

Nutrition and the CKD (Chronic Kidney Disease) Renal Diet



Presented by Renal Medicine Associates

Nutrition and the CKD/Renal Diet:

Good nutrition is important to reduce the workload on the kidneys and provide you with improved overall health. This includes maintaining a healthy weight, limiting total fat (especially saturated fat), eating an appropriate amount of protein, limiting salt (sodium), potassium and phosphorus. Limiting your fluids is needed if your urine output is small and you are swelling (edema). If you are diabetic, it is important that you follow the meal plan outlined by your diabetes educator.

Diet plays a very important role in the treatment of kidney disease. The kidney does the following for your body:

- ✓ Removes the waste products that are made when protein is broken down in the body. This includes urea and creatinine.
- ✓ Regulates the amount of sodium and other minerals.
- ✓ Maintains the proper balance of fluid.

If you have CKD, your kidney may have problems doing these functions. By watching your diet, you can help reduce the strain on the kidney.

Reducing protein in the CKD Diet:

Protein is needed to repair tissues. The protein must be broken down in order to be used. During protein breakdown, waste (such as urea) is made. When kidney function decreases, the kidney has trouble removing the urea. The urea then builds up in the bloodstream, which may cause nausea, vomiting, tiredness or itching.

To help keep urea from building up in your body, you need to limit the amount of protein in your body. This should begin around a GFR of 30 mL or sooner in certain people. Protein is a nutrient found in fish, poultry, beef, lamb, pork, eggs, cheese and milk.

Smaller amounts are also found in vegetables, fruits and grain products.

Protein will be limited to approximately 0.6 gram per kilogram (of your weight) per day. RDA recommends 0.8 gram per kg per day for people with normal functioning kidneys.

Below is a chart to figure out your weight and amount of protein that is recommended if your GFR is 30 mL or less.

90-100 pounds (41-45 kg)	25-27g of protein per day. Calorie needs for weight maintenance: <60 yrs = 1500-1890. >60 yrs = 1230-1350 calories per day.
110-120 pounds (50-54 kg)	30-33g protein per day. Calorie needs: <60 yrs = 1750-1890. >60 yrs = 1500-1890 calories per day.
130-140 pounds (59-64 kg)	35-38g protein per day. Calorie needs: <60 yrs 2065-2240. >60 yrs 1770-1920 calories per day.
150-160 pounds (68-73 kg)	41-44g protein per day. Calorie needs: <60 yrs 2380-2555. >60 years 2040-2190 calories per day.
170-180 pounds (77-82 kg)	46-49g protein per day. Calorie needs: <60 yrs 2695-2870. >60 yrs 2310-2730 calories per day.
190-200 pounds (86-91 kg)	52-55g protein per day. Calorie needs: <60 yrs 3010-3185. >60 yrs 2580-2730 calories per day.

**** Normal protein intake is 40-60 grams of protein per day. ****

People with heavier weights **do not** adjust to allow for higher protein intake.

Protein diet changes:

Meat and meat substitutes (7g protein per ounce).

Limit to _____ servings per day.

Beef, lamb, pork, veal, poultry and fish 1 ounce
Salmon or tuna (fresh or water packed, no added salt) ... ¼ cup
Cheese (less than 80 mg sodium per oz.)..... ¼ cup shredded
Unsalted peanut butter 2 TBS
Egg 1
Dried peas or beans (cooked) ½ cup

Avoid: Salt-cured meats, bacon, ham, sausage, dried beef, corned beef, sardines; salted, canned or processed meats, fish or fowl. Processed cold cuts, hot dogs, sausages; all other cheese or cheese food, salted nuts and dried beans seasoned with ham or bacon.

Guidelines:

- ✓ Do not eat all of your meat allowance in one meal.
- ✓ Meat should be weighed after cooking and skin, excess fat and bone have been removed.
- ✓ When a food scale is not available, use the following estimates: 2 oz. = ½ chicken breast, 1 chicken thigh, 2 small chicken legs, 2 chicken wings, ½ cup canned fish.

Milk and milk products 4 gram protein per serving:

Limit to _____ servings per day.

All milk, half and half, cream ½ cup
Yogurt, pudding, ice cream ½ cup

Avoid cultured buttermilk.

Starches 3 grams of protein per serving:

Limit to _____ servings per day.

Pasta, hot cooked cereal, potatoes, corn, peas	½ cup
Bread, muffin	1
Bagel, English muffin	½
Rice	1/3 cup
Soup	1 cup
Dry cereal	¾ cup

Avoid breadsticks, and other salted bread products; salted snack foods (crackers, chips, pretzels, popcorn); canned soups, dried soup mixes, broth and bullion.

