What is a Healthy Diet?
Nutrition After Kidney Transplantation

After your kidney transplant it is important to eat a healthy diet. Healthy eating habits will help prevent some health complications that post-transplant medications can cause.

A healthy diet can…

- Keep blood sugar levels within normal limits. This prevents diabetes. Blood sugar can go up after transplant.
- Keep blood cholesterol levels within normal limits. This keeps your heart healthy. Cholesterol levels can become elevated after transplant.
- Prevent excessive weight gain. Some patients gain too much weight after transplant.
- With appropriate salt intake possibly help to keep blood pressure normal directly after transplant.
- With enough calcium keep your bones strong. This can help support growth. Patients on prednisone after transplant have higher calcium needs.

Make sure for the first 4-6 weeks after transplant that you eat plenty of protein. Protein rich foods are chicken, turkey, fish, eggs, cheese, lean red meat, and tofu.

So What Exactly is a Healthy Diet? How Should I Eat?

(1) Low in Sugar – Limit juice, soda, candy, chocolate, sweets, ice-cream.
  - Limit juice, soda, or other high sugar content drinks to less than 8 ounces a day.
  - Limit candy or dessert type foods to 1 serving a day or less a day. Use the food label to determine what is considered a portion size.
  - Limit added sugar to foods or drinks such as cereal, coffee, or tea. Some healthy foods contain added sugar such as yogurt and chocolate milk.

(2) Low in Fat – Limit butter, margarine, red meat, fried foods, poultry skin, bacon, sausage, full fat dairy, eggs, mayonnaise, junk food.
  - Choose skinless poultry and fish more often than red meat.
  - Limit red meat to 3 times a week or less. Choose cuts with “loin” or “round” in the name. Keep serving sizes to 3-4 ounces of cooked meat. Cut off all visible fat from the meat.
• Choose low-fat or non-fat dairy products.
• Choose low-fat or non-fat additives to foods such as margarine, mayonnaise, salad dressing, sour cream etc.
• Limit foods like chips, crackers, cookies. Try baked or low-fat versions of your favorites.

(3) High in Fiber – Eat fruits, vegetables, whole grains, legumes, and lentils.

• Eat 2-4 pieces of fruit a day. Choose fruit instead of juice. A serving of fruit is equal to a small-medium size piece or ½ cup.
• Eat 3-5 servings of vegetables a day. A serving is equal to ½ cup cooked or raw vegetables or 1 cup raw leafy vegetables.
• Include whole grains in your diet every day. The goal is 3 servings a day of whole wheat versions of bread, pasta, couscous, tortillas, pita bread, oatmeal, wheat or oat cereals. Look for “whole wheat flour” vs. enriched wheat or enriched white flour on the ingredients list. Try grains such as quinoa and amaranth.
• Eat beans and lentils 3 times a week or more. Add to salad, stir-fries, soups, chili, burritos or eat plain.

(4) Moderate in Sodium

• Limit salt added to food during cooking. Use herbs, spices, lemon juice, and vinegar to flavor foods.
• Do not use a salt shaker at the table.
• Limit salted foods such as chips, crackers, French fries, lunch meat, and hot dogs.
• Limit processed foods such as frozen meals, processed cheese, sauce or powder flavor packets for noodles or rice, soups, and canned vegetables. The more processed the food usually the more salt.

* Most patients should be limiting sodium to 3-4 grams a day or 3,000 – 4,000 milligrams a day. Use the food labels to help guide you. One teaspoon of salt = 2400 milligrams of sodium.
* This restriction can usually be liberalized after the first 4 weeks after transplantation. Talk with your dietitian for guidance.

(5) Adequate in Calcium

• 1-3 years old 400 – 600 mg/day
• 4-8 years old 800-1000 mg/day
• 9-18 years old 1300-1500 mg/day

• Try to meet your calcium needs with foods. Supplementation may be necessary but is not appropriate for all patients. Talk with your doctor and dietitian for guidance.

• Great sources of calcium are milk, yogurt, cheese, and calcium fortified orange juice – each has about 300 mg per serving. A serving is equal to 8 oz. of milk or yogurt or 1 oz. of cheese. Good sources of calcium are dark green vegetables like spinach and broccoli.
Why Do I Need to Monitor My Weight Gain?  
How Do I Avoid Gaining too Much?

