KIDNEY HEALTH

REDUCING RISK AND RAISING AWARENESS

Alonzo Mourning overcame his battle with kidney disease, becoming a champion on and off the court.

Strength in numbers
Join the fight to stop polycystic kidney disease.

Kidney 101
How well do you know your kidneys?
You are born with two kidneys. They start life behind the bladder in the unborn fetus and then “grow” up your back into their final position just below the rib cage.

Understanding your kidneys

Kidneys reach maximum function at approximately age 10 and ultimately weigh about five ounces each. Despite their small size, they receive about 25 percent of the heart output and cleanse the entire volume of blood many times per day. How well the kidney functions is expressed as glomerular filtration rate (GFR). Normal GFR is 90–100 percent.

In addition to cleaning blood, kidneys correct salt and water imbalance. They release and regulate hormones important in bone health and in the manufacture of red blood cells. They regulate blood pressure and important chemicals in the blood including sodium, potassium, calcium, phosphate, magnesium and acid. The kidneys also remove toxins and drugs from the body.

Diagnosing kidney disease

The most common causes of kidney disease are diabetes and high blood pressure. There are also inherited kidney diseases such as polycystic kidney disease and Alport’s syndrome.

Chronic kidney disease (CKD) is diagnosed by measuring a blood chemical (creatinine) which is then used to estimate GFR (eGFR). A urine test is done, looking for abnormal cells or protein. The combination of urine tests and eGFR divides CKD into Stages 1 through 5. Stage 5, also known as “end stage kidney disease,” is when eGFR is less than 15. At that point, patients are very sick and may need dialysis treatment or a kidney transplant to replace the job normal kidneys would do for them.

Screen before symptoms strike

Kidney disease may be totally without symptoms. Because early detection can slow or prevent progression to kidney failure, the National Kidney Foundation recommends blood and urine testing for CKD in everyone at risk—those with high blood pressure, diabetes, or family history of either. Those who are elderly or people with heart disease and family history of kidney disease as well as racial minorities including African-Americans, Hispanics, Asians, American Indians and Pacific Islanders, are all at high risk of CKD and should be screened.

Patients with CKD should carefully control blood pressure, especially with the use of drugs such as ACE-inhibitors and ARB agents. These drugs have been shown to slow kidney disease. Low salt and avoidance of a high protein diet are important. Treatment of bone disease and anemia may be necessary. Treatment of infections and blockage in the bladder or kidneys will preserve kidney function. Maintaining ideal body weight with diet and exercise is desirable. Cholesterol treatment, careful management of diabetes and heart disease, and avoiding smoking will keep kidneys functioning longer.

High blood pressure, diabetes, hardening of the arteries and other kidney diseases may hasten the loss of kidney function. Be good to your kidneys so they will last you the rest of your life. The National Kidney Foundation offers free screenings through its Kidney Early Evaluation Program (KEEP). For information on local KEEP screenings and to learn about kidney disease, visit the National Kidney Foundation website at www.kidney.org.

HOW I MADE IT

Frank Germinaro of Kenosha, Wisconsin, set a record last March when he celebrated an anniversary—his 40th year with a kidney donated to him. To celebrate this landmark, Germinaro participated in the 2010 National Kidney Foundation U.S. Transplant Games, which took place in his home state this summer.

Germinaro, who outlived the hospital where he was transplanted, never dreamed he’d have to think about things like gray hair. Diagnosed with kidney disease as an infant, he was a chronically ill child who was hooked up to a dialysis machine.

Today, the married father of four grown children who’s enjoyed a career as a school principal and conductor/musical director of the Kenosha Pops/Concert Band, is still overwhelmed with gratitude. He received the kidney of a 13-year-old girl who died of a brain tumor and thinks about her family’s sacrifice. “She was a young girl with a future ahead of her and I was a young guy who needed a future and I’ve been able to have one because of her,” says Germinaro.

Germinaro, who is the owner of one of the longest-lasting kidneys in the U.S., gives back through the National Kidney Foundation. He’s served on the organization’s patient family council and on a special workgroup that developed practice guidelines for kidney specialists. Germinaro spoke at the NKF 2010 U.S. Transplant Games Donor Recognition Ceremony this summer, where he tried his hand in the event’s golf competition.

