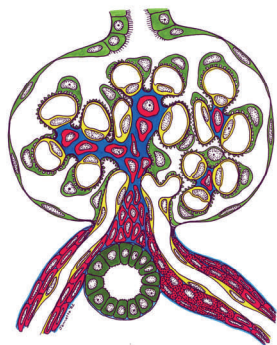


KIDNEY CARE



Health care professionals and patients working together to learn more about diseases that affect the filters (glomeruli) in the kidney.

Co-Directors:

Ronald J. Falk, MD, and
J. Charles Jennette, MD

Research Director:

Susan L. Hogan, PhD, MPH

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ELAINE'S STORY: LIFE WITH VASCULITIS

Study Coordinator Kristen Hendrickson sat down with Elaine Holmes of the North Carolina/Raleigh Chapter of the Vasculitis Foundation to discuss her experiences with ANCA-vasculitis.

Elaine Holmes had just had her sixth infusion of Cytoxan. After being diagnosed with ANCA Vasculitis six months earlier, and undergoing aggressive treatment, it had appeared that the disease had gone into remission.

"I think we had all been thinking, 'Oh, we're through. This is the last of the Cytoxan.'"

Two weeks later, though, at a regular check-up, it was discovered that her kidneys were inflamed again.

Elaine describes that as a tough time for her.

"When your expectations are dashed, it's a rollercoaster."

It was then that Elaine truly realized she had a long road ahead of her, and she made the decision to accept vasculitis as part of her life.

"I realized that I just needed to live my life, and not to put things on hold while I waited to get better."

Side effects from treatment made this even more difficult.

Elaine lost most of her hair from the treatment and she started wearing a wig. Her face, she says, became extremely round. It was during this time that Elaine's nephew was getting married. She had an invitation to attend his wedding.

"I thought, I'm going to enjoy it, in my wig, with my pudgy face, and that's okay," she laughs.

"It was fine. I had such a good time."

While she continued to do the things she wanted to do, Elaine also made some changes in her life, mainly at work. Her career was demanding and she also was caring for her mother. She didn't have the energy she once had.

Fortunately for Elaine, her colleagues were supportive. Elaine modified her schedule, cut back at times, delegated tasks and even worked part-time. She says it was helpful for her make sure she took her full lunch hour to rest. Elaine also told co-workers about needing to avoid infection, so they kept their distance when they were not feeling well.

When the time was right, Elaine made the decision to retire. She says this helped bring her energy level back up. Since that time, she's been in remission for more than three years.



Elaine Holmes during a trip to Juneau, Alaska

Many Thanks to our Sponsors:

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Continued on Page 3...

KIDNEY TRANSPLANTATION: FREQUENTLY ASKED QUESTIONS

By Lynn W. McCoy RN, CNN, Pediatric Nephrology Care Coordinator, UNC Kidney Center, Chapel Hill, NC

Considering whether or not renal transplantation is right for you is a very personal decision that patients and their families must consider carefully. There are many members of your local healthcare team that can support you through the decision making process. Once you've decided to pursue renal transplant as a treatment for your kidney failure, your transplant team will join your local healthcare team in providing additional support specific to transplant. The following are commonly asked questions and answers to consider as you think about whether a kidney transplant is right for you.

1. Does my insurance require a "special" referral for me to be evaluated for a kidney transplant?

Some insurance DOES require your doctor to obtain a referral BEFORE any appointments for transplant evaluation are made. Check with your insurance directly or speak with someone at your employer's Human Resources office.

2. Can I choose which transplant center I go to?

Yes, unless your insurance requires your transplant evaluation and surgery occur at a particular center. Again, it's important to contact your insurance company directly or speak to a representative in your human resources (HR) department about the specifics of your coverage. Some insurance companies will assign you a special transplant case manager and this individual can be very helpful in addressing these and other transplant-related insurance issues.

3. When will my medical records be sent to the transplant center for review and consideration for evaluation? How long before I know whether or not I can be evaluated?