Vegetables 2 grams of protein per serving:

Cooked vegetables (fresh or frozen)	½ cup
Raw vegetables	1 cup
Vegetable juice (no added salt)	1 cup

Avoid sauerkraut, pickles, pickled vegetables or relish.

Fruits ½ gram of protein per serving:

Limit to _____ servings per day.

Juice, raw or canned	½ cup
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Fat and sugar have no protein.

Avoid: Canned gravy or gravy mixes, commercially prepared salad dressings (unless low sodium); avoid salt and all salt containing mixtures, soy sauce, olives, bottled steak sauces, ketchup, chili sauce, meat tenderizer, prepared horseradish sauce, prepared mustard, commercially prepared salsa, licorice and Gatorade.

Calories:

If you are less than 60 years of age then 35 calories per kg are recommended to stay the same weight. If you are over 60 years of age, then 30 calories per kg are recommended to maintain the same weight. To either gain or lose weight, please see the special sheets at the end of this booklet. Alcohol is not recommended since it is an empty calorie. The recommended vitamin is over the counter. It should be labeled **B Complex with C.**

The weight chart for amount of protein also lists calorie needs. To evaluate caloric intake, there are many small calorie counter books available. Or read food labels.

Potassium:

Unless you are told to increase the potassium in your diet due to medications, you should watch and reduce your potassium intake. A low potassium diet helps prevent high levels of potassium (>5). When blood potassium levels become too high, muscle weakness, irregular heartbeat and death can occur. Limiting potassium in your diet will help keep blood potassium levels normal.

Potassium is found in most foods. Fruits, vegetables, nuts, meat and milk are especially high in potassium. You will need to avoid or limit your intake of these foods.

How to follow a low potassium diet:

- ✓ Avoid salt substitute (most have a high potassium content). Use only herbs and spices or seasoning mixes without potassium.
- ✓ Limit fruits and vegetables to 4 servings (1/2 cup) per day.
- ✓ Limit milk to _____ cups per day. This includes ice cream, yogurt and all kinds of milk.

- ✓ Potatoes may be used if they are soaked overnight prior to cooking.

Very high potassium fruits to AVOID:

Apricots, avocado, bananas, cantaloupe, honeydew melon, nectarines, plantains, tangelos, orange juice and oranges.

High potassium fruits to limit:

Blackberries (3/4 cup), Boysenberries (1 cup), Cherries (12 each), Dried Figs (2 each), Dried Prunes (3 each), Raisins (2TBS), Grapefruit (1/2 cup), Kiwi Fruit (1 medium), Mulberries (1 cup), Mandarin Oranges (3/4 cup), Peach (fresh, 1), Pear (1), Plums (2 medium), Prune Juice (1/2 cup), Raspberries (1 cup), Strawberries (1 ¼ cup), Watermelon (1 ¼ cup).

Very high potassium vegetables to AVOID:

Artichokes, butter beans, dried peas or beans, lentils, sweet potatoes, swiss chard, tomato paste or puree, winter squash, yams, potatoes (not soaked prior to cooking).

*****note: potatoes if soaked overnight in water are okay. Dump water out after soaking.***

High potassium vegetables to limit to one serving (2/3 cup):

Asparagus, beets, brussels sprouts, collard greens, corn, cowpeas, dandelion greens, kale, mixed vegetables, mushrooms, parsnips, pumpkin, spinach, tomato juice, canned tomatoes, zucchini.

Completely AVOID these very high potassium foods:

Chocolate candy or beverage, molasses, nuts.

Phosphorus and CKD:

One function of the kidney is to keep bones healthy by regulating the minerals calcium and phosphorus. In CKD, the regulation of these minerals is affected. High blood phosphorus levels cause calcium to be pulled out of the bone, leading to thinner and weaker bones. This condition is called osteodystrophy. Also, calcium and phosphorus can combine to form stone-like deposits in the skin, blood vessels or any other body part. Itching, bone pain, red eyes and scaly skin can result from high phosphorus levels in the blood. Diet and medication can control these conditions.

Phosphorus is a mineral that is found in most foods. Milk, dairy products, cola beverages, meats, whole grains, chocolates, legumes, nuts and seeds all contain a large amount of phosphorus. Limit or avoid these foods in your diet. Milk/dairy products (cheese included) are limited to ½ cup serving per day or one ounce of cheese.

To further control phosphorus, medicines called binders are used. These medications (taken when you are eating) bind with the phosphorus to prevent absorption into your blood. Examples of these are: Calcium pills, Renagel, Fosrenol, or PhosLo (Calcium Acetate). Binders with a low phosphorus diet are required to keep your phosphorus levels low.

Limit phosphorus to 600-800 mg per day.

Tips to help keep phosphorus in control:

- Protein foods (meats, chicken, etc.) are high in phosphorus but should be included sparingly into your daily diet.
- Control the portion size. Eating too much can be the problem.

