



To Our CRIC Participants

I am pleased to share with you our Winter 2012 newsletter! As always, we appreciate your continued participation in the CRIC study and thank you for the time and effort you contribute to our study of the impact that chronic kidney disease has on millions of Americans.

In this issue, we've provided you with information about anemia, tips for dealing with depression, ways to distinguish heart burn from a more serious heart event, a summary of a publication from CRIC, and a winter recipe.

I would also like to take this opportunity to fill you in on current and future plans for CRIC. For almost 10 years now, the CRIC Study has successfully recruited and followed a study population of almost 4000 participants with chronic kidney disease. Over these past 10 years the study performed research that we hope will promote the health of the individuals with or at risk for kidney disease. Owing to our success thus far, the National Institutes of Health has committed to extending the CRIC Study for a third phase that will begin in Spring 2013 and continue through 2018. My co-investigators and I are very excited to be able to design the protocol for the third phase over the coming months. During this extension, we will not only continue to follow our current participants, but will potentially expand the study population by recruiting new individuals into the study. The details of these exciting new developments will be shared with you in a subsequent newsletter.

If you have any questions or comments about CRIC or about this newsletter, please do let us know. Once again, many, many thanks for your partnership in this critical study and your commitment to helping fight kidney disease.

Warm wishes,



Harold I. Feldman, M.D., M.S.C.E.
Chair, CRIC Steering Committee

CRIC Newsletter Manager:
CRIC Newsletter Team:

*Melanie Glenn, MPH, CRIC Project Manager
Jeanne Charleston, Martha Coleman, Magda Cuevas, Victor Cruz, Mark Duckworth, Jinny Ford, Nancy Jensvold, Liliana Metzger, Jacqueline Theurer, Arthur Choi*

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On the Web...

<http://www.cristudy.org>
<http://www.kidney.org>

Anemia and Treatment

Since people with kidney disease often also have anemia, we thought it would be helpful to explain anemia, the common symptoms and possible treatments.

Hematocrit and Hemoglobin are two lab measures that are part of a complete blood count. Hematocrit (Hct) is the portion of blood made up of red blood cells. Hemoglobin (Hgb) is the oxygen carrying protein in the blood. Anemia occurs when blood lacks enough healthy red blood cells which are the transporters of oxygen to the cells of your body.

There are three main causes of anemia:

1. excessive blood loss
2. excessive blood cell destruction
3. less than normal red blood cell production

Healthy kidneys produce a

LAB VALUES	Normal Values for Men	Normal Values for Women	Diagnosis of Anemia
Hematocrit (red blood cell volume)	42-54	38-46	For men- below 39 For women-below 36
Hemoglobin (iron containing protein)	14-18	12-16	For men-below 13 For women-below 12

hormone called erythropoietin, or EPO. This hormone stimulates bone marrow to make red blood cells needed to carry oxygen throughout the body. People with kidney disease may not make enough EPO.

The common symptoms of anemia are fatigue or tiring easily from simple tasks, pale/ashen skin color, palpitations or a racing heart, and becoming short of breath with little exertion. Some people may complain of headaches and dizziness, especially when standing too quickly.

Additional symptoms may include hair loss and confusion or mental slowness.

If you are anemic, your doctor will recommend the best treatment option for you. With less severe anemia, your doctor may recommend that you take an iron supplement. If your anemia is a little more serious, other options may include Folic acid or B-12 injections, blood transfusion, EPO injections, or Iron infusions.

Anyone with anemia knows it can make you feel like you have to fight to get through the day. The good news is that there are many options to restore your red blood cells to normal levels and help you feel much better!

Heartburn or Heart Attack? Knowing the difference can save your life.



You probably know the feeling: You eat a big meal, it doesn't "sit well," and you begin to feel an unpleasant burning sensation in your chest. You decide its heartburn or acid indigestion. But could it be a heart attack instead?

Sometimes people who are having a heart attack wrongly assume it is heartburn. This prevents them from acting quickly to get life-saving medical help. Recognizing the differences between the two may help save your life.

Heartburn has nothing to do with your heart. It is a digestive problem in which acid from your stomach backs up into your esophagus and

inflames its lining. Some symptoms of heartburn include:

- A burning pain in your chest, behind your breastbone.
- Pain which occurs after eating and at night.
- Pain which worsens when you lie down or bend over.

Unlike heart attack symptoms, heartburn symptoms are similar for men and women.

A heart attack occurs when the artery walls of the heart narrow, severely reducing the flow of oxygen and blood to the heart muscle. Some symptoms of a heart attack include:

- Chest pain that keeps getting worse.
- Feeling chest pressure rather than burning, (some people describe it as "an elephant sitting on my chest").
- Other symptoms, including jaw

or arm pain, feeling sweaty, or having trouble breathing.

Unfortunately, women's heart attack symptoms can be more subtle and are easier to miss. Women may also experience the following:

- Jaw pain or back pain
- Unexplained extreme fatigue or shortness of breath
- Nausea, dizziness and/or vomiting

If you begin to feel one or more of the heart attack symptoms listed above, **Do not delay. Call 911** and ask for an ambulance so that treatment can begin before you reach the hospital. Don't feel embarrassed if your problem turns out to be heartburn, just consider yourself lucky—and feel proud that you took action.

Depression and Chronic Kidney Disease

About 20 million Americans have Chronic Kidney Disease (CKD). Studies show that at least 40% of CKD patients experience bouts of depression.

As a participant in the CRIC study, you were asked to complete a questionnaire designed to assess your risk for depression. Anyone with a chronic disease is at higher risk for depression, but it's important to remember that (1) you are not alone and (2) there is help available.

Symptoms of depression may include:

- Loss of interest in activities you once enjoyed
- Crying and feelings of sadness
- Sleep changes (too much or too little)
- Increase or decrease in appetite
- Low self esteem and excessive guilt feelings or feeling 'empty'
- Increased fatigue
- Thoughts of harming self or thoughts of death

What you can do:

If you feel you may be depressed, it may be time to discuss treatment options with your primary doctor. Antidepressants can be very helpful and there are many medication options for people with CKD. In addition, short term therapy sessions may provide a safe atmosphere to vent your frustrations. If you are on dialysis, each clinic has a social worker who can help patients manage depression.

- Continue to educate yourself about depression.
- Treat yourself to a special lunch or snack after a difficult day.
- Let family and friends help. Confiding in someone is usually better than being isolated.
- Set realistic goals for yourself.
- Prioritize and break large tasks into smaller ones, doing what you can as you can.

- Seek support and advice from others with CKD and other chronic illnesses.
- Go to a movie, a ballgame or participate in activities that make you feel better.
- Exercise, exercise, exercise – there are fun exercise programs for everyone!
- Feeling better takes time. Expect your mood to improve gradually.
- Seek help as soon as possible if your depression symptoms seem to worsen.

For more information:

- American Association of Kidney Patients www.aakp.org
- The National Institute of Mental Health www.nimh.nih.gov
- National Alliance on Mental Illness – www.nami.org

Recipe for the Winter: Rotisserie Chicken Noodle Soup

During the cold winter months, it's nice to warm up with a delicious bowl of soup. We've chosen a delicious recipe that's also "kidney friendly."

Ingredients:

- One prepared rotisserie chicken
- 8 cups low-sodium chicken broth
- 1/2 cup onion, chopped
- 1 cup celery, sliced
- 1 cup carrots, sliced
- 6 ounces wide noodles, dry
- 3 tablespoons parsley, chopped

Preparations:

1. Remove chicken from bones and chop into bite-sized pieces. Measure 4 cups for the soup.
2. Pour chicken broth in a large stock pot; bring to a boil.

3. Add chicken, vegetables and noodles.
4. Bring to a boil and cook approximately 15 minutes until noodles are done.
5. Garnish with parsley.

Nutrients per Serving:

Calories: 185
 Protein: 21 g
 Carbohydrate: 14 g
 Fat: 5 g
 Cholesterol: 63 mg
 Sodium: 361 mg
 Potassium: 294 mg
 Phosphorus: 161 mg
 Calcium: 22 mg
 Fiber: 1.4 g

Renal and diabetic food choices:

2 meat, 1 starch, ½ vegetable, medium potassium.

Carbohydrate choices: 1



Recipe submitted by DaVita renal dietitian Elizabeth from Pennsylvania.

For helpful hints about this recipe: <http://www.davita.com/recipes/soups-and-stews/rotisserie-chicken-noodle-soup/r/5563>

Metabolic Syndrome, Components, and Cardiovascular Disease Prevalence in Chronic Kidney Disease: Findings from the Chronic Renal Insufficiency Cohort (CRIC) Study [*Am J Nephrol.* 2011;33(6):477-84.]

“Metabolic syndrome” is the name of a group of risk factors, including high blood pressure, high blood sugar, increased belly fat, high triglycerides (‘bad’ cholesterol), and low HDLs (‘good’ cholesterol). Having at least three of the factors listed above would classify someone as having metabolic syndrome, which can raise one’s risk of heart disease. CRIC researchers looked at these risk factors in study participants with chronic kidney disease (CKD) to examine their risks of having heart disease. Four mathematical models were used to examine metabolic syndrome and its individual factors to predict risk for heart disease.

3,939 participants in CRIC from seven centers across the United States were asked about their history of heart disease and

completed various physical and lab measures, such as blood pressure and lipid profiles. From all of these participants, several key pieces of information were gathered. It was found that about 65% of our study participants had three or more risk factors for metabolic syndrome. Less than 3% of CRIC participants had no risk factors and 15% had all five risk factors for Metabolic Syndrome. Among the CRIC participants with diabetes, which is near one half of CRIC participants, 87.5% had metabolic syndrome. And among the CRIC participants without diabetes, 44.3% had metabolic syndrome. Of the risk factors, the most common one in the CRIC population was high blood pressure.

There are four important

findings from the CRIC population. First, there are a large number of participants with metabolic syndrome. Second, it is hard to predict how common each risk factor is in different populations, such as in CKD patients versus in non-CKD patients. Third, understanding individual risk factors in CKD patients with diabetes is more important than diagnosis of metabolic syndrome itself. And fourth, the best way to predict the development of heart disease is simply counting the number of risk factors for metabolic syndrome.

Treatment for metabolic syndrome focuses on improving individual risk factors and making lifestyle changes. If you have any of the components of metabolic syndrome, work with your healthcare provider to find ways of preventing or eliminating these risk factors.

We’d Love to Hear from You!

Do you have a question about the CRIC study or about kidney or heart disease? If so, please let your local CRIC staff know by writing or calling: