm.D., is working closely with Dr. O'Keefe as a research scientist at the Mid America Heart Institute.



Dr. DiNicolantonio

Fast Each Night to Shine Each Day

By James H. O’Keefe, M.D., with Joan O’Keefe, R.D.

Joan’s parents, Kathleen and Leonard, were examples of the remarkable people from the Greatest Generation. Leonard, born and raised in Hawaii, didn’t own a pair of shoes until he was 10. For after-school snacks, he climbed trees to pick tropical fruit and dove for abalone in the Pacific.

Kathleen moved to Honolulu to work for the U.S. Navy shortly after the bombing of Pearl Harbor. After the war, Kathleen and Leonard moved to San Francisco and got married. They made a perfect pair: Leonard was a happy-go-lucky, free spirit who loved nature and worshipped his “Kitty.”

Kathleen, in contrast, was smart, tough-minded, practical, and had a passion for betting on the horse races. They both lived nearly a century (Kathleen to age 99 and Leonard to 94) with sharp minds, clear vision and strong steady hearts. They were generations ahead of their time in how they ate and lived.

Their daily diet was full of fresh vegetables and fruits, including their evening meal which consisted of a large salad of leafy greens dressed with extra-virgin olive oil and red wine vinegar. Other staples in their diet included fish, eggs, nuts and berries, along with coffee, green tea and water.



Leonard and Kathleen

Even so, one of the keys to their longevity was an aspect of their diet that I didn’t appreciate at first. After Kathleen and Leonard finished their dinner about 7 p.m., they never ever ate anything else until breakfast—12 hours later.

Fasting is, without question, one of the most widely prescribed religious practices. A time-honored commandment of Buddhist, Hindu, Jewish, Muslim and Mormon religions, these faiths teach that fasting, generally for 12 to 24 hours, purifies the mind and body, strengthens resistance, and improves concentration. An evolving scientific body of evidence confirms the fact that fasting can indeed purify the body, perhaps better than any other strategy. Studies also show that regular fasting may improve survival and reduce risks of diabetes and heart disease.

Purify Your System

Annoyingly often, I find myself trying to discourage my patients from pursuing sham treatments such as colonic cleansing or chelation therapy in their misguided efforts to purify their bodies and become healthier. Perhaps they imagine that flushing out one’s bowels is like hosing out a dirty garage, but in truth your body is amazingly effective at self-cleaning if you can just pause and give it a break from having to continually process calories—non-stop, 24/7.

We are strong proponents of our “Forever Young” diet, which is anti-inflammatory by reducing the

spikes in blood glucose and fats after eating a meal. Yet, the undisputed best method for preventing these spikes is to just simply quit consuming calories for at least 12 hours on a regular basis. This ensures that all the “smoke” generated by metabolizing your last meal is cleared from your system by the next morning. This smoke billowing through your body is in the form of free radicals, which in turn triggers inflammation. By simply fasting, you can help to clear the inflammation, strengthen the immune system, and enhance your capability to heal yourself and grow stronger overnight.

The old saying—“starve a fever and feed a cold” originated in Michelangelo’s era—16th century Europe. As with much cultural wisdom, it may convey some truth. Fasting for a short period of time enhances immunity, especially against bacterial infections and influenza. And because the process of digestion requires substantial energy, fasting allows your body to divert more of its resources toward fighting off the infection. In contrast, a cold usually runs its course in about a week, and fasting for this length of time would be counterproductive for immunity and healing.

Fasting the Easy Way

Bill was turning 55 and was overweight. He asked if he could try a diet that involved fasting. I told him, “Each week I want you to eat three meals a day for six days, then skip a day.” When he returned six weeks later, he had lost nearly 20 pounds. I congratulated him.

“That’s astounding Bill. You must be following the program closely.” He nodded yes. “I’ll tell you

though, that seventh day nearly kills me!" I said, "So the hunger gets pretty difficult to tolerate?" Bill replied, "No, it's all that darned skippin' that nearly does me in!"