Patients on glucocorticoids (prednisone) after kidney transplantation often have very large appetites, feeling hungry all day. This can cause people to eat larger portions than usual and to eat more often.

Eating more calories than your body needs can cause you to gain weight. All kids who are still growing in height need to continue to gain weight, BUT The goal is to avoid gaining too much weight too fast.

- Follow all of the guidelines outlined above for following a healthy diet.
- Remember that usually the more fat a food contains, the higher in calories it will be.
- Use the attached handout of Recipe Modification ideas to help decrease calories in food preparation.
- **PORTIONS, PORTIONS, PORTIONS.** One of the most important things to monitor is the portion sizes of foods eaten.
  - Keep meat to 3-4 oz. cooked meat (size of deck of cards or a woman’s palm) at meals.
  - Keep servings of starches such as pasta, rice, oatmeal, cereal, bread, or tortillas to about 2 servings per meal. One serving is equal to ½ cup pasta, rice, oatmeal; ¾-1 cup dry cereal; 1 slice of bread; or 1 6” tortilla. This will vary from child to child and is somewhat dependent of age. Work with your dietitian to determine appropriate amounts.
- Fill up on vegetables! Vegetables are very low in calories. They also contain a lot of fiber that helps make you feel full.

**WHAT ABOUT SNACKS?**

Snacks should be included in a child’s diet. Eating 1-2 snacks a day can help prevent a child from getting too hungry and therefore eating too much at their meals.

Choose low-fat and low – moderate calorie snacks such as fruits and vegetables. Do not snack on junk foods like candy, chips, or sweets. Use the attached Healthy Snack Ideas handout to provide ideas.

**BE ACTIVE – EXERCISE!!!!!**

Be active every single day. Go for a walk, ride your bike, or play with friends. Sign up for a group or individual sport like soccer, basketball, baseball/softball, dance, or gymnastics. Being active makes you healthy and happy. It will also help to manage your weight. Your doctor can tell you what kinds of activities are allowed after transplant.
Good News!

Potassium Restriction – There is no longer a potassium restriction.

Phosphorus Restriction – There is no longer a phosphorus restriction.

Protein Restriction – There is no longer a protein restriction
(if you were on one before transplant).

Dairy Restriction – There is no longer a dairy restriction.

Some patients may have low levels of potassium, phosphorus, and magnesium in their blood. These patients often need supplements to raise levels of the minerals in the blood. In addition to supplements, eat foods rich in these minerals.

High Potassium Foods

Fruits and Juices - Cantaloupe, dried apricots, orange juice, honeydew melon, mango, banana, papaya, prune juice, prunes, nectarine, apricot nectar, raisins, dates, kiwi, and oranges.

Meat and Protein Foods - Sole, halibut, salmon, red snapper, trout, flank steak (lean), tempeh, tofu, chicken/turkey, peanut butter.

Cereals - Bran flakes, All Bran Cereal

Vegetables - Baked potato with or without skin, avocado, yams, winter squash, bamboo shoots, sweet potato, tomato juice, vegetable juice, mashed potatoes, chines cabbage, spinach, tomato.

Beans and Legumes - Refried, lima, pinto, kidney beans; black eyed peas, and lentils.

Dairy Products - Low-fat milk, chocolate milk, yogurt.

High Phosphorus Foods

Dairy foods - milk, yogurt, cheese, ice-cream/frozen yogurt, pudding, and custard.

Protein rich foods - red meat (lean), fish, pork, chicken/turkey, eggs, beans and lentils, nuts, and peanut butter.

Other - Chocolate and caramel (limit portion and frequency because high in sugar).

High Magnesium Foods

Grains and Cereals - 100% Bran Cereal, brown rice, soybean flour, bran flakes, oatmeal, wheat germ, instant oatmeal, whole wheat bread.

Beans and Legumes - Black, navy, refried, pinto, lima, and kidney beans; lentils.

Nuts, Seeds, and Protein Foods - Tofu, sunflower seeds, almonds, cashews, walnuts, peanut butter, peanuts, beef, poultry, and fish.

Vegetables - Spinach, swiss chard, avocado, baked potato with skin, beet greens, broccoli, okra.

Fruits - Figs, pineapple, banana, and raisins.