- Try to balance your phosphorus intake throughout the day.
- Many snacks contain phosphorus, be sure to count these.
- Combination foods like pizza and casseroles can be tricky. Let the main ingredients help you estimate the phosphorus amount.
- When you go out to eat, use these following tips.
 - i. Do not add cheese to sandwiches or hamburgers.
 - ii. Limit creamed, au gratin, scalloped food.
 - iii. Limit nuts or beans.
 - iv. Do not super size your meal.
 - v. Ask for sauces on the side.

If the phosphorus levels remain high, the phosphorus binders that you are taking need to be increased.

Phosphorus foods and amounts:

Meats:

Beef 3oz	207 mg	Hamburger 3oz	144 mg
Veal 3oz	192 mg	1 Lamb chop	107 mg
Pork loin 3oz	168 mg	½ Chicken Breast 3oz	210 mg
Turkey 3oz	198 mg	Liver 3oz	345 mg
Fish 3oz	150 -240 mg	Tuna 3oz	201 mg
Sardines 2 each	118 mg	Lobster 3 oz	156 mg
Oysters 4 med	79 mg	Egg yolk (1)	86 mg

Nuts and seeds: (one ounce unless otherwise stated)

Dried almonds	148 mg	Dry roasted cashews	139 mg
Dried coconut	59 mg	Dry roasted pecans	86 mg
English walnuts	90 mg <small>(14 halves)</small>	Dry roasted peanuts	100 mg <small>(1oz)</small>
Roasted pumpkin or sunflower seeds (1 oz)			330 mg
Peanut butter	60 mg (1TBS)		

Dairy: (1/2 cup unless otherwise stated)

Milk	116 mg	Cheese (1oz)	145 mg
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Cottage cheese	145 mg	Yogurt	160 mg
Ice cream	70 mg	Pudding	125 - 150 mg

Dairy (continued):

Custard	150 - 175 mg	Cream soup	46 - 125 mg
Chocolate milk	128 mg	Buttermilk	109 mg

Whole Grains:

Bran flakes (3/4 c.)	139mg	Bran Muffin (1)	111 mg
Oatmeal (1/2 c.)	128 mg	Brown rice	71 mg
Whole wheat bread (1 slice)	65 mg		
Wheat germ (1/4 c.)	225 mg	Raisin bran (3/4 c.)	137 mg

Dried Beans: (1/2 cup)

Navy beans	143 mg	Kidney beans	60 mg
Frzn lima beans	101 mg	Canned pinto beans	110 mg
Black-eyed peas	133 mg	Lentils	178 mg
Soy beans	210 mg	Raw tofu	120 mg

Other:

Carbonated cola (12 oz)	45-55 mg		
Cheese pizza (1 slice)	216 mg		
Frzn peas (1/2 c.)	72 mg	Molasses (1T)	17 mg
Chocolate (1oz)	65 mg	Cocoa powder (1T)	35 mg
Caramel (1oz)	35 mg	Mushroom (1/2 c. raw)	36 mg
Raisins (1 c.)	97 mg	Dates (10 ea.)	33 mg

Beverages:

Summertime drinks can add a lot of phosphorus to the daily food intake if we aren't careful. STAY WITHIN YOUR FLUID ALLOWANCE and choose your drinks carefully. The highlighted values are listed for potassium, 50-150 mg potassium, 150-200 mg of potassium, 200-250 mg of potassium, over 300 mg of potassium → (over 300 mg should be avoided).

Your best choices are those beverages with less than 10 mg phosphorus that have low potassium content.

No phosphorus	1-10 mg phosphorus	11-30 mg phosphorus
Cream soda	Lemon/lime soda 12oz	Orange soda 12 oz
Fruit punch soda	Five alive fruit punch 6 oz	Diet soda (most) 12 oz
Ginger ale	A&W root beer 12oz	Five alive-citrus 4oz
Grape soda	Cranberry apple juice 4oz	Fruit juice drink 4oz
Peach soda	Lemonade from mix 8oz	Kool-aid 8 oz
7-Up	Lemon juice fresh 4oz	Red wine 3 ½ oz
Club soda	Limeade 8oz	Orange Juice
Sprite	Peach juice drink 6oz	Tomato juice 4 oz
Teem	Pineapple grapefruit 6oz	Tomato juice cocktail
Perrier mineral water	Tangerine juice drink	Pineapple juice 4 oz
Apple juice	Coffee 6 oz	Apricot juice
Lemon Lime Soda	Tea 8 oz	Grapefruit Juice
Mountain Dew	Hawaiian Punch	Grapefruit orange
Fresca	Grape Juice 4 oz	Tangerine Juice 4 oz
Diet Root Beer	Hi-C Pineapple orange	Pepsi Light