For more than 99.9 percent of our homo sapiens' family history, we had no electric lights, refrigerators, TVs, computers, microwaves or all-night drive-thru restaurants. Shortly after we finished eating our evening meal and the daylight faded to night, we retired to our beds. And we didn't eat again until sometime after the sun came up the next morning. The long night's sleep and fast provided indispensable time for healing and purifying the body and brain; leaving one feeling rested, revitalized, and recharged upon awakening the next morning.

A 12-Hour Nightly Fast Extinguishes Inflammation

You are designed to thrive and look and feel your best when you go 12 hours of each 24-hour period without consuming any calories. Why do you think it's referred to as "break-fast?" You can't break a fast if you snack right up until your midnight bedtime and then eat again upon awakening five hours later. The habits of staying up late and eating after dark are very recent developments in the 150,000-year sweep of human existence. So, your metabolism is hardwired to anticipate a nightly fast, which is a key time for your body to clear the inflammation from your system, and burn off belly fat to supply the energy to keep your "furnace running" while you are sleeping.

Consume No Calories After Dinner to Burn Off Belly Fat

During daylight hours, the majority of the calories you consume are burned for fuel to power

your muscles and brain. The leftover energy is converted to glycogen and stored in the liver as a source for quick fuel between meals. During the night, as you sleep and fast, your body converts any leftover glycogen back into glucose and trickles it into your bloodstream to maintain steady blood sugar levels. And when you burn through your stored glycogen, your body taps into your fat stores, and begins to melt away belly fat, which is burned for energy. So when you quit eating after your evening meal and get to bed for eight luxurious hours of healing, age-defying, restorative beauty sleep, you will also be burning off belly fat while you snooze.

But keep in mind that it takes a few hours to deplete the day's glycogen stores. So when you snack until midnight and then gobble down a breakfast at 7:30 a.m. the next morning, your body will not have needed to melt much body fat during the night. In other words, if you limit your eating to a period of about 12 hours a day, say between about 7:30 a.m. to 7:30 p.m., you will give your body a chance to burn through all of its stored glycogen for the first half of the night, at which point it will start melting belly fat for the last several hours of the fast.

Over time, a nightly fast can transform your body composition and rejuvenate your long-term health.

In a recent study published in *Cell Metabolism*, researchers found that mice fed a high-calorie diet with meals spread evenly throughout the 24-hour period became obese and diabetic; while in contrast other mice eating the same diet with the same total daily calorie intake, except concentrated in an eight-hour period, did not gain any weight and did not develop diabetes. So it appears that fasting for 12

hours might protect to some degree against many of the harmful effects of an unhealthy diet, including putting on excess belly fat and developing diabetes.

Protein and Fiber: Essential for Overnight Fasting and Losing Weight

A dinner that contains protein, fiber and water will make it easy to get in the habit of not eating or drinking calories between the evening meal and breakfast the next morning. When you want to avoid eating for 12 hours it is essential that you are not feeling any hunger. And the recipe for long-lasting satiety is protein + fiber + hydration. Your body needs plenty of protein to rebuild tissues that are constantly breaking down.

Each day you tear down about a half-pound of protein, which must be reconstructed in order to build and maintain strong muscles, sturdy bones, a healthy digestive tract, and a powerful and vigilant immune system. Eating protein will keep you full, and help you to lose excess body fat while preserving or even augmenting your valuable muscle tissue. Fiber ideally obtained from vegetables, fruits, nuts and legumes will also help to keep you feeling full longer.

Recent studies also show that a high-fiber diet is helpful at preventing cancers, especially of the digestive tract, lowering heart attack risk and improving overall life expectancy. Gulping down a 12 to 16-ounce glass of water mixed with a heaping tablespoon of sugar-free Metamucil an hour or two after your evening meal will help to keep you full and make it easier to fast after dinner each night.

