

**Patient Education**

# Nutrition

## Proper Nutrition is Important

Proper nutrition is especially important when you have decreased kidney function. Good nutrition can help your kidneys function longer and improve your overall health. Remember, no single nutrition plan is right for everybody.

Your blood work will reflect the nutrients you need to increase and which nutrients you need to limit. Your dietitian will recommend a well-rounded nutrition plan for your needs. Well-rounded nutrition means that you focus on getting key nutrients such as protein, vitamins, minerals and calories.

## Monitor Protein

You will probably hear a lot of talk about protein. Your body uses protein to build muscle, repair tissue and fight infection. With kidney disease, you may need to eat less of certain types of proteins. Watching the amount and type of protein you eat puts less stress on your kidneys and lowers waste build-up in your blood. Excess protein waste in your blood can cause nausea, loss of appetite, vomiting, weakness, taste changes and itching.

Your dietitian will help you determine how much and which types of



protein you should eat. Animal products such as meat, poultry, fish and eggs contain higher quality proteins. If you have high cholesterol or heart disease, your doctor or dietitian may recommend eating heart-friendly protein foods. Heart-friendly proteins include chicken breast, lean red meats, low-cholesterol egg products and low-fat soy products. Lower quality proteins are found in vegetables and grains

## Vitamins and Minerals are Essential

Most people get the vitamins and minerals they need by eating a variety of foods each day. However, a nutrition plan for decreased kidney function may not contain enough of some vitamins and minerals. You may need to take a vitamin pill. Take only vitamins or supplements that your doctor or dietitian recommends. Ask your doctor or dietitian before taking any herbal supplements or herbal remedies! Many vitamins, minerals and popular herbal supplements are not safe for people with kidney disease. Taking herbal supplements can cause drug interactions and harmful effects.

## You Need Calories

These days many people are counting calories and trying to lose weight. This is not always the focus when you have kidney disease. Instead, you should view calories as fuel. The calories you eat provide your body with the energy you need to live. You should eat enough calories to keep a healthy weight and to get the energy you need for your daily activities.

If you do not get enough calories, your body will break down your muscles (protein) to use for fuel. This can increase your chances for complications. Calories come from starches, sugars and fats. If you have diabetes, your dietitian can help you fit the right types of calories in your nutrition plan..

## Manage Your Cholesterol By Choosing Healthy Fats

Some cholesterol is important for body functions. Cholesterol is a fat-like substance that can build up on the inside of your blood vessels. Too much bad (LDL) cholesterol in the blood can cause stroke and heart attacks. A high-fat diet can cause high blood cholesterol. Work with your dietitian to choose foods that are lower in fat and cholesterol.

## Limit Your Sodium

Sodium is found in table salt and many processed foods. Too much sodium in your diet can make you thirsty and raise blood pressure. Your doctor will monitor your blood pressure. Controlling blood



pressure is important in managing kidney disease. Eating less salt, or sodium, can help if your blood pressure is high or if you are retaining water in your body. Excess water in your body can cause high blood pressure and swelling of ankles, fingers, or eyes. Eating less sodium, or salt, can help keep your kidneys healthy longer. Your doctor or dietitian may ask you to lower your sodium intake. Some high sodium foods are:

- Processed meats (ham, bacon, sausage, and cold cuts)
- Most canned food and frozen dinners
- Many seasonings and sauces (salt, soy sauce, Teriyaki sauce, ketchup, salad dressing, garlic salt, and onion salt)
- Salt substitutes should not be used because they contain large amounts of potassium. This can be dangerous.

## **Potassium (K) May Need to Be Regulated**

Potassium helps your nerves and muscles (especially the heart) work properly. Potassium is found in leafy vegetables, fruits and fruit juices, tomatoes and potatoes. The kidneys remove excess amounts of potassium. The wrong amount of potassium in the body can be dangerous.

Too much potassium can make your heart beat irregularly or even stop. Some medications can increase the potassium levels in people with CKD. Your doctor and dietitian will monitor your potassium level by looking at your blood tests. They will recommend adjustments if needed.

## **Phosphorus (P) May Need to Be Limited**

Phosphorus is a mineral that works with calcium to keep your bones healthy and strong. It also helps your nerves and muscles work. The kidneys usually regulate phosphorus. With kidney disease, the kidneys are not able to remove excess amounts of phosphorus in your blood. Your dietitian may adjust your diet to decrease phosphorus. Phosphorus is found in most foods, but is mainly present in dairy products, beans, nuts and processed foods. As your kidney function decreases, you may also be prescribed medication to help remove excess phosphorus. High phosphorus levels cause an increase in the parathyroid hormone (PTH) levels. High PTH levels may cause bone damage.



## **Calcium (Ca) Should Be Monitored**

As you may know, we all need calcium to build strong bones. When the kidneys fail, your body has trouble using calcium to build bone. Your doctor may have you take a special form of vitamin D to help keep your bones healthy. If your calcium level is too high, your calcium intake may need to be reduced. Too much calcium along with too much phosphorus in the blood can make you itch and can damage your blood vessels. Remember, you should never take calcium, vitamin, or herbal supplements unless directed by your nephrologist.

## **Fluids Should Be Monitored**

Your kidneys help to control the amount of fluid that leaves your body. Depending on how much kidney function you have, you may or may not need to limit your fluid intake. As your kidney disease progresses, your kidneys may be unable to remove the excess fluid from your body. Too much fluid may cause swelling, shortness of breath, or high blood pressure.