To Our CRIC Participants

CRIC Phase III is now in its second year of recruitment and follow-up. Our goal is to enroll 1500 new participants in Phase III as well as continue to follow up with our CRIC Phase II participants. To date, over 1,300 new participants have enrolled in Phase III. In addition, as displayed in the figure to the left, 85% of participants from CRIC Phase II have re-enrolled in CRIC Phase III. We are deeply appreciative of those CRIC participants who continue their activities in Phase III as well as those who have recently joined the CRIC Study.

In this issue, we highlight the importance of recognizing and managing low blood sugar. We have also included an article about a simple way to get more exercise – by walking. Exercise is an important component of a healthy lifestyle and may reduce health risks associated with chronic kidney disease. We also provide a new recipe for healthier eating. This issue of our newsletter includes an interview with a CRIC participant who has had a kidney transplant. Finally, we have also provided a few links to useful websites with resources for people with chronic kidney disease.

As always, we thank you for your continued participation in this important study. The success of the CRIC Study comes principally from your longstanding commitment and participation. If you have any questions or comments about CRIC or about this newsletter, please feel free to contact the investigators and staff at the CRIC Center where you are followed.

Wishing you and your families a safe and enjoyable spring,

Warm regards,

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

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On the Web...
http://www.cristudy.org
http://www.kidney.org

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 contact your local CRIC staff by writing or calling:
Chronic Kidney Disease and Low Blood Sugar

Low blood sugar, or hypoglycemia, is an important concern for people with chronic kidney disease (CKD) and diabetes. Hypoglycemia occurs when blood sugar levels fall below 70 mg/dl. You may or may not have symptoms. Typical symptoms include increasing hunger, anxiety, tremors, sweating, irritability, confusion, seizures, and “passing out.” Untreated hypoglycemia can even lead to death. Repeated episodes of hypoglycemia are not rare in diabetics. Diabetic CKD patients with frequent low sugar, or glucose, often have other CKD complications including lightheadedness, high potassium levels, and gastrointestinal symptoms.

Insulin controls the amount of sugar in the blood. As the kidneys weaken with advancing CKD, it is more difficult for them to remove waste products. If insulin and other diabetic drug doses are not properly adjusted, these drugs may stay in the bloodstream longer than expected and cause a stronger effect on blood glucose than desired. In addition, the weakening kidney may lose the ability to store and release glucose to defend against hypoglycemia.

Strategies to reduce low blood sugar include frequent finger sticks, and following a strict, regular eating schedule that includes modest snacks high in complex carbohydrates such as unpeeled apples, berries, whole grain cereals and bread, and nuts. Other strategies are avoiding alcohol, taking short-acting insulin at the time of a planned meal; having your doctor review your diabetic drug doses and kidney function; and eating a snack before planned exercising or exertion. Also, ask your doctor to review your treatment goals as this may influence how much insulin and other diabetic drugs you take.

If you have symptoms of hypoglycemia, confirm it with a finger stick. If this is not possible, eat a snack with both simple (like candy) and complex carbohydrates. Simple carbohydrates are digested quickly to raise the sugar while the slower digested complex carbohydrates help stabilize the glucose levels. If your blood sugar is under 70, eat a snack. If it is 60 or lower, use the “rule of 15”: eat 15 to 30 grams of carbohydrate, wait 15 minutes and then recheck your blood sugar. If your sugar is still less than 60, eat another 15 grams of carbohydrate and retest your blood sugar in another 15 minutes, and repeat if necessary.

15 grams of simple carbohydrates are:
- glucose tablets or gel tube
  (follow package instructions)
- 2 tablespoons of raisins
- 1/2 cup of juice or regular soda (not diet)
- 1 tablespoon sugar, honey, or corn syrup
- 8 ounces of nonfat or 1% milk
- hard candies, jellybeans, or gumdrops
  (see package to determine how many to eat)

When you have diabetes and CKD, it is best to avoid snacks high in potassium because it is difficult for your kidneys to remove excess potassium. High potassium levels can lead to serious health problems. Snacks high in potassium that are commonly used to treat hypoglycemia include orange juice, oranges, and bananas. People with diabetes and CKD should eat snacks higher in carbohydrates and lower in potassium such as apples, apple juice, grapes, and cereals in order to treat hypoglycemia.

If you often have low blood sugar, talk to your doctor about emergency kits and educating family members, close friends or coworkers about how they can help you if your sugar gets too low.