How Sleep Flushes Debris from Your Brain

By James H. O'Keefe, M.D.

A revolutionary new study found that sleep allows for markedly increased circulation of cerebrospinal fluid throughout the brain, thereby cleansing it of accumulated debris (including beta-amyloid protein, the prime suspect in causing Alzheimer's). So we need sleep in part to flush out the brain, ridding it of toxins that are the harmful by-products generated during wakefulness.

Thinking demands massive metabolic work, and indeed the brain is the "hottest" tissue in the body, requiring more energy when awake than any other organ, including the heart. Burning all this fuel to power the brain while you are awake generates a great deal of "smoke" in the form of free radicals, beta-amyloid proteins and other potentially toxic metabolic by-products.

When we drift off into dreamland, our stress hormones fall and the lymphatic channels which course along parallel to the arteries and veins running throughout the brain expand by about 60 percent. The wide open lymph channels allow the cleansing cerebrospinal fluid to wash throughout the brain while you sleep, flushing out the sludge and smoke that had built up during the day. Perhaps the worst of the debris is beta-amyloid protein, which gums up the neurons of the brain and eventually causes Alzheimer's disease. Astonishingly, during sleep the clearance rates of beta-amyloid are doubled.

Problems that seem overwhelming when you're exhausted are usually not so daunting after a long, refreshing night's sleep. Your fully rested brain is cleansed, un-



cluttered and more powerful again. Getting 7 to 9 hours of rejuvenating sleep cleans out your brain like a hard rain flushes out a city's debris, carrying the dirt, grime, litter and pet waste into the sewers to be eliminated.

Along these same lines, the best way to cleanse your body and bloodstream is to fast regularly. If you can even just get in the habit of going 12 hours most nights without eating, it will allow the time necessary to clear the "smoke" generated by metabolizing all the calories from the foods and beverages you consume during the day.

Work Out to Plump Up Your Brain

Regular exercise is like Miracle Grow for your brain, and is the single-most important step you can take to keep your mind sharp. Physical exertion is especially good for improving memory and mood. An encouraging new study found

that middle-aged people who did moderate exercise for about 150 minutes per week for two years showed growth in the size of the hippocampus—the part of the brain responsible for memory. In contrast, the sedentary group showed continued shrinkage in this crucial brain region over the two-year span. Exercise increases levels of brain-derived neurotrophic factor (BDNF), which stimulates growth of new neurons and new connections in your brain—regardless of whether you are 10 or 90 years old. Other steps for keeping your brain youthful and your mind astute include:

♥ Keep your waist size to half your height in inches.

♥ Eat more brightly colored vegetables and fruits. Berries and leafy greens are best.



♥ Decrease your intake of processed carbohydrates such as sugar and grains.

♥ Eat more healthy fat, like olive oil, avocados, nuts and seeds.



♥ Increase your consumption of omega-3 fat from fish and fish oil.

♥ Have your vitamin D level checked, and make sure it's well into the normal range (35 to 65 ng/ml). Usually this requires taking a supplement of at least 2,000 IU daily of D3.

♥ Brush your teeth twice daily and floss every day.

Coffee and Tea Improve Brain Health

Coffee and tea, after water, are the most widely consumed beverages in the world, and are healthy sources of caffeine. These drinks are loaded with biologically active compounds that are good for you. Coffee and tea can lower risks for diabetes and high blood pressure, and also help to burn belly fat and ward off depression.

Impressive new studies suggest that coffee and tea may also improve longevity and brain health, reducing risks for stroke and degenerative brain diseases such as Parkinson's and Alzheimer's.

But be careful, because of their caffeine content, too much coffee and tea can cause anxiety, insomnia, tremulousness, and palpitations, and at high doses can increase calcium loss in the urine possibly leading eventually to bone fractures. Best to drink coffee and tea in moderation, not more than four cups of coffee or six cups of tea per day.