31-50 mg Phosphorus	51-70 mg Phosphorus	71-90 mg Phosphorus
Mr. Pibb 12 oz	Coca Cola 12 oz	Tang-Grape 6 oz
R-C Caffeine Free 12 oz	Colas 12 oz	
Dr. Pepper 12 oz	Orange Plus 6 oz	90-110 mg Phosphorus
Tab 12 oz	Pepsi 12 oz	Strawberry Soda
Coffee Flavored 6 oz	Diet Pepsi 12 oz	Lemonade Frozen Concentrate
Ale 8 oz		
Beer 12 oz		
Shasta Cola		
Diet Rite Cola		
Prune Juice 4 oz		

THE FOLLOWING BEVERAGES HAVE VERY HIGH PHOSPHORUS AND POTASSIUM CONTENT AND SHOULD BE AVOIDED:

Whole milk	234 mg phosphorus and 356 mg potassium
Milk Shake	321 mg phosphorus and 822 mg potassium
Skim milk	222 mg phosphorus and 278 mg potassium
Malted milk shake	317 mg phosphorus and 529 mg potassium
Eggnog 4 oz	131 mg phosphorus and 162 mg potassium

If your favorite beverage is not listed be sure to refer to the packaging labels to find out what the phosphorus, potassium and sodium content are. Above all remember if your diet only allows

for a limited amount of fluid, it is up to you to control that amount.

How to follow a low sodium (salt) diet:

The typical American diet is very high in sodium. Even if you do not add salt while cooking or do not use the salt shaker at the table you are probably eating too much sodium. That is because we eat processed foods like frozen dinners, boxed noodle dishes, canned soups and canned vegetables. Most processed foods are high in sodium.

It will take some time to adjust to a low sodium diet, but it is worth the effort. A low sodium diet can help you feel better and you will not have as much swelling (edema).

What is a low sodium diet?

A low sodium diet includes no more than 2400 mg of sodium per day. That is equal to one teaspoon of salt. Sodium is an essential mineral needed by the body, *but only 200 mg is needed.*

How do I follow a low sodium diet?

You can take 4 steps to reduce the sodium in your diet:

1. Stop adding salt to your food.
2. Change your recipes to low sodium versions.
3. Pick foods naturally low in sodium.
4. Learn to read food labels.

Step one: Stop adding salt to your food.

To get this done, remove the salt shaker from the table, and *do not* add salt when cooking. People usually say food tastes bland

without salt. To make your food taste good without adding salt try the following.

- Experiment with low or no salt herbs and spices (all types of pepper, onion or garlic powder-not salt-, dill, rosemary. ***Combination spices are good but read the label and be sure salt/sodium is not an ingredient.***
- If you are not eating fresh foods choose other low sodium foods as much as possible. Good options include canned fruits and plain frozen vegetables (not canned vegetables). Dried beans, peas, rice and lentils are also low sodium, but do not add salt or salt pork when cooking.

Step two: Change recipes to low sodium versions.

To do this, try these tips.

- Consider getting a low salt cookbook. You can go online for recipes or check one out at the library.
- Try changing the recipes you have with low sodium versions. For example, if you like soups make your own low sodium version with fresh meat and vegetables. Toss the ingredients in to a Crock-Pot®, and use herbs and spices for seasonings. Make extra and freeze some for later meals.
- Use low sodium substitutes for foods that you like. For example, cook fresh lean pork instead of a country ham. You can cook chicken, turkey or beef without adding salt and use the leftover meat for sandwiches instead of buying luncheon meat (which is high in sodium).
- Look for low sodium versions of the foods you like. Look for canned foods labeled *Sodium free, low sodium, no salt, light in sodium, very low sodium, or unsalted*. You can also remove **some** of the salt by rinsing. ***This does not remove all of the sodium.***
- Select low sodium cheeses or yogurt when making sauces.

Step three: Pick foods naturally low in sodium.

To accomplish this step, try the following tips.

- Choose fresh foods. Fresh fruits and vegetables including freshly squeezed fruit and vegetable juices have very little sodium. The same is true for fresh meat, poultry and fish.
- Keep a list of low sodium foods on the refrigerator.
- Learn which foods are high in sodium and try not to buy them. That will stop the temptation to eat them.
- When picking main food items, choose those that have less than 500 mg of sodium per food item.
- Try tracking the amount of sodium that you eat for a few days. Don't forget to record snacks. If you can't find the sodium amount write it down and your dietician or doctor/NP will help you find the amount later. You can also look up the sodium amount on the internet. If you eat more than 3000 mg of sodium per day, look at ways that you can cut down on that amount.
- Review your list with your doctor if you are having trouble understanding or following a low sodium diet.

