

PRINCIPLES OF RENAL DIET (FOR PERSONS WITH KIDNEY DISEASE)

Renal diet is a special diet designed for people with kidney disease. The normal kidneys remove waste, extra water and substances from the body, and turn them into urine. Chronic kidney disease occurs when the kidneys become damaged and lose their functions over the years. Following a renal diet can slow down kidney damage and prevent waste and fluid buildup. Since each person's kidney function and treatment are different, it is important to consult your doctor or a dietitian to design an individualized meal plan to meet your needs. In general, a renal diet limits foods that are high in **phosphorous, sodium, potassium, protein and fluids**.

Phosphorus

Phosphorus is a mineral found in many foods. Too much phosphorus in the body can pull calcium from bones and lead to bone fracture or bone disease.

*In general, limit daily intake of phosphorous to less than 1000 mg. Refer to table below:

Limit:
milk, cola.
yogurt, cheese, tofu, meats.
brown rice, whole grain products
dried beans and peas, nuts and seeds, chocolate, processed foods.

Sodium

Sodium is a mineral found in salt and in many other foods. Since the kidneys are losing their ability to remove wastes and fluid, too much sodium intake can build up fluid in the body leading to thirst, swelling, high blood pressure, stroke and congestive heart failure.

*In general, limit daily sodium intake to less than 2000 mg; choose products with less than 300 mg per serving. Refer to table below:

Choose	Limit
Fresh and unprocessed foods.	Preserved meats such as lunch meat, sausage, hot dog, ham, bacon, salted fish, canned food, instant noodles, cheese and most processed foods.
Lemon juice, vinegar, scallion, ginger, garlic, parsley, curry powder, five spice powder, anise, or other fresh herbs.	High-sodium seasonings such as regular soy sauce, oyster sauce, BBQ sauce, chicken powder, ketchup, hot sauce, fish sauce, MSG, fermented black beans, chili sauce bean paste, shrimp paste, fermented soybean curd.
"Reduced sodium", "low sodium" or "no salt added" versions of canned/processed foods.	Table salt, sea salt, garlic salt, and any other flavored salts. *Note: salt substitutes are high in potassium and <u>not</u> recommended

Potassium

Potassium is a mineral found mainly in fruits, vegetables, milk and meats. Too much potassium can lead to irregular heartbeats or even a heart attack.

*In general, limit daily potassium intake to less than 2000 mg. (approx. 1-2 small fruits and 1-2 cups vegetables daily) Refer to table below:

Choose	Limit
Fruits and juices-apple, berries, cherries, grapes, lychee, peach, pear, pineapple, tangerine, watermelon.	Fruits and juices-apricot, avocado, banana, cantaloupe, dates, durian, figs, grapefruit, honeydew, kiwi, mango, nectarine, orange, papaya, persimmon, pomegranate, prunes, raisins, and other dried fruits.
Vegetables-bok choy, bean sprouts, bell pepper, cabbage, carrots, cauliflower, celery, corn, cucumber, eggplant, green beans, lettuce, mushroom, okra, onion, radish, zucchini.	Vegetables-beets, bitter melon, broccoli, butternut squash, choy sum, lotus root, potato, pumpkin, spinach, swamp cabbage, sweet potato, taro, tomato, watercress.
	Other foods- chicken, fish, seafood, meat, dried beans, nuts, soymilk, milk, yogurt, salt substitute.

Protein

Meat, poultry, seafood, milk products and eggs are good sources of high-quality protein. Protein helps to maintain muscle mass, fight infections, and repair body tissue, but too much protein can create large amounts of waste products.

*In general, limit daily intake of protein to less than 50 gm

3 oz. meat, poultry or seafood = 21 gm protein; 8 oz. milk = 8 gm protein

Fluids

Fluids include soup, congee, water, tea, coffee, milk, soymilk, juice, soda, fruits with a high water content such as watermelon. Too much fluids can cause swelling, high blood pressure, heart failure or shortness of breath. To reduce thirst, eat less salt and high sodium foods, chew sugarless gum or suck on ice chips, sugarless candy or a lemon wedge.

*In general, limit daily fluid intake to less than 6 cups (1cup= 8 oz.)

If you are also diabetic, you may need to limit the amount of carbohydrates (starch and sugar) in your diet. Due to many food restrictions, your doctor may prescribe a daily multi-vitamin mineral supplement for you.

For more information on phosphorous, sodium, potassium, and protein content of foods:

<http://www.cchrhealth.org/food-and-nutrition/> (English)

<http://www.cchrhealth.org/taiwan/%e9%a3%9f%e7%89%a9%e5%8f%8a%e7%87%9f%e9%a4%8a/> (Chinese)