The Healing Power of Sleep

By James H. O'Keefe, M.D.

Instinctively, you've always known that a good night's sleep was good for you. But scientific evidence continues to show that getting your "40 winks" is one of the best things you can do every day, especially for your heart.

A recent study published in the *European Journal of Preventive Cardiology* was the first to investigate whether the addition of sleep duration to four other traditional healthy lifestyle factors could reduce the risk for heart disease.

This study, called the Monitoring Project on Risk Factors for Chronic Diseases (MORGEN) was conducted in the Netherlands and included 6,672 men and 7,967 women aged 20–65 years old. They were free of heart disease when the study started, and were followed up for a mean time of 12 years. Details of physical activity, diet, alcohol consumption, smoking and sleep duration were recorded between 1993 and 1997, and the subjects were followed-up through a cross-link to national hospital and mortality registers.

The four healthy lifestyle habits followed were exercise, healthy diet, moderate alcohol consumption and non-smoking. The study showed that the combination of these four traditional healthy lifestyle habits alone was associated with a 57 percent lower risk of heart disease and a 67 percent lower risk of death.

But add "sufficient sleep," defined as seven or more hours a night, to the mix and the overall protective benefit increased—resulting in a 65 percent lower risk of heart disease and an 83 percent lower risk of death. Even just getting a good night's sleep reduced the risk of heart disease by 22 percent, and death by 43 percent, when compared to those with insufficient sleep.

So what's the bottom line? Don't skimp on sleep, yet don't overdo your snoozing either. Aim for 7 to 9 hours of sleep in each 24-hour period. If you do, you'll multiply the beneficial impact of the other healthy things you're doing in your life, like exercising and eating right. Getting a good night's sleep will not only reduce your overall risk for heart disease and death, but there are other benefits too that you'll see immediately: you'll feel happier, look healthier and you will be ready for whatever comes your way each new day.



A \$50 Scan that Might Save Your Life

By James H. O’Keefe, M.D.

Cathy was NOT happy about turning 52. Like most of us, since the day she turned 21, the anniversary of her birth has generally made her feel a little melancholy about being another year older. Yet, this birthday was especially anxiety provoking. When she was in the fifth grade, her father dropped dead of a heart attack at age 52. Understandably, the event emotionally traumatized her at the time, and she always dreaded the day when she would reach that fateful age.

So she decided to face her fears head-on and came into our office for a CardioScan. She didn’t even need a doctor’s referral; for just \$50, and a few minutes of her time, this non-invasive, no-stress, no-needle, quick and safe procedure allowed us to “look under her hood” and check the fuel lines to her engine.

Ideally, Cathy should have had no calcium in her coronaries—a Calcium Score of 0. So we were concerned when we saw her Calcium Score was 355. . . a moderate to severe amount of plaque. This is a powerful predictor of future risk of heart attack and cardiac death. Cathy was devastated. Her worst fears were confirmed. The disease that took her father was now threatening her.

I saw her for an office visit and ordered an exercise stress test, which turned out to be perfectly normal. Importantly, I enrolled her in our CardioWellness Center (CWC). For the past seven years, Cathy has been part of a project that



Soft, supple normal coronaries

Diseased and calcified coronaries

we recently published in a *Journal of the Mayo Clinic Proceedings*. In this study, we followed for up to 10 years 800 people like Cathy who had abnormal calcium scores. For all of our people in the CWC, we use aggressive risk factor treatment with diet, exercise, stress reduction, smoking cessation and drugs as needed to control cholesterol, blood pressure, weight and blood sugar. In this study we were encouraged to find that the folks in the CWC stayed perfectly healthy, with very low rates of cardiac problems. In fact, these people did every bit as well as a matched healthy population without heart trouble.

If Cathy wouldn’t have come in for her CardioScan, she would’ve remained oblivious to the inflamed plaques that were festering in her coronary arteries, and she might have ended up like her father. Instead, she and her coronaries are healthier today than they have been in decades and her future is rosy.