Step four: Learn how to read food labels.

By reading food labels you can learn which foods are high and low in sodium. As a rule *most processed foods are high in sodium*. Some packaged foods are available in low or no salt versions.

How to read a food label for sodium content:

Begin by looking at the *serving size* and sodium content. *See the example below*. The serving size is 1 cup (228g) the sodium content is 660 mg. If you eat that amount, then you are eating 660 mg of sodium. **But if you eat more or less than the recommended serving size, then the amount of sodium is more or less.** For example, if you eat a double portion of the serving then the sodium amount for your serving is 1320 mg.

Nutrition Facts	
Serving Size: 1 cup (228g)	
Servings Per Container: 2	
Amount Per Serving	
Calories: 260 Calories from Fat: 120	
	% Daily Value*
Total Fat 13g	20 %
Saturated Fat 5g	25 %
Trans Fat 2g	
Cholesterol 30mg	10 %
Sodium 660mg	28 %
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0 %
Sugars 5g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 15%	• Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet.	

The amount listed is for one 1-cup serving. If you eat two servings, the amount doubles.

This package has two 1-cup servings.

One serving has 28% Daily Value of sodium.

- 5% or less is low.
- 20% or more is high.

One serving has 660 milligrams of sodium.

For this food label, 28% Daily Value is **high** for sodium.

Tips to help you get started on the low sodium diet:

- Make changes slowly instead of all at once.
- Sprinkle fresh lemon juice over vegetables or salads.
- Season or marinate meat ahead of time with garlic, onion and your favorite herbs. Adding these prior to cooking and letting the flavors settle in can help spice up flavor.
- **Avoid adding spices or seasoning mixes with the word salt or sodium in the name.** They will be high in sodium. Example garlic or celery salt. Look in the spice section for seasoning labeled “Salt-free”.

Below you will find a chart to help you track your sodium.

TRACKING THE SODIUM YOU EAT:

	Breakfast	Lunch	Dinner	Snacks
Day One				
Day Two				
Day Three				
Day Four				
Day Five				
Day Six				
Day Seven				

Other tips:

- Watch for the word *soda* on labels. For example you may see sodium carbonate on labels. These contain sodium compounds. Try to avoid them if able.
- Preservatives are often sodium based, and increase sodium amount. Some of the high sodium preservatives are: Sodium

alginate, sodium sulfite, sodium caseinate and sodium benzoate.

- Some over the counter (OTC) drugs have large amounts of Sodium, read the label (try to avoid drugs that fizz).
- If you are at a party eat fresh fruit and raw vegetables without the dips. Avoid the chips, peanuts and pretzels.
- Limit the use of condiments that are high in sodium: Worcestershire sauce, steak sauce, or ketchup.

When eating out:

- Choose restaurants that have fresh food choices.
- Pick foods without breading (breading contains salt).
- When ordering be specific about what you want. For example ask that your food be prepared without any salt.
- Never add soy sauce to your food.
- Do not be afraid to ask your server about how your food is prepared.
- Choose foods without sauces or ask for your sauce on the side.
- Avoid dishes labeled au gratin, parmesan, hashed, Newberg, casserole and Devonshire, because they are high in sodium.
- Choose the salad bar when available. Avoid high sodium foods including croutons, olives, cheese, bacon, macaroni salad, potato salad, coleslaw, sunflower seeds, pepperoni, Chinese noodles, pickles and creamy salad dressing. Choose oil and vinegar type dressings.
- Eating at a fast food restaurant, pizza place or deli is difficult. Eat a hamburger or grilled chicken without condiments add only a small amount of mayonnaise or mustard. Order French fries without salt.

Be careful of foods that are labeled “good for your heart”. They are often low fat but high in sodium.

Examples of spices, herbs, seasonings and condiments:

Low Sodium		High Sodium	
Allspice	Basil	Alfredo Mixes	BBQ Sauce
Garlic powder	Ginger	Pickle Relish	Plum Sauce
Bay leaves	Black pepper	Celery Salt	Poultry seasoning
Lemon juice	Low-sodium ketchup	Cocktail Sauce	Regular ketchup
Cayenne pepper	Nutmeg	Dry meat marinade mix	Salt
Celery powder	Chili powder	Dry salad dressing mixes	Salt sense
Onion powder	Oregano	Fish sauce	Sea Salt
Chives	Paprika	Garlic salt	Seasoned salt
Cinnamon	Parsley	Generic sauce mixes	Soy sauce
Cloves	Pimento	Horseradish	Steak sauces
Cocoa powder	Red pepper	Kosher salt	Stir fry mixes
Cumin	Sage	Lite Salt	Stir fry sauce
Curry	Salt substitute (with physician's approval)	Lite soy sauce	Taco sauce/seasoning
Dill	Tabasco sauce (1 tsp okay)	Meat tenderizer	Teriyaki sauce
Dry mustard	Thyme	MSG	Worcestershire sauce
Flavored extracts (vanilla, almond, etc.)	Vinegar	Onion salt	
Fresh Garlic			

