

## **11. Diet & Kidney Disease**

### **11.1. How can proper nutrition help CKD patients?**

When your kidneys can no longer do their jobs well, you have to control the types and the amounts of food you eat. Together, you and your dietician will make a daily eating plan which will:

- Meet your nutritional needs
- Cut down the workload on your kidneys
- Control the build-up of food wastes like urea
- Reduce symptoms like fatigue, nausea, itching and bad taste in the mouth
- Control the effects of high blood sugars if you have diabetes

Each person has different needs depending on their age, medical history and kidney function. Your dietician will work with you to design an individual daily eating plan that's right for you.

Together you can plan proper food choices to keep you feeling as well as possible, and to try to slow the loss of kidney function.

### **Energy Foods**

Energy foods provide the calories you need to do your daily activities and help you maintain a healthy body weight.

When you are controlling your protein intake, it is important to get the energy you need from other food sources. Energy is found in most foods, particularly starches, sugars, grains, fruits, vegetables, fats and oils.

Your daily eating plan will help you to select enough food choices to meet your energy needs, and if you have diabetes, assist with blood sugar control.

### **Protein**

Protein builds, repairs and maintains your body tissues. It also helps your body fight infections and heals wounds. As your body breaks down protein foods, a waste called urea is formed.

If this is not eliminated, too much urea in the blood may cause tiredness, nausea, headaches and a bad taste in your mouth. If you eat too little protein, you may lose muscle and weight, lack energy and have difficulty fighting infections.

Your daily eating plan will provide enough protein for your body while limiting the amount of urea formed. Foods like meat, fish, poultry, eggs, tofu and milk are high in protein.

## **Phosphorus**

Phosphorus is a mineral which normally keeps your bones strong and healthy. However, too much phosphorus may cause itchy skin or painful joints.

When the kidneys start to fail, your blood phosphate level will rise. Therefore, you may need to limit certain foods which contain even a moderate amount of phosphorus. These include milk, cheese and other dairy products, and protein foods such as meat, fish and poultry.

However, you still need some dairy products and protein foods for overall good nutrition. Generally, foods with very high levels of phosphorus, such as seeds, nuts, dried peas, beans and processed bran cereals, are not included in your daily eating plan.

Your doctor may also prescribe phosphate binders. These medications bind with the phosphorus in your intestine. The bound phosphorus will pass in your stool. You need to take phosphate binders at meals and snacks. Do not take phosphate binders at the same time as iron supplements.

## **Potassium**

Potassium is a mineral which helps your nerves and muscles work well. Some potassium is necessary for good health, but too much can be dangerous.

If the potassium level in your blood is too high or too low, it can affect your heartbeat. A very high level can cause the heart to stop beating.

Usually people with CKD don't need to limit their potassium intake. However, if necessary, your doctor and dietitian may recommend you adjust how much potassium you eat. Some high potassium foods are potatoes, squash, bananas, oranges, tomatoes, dried peas and beans.

## **Sodium**

Sodium affects your body fluids and blood pressure. You need to control your salt intake and avoid foods with high sodium content.

These include processed foods like canned foods, fast foods, salty snacks and salty seasonings. To improve the taste of unsalted food, you can use unsalted spices, herbs, vinegar and lemon.

## **Fluids**

Some people need to limit their fluids while others can drink any amount they wish. As kidney function decreases, the kidneys may not produce as much urine as before, and your body may become overloaded with fluid.

This can cause swelling of the legs, hands and face, high blood pressure and shortness of breath.

To relieve such symptoms, you may need to limit your fluids. Fluids include water, soup, juice, milk, ice-cream and similar items.

Please refer to Healthy Eating Diet for Dialysis for further details on diet for dialysis patient.

### **11.2. Are vitamins and mineral supplements necessary?**

Normally, a well-balanced diet will supply you with enough vitamins and minerals to keep you in good health. With kidney problems, you may need additional vitamins and minerals, such as calcium and iron.

Vitamin and mineral supplements must be prescribed by your doctor in collaboration with your dietician. This ensures that you get the right kind. Some over-the-counter vitamins and minerals may be harmful.

### **11.3. What if I have diabetes?**

In some cases, you may need to make only a few changes in your diet to fit your needs as a kidney patient. For example, some of the free foods (any food or drink that contains less than 20 calories or less than or equal to 5gm of carbohydrate per serving) of you have been using may need to be limited on your kidney diet. Your dietitian will help develop a meal plan especially for you.

### **11.4. What if I have high cholesterol?**

Changing your diet may help lower the cholesterol level in your blood. Your dietitian will talk with you about the kinds of fat and animal foods you eat. Also, your doctor may decide you need a special medication to reduce the cholesterol in your blood.