This month, appearing in another major medical journal, we published a study focusing on a new silent killer—fatty liver disease. Today about one in every three American adults, generally unbe-

knownst to them, has an abnormal amount of fat in their liver. This study, headed by Drs. John Helzberg and Rajiv Chhabra, found to our surprise that in a group of about 400 healthy individuals who had a screening CardioScan, a fatty liver was the strongest predictor of having calcified plaques in the coronaries.

How does a person get a fatty liver? By consuming too many calories, especially in the form of sugar, grains, processed foods and alcohol and having a lot of belly fat.

Pâté (also known as foie gras) is a high-fat spread or dip made from duck or goose liver that’s popular in France. Farmers who raise waterfowl have long understood the recipe for producing fatty liver in their birds—force-feed them grain three times a day and keep them penned up so they can’t exercise. So you shouldn’t be shocked to learn that if you want to avoid having a fatty liver, you should stay physically active and not eat sugar and grains, especially in the forms of processed starchy foods such as bread, rolls, pasta and baked goods. When your liver gets full of fat, it spews inflammation out into the bloodstream, which eventually predisposes to everything from diabetes and heart disease to cancer and dementia.

Starting soon, on every person’s CardioScan in addition to measuring the amount of calcified plaque in the coronary arteries, we will also be looking for evidence of fatty liver.

Trim Your Waistline and Save Your Senses

By James H. O'Keefe, M.D.

Startling new evidence shows links between coronary artery disease and hearing loss, macular degeneration and even Alzheimer's disease. The most effective treatment of all for these diseases is to prevent them before they ever get a foothold in your system.

James A. Wise, Ph.D., FAAA, president emeritus, Associated Audiologists, Inc., sees evidence of the connection between these diseases every day in his practice.

"It's very common for me to see a patient who has heart disease and hearing loss," he says. "Researchers theorize that the inner ear is so sensitive to the blood flow changes that occur with heart disease, that it could affect the ear earlier than other parts of the body. So, if you have a heart problem, be aware of the potential connection and monitor your hearing closely."

Likewise, the link between a healthy heart and healthy vision is apparent for ophthalmologist Daniel Durrie, M.D., Durrie Vision.

"Researchers have connected age-related macular degeneration (AMD) to increased risk of dying from heart attack, as well as stroke," Dr. Durrie says. "The risk increases significantly when we see AMD in patients under 75. That's why it's so important that we dilate your eyes during an annual vision exam. It allows us to look closely at the blood vessels in the eye and determine if there have been any worrisome changes since your last vision exam."



The good news is that because all of these problems are connected, these simple diet and lifestyle strategies can not only make your heart happy, but can keep your mind sharp, your vision clear and your hearing keen.

By the way, these steps will also help you burn off any excess belly fat and get back your sexy waist. Talk about your "win-win" strategy!

- 1** Avoid anything and everything with added sugar.
- 2** Don't smoke. If you do, switch to electronic cigarettes.
- 3** Drink six to eight glasses of water daily (for a total of at least 50 ounces per day).
- 4** Drink coffee and tea, but switch over to decaf by mid-afternoon.
- 5** Sleep for seven and to nine hours during each 24-hour period; naps count toward the total sleep time.

6 Choose two colors (vegetables and fruits) and one protein, three times a day. Serve your meals on seven-inch plates.

7 Mix one rounded tablespoon of Metamucil (no added sugar version) into 16 ounces of water and drink this in the late afternoon or early evening.

8 If you drink alcohol, choose red wine, and be disciplined about limiting it to not more than one six-ounce glass per day for women, or up to two glasses daily for men. It's ideal to have your red wine with or before the evening meal.

9 Avoid anything and everything made with wheat, even whole wheat.

10 The only juice you should ever drink is low-sodium V8 juice. Shoot for one or two glasses daily.

Stand Up for Yourself!