Your kidney doctor and dialysis staff can tell you the status of the "paperwork" that goes to the transplant center. They also have experience with the various transplant centers in your area and can give you a reasonable estimate of when you might know something. They can also provide you with a contact at the transplant center if you want to personally confirm your paperwork was received.

4. Are there educational opportunities I can access before beginning the transplant medical evaluation?

Your dialysis staff, social worker and kidney doctor can help provide you with a variety of resources about transplantation. The transplant center you have been referred to also has resources such as written materials, videos and/or patient classes to help you through the learning process. There is a lot of information to be learned, and no one expects patients to learn it all at once. If you obtain information from the internet it is wise to carefully consider the source. If in doubt, the dialysis staff, your doctor, and transplant center can verify sources for you.

5. What is the time-frame to complete the transplant evaluation for a patient with a diagnosis similar to mine?

Your transplant center will be able to provide an overview of what you might expect during your evaluation, including the actual testing to be done and the implications of various results, whether additional testing required, what would exclude you as a recipient, and how much time everything can take.

6. When will I know my evaluation testing is complete and what the outcome is?

Your transplant center will have the final word on when your evaluation is complete and whether or not you have been cleared to proceed with transplant surgery or listing for a deceased donor transplant.

7. If I have possible donors how and when can they find out if they can donate to me?

The live donor evaluation process begins with identifying those individuals who are willing to consider donation. Very basic requirements include that they be in good overall health and of a compatible blood type. Your transplant center will provide potential donors with detailed information about the donor evaluation and donor surgery. A separate healthcare team will care for the potential donor throughout the process.

8. If I do not have a live donor and have to be on the waiting list for a deceased donor is there anything I should know while waiting?

Stay in contact with your transplant center on a regular basis. Let them know if you have any changes in your health, undergo surgeries, have a change in type of dialysis you are receiving, change in insurance coverage or change in your contact information.

Continued on Page 5...

Elaine's Story Continued from Page 1

Elaine explains the importance of being in tune with your body.

"You have to stay in touch with what's going on with you, and compare it to the symptoms that you've had, and gauge what to do."

When she thinks about the possibility of flaring again, Elaine is comforted by several things, one being that she now has the experience of dealing with flares. She's also become much more knowledgeable about the disease. And regular visits with her doctor help her to make sure things are on track.

"I hope that if I flare again it would be caught early," she says.

Although the disease is in remission, Elaine says she still has to deal with fatigue.

"I notice it in the late afternoon and in the evening. More so on some days than others. I don't have as much energy."

This hasn't stopped her from doing the things she wants to do in her retirement.

"If I have something I really want to do, I do it," she stresses.

Take traveling, for example.

Elaine has traveled to many places over the past several years, including Japan, Alaska, the Baltic, London, and this past summer visited Ecuador and the Galapagos. She says she rests as often as she needs to on her vacations and tries to keep from becoming too worn out. Although she is in remission, Elaine frequently contracts minor illnesses while traveling. She has learned to cope with it, and feels the colds and infections she gets are tolerable.

Elaine also spends her time leading the North Carolina/Raleigh Vasculitis Support Group, a chapter of the Vasculitis Foundation, which she says has been rewarding for her. She believes the support group is especially helpful for patients, because vasculitis is rare and not well understood.

"Vasculitis is an isolating disease," she says. Elaine explains that if she tells someone she has vasculitis, she is often met with a blank stare. Participants in the support group, however, share similar experiences and understand what the others are going through.

Elaine acknowledges that it can take a while for patients who've been newly diagnosed with vasculitis to feel ready to reach out for support. She says that it took several weeks after her diagnosis before she really started getting educated on the disease. Ultimately, becoming more educated about vasculitis and finding support from others has helped her.

"Reaching out rather than focusing on myself helps," she says.

The Vasculitis Foundation has many support groups around the United States. If you're interested in seeking support, visit <http://www.vasculitisfoundation.org/support> to find a chapter in your area.

"I realized that I just needed to live my life, and not to put things on hold while I waited to get better."

LUPUS: INFORMATION FOR PATIENTS AND THEIR FAMILIES

By *Connie Gilet, MSN, Adult Nurse Practitioner*

If you or a family member have been told you might have Lupus or have been diagnosed with Lupus, you probably would like to know more about this condition. Below are some answers to frequently asked questions about Lupus.