High Sodium foods:

Meats: Anchovies, bacon, beef jerky, bologna, Breaded meat, breakfast sausage, chipped ham, corned beef, dried beef (jarred), Herring (jarred), hot dogs, knockwurst, kielbasa, liverwurst, pastrami, pepperoni, pickled loaf, pickled meat and eggs, pimento loaf, frozen pot pies, salami, sardines, canned tuna, canned salmon, canned chicken, Vienna sausages.

Vegetables: Pickles, pizza sauce, regular canned vegetables, regular canned or jarred tomatoes, sauerkraut, spaghetti sauce, stewed tomatoes, tomato and vegetable juice, tomato sauce.

Milk products: Buttermilk, canned milk, cheese.

Starches: Baked beans, batter mixes, biscuit and pancake mixes, corn and potato chips, hot (instant) cereals, macaroni and cheese (boxed), microwave popcorn, stuffing mixes, frozen waffles.

Other: Bouillon cubes, canned soups.

Instead of high sodium foods, choose the following alternatives:

<i>Instead of:</i>	<i>Use:</i>
Baking powder	Low sodium baking powder
Garlic salt	Garlic powder
Peanut butter	Unsalted peanut butter
Canned pasta sauce	No salt added pasta sauce
French fries (small order)	Unsalted French fries
Salted nuts (1 oz)	Unsalted nuts (1 oz)
Saltine crackers	Low sodium saltine crackers
Self rising flour (1cup)	Enriched white or whole wheat flour
Ham 3 oz	Fresh pork (3 oz)
Instant oatmeal	regular cooking oatmeal
Turkey ham (3 oz)	Turkey (3 oz)
Corned beef (3 oz)	Roast beef (3 oz)

Low sodium cooking - Seasoned “un-salt”

This blend comes close to tasting like Lawry’s© without the salt/sodium. Use it anywhere season salt is called for or when you want to give food a little extra flavor (like soups or egg dishes).

1 tsp chili powder

¼ tsp celery seed

½ tsp nutmeg

½ tsp coriander

1 tsp onion powder

1 tsp paprika

¼ tsp garlic powder

1 tsp turmeric

Mix together. Store in airtight container.

Yield: 24 servings, sodium free.

Low Sodium Chicken Soup

Diet types:

CKD non-dialysis

Dialysis

Diabetes

Recipe submitted by DaVita dietitian Melissa from Indiana.

Portions: 10 **Serving size:** 1-1/2 cups

Ingredients

1 pound chicken breast, boneless, skinless, cooked

1 tablespoon onion

4 celery stalks

2 tablespoons fresh parsley

1 cup fresh carrots

1 tablespoon butter
7-1/2 cups water
5 cups **low-sodium** chicken broth
1/8 teaspoon black pepper
1 cup frozen mixed vegetables

Preparation

1. Dice chicken, chop onion, celery and parsley; slice carrots 1/2-inch thick.
2. Sauté butter and onion in a 4-quart pot for 5 minutes, until tender.
3. Add water and chicken broth and bring to a boil.
4. Add chicken, celery, parsley and pepper, then cover and simmer for 30 minutes.
5. Add carrots, cover and simmer for 20 minutes.
6. Add frozen vegetables, cover and simmer 20 minutes longer.

Renal and renal diabetic food choices

2 meat
1 vegetable, low potassium

Helpful hints

Look for reduced sodium broth containing 500 milligrams sodium or less per 1 cup serving. Avoid low sodium broths and bouillons containing potassium chloride—it's very high in potassium. Recommended brands include No Salt, Fat Free Chicken Broth, Natural Chicken Stock and 50% Less Sodium Chicken Broth.

If you are on hemodialysis or restricted fluid, be sure to count liquid in the soup as part of your fluid allowance for the day.

How to gain weight with CKD:

Calories are the energy that comes from the food you eat. You need to eat enough calories to maintain your weight and energy level. Calories in your food come from carbohydrates (sugars and starches), proteins and fat.

If you are losing weight, you should try to add extra calories from simple carbohydrates like jelly, jam, hard candy, honey and syrup.

Other good sources of calories come from vegetable fats, such as margarine, vegetable oil and non-dairy creamer. These foods can be used as free foods to give you extra calories each day.

If you have diabetes and need to gain weight, it may be best for you to increase your calories from starches and vegetable fats.