By James H. O'Keefe, M.D.

I hope you are NOT sitting down as you are reading this because mounting evidence indicates you would be better off if you got in the habit of standing more often.

My wife Joan is the queen of standing. Like her mother (who lived to be 99 with a sharp mind and healthy heart), she rarely sits down during the day—even to eat. Data to prove that standing up is good for you goes back more than 60 years, when a study from England compared bus conductors, who stood while they worked, with bus drivers, who of course sat while they worked. This study, which appeared in the esteemed medical journal the *Lancet*, found that the bus drivers had twice the risk of developing heart disease compared to the bus conductors.

Spending ever more time on our bottoms is getting to be a big problem. Some recent studies suggest that sitting too much may shorten a person's life by about two years or more. Indeed, sitting is the new smoking and it's become a raging epidemic. We sit in cars, planes and trains, and we sit all day at work, and then come home to sit and eat; after which we sit and watch TV.

Michael Mosley, a British medical doctor and BBC journalist, along with a team of researchers, recently conducted an experiment about the dangers of sitting. The researchers asked a group of average sedentary adults to stand rather than sit for at least three additional hours each day for one week.

The study volunteers stuck to the program nicely. Indeed stand-

ing for three extra hours a day seemed not to bother them and many even reported feeling better, including one woman who was surprised that the increased time on her feet during the day improved her arthritis symptoms.

After meals, the study volunteers' blood sugar levels fell back down to baseline much more rapidly on the days when they stood compared to the days when they sat. They also burned more calories, about 50 calories extra during each hour of standing.

That may seem trivial, until you consider that if you made a habit of standing an additional three hours a day for a year, it would add up to about 30,000 extra calories, or around eight pounds of fat. This would be the amount of energy you burned if you ran 10 marathons during the year! And simply standing up an additional three or four hours each day would put much less wear and tear on your joints and your heart compared to 10 marathons a year.

And don't get too smug just because you make a point of exercising most days. Accumulating data indicates that even a bout of daily exercise cannot protect you from the damage done by extended periods of sitting.

Exercising vigorously, such as jogging, weight lifting, stair climbing, tennis, swimming or biking, provides unique and wonderful health benefits to both mind and body. Yet, each of us also thrives on the continual, hardly noticeable increased muscular activity and balance adjustments that standing requires. Just getting off your duff and up on your feet helps to normalize blood sugar levels and improves many hormones, and also



douses the fires of inflammation.

So what is it about sitting that is so detrimental? For starters, your body becomes resistant to insulin, the hormone that keeps your blood sugar in check. Extended periods of sitting also markedly decreases the activity of an important enzyme called lipoprotein lipase, which dissolves fats so that they can be burned as a fuel by the muscles.

When you sit for a prolonged period of time, the amount of fat circulating in your blood as triglycerides rises, and this can lead to clogged arteries. And perhaps most importantly, spending too much time perched on your "booty" also increases inflammation—which over time can predispose to all sorts of nasty diseases such as diabetes, heart disease, arthritis and Alzheimer's.

By the way, this notion of standing while working is not a new idea. Benjamin Franklin designed a special desk so he could read and write while he stood. Ernest Hemingway and Sir Winston Churchill also had elevated work surfaces for reading and writing while standing. I have a new office desk that is designed to be used while on my feet. In fact, I wrote this article while standing up!

Unlock the Secrets in Your DNA

By James H. O'Keefe, M.D.

Recently I had my DNA analyzed by 23andMe and discovered all sorts of secrets about myself. I strongly encourage you to have a DNA analysis too. This is a mind-blowing technology for assessing your health, disease risks and ancestry.