What is Lupus?

Lupus is a chronic, autoimmune disease that can affect any part of the body (i.e. skin, muscles, joints, blood, kidneys and/ or other body organ). Chronic means the symptoms can last many weeks and often for years. Autoimmune (auto = self) means the body inappropriately attacks itself. Normally, your body produces antibodies that fight only foreign invaders, such as viruses and bacteria (commonly called germs). In some people, the antibodies can not determine the difference between the invaders and the body's healthy tissue. In these cases, the body starts to produce auto antibodies that attack normal, healthy tissues, causing inflammation, pain and destruction of tissues. Lupus is characterized by an unpredictable pattern of flares (increase in symptoms) and remissions (decrease in symptoms).

Lupus is usually not associated with a single, precipitating event. However, several factors that have been attributed to triggering or exacerbating (making symptoms worse) the disease are:

- Sun exposure, which can trigger skin rashes
- Infections, colds, or viral illnesses (like the flu)
- Exhaustion
- Emotional stress
- Surgery
- Pregnancy and giving birth



What causes lupus?

Although genetic and environmental factors are thought to play a role in the development of Lupus, the exact cause is not known.

Who gets Lupus?

Lupus, for unknown reasons, affects more women than men. People are most frequently diagnosed in their 20's and 30's. People of color are 2 to 3 times more likely to develop Lupus.

How is Lupus diagnosed?

Sometimes it can be difficult to diagnose Lupus because its symptoms can be vague and nonspecific. Fatigue is the most common complaint. Other symptoms may include fever, weight loss, joint pain and skin changes or rashes. An assessment of these signs and symptoms by a doctor plus certain blood tests can lead to a diagnosis of Lupus.

How is Lupus treated?

Medications used to treat lupus depend on the amount and severity of symptoms and can include antimalarials, steroids, and other medications that suppress your immune system. Over-the-counter medicines like ibuprofen may also be used. Health care strategies such as smoking cessation, adequate sleep, balanced diet, and regular exercise can help an individual with Lupus stay healthy.

Where can I go for more information?

There are national organizations dedicated to educating patients and promoting research: The Lupus Foundation of America (www.lupus.org), The Lupus Research Institute (www.lupusresearchinstitute.org), and DxLupus (www.dxlupus.org). You can find local support groups through these organizations, or join an online web support group like this one: www.mdjunction.com/lupus.

If you do not have Internet access and would like more information on Lupus, you can call Caroline Jennette toll-free at 1-866-462-9371.

KIDNEY PUBLIC POLICY 101: JOIN THE DISCUSSION ON POLICIES AFFECTING KIDNEY & DIALYSIS PATIENTS!

The Renal Support Network (RSN) has created an online forum called KidneyPublicPolicy101.com to help people with chronic kidney disease (CKD), family members, and healthcare professionals learn about pending reimbursement changes for patients on dialysis. A new payment system takes effect in 2011, and will reimburse all dialysis-related drugs and services in one bundled payment (that is, medications given during dialysis and laboratory tests will no longer be billed separately). The dialysis providers will be given a standardized bundled payment for each patient's dialysis session. This payment rate may be increased based on factors such as:

- The patient's case-mix (if a patient has certain characteristics or other diseases/conditions)
- Time on dialysis (providing a slight increase in reimbursement for new patients),
- The size of the dialysis facility (giving dialysis centers who don't have a lot of patients additional reimbursement),
- Outlier payments (patients who require more resources than a normal patient).

The Centers for Medicaid & Medicare Services (CMS) has also proposed quality measures to protect patient quality of care. The initial three quality indicators address anemia management (making sure someone's hemoglobin is not too high or too low), and whether a person is getting the right amount of dialysis. Additional quality indicators would be added in the future.