If you are losing weight without trying, it may be best to increase your portion size of all your foods or include more free foods. Discuss this with your provider because there may be other reasons for weight loss. You may need a special nutrition supplement that is not free food. These supplements provide extra calories and protein and are usually used for a short time.

If you have high cholesterol, select vegetable fats that are low in saturated fat (such as olive oil, canola oil). Use lean cuts of meat. Remove all the visible fat from the meat and skin from poultry before cooking. Egg yolks contain large amounts of cholesterol and can be eaten a few times per week. The egg whites contain no cholesterol and are a very good source of protein. So, they can continue to be eaten. You need to increase the calories in your diet until you regain to the normal healthy weight. This will take time.

Tips for adding the free foods into your diet:

- Use honey or sugar on cereal and in drinks.
- Use syrup on pancakes, waffles and hot cereal.
- Eat hard candy, gum drops and lollipops after meals or as snacks.
- Use honey, jelly, jam, margarine or cream cheese on toast, bread, rolls or crackers.
- Drink beverages that have calories from sugar instead of plain water.

- Add margarine to rice, hot cereal, noodles, vegetables and bread.

Tips for adding high calorie foods to your diet:

- Add sour cream to omelettes, noodles, rice and vegetables.
- Use cream, half and half, non-dairy creamer instead of milk.
- Eat desserts that are low in potassium, sodium, phosphorus like croissants, sweet rolls, plain wafer cookies, rice krispie treats, cobbler or pie (made with allowed fruit), pudding made with half & half, non-dairy creamer or cream.

These free foods are all 100 calories per serving:

Non-cola sodas (6 ounces)	Kool-Aid with sugar (8 ounces)
Sorbet (4 ounces)	Popsicles with sugar (2 halves)
Liquid non-dairy creamer (5 TBS)	Margarine (1 TBS)
Vegetable oil (1 TBS)	Mayonnaise (1 TBS)
Candy corn (2 TBS or 1 oz)	Hard candy (5 pieces)
Lifesavers (1 package)	Marshmallows (5 large)
Mints (1 ounce)	Lollipops (1 ounce)
Sugar, honey, syrup (2 TBS)	Whipped topping non-dairy 8TBS

100 calorie portions of high calorie foods:

Cream cheese (2 TBS)	Sour cream (8 ounces)
Half & Half (5 TBS)	Cream (3 TBS)
Table cream (4 TBS)	Whipping cream (2 TBS)

Why being over weight matters and what you can do about it.

We used to think that those “few extra pounds” were just *dead weight*. We now know that those extra pounds work together to disrupt your body’s normal functioning-with the goal of making you gain more weight. That’s why losing weight is such a difficult task.

To lose weight you must do two things:

- Be more physically active
- Eat fewer calories

Losing weight is hard work but you **can** do it! Plus you’ll feel better and improve your health and your chances of living a longer life.

Table examples of activity:

Moderate-intensity Physical Activity (Approximately 3-6 METs)	Vigorous-intensity Physical Activity (Approximately >6 METs)
Requires a moderate amount of effort and noticeably accelerates the heart rate.	Requires a large amount of effort and causes rapid breathing and a substantial increase in heart rate.
Examples of moderate-intensity exercise include:	Examples of vigorous-intensity exercise include:
<ul style="list-style-type: none"> • Brisk walking 	<ul style="list-style-type: none"> • Running
<ul style="list-style-type: none"> • Dancing 	<ul style="list-style-type: none"> • Walking / climbing briskly up a hill
<ul style="list-style-type: none"> • Gardening 	<ul style="list-style-type: none"> • Fast cycling
<ul style="list-style-type: none"> • Housework and domestic chores 	<ul style="list-style-type: none"> • Aerobics
<ul style="list-style-type: none"> • Traditional hunting and gathering 	<ul style="list-style-type: none"> • Fast swimming
<ul style="list-style-type: none"> • Active involvement in games and sports with children / walking domestic animals 	<ul style="list-style-type: none"> • Competitive sports and games (e.g. Traditional Games, Football, Volleyball, Hockey, Basketball)
<ul style="list-style-type: none"> • General building tasks (e.g. roofing, thatching, painting) 	<ul style="list-style-type: none"> • Heavy shovelling or digging ditches
<ul style="list-style-type: none"> • Carrying / moving moderate loads (<20kg) 	<ul style="list-style-type: none"> • Carrying / moving heavy loads (>20kg)

I weigh _____ lbs; a healthy weight is _____.

Body shape matters: Men whose waste lines are larger than 40 inches and women whose waste lines are larger than 35 inches are at increased risk for heart disease, diabetes and other illnesses.

Today my waist is _____ inches.

But simply changing your waste size by doing so-called targeted exercise, will not improve the chemical processes that are interfering with the way your body should work. Losing weight overall should be your goal.