“I am honored to have been asked to speak at the ceremony,” Germinaro says. “As for golf, I am a better cheerleader than participant!”

FACTS

Common causes

1. The most common causes of kidney disease are diabetes and high blood pressure.

Diagnosing CKD

2. Chronic kidney disease (CKD) is diagnosed by measuring a blood chemical (creatinine) which is then used to estimate GFR (eGFR). A urine test is done, looking for abnormal cells or protein.

Blood and urine testing

3. The National Kidney Foundation recommends blood and urine testing for CKD in everyone at risk—those with high blood pressure, diabetes, or family history of either.

Leslie Spry MD, FACP, FASN

Spokesperson for the National Kidney Foundation

Leslie Spry MD, FACP, FASN

Spokesperson for the National Kidney Foundation

Help those with kidney disease by discussing healthy eating options

Create a healthy diet for your kidneys

Fighting PKD through research

Join the battle against polycystic kidney disease
Question: Is it possible to have a good life on dialysis?

Answer: Yes. Learn all you can about dialysis, keep a positive attitude, and take an active role in your care.

Living a good life on dialysis

Kidney failure is not the end of the world. It is possible to have a good life on dialysis.

How? Learn all you can, keep a positive attitude, and take an active role in your care. And—most important of all—choose a treatment that fits your preferred lifestyle.

Healthy kidneys work 24/7 to filter wastes and excess water out of your blood. When your treatment closely mimics this, you’ll feel better, and may live longer. Most Americans with kidney failure go to a clinic three times a week for “standard” three to four hour hemodialysis treatments. These leave a two-day gap—with no treatment at all—each weekend, which is hard on the heart.

Dialysis is best done longer or more often. For you, this can mean:
- A more normal diet
- Fewer fluid limits or meds to take
- Control of your schedule
- Ability to keep a job
- Ease of travel
- More energy
- Better sleep

Your sex life and chance of having a child may also improve, too.

Nocturnal hemodialysis can be done at night while you sleep in a clinic, three times a week, for twice as much treatment as the “standard.” Or, you may be able to do home hemodialysis, at night or as short daily treatments five to six days a week.

The clinic provides the machine and trains you and a partner until you’re confident. Peritoneal dialysis, which uses the inner lining of the abdomen as a filter, is easy to learn and do, and requires no needles and no partner.

Your choice of dialysis can let you live the life you want to have.

DORI SCHATELL
Executive Director, Medical Education Institute, Inc.
editorial@mediaplanet.com

Kidney stone treatment: shock wave lithotripsy

1. What is shock wave lithotripsy?

Shock Wave Lithotripsy (SWL) is the most common treatment for kidney stones in the U.S. Shock waves from outside the body are targeted at a kidney stone causing the stone to fragment. The stones are broken into tiny pieces. It is sometimes called ESWL: Extracorporeal Shock Wave Lithotripsy.

2. What is ureteroscopy?

It is a procedure in which a small scope (like a flexible telescope) is inserted into the bladder and ureter, and it is used to diagnose and treat a variety of problems in the urinary tract. For ureteral stones, it allows the urologist to actually look into the ureter, find the stone and remove it. The surgeon passes a tiny wire basket into the lower ureter via the bladder, grabs the stone and pulls the stone free. This is an outpatient procedure with or without a stent inserted (a tube that is placed in the ureter to hold it open).

However, depending on the skill and experience of the surgeon, ureteroscopy can be used for virtually any stone of a size appropriate for it. Fragmentation of stones using helium laser device ureteroscopy is more assured than with shock wave lithotripsy (SWL).

3. When is ureteroscopy used?

Most often ureteroscopy is used for stones in the ureter, especially for stones closest to the bladder, in the lower half of the ureter. It is the most common treatment of lower ureteral stones. For stones in the kidney, shock wave lithotripsy (SWL) is the most common treatment. SWL treatment cannot be used in everyone. For patients who are pregnant, morbidly obese, or have a blood clotting disorder, ureteroscopy is a good choice. For very large or oddly shaped stones, or stones that are very hard, other treatments such as percutaneous nephrolithotomy or, rarely, open surgery may be needed.

Source: National Kidney Foundation
HELP THOSE WITH KIDNEY DISEASE BY DISCUSSING HEALTHY EATING OPTIONS

According to the American Diabetes Association (ADA), diabetes is the leading cause of kidney failure with 23 million children and adults having some type of diabetes in the United States.