RSN's new online forum is dedicated to the Proposed Rule for reimbursing dialysis. The new payment system is not finalized and the proposed rule period gives patients and other stakeholders a chance to provide input. RSN encourages all patients (and their significant others) who depend on this system to survive to go to www.kidneypublicpolicy101.com and participate in the forum. The comments of healthcare professionals who treat people with CKD, public policy professionals, and others interested in the quality of life of patients with CKD are also welcome.

The forum is organized by topic such as: laboratory testing, medications, share of costs, home dialysis, quality of care incentives, and access to care. Users can click on these links for information on how each topic will be affected by the proposed bundled reimbursement program. A toll free number dedicated to the Proposed Rule has been created for patients to ask questions or leave comments and can be reached at: 877-Kidney-Rule (543-6353).

RSN will be developing a position paper on the Proposed Rule to CMS, and will use the comments posted on the online forum as a vital information source. The deadline for comments to CMS on the Proposed Rule is **December 16, 2009**, so it is crucial that comments be received as soon as possible. Even if you don't make the deadline, visit the forum to learn more about the new payment system. You can also make comments directly at www.regulations.gov. We encourage all who are interested to join the discussion and let your voice be heard!

For more information on The Renal Support Network's programs and activities, check out: <http://www.rsnhope.org/>

Transplant Q&A Continued from Page 2

9. How long is the transplant evaluation good for? Does it ever expire?

Evaluations or portions of it are typically good for a year to eighteen months. The evaluation will need to be updated periodically based on your current medical diagnosis and any new medical issues that may arise. When and how your evaluation will be updated may also depend on recommendations from the transplant team and your local kidney doctor.

10. Do I have to have a transplant just because that's what everyone says I should do?

No, the final decision to proceed with transplant is a choice you have to make for yourself. It is a treatment just as dialysis is a treatment and has the potential for good outcomes, as experienced by many who choose transplant. There are also risks that must be considered carefully. Your kidney doctor, dialysis staff and the transplant center will support you regardless of the decision you make.

Have more questions? We encourage you to write them down and take them with you to your next doctor's appointment.

H1N1 INFLUENZA VACCINE: WHAT YOU NEED TO KNOW

Information for this article is from the Centers for Disease Control: <http://cdc.gov/h1n1flu/> and www.flu.gov

What is 2009 H1N1 Influenza?

2009 H1N1 Influenza (also known as Swine Flu) is caused by a new strain of influenza virus and like other viruses, it can be spread from person to person through coughing, sneezing, and touching objects contaminated with the virus.

Signs of H1N1 include fatigue, sore throat, fever, muscle aches, chills, coughing, and sneezing. Most people get better in a week. But some people get pneumonia or other serious illnesses. Some people have to be hospitalized and some have died.

What is the 2009 H1N1 influenza vaccine?

The H1N1 vaccine is made just like seasonal flu vaccines and they are expected to be as safe and effective as seasonal flu vaccines. The H1N1 will NOT protect you from seasonal flu—you should also get a seasonal flu vaccine if you want to be protected from seasonal flu.

The H1N1 vaccine can be given as a shot in the arm, just like your annual flu shot. Like the annual flu shot, the H1N1 vaccine is *inactive*, which means the vaccine contains the killed virus in it. A *live*, intranasal vaccine (the nasal spray vaccine) is also available.



Who should get the 2009 H1N1 vaccine?

Groups that should receive the vaccine first are: Pregnant women, people who live with or care for infants younger than 6 months old, medical personnel, anyone between 6 months and 24 years of age, and anyone from 25 through 64 years of age with certain chronic medical conditions such as chronic kidney disease or compromised immune systems such as kidney transplant recipients. Transplant patients should NOT get the nasal spray because it is a live virus, but they should get the shot.

Can I get both the H1N1 and the seasonal flu vaccines at the same time?

You can get the H1N1 and seasonal flu vaccinations at the same time but you cannot get the live H1N1 vaccine (the nose spray) and the seasonal flu shot or nasal spray at the same time.

Where can I go to get the H1N1 vaccine?

To find out where your state is offering the flu shot, visit www.flu.gov or call the Centers for Disease Control toll-free at: 1-800-232-4636.

What should I do if I get sick?