To increase physical activity

Long term goal: At least 30 min of moderate intensity physical most days of the week.

Getting started: Walking is the most effective form of physical activity (for most people). Start *slowly* by walking 30 minutes for 3 days a week and build up to 45 minutes of more intense walking at least 5 days a week. If you tire easily, try starting with 3 ten minute sessions a day.

What works best: Physical activities that you enjoy will help you stick with your plan and develop life-long healthy habits. Group activities can be fun for the whole family and a great way for isolated older adults to meet with others.

Work more physical activities into your everyday activities (if you are able):

- Take stairs instead of elevators
- Park your car at the far end of the parking lot
- Get off the bus one stop early
- Walk around your yard or neighborhood

Strategies for losing weight

Losing weight is about increasing physical activity and eating less. Decreasing the amount of food you eat by 500 to 1,000 calories a

day can lead to weight loss of 1 to 2 pounds a week; this is a healthy and achievable goal.

One key to eating less is to watch your portion sizes; most of today's mega/biggie/super size meals contain more than one portion, so don't be fooled by the "extra value" advertisement.

Tips to eating well:

- Reduce portion sizes.
- EAT MORE fruits, vegetables, beans, nuts, olive oil, whole grains and low-fat dairy products.
- Eat more fish 2-3 servings a week.
- Eat LESS red meat, saturated fat, cholesterol, sugar, refined carbohydrates and sugared beverages.
- Use smaller dishes at home (to make your portions look bigger).
- Avoid buffets and don't take seconds.
- Freeze leftovers in portion sized amounts.
- Never eat out of the bag or carton; buy the smallest bag to avoid temptation.
- Drink water or club soda.
- Beware of "mini" snacks. Most of us end up eating more than we realize.

At restaurants:

- Ask for half/lunch/smaller portions
- Ask for a to-go box before you get your meal, you can separate half your meal in this box to eat at a later time.
- Consider sharing your dessert

<i>Food groups</i>	<i>Choose</i>	<i>Go easy on</i>	<i>Avoid</i>
<ul style="list-style-type: none"> ▪ <i>Meat</i> ▪ <i>Poultry</i> ▪ <i>Fish</i> ▪ <i>Dry beans</i> ▪ <i>Eggs</i> ▪ <i>Nuts</i> <p><i>(5 ounces a day)</i></p>	<ul style="list-style-type: none"> ▪ Lean cuts of meat ▪ Chicken/turkey without skin ▪ Fish ▪ Egg whites ▪ Means/tofu 	<ul style="list-style-type: none"> ▪ Shellfish ▪ Duck ▪ Egg yolks ▪ Nuts 	<ul style="list-style-type: none"> ▪ Processed meats like bacon or bologna ▪ Hot dogs
<ul style="list-style-type: none"> ▪ Milk ▪ Yogurt ▪ Cheese (2 or more servings day; 3 to 4 for pregnant/breast-feeding women) 	<ul style="list-style-type: none"> ▪ Fat-free or low fat dairy products ▪ Skim or 1% milk ▪ Cheese with no more than 3 g of fat per ounce ▪ Low fat yogurt 	<ul style="list-style-type: none"> ▪ 2% fat milk ▪ Sour cream 	<ul style="list-style-type: none"> ▪ Whole milk ▪ American, Swiss or cheddar cheese ▪ Cream cheese
<ul style="list-style-type: none"> ▪ <i>Fat</i> ▪ <i>Oils (approx. 5-8 tsp per day)</i> 	<ul style="list-style-type: none"> ▪ Corn ▪ Olive ▪ Canola ▪ Sunflower ▪ Safflower 	<ul style="list-style-type: none"> ▪ Avocados ▪ Olives ▪ Peanut oil 	<ul style="list-style-type: none"> ▪ Butter ▪ Lard ▪ Bacon fat ▪ Coconut oil ▪ Solid shortening
<ul style="list-style-type: none"> ▪ <i>Breads</i> ▪ <i>Cereals</i> ▪ <i>Pasta</i> ▪ <i>Rice</i> 	<ul style="list-style-type: none"> ▪ Whole grain breads ▪ Whole wheat pasta ▪ Whole grain rice ▪ Plain baked potato 	<ul style="list-style-type: none"> ▪ Granola ▪ Biscuits ▪ Muffins ▪ Cornbread 	<ul style="list-style-type: none"> ▪ Croissants ▪ Pastries ▪ Egg noodles ▪ Doughnuts
<ul style="list-style-type: none"> ▪ <i>Fruits</i> ▪ <i>Vegetables (3-5 servings a day)</i> 	<ul style="list-style-type: none"> ▪ Fresh ▪ Frozen ▪ Dried fruit 	<ul style