

Renal Diet: Be Friendly To Your Kidneys

Our kidneys keep our body fluid levels normal. When kidneys no longer work well, your diet can be changed to help keep these levels normal. Your diet order is:

Five Nutrients of Concern:



Protein
Sodium
Phosphorus
Potassium
Fluid

Serving Sizes



¼ cup = Golf Ball

½ cup = tennis ball



1 cup = 1 fist

1 Small Fruit = Baseball



1 Pancake = Compact Disk

1 Potato = computer mouse



Protein

Protein is important to help build and maintain muscle mass and build the immune system. Too much protein can cause nausea, vomiting, and more damage to the kidneys. Usually, protein is limited with renal failure. However, protein is added back when hemodialysis is started. You may have grams of protein per day.

Vegetables, grains, meats, fish, poultry, and legumes (beans/peas) have protein. The majority of the protein we eat should come from meats, fish, poultry and legumes. Use the list below to plan meals.

1oz cooked meat, fish, poultry = 7 grams

1 large egg = 7 grams

½ cup cooked dried beans, peas, lentils = 8 grams

½ cup tofu = 7 grams

2 Tbsp peanut butter = 7 grams



1 cup milk, soy milk, or yogurt = 8 grams

½ cup pudding or custard = 4 grams

1 slice or 1 inch cube cheese = 7 grams

¼ cup cottage or ricotta cheese = 7 grams

2 Tbsp Parmesan cheese = 7 grams



Sodium

Sodium makes us thirsty and want to drink more. As we drink more fluids, our blood pressure rises and we retain fluid. Avoiding foods high in salt and sodium can help control fluid. You may eat 2000 milligrams (mg) of sodium a day. **Table Salt:** Contains sodium and chloride; 1 tsp salt = 2 grams sodium. **Salt Substitute:** Do not contain sodium; Usually made from potassium; Consult your doctor.



Foods to Avoid

- Canned Vegetables and Soups
- Packaged Seasonings and Meal Starters
- Ham, Bacon, Sausage
- Chips, Pretzels, Nuts
- Pickled Meats and Vegetables
- Butter, Garlic Salt, Season Salt
- BBQ, Soy Sauce, Ketchup, Mustard
- Processed Cheeses and Cheese Foods

Tips to Lowering Sodium in Your Diet

- Leave salt shaker in cabinet (out of site-out of mind).
- Season with herbs and spices: Garlic, Onion, Sage, Rosemary, Thyme, Lemon Juice, Fruit
- Read medication labels and consult doctor
 - Beware of Medications that contain sodium such as antacids and laxatives
- Dining out: Request meals not to be made using salt or MSG (Monosodium Glutamate)
- Choose fresh or frozen Vegetables
- Read food labels:
 - Choose foods with **less than 200 mg** of sodium per serving
 - Avoid foods with salt or sodium listed as one of the first 4 ingredients

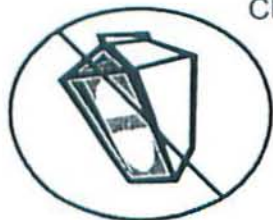
Phosphorus

Phosphorus comes in most foods. Excess amounts of phosphorus can cause calcium to come out of bones, making bones brittle. Your doctor may prescribe a phosphorus-binding medicine that will reduce the amount of phosphorus in your body.

Most people with kidney failure should eat **no more than 800-900 mg** of phosphorus each day. It is recommended that you limit or avoid the following foods:

Baking Powder
Beer
Bran cereals
Breads raised with Baking Powder
Caramels
Cheese (except cottage cheese)
Chocolate

Dark cola beverages
Dried beans
Dried peas
Milk
Nuts
Peanuts and peanut butter
Whole wheat bread



Potassium

Potassium helps muscles (including the heart muscle) to contract and relax. Too much potassium can cause your heart to beat irregularly or even stop. You may eat 2000 mg of potassium each day. The following list will help you with lower potassium options. Choose foods from the Medium and Low Potassium Groups.

LOW POTASSIUM FOODS (< 150 mg per serving)

Apples
Applesauce
Bean sprouts
Bell pepper
Black/green olives
Blueberries
Brewed tea



Cottage cheese
Cranberry juice
Diced turnips
Frozen peas
Grapes
Green beans
Instant coffee

Lemonade
Onion
Parmesan cheese
Pear/papaya nectar
Pineapple
Radishes
Raspberries

Raw cucumber
Sliced cheddar/swiss
Sour cream
Strawberries
Summer squash
Tangerine



MEDIUM POTASSIUM FOODS (150-300 mg per serving)

Apple Juice
Asparagus
Beets
Brewed coffee
Broccoli
Carrots
Cauliflower



Celery
Corn
Dates (4)
Eggplant
Grape juice
Grapefruit (1/2)
Grapefruit juice



Hot cocoa
Ice cream (1/2 cup)
Kiwi
Milk (1/2 cup)
Mushrooms
Okra
Peaches

Pears
Pineapple juice
Plums
Raw cabbage
Ricotta cheese
Turnip/mustard greens
Zucchini squash

HIGH POTASSIUM FOODS (>300 mg per serving)

Apricots
Avocado
Banana
Bran cereal
Buttermilk
Chard
Dried beans/peas
Figs



Honeydew melon
Milk (1 cup)
Molasses
Nectarine
Orange juice
Oranges
Papaya
Potatoes

Prune Juice
Prunes
Pumpkins
Raisins
Salt substitutes
Spinach
Sunflower seeds
Sweet potatoes

Tofu
Tomato juice
Tomato sauce
Tomatoes
Vegetable juice
Watermelon
Winter squash
Yogurt

DIALYZING VEGETABLES

Some vegetables can be prepared a certain way to reduce sodium and potassium levels. This is called Dialyzing Vegetables. Follow these directions **exactly**. Be sure your doctors know you are using these methods.

1. Use fresh potatoes, carrots, beets, rutabagas	5. Rinse under warm water
2. Peel and eye, place in cold water	6. Cook for 5 minutes in 5 times the amount of water to the vegetables
3. Slice 1/8 inch thick slices	7. Serve only 1 portion
4. Soak in warm water for 2 hours. Use 10 times amount water than vegetables	8. You may freeze

Fluid Monitoring

Fluid restrictions are often needed in people who tend to retain fluid. According to your doctor's orders, you can have _____ of fluid each day.

Fluid Formulas

1500 mL = 50 ounces = 6 $\frac{1}{4}$ cups
1000 mL = 33 ounces = 4 cups
300 mL = 10 ounces = 1 $\frac{1}{4}$ cup
240 mL = 8 ounces = 1 cup
120 mL = 4 ounces = $\frac{1}{2}$ cup



Fluid is anything that is **liquid** at room temperature



- * Juice * Ice Cubes * Water * Milk
- * Gelatin * Liquid Meds * Pudding * Soups
- * Ice Cream * Popsicles * Beverages

Fluid Intake Breakdown

This table shows how to break up your fluid allowances throughout the day. Remember to save enough fluid for medications, which is counted in the "other" category.

Total Daily Fluid	Breakfast	Lunch	Dinner	Other

Measuring Fluid

Another way to keep track to fluid intake is to fill a jar with water to the amount of fluid prescribed by your doctor.

1. Measure each item you eat or drink that counts as liquid
2. For each item, remove the same amount of water from the jar
3. Once the jar is empty, you are finished with your fluid for the day

Contact for Questions

Your Renal Doctor: _____ Your Dialysis Clinic: _____



Clinical Dietitians
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