The most common being Type 2, accounting for nearly 95 percent of all adult cases.

Once diagnosed with kidney disease, it’s important to limit sodium, phosphorus and potassium in your diet. Also, you need to adhere to a strict diet in order to keep laboratory values within healthy ranges. Follow your doctor’s orders with regard to nutrition, appointments, follow-ups and medications.

What is safe?
A solid plan is limited in phosphorus, potassium and sodium, making it ideal for renal patients. Since the food industry adds phosphates to foods that are typically considered low-phosphorus, this makes it difficult to know what is “safe” and what should be limited. In fact, the USDA does not require values for phosphorus and potassium to be included in food labels.

Companies such as Seattle Sutton’s Healthy Eating (SSHE) have been helping people at risk of developing kidney disease and those living with it for the last 25 years since registered nurse, Seattle Sutton, started the company. SSHE is a freshly prepared, calorie controlled, low fat, low cholesterol and sodium restricted meal plan that includes fresh fruits, vegetables and salads. It appeals to those with health issues such as kidney disease, diabetes and heart disease, as well as anyone wanting to eat a balanced diet.

Preventative measures
“Obesity is a key issue with Type 2 diabetes and preventable kidney disease,” says Seattle Sutton. “Since controlling weight is a matter of calorie intake versus output, a calorie controlled diet is an important factor in maintaining healthy kidneys.”

The ADA recommends the following basic tips to help prevent diabetes:

- Be mindful of portion size
- Eat lots of fruits and vegetables
- Choose whole grains over processed grains
- Eat fish two to three times a week

According to Paula Heaton, RN, BSN, of SSHE, “Prevention is key. Limit sodium intake, eat healthy and drink plenty of water. She says if you are overweight and diagnosed with high blood pressure and/or Type 2 diabetes, weight loss may help you manage these conditions and help avoid chronic kidney disease.”

For more information about SSHE, go to seattlesutton.com or call 1-800-442-DIET (3438).

©2010 Seattle Sutton’s Healthy Eating

Think Smart  Think Healthy
Think Seattle Sutton’s Healthy Eating

Seattle Sutton’s Healthy Eating is the answer to your healthy eating dilemma!

Our Plan Offers:
- Freshly prepared, healthy meals
- Nationwide availability
- Delivery to home or office available
- Fresh fruits, salads and vegetables
- Portion and calorie controlled
- Choice of portion size: 1,200 and 2,000 calorie plan per day
- Nutritionally balanced diet (ingredient label & nutrition facts on every meal)
- Low fat, low cholesterol and sodium restricted
- No hydrogenated or partially hydrogenated oils = zero trans fat
- 5-week menu rotation (105 different meals)
- No contracts or enrollment fees
- All the shopping, preparing and cooking for you
- No hormones, additives or antibiotics in poultry served
- No artificial sweeteners, food dyes, harmful additives or preservatives
- No high fructose corn syrup

Our Plan Offers:

- Freshly prepared, healthy meals
- Nationwide availability
- Delivery to home or office available
- Fresh fruits, salads and vegetables
- Portion and calorie controlled
- Choice of portion size: 1,200 and 2,000 calorie plan per day
- Nutritionally balanced diet (ingredient label & nutrition facts on every meal)
- Low fat, low cholesterol and sodium restricted
- No hydrogenated or partially hydrogenated oils = zero trans fat
- 5-week menu rotation (105 different meals)
- No contracts or enrollment fees
- All the shopping, preparing and cooking for you
- No hormones, additives or antibiotics in poultry served
- No artificial sweeteners, food dyes, harmful additives or preservatives
- No high fructose corn syrup

Think Smart  Think Healthy
Think Seattle Sutton’s Healthy Eating

Seattle Sutton’s Healthy Eating is the answer to your healthy eating dilemma!

Our meal plan is helpful for:

- Convenience
- Heart Healthy Eating
- Weight Reduction and Management
- Blood Pressure Control
- Diabetes Prevention and Control
- Lowering Cancer Risk
- Reducing Cholesterol Levels

Look at these Fantastic Results…

I’ve dropped over 80 lbs. and gone from size 3X to a size 12.

Mary O.

I no longer need to take medication for high blood pressure and my cholesterol is way down.

Bill E.