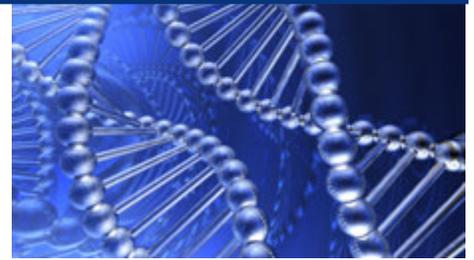
Using the simple and quick kit they mailed me, I collected a saliva sample in the small test tube and sent it back to them via a pre-paid package—all for only \$99. Over the next six weeks they e-mailed me a large amount of fascinating information they uncovered by precisely reading the billions of bits of data

encoded in my DNA.

For instance, my ancestors were Celts from Ireland, Vikings from Norway, and Basques from France/Spain; I also have a trace of Native American ancestry. And surprisingly, about three percent of my DNA is from ancient Neanderthals. My wife Joan's reaction to this last piece of information was, "Well that explains a lot."

Knowing your DNA will allow you to peer far more deeply into your true identity—where you came from, who your ancestors were, the diseases you are at risk for and others for which you have innate immunity.

DNA is not destiny. Genes load



the gun, but our environment and day-to-day habits pull the trigger. Forewarned is forearmed. When you know what diseases you are at risk for, you can usually adjust your lifestyle, diet and daily regimen to neutralize nearly all of these potential threats to health and vitality. The future is now—take advantage of the 21st century scientific triumph of DNA analysis. Five years ago this test would have cost \$10,000 and wasn't nearly as comprehensive. Today you can get it for a hundred bucks.

Rx: 10,000 Steps; Sig: Take Each Day

By James H. O'Keefe, M.D.

The first step in changing anything is measuring it. If you are like most Americans, you aren't getting enough exercise, so you need to start tracking your steps each day. This is more fun than it may sound at first blush. The new activity devices are clever, inconspicuous little digital wonders that will track the number of steps you take, floors of stairs you climb up, calories you burn, miles you walk or run, and even the amount of time it takes you to fall asleep, total sleep time and number of times you wake up. All this for about \$100!

My favorite such device is the Fitbit One, which you can find at fitbit.com. It is simply astounding how wearing this little digital genius can dramatically change a person's attitude and behavior.



When I wear this I feel like I am "getting credit" for climbing the stairs; or walking for 15 minutes over my lunch break;

or making a point to get to bed on time so I can get a rejuvenating eight hours of sleep. And you can compare your results to friends and family either in person, or using social media like Facebook or Twitter. The results stream automatically to your cell phone too.

Some of the healthiest populations on Earth average about 10,000 steps per day; we Americans take about half that—5,200 per day. Your goal is 10,000 steps—so get a Fitbit or some another activity tracker. My good friend and colleague, Dr. Joe Goeke, wears a Jawbone—a bracelet that measures his daily activity.

Even small tweaks to your lifestyle can add up to large differences. I have developed the habit of standing up whenever my cell phone rings—why do you think it's called a MOBILE phone?! If the call is going to take a few minutes, I will often step outside to get some fresh air and talk while I stroll around in the gorgeous gardens on the campus at Saint Luke's Hospital on the Plaza.

I also stand up more often and go over to chat in person when I need to communicate with a colleague rather than firing off yet another e-mail. It is also very important to get in the habit of taking the stairs every chance you get—climbing up flights of stairs is the single most strenuous activity most adults do during their everyday lives.

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James H. O'Keefe, Jr., M.D., Editor-in-Chief

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Make it a Priority to Get Your Flu Shot — It Might Save Your Life!

A recent study published in the esteemed medical *Journal of the American Medical Association* looked at 6,700 people and found that those who received the influenza vaccine (flu shot) had a one-third lower risk of having a heart attack or dying over the next year compared to those who did not get the flu shot.

Being vaccinated against influenza was particularly effective for preventing cardiovascular catastrophes and death in people with known coronary artery disease.



**Any names of patients used in this newsletter have been changed to protect the privacy of these individuals, except in instances where they preferred that we use their real names.*

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