American Diabetes Association:  www.diabetes.org
Participant Interview

“I have a kidney transplant, and I still participate in CRIC.” - Mr. S from Baltimore

My name is Dr. Lawrence Appel, and I am the lead investigator at the CRIC clinical center at Johns Hopkins. When I am in our clinic, I drop by to say hi to our participants. Last July, I had the pleasure of meeting Mr. S, a participant at our center for nearly 10 years. During our chat, I learned that he had received a kidney transplant. Medically, he was doing quite well, and his spirits were excellent.

Of course, I thanked him for his sustained participation in the study. Kidney disease is a chronic problem, and it is important that we continue following people throughout the course of their condition, including kidney transplantation. I then mentioned that some CRIC participants who have a kidney transplant have decided to stop participating in the study. He was quite surprised.

He stated that he was grateful to be part of the study and that he planned to continue coming to the visits every year. He was thankful to receive a kidney transplant and realized that his contributions would contribute to the story about what happens to people with chronic kidney disease. He agreed to let us distribute his story which he hoped would encourage other persons with a kidney transplant to continue in CRIC.

Walking for Health and Fun

Exercise is very important for all people, and is beneficial in many ways. Exercise can build and strengthen muscles; reduce stress, depression and anxiety; help control body weight; burn fat; result in better blood pressure control, lower blood fats (cholesterol and triglycerides); and help you feel more energetic. Physical activity is a great way to exercise your heart muscles.

Talk to your doctor about an exercise program that is best suited to your physical condition and history of exercise. If you have not exercised in a while, you will need to start slowly.

Maintaining or improving overall health can be as simple as walking! Walking moves large muscle groups repetitively and can be done indoors or outdoors, quickly or slowly. For those of us in parts of the country with cold winter weather, it may be difficult to get to the gym or go outside for a walk. It is not hard to incorporate walking into your daily routine. You may not even realize how many steps you are taking. Run errands on foot instead of driving, walk during your lunch break, walk to the mailbox around the corner, park far away from the store entrance, take the stairs instead of the elevator, or walk around the house or pace while talking on the phone. Try taking an after-dinner stroll every night. For longer walks, find a walking partner, and make sure you have comfortable walking shoes.

Getting started on a walking program is as easy as 1-2-3:

1. **Warm up** the body and stretch before every walk. Ask your doctor about warm up exercises before trying them. Stretching for 5 minutes and can be gentle and enjoyable.
2. **Walk** for 30 minutes or more, at least 3 times per week. If that’s a challenge, do what is manageable and slowly work up to it.
3. **Cool down** by slowing the pace for the last 5 minutes of your walk. This allows the body to come back to a more relaxed state.

While it is very important to stay hydrated while walking, people on dialysis should stay within their prescribed fluid limits. Ask your healthcare team about how to remain hydrated while walking and still control fluid intake. Also, check labels on water bottles and sports drinks to make sure there is no
added potassium or phosphorus which are things that people with CKD need to limit or avoid when possible.

Walking is one of the easiest ways to improve overall health and maintain an active lifestyle when you have kidney disease or are on dialysis. So go ahead, put your best foot forward and enjoy the health benefits exercise can provide!

**Disclaimer:** This article is for informational purposes only and is not intended to be a substitute for medical advice from a physician. Talk with your doctor before attempting any exercise program.

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**Kidney Friendly Recipe – Savory Herb Blend**

**Ingredients:**

- ¼ cup dried parsley, crumbled
- ¼ cup dried marjoram, crumbled
- 2 ½ tablespoons dried basil, crumbled
- 1 ½ tablespoons sesame seeds
- 1 ½ tablespoons crushed red pepper flakes
- 1 ½ tablespoons dried rosemary, crushed
- 1 ¼ tablespoons celery seeds, crushed
- 2 ½ tablespoons dried savory, crumbled
- 2 ½ tablespoons dried sage, crumbled
- 2 ½ tablespoons dried thyme, crumbled
- 2 teaspoons dried onion flakes, crumbled
- 2 teaspoons dried dill, crumbled
- 1 ¼ teaspoons pepper
- ¾ teaspoon garlic powder

Makes 1 cup. ½ teaspoon per serving

**Helpful hints**

This blend may be rubbed on chicken, meat, tofu and fish.

**Calories** 3  
**Protein** 0 g  
**Carbohydrates** 0 g  
**Fat** 0 g  
**Cholesterol** 0 mg  
**Sodium** 1 mg  
**Potassium** 12 mg  
**Phosphorus** 34 mg  
**Calcium** 9 mg  
**Fiber** 0 g

From *American Heart Association Low-Salt Cookbook*

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For general information about kidney disease and good nutrition for people with kidney disease, please visit the National Kidney Foundation at [www.kidney.org](http://www.kidney.org) (or call 800-622-9010) and [www.davita.com](http://www.davita.com).