Seattle Sutton’s Healthy Eating has helped me lose 102 pounds in 10 months!

Maria K.

www.seattlesutton.com
1-800-442-DIET(3438)

The above are based on an average of a 5-week menu analysis of all meals per day. *1,200-calorie plan contains less than 2,000 mg of sodium/day, whereas USDA recommends a goal of less than 2,400 mg/day
Question: What are probiotics?

Answer: Probiotics and kidney health probiotics are healthy bacteria that enter the body through supplements or probiotic-rich foods such as yogurt, kefir and sauerkraut.

Probiotics: Impact on kidney health

There is a growing awareness of probiotics and their potential benefits, particularly on digestive health issues such as Irritable Bowel Syndrome or Crohn’s Disease.

Research

There is little scientific evidence to support some uses of probiotics, but a great deal of research is underway to determine whether “good” bacteria may have a positive effect on a number of health problems including tooth decay, skin infections and kidney stones. In 2008, Boston University researchers released a study that found people who naturally carried a bacterium called Oxalobacter formigenes were less likely to develop kidney stones. While investigators emphasized that more research was necessary, the findings suggested that using O. formigenes as a probiotic may reduce the risk of developing kidney stones.

Potential

Some have even greater hope for probiotics’ impact on kidney health. Natarajan Ranganathan, PhD, is interim CEO at Kibow Biotech, Inc., a company that has developed a probiotic supplement aimed at patients with kidney problems. He says, “Our researchers have developed an inexpensive probiotic dietary supplement that would help maintain healthy kidney function.” The supplement may possibly benefit patients by metabolizing nitrogenous waste products in the bowel, which in turn aids the excretory function of the kidneys. The hope is that it will possibly postpone dialysis and potentially reduce the frequency and/or duration of dialysis once it becomes necessary. Three additional human trials are planned to investigate the supplement’s effects.

"Our researchers have developed an inexpensive probiotic dietary supplement that would help maintain healthy kidney function."

Natarajan Ranganathan
CEO, Kibow Biotech

Jill Smits
editorial@mediaplanet.com
**Question:** How did one of the best big men on the court in NBA history overcome kidney disease and go on to inspire and educate the masses?

**Answer:** By using his lifelong mindset of not letting anything stop him from accomplishing his goals, he beat the illness and became a champion both in the NBA and for advocating kidney research.

Alonzo Mourning uses NBA fame to fight kidney disease

In October 2000, Mourning was diagnosed with focal segmental glomerular sclerosis (FSGS), a kidney disease that causes scarring in the glomeruli, the blood vessels in the kidneys that filter the blood to make urine.

Mourning was obviously unsettled by this news in the midst of a Hall of Fame-caliber NBA career. “I was devastated, scared, and unsure about my future...looking for answers. It was just like going into a classroom for the biggest test of your life without studying,” he says.

**A second chance and new battles**
Mourning received a kidney transplant in late 2003 from a cousin with whom he had fallen out of touch. This enabled Mourning to play a key role in the Miami Heat’s 2006 NBA Championship.
Mourning knew that he could use his celebrity to touch many more lives off the court to help fight the battle against kidney disease. “Zo’s Fund For Life” was created in 2001 to “be an inspiration, and ensure communication and prevention of kidney disease.” This has become Mourning’s true passion as he encouraged everyone to “become an organ donor... (It) is one of the most important things in the fight against kidney disease. It’s an amazing gesture,” he says.

**Hope for the future**
Mourning also expressed how excited he is about his future work with Zo’s Fund For Life. “Tremendous strides have been made and the best is yet to come.”

**For the past 40 years,**
Associates in Nephrology has provided high-quality, compassionate care to patients with kidney disease and hypertension throughout the entire Chicagoland area.

Conveniently located outpatient clinics provide AIN the opportunity to identify, educate and treat patients in the first stages of kidney disease. Our physicians are recognized not only for their innovative patient service programs, but also for being actively engaged in initiatives to improve patient outcomes through outreach efforts in the local community.

AIN’s thirty-two board-certified nephrologists provide comprehensive services to approximately 2,500 dialysis patients in over 150 site locations, including hospitals, nursing homes, out-patient and dialysis facilities. As the first nephrology practice in Chicago to establish a vascular lab, Associates in Nephrology has over ten years of experience in providing vascular access services in three locations.

In 2006, Associates in Nephrology was the recipient of the prestigious Renal Physicians Association (RPA) Exemplary Practice Award. This award recognizes a nephrology practice that uniquely incorporates and supports the strategic efforts of the RPA to optimize the highest standards of medical care for patients.

For a complete list of physicians and practice locations, please visit our website www.associatesinnephrology.com

210 South Des Plaines Street
Chicago, Illinois 60661
(312) 654-2720

**TIP**

**WE GIVE YOU**

Another chance at life.

Miami Transplant Institute

Celebrating 40 Years of Excellence

Beginning with the first kidney transplant in 1970, our program has grown into one of the largest and most comprehensive solid organ transplant centers for adults and children. Today we perform over 500 transplants annually, placing the University of Miami/Miller School of Medicine and Jackson Memorial Hospital in the elite high volume transplant centers in the nation. We save lives by providing the most advanced patient care, research and education in organ and cellular transplantation. www.miamitransplant.com
Parents with the disease have a 50 percent chance of passing it on to each of their children. Currently, dialysis and transplantation are the only treatments. There is currently no cure for PKD.

Common side effects include high blood pressure, constant or intermittent pain in the back and side, blood in urine, kidney stones, frequent urinary tract infections, heart problems and stroke. About 50 percent of people with PKD will develop kidney failure and be forced to depend on dialysis or a transplant to live.

PKD equally affects men, women and children—regardless of age, race or ethnic origin. It does not skip a generation.

The devastating disease comes in two hereditary forms:

- Autosomal Dominant Polycystic Kidney Disease (ADPKD): ADPKD affects one in 500 worldwide. Parents with the dominant form of PKD have a 50 percent chance of passing the disease on to each of their children.
- Autosomal Recessive Polycystic Kidney Disease (ARPKD): ARPKD is a relatively rare form of PKD affecting one in 20,000 babies and can lead to death in the first month of life. Parents who carry the ARPKD gene have a 25 percent chance of passing the disease on to each of their children.

Fortunately, there is hope. The PKD Foundation is the only organization in the world dedicated to fighting PKD through research, education, advocacy and awareness. Since 1982, the PKD Foundation has funded millions in critical research. Thanks to this critical support, the development of new drug therapies offer help and hope to the 12.5 million people worldwide suffering from the disease.

To learn more, visit www.pkdcure.org or call 1-800-PKD-CURE.

**Polycystic kidney disease or PKD is one of the world’s most common, life-threatening genetic diseases, often causing kidney failure and death. PKD causes cysts to grow on the kidneys, eventually leading to kidney failure.**

Parents with the disease have a 50 percent chance of passing it on to each of their children. Currently, dialysis and transplantation are the only treatments. There is currently no cure for PKD.

Common side effects include high blood pressure, constant or intermittent pain in the back and side, blood in urine, kidney stones, frequent urinary tract infections, heart problems and stroke. About 50 percent of people with PKD will develop kidney failure and be forced to depend on dialysis or a transplant to live.

PKD equally affects men, women and children—regardless of age, race or ethnic origin. It does not skip a generation.

The devastating disease comes in two hereditary forms:

- Autosomal Dominant Polycystic Kidney Disease (ADPKD): ADPKD affects one in 500 worldwide. Parents with the dominant form of PKD have a 50 percent chance of passing the disease on to each of their children.
- Autosomal Recessive Polycystic Kidney Disease (ARPKD): ARPKD is a relatively rare form of PKD affecting one in 20,000 babies and can lead to death in the first month of life. Parents who carry the ARPKD gene have a 25 percent chance of passing the disease on to each of their children.

Fortunately, there is hope. The PKD Foundation is the only organization in the world dedicated to fighting PKD through research, education, advocacy and awareness. Since 1982, the PKD Foundation has funded millions in critical research. Thanks to this critical support, the development of new drug therapies offer help and hope to the 12.5 million people worldwide suffering from the disease.

To learn more, visit www.pkdcure.org or call 1-800-PKD-CURE.
One in 9 adults in the United States has chronic kidney disease (CKD) and many of them don’t even know it.

You may have an increased risk for kidney disease if you have diabetes, high blood pressure, or a family history of kidney disease.

Do you have or are you at risk for kidney disease?
Learn more at www.kidneywatch.org/risk