Patients with kidney disease are a high risk group and should talk to their health care provider about whether they need to be examined if they come down with flu-like symptoms. Anyone with emergency warning signs should get medical care immediately. Emergency warning signs in adults include difficulty breathing/shortness of breath, pain or pressure in the chest or belly, sudden dizziness, confusion, and severe or persistent vomiting. Emergency warning signs in children include fast breathing/trouble breathing, bluish skin color, not drinking enough fluids, not wanting to interact with others, irritability, and fever with a rash.

If I get the H1N1 Virus can it be treated?

Yes. There are drugs your doctor may prescribe for treating both seasonal and 2009 H1N1 called “antiviral drugs.” These drugs can make you better faster and may also prevent serious complications.

Other than getting the H1N1 vaccine, how can I protect myself?

Wash your hands often with soap and water for 15-20 seconds (sing the “Happy Birthday song” twice). If soap and water are not available, use an alcohol-based hand rub. Avoid touching your eyes, nose or mouth since germs spread this way, and try to avoid close contact with sick people.

NOW ENROLLING: USING RITUXIMAB TO TREAT IGA NEPHROPATHY

Study Title: A Multicenter, Randomized, Prospective, Open-Label Trial of Rituximab in the Treatment of Progressive IgA Nephropathy

Sponsored by: Genentech, Inc.

Principal Investigator: Patrick Nachman, MD

The purpose of this research study is to learn about treatment of a kidney disease called progressive Immunoglobulin A (IgA) Nephropathy. With IgA Nephropathy a person can have too much blood and protein in the urine and this may cause progressive loss of kidney function in some patients. The goal of this study is to assess if a medication called rituximab (also called rituxan) can reduce the amount of protein in the urine and stabilize kidney function.

People diagnosed with IgA Nephropathy who have high levels of protein in the urine are at the highest risk of losing kidney function over time. Exactly how IgA Nephropathy causes kidneys to lose protein is unknown. New studies suggest that IgA antibodies (proteins that are part of the immune system that protects you from infections) are important to this process. Medications like prednisone can suppress the immune process involved in IgA Nephropathy, but doctors do not agree whether treatment with prednisone will help patients with this type of kidney disease. In addition, this treatment can be associated with severe side effects including 1) osteoporosis (reduction in bone mass), 2) increased risk for infectious complications, 3) diabetes mellitus, (sugar diabetes), 4) cataracts (clouding of the lens of the eye) and 5) hypertension. Other drugs that have been shown to be effective include cyclosporin A and tacrolimus. While these drugs often allow doctors to reduce protein losses in the urine, both cyclosporin A and tacrolimus are associated with chronic scarring of the kidney and lowered kidney function, so they are not ideal. IgA Nephropathy is typically treated with blood pressure control and fish oil.

Rituximab is a new drug, approved by the Food and Drug Administration, for use in treatment of B cell lymphomas (a type of blood cancer) and for patients with rheumatoid arthritis who have had an inadequate response to other treatments. Rituximab is generally well tolerated and may be less toxic than cyclosporin or tacrolimus. There have been no trials of rituximab in the treatment of IgA nephropathy, but rituximab appears to be effective in other antibody dependent diseases. However, because rituximab suppresses the immune system like steroid hormones and cyclosporin A, the study doctors believe that it may reduce the protein in patient's urine. The purpose of this study is to compare the ability of rituximab combined with standard therapy (tight blood pressure control and fish oil) to standard therapy alone in lowering protein in the urine in patients with IgA Nephropathy. The study doctors will also learn what type of side effects may occur in patients taking rituximab.

To be part of the study, you need to have had a kidney biopsy confirming that you have IgA Nephropathy.

The study will last a maximum of 15 months and requires 8 visits. Participants will have one chance out of two to be in the group that will receive standard treatment plus 4 infusions of rituximab and one chance out of two to receive the standard treatment only. Treatment groups are randomly assigned and not selected by you or your doctor.

For more information, please contact:

Anne Froment, study coordinator

(919) 966-2561 ext 247 or cell: (919) 923-1382

Anne.froment@med.unc.edu

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

☆ A BIG Thank You ☆

☆ to everyone who ☆

☆ participates in the GDCN ☆

☆ Patient Registry studies. ☆

☆ Thanks for ☆

☆ all that you do!! ☆

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

ENROLLING SOON: THE NEPHROTIC SYNDROME STUDY NETWORK (NEPTUNE)

Researchers at the UNC Kidney Center are participating in a \$10.25 million multi-center study led by the University of Michigan Health System. The project, known as the NEPHrotic Syndrome STUdy NETwork, or NEPTUNE, will focus on some of the kidney diseases that most often cause the syndrome including Focal Segmental Glomerulosclerosis (FSGS), Minimal Change Disease, and Membranous Nephropathy, all of which affect the filters in the kidney.

The objectives of NEPTUNE are to perform longitudinal observational studies on FSGS, Minimal Change Disease and Membranous patients within a collaborative, integrative, cost-effective infrastructure established through the 15 coordinating sites, and to collaborate with organizations including the Office of Rare Diseases Data Management Coordinating Center, NephCure and the Halpin Foundation to disseminate new knowledge to the public, physicians and researchers. A training program for physicians and researchers who aspire to do research in the field is also a part of the project.

UNC is one of 15 participating sites in the United States and Canada which will be conducting the research over the five years of the project. Patrick Nachman, MD will lead as the Principal Investigator from UNC, with Susan Hogan, PhD, as the leading Co Investigator. J. Charles Jennette, MD, of UNC will participate as part of the study's nephropathology team. Matthias Kretzler, MD Principal Investigator for the study and Professor of Nephrology and the Center for Computational Medicine and Bioinformatics at the University of Michigan spoke about UNC's participation.

"The UNC team has been instrumental in securing the funding of this unique opportunity to the field of glomerular research. The 25 years of experience gained in the Glomerular Disease Collaborative Network (GDCN) have been an invaluable asset for the design of NEPTUNE and we are looking forward to the leadership of the UNC team in our cohort studies."

Kretzler noted the value that Dr. Jennette brings to this project.

"Having Dr. Jennette's outstanding expertise in nephropathology available to the group will allow optimal integration of state of the art histopathology with the clinical and molecular data obtained from our patients," said Kretzler.

The study is supported by a \$6.25 million grant from the National Institutes of Health Office of Rare Diseases and the National Institutes of Diabetes, Digestive and Kidney Disease, a \$2 million commitment from NephCure Foundation and a \$2 million contribution from the University of Michigan. The NephCure Foundation supports research on the Nephrotic Syndrome and FSGS and provides educational resources for those seeking information about these conditions. Working in conjunction with the researchers and the NephCure Foundation, the Halpin Foundation will also provide support for the grant, particularly in helping to create and support a web-based environment with educational information for patients and the public. The Halpin Foundation has a particular interest in targeted research on membranous nephropathy.

"We hope that this integrative approach will help to unravel the mechanism responsible for these diseases and potentially develop new targeted treatment therapies," said Kretzler. As researchers better understand these glomerular diseases, the ultimate goal is to better manage and treat them while keeping patients well informed of new discoveries.

NOW ENROLLING: NEW THERAPIES FOR FOCAL SEGMENTAL GLOMERULOSCLEROSIS

Study Title: Novel Therapies for Resistant FSGS, A Phase II Clinical Trial.

If you are age 1 year to 50 years with biopsy proven FSGS, kidney function rate ≥ 40 ml/min and urine protein >1 gm, please consider calling about eligibility.

You are not eligible for this study if you have any of the following: History of malignancy, Diabetes Type I or II, uncontrolled blood pressure, organ transplant, congestive heart failure

Please contact Sandy Grubbs at 919-966-2561 x245 or sandra_grubbs@med.unc.edu to learn more about this study.

STAYING ON TOP OF TREATMENT DURING THE RECESSION

When times are tight, it's hard to budget for everything you need: bills, utilities, food, and for patients with chronic conditions, keeping up with medications and Physician appointments. Below are some ideas to keep your medical costs down while still protecting your health.

- If you are paying out of pocket for medicines (no insurance or in the “donut hole”) call different pharmacies in your area to ask how much your medicine costs if you buy it from them. Not all pharmacies charge the same for medication . Some pharmacies also have programs that offer discounts for patients with no insurance.
- Do you have a Medicare Part D plan? If so, you may be eligible for their “Extra Help” program. To find out if you are eligible, visit: <http://www.benefitscheckup.org/> or call Medicare at 1-800-633-4227.
- Check with the Partnership for Prescription Assistance (PPARX) to see what assistance programs might be available: www.pparx.org or 1-888-477-2669.
- At your next doctor’s visit, ask if they have any extra samples they could give you to help you cover costs.



Whatever you do, **DO NOT** skip medicines or split pills to save money. Instead, call your health provider and talk to them about medicines that may be cheaper (like generic versions) or other medically safe ways to reduce costs.

Questions? Call Caroline Jennette at 1-866-462-9371 or e-mail caroline_jennette@med.unc.edu

RECIPE BOX: CRANBERRY NUT BREAD

Diet type: CKD non-dialysis Dialysis Diabetes



Portions: 10

Serving size: 1/10 Loaf

Ingredients

- 1-1/2 cups cranberries
- 2 cups all purpose flour
- 1 cup sugar
- 1-1/2 teaspoons baking powder
- 1/2 teaspoon baking soda
- 1/2 cup apple juice
- 1 teaspoon orange zest
- 2 tablespoons melted margarine
- 1 egg lightly beaten
- 1/4 cup chopped walnuts
- 2 tablespoons hot water

Preparation

1. Cut each cranberry in half with a paring knife and reserve.
2. Preheat oven to 350° F. Grease loaf pan and line with wax paper. Grease waxed paper.
3. Sift flour, sugar, baking powder and baking soda together in a large bowl.
4. In a separate bowl mix apple juice, orange zest, melted margarine and beaten egg. Add to the flour mixture and stir until flour is combined.
5. Mix in cranberries and walnuts. Stir in the hot water.
6. Place in prepared loaf pan and bake 1 hour and 10 minutes. Test by poking a toothpick into bread; if it comes out clean the bread is done.

Renal Food Choices

- 1 starch
- 1/2 fruit, low potassium
- 1 fat
- 1 high calorie

Renal Diabetic Choices

- Reduce portion to 1.2 slice
- 1 starch
- 1/2 fat
- 1/2 high calorie

Nutrients per serving

- Calories: 214
- Protein: 4 g
- Carbohydrate: 40 g
- Fat: 5 g
- Cholesterol: 21 mg
- Sodium: 143 mg
- Potassium: 85 mg
- Phosphorus: 58 mg
- Calcium: 49 mg
- Fiber: 1..4 g

Helpful Hints

Nuts are high in potassium and phosphorus. The 1/4 cup chopped walnuts in this Cranberry Nut Bread recipe may surprise you. This is a very small amount when divided into 10 servings. It equals 1 teaspoon, which is approximately 15 milligrams potassium and 9 milligrams phosphorus. When used in very limited quantities nuts add texture and taste.

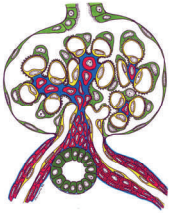
Always consult with your physician, dietitian and other members of your dialysis team before partaking in any activity or trying any recipe.

Recipe from "Cooking for David: A Culinary Dialysis Cookbook" by Sara Colman RD, CDE and Dorothy Gordon BS, RN.

A Newsletter from the
Glomerular Disease
Collaborative Network

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*Health care professionals and
patients working together to learn
more about diseases that affect the
filters (glomeruli) in the kidney.*



UNC
KIDNEY CENTER

www.unckidneycenter.org

Remember to T.E.S.T Your Family Members



- T** Teach them that kidney disease runs in families.
 - E** Encourage them to get tested for kidney disease.
 - S** Support their efforts to control their diabetes and high blood pressure.
 - T** Tell them where they can find more information :
www.unckidneycenter.org (1-866-256-2930) or
www.nkdep.nih.gov (1-866-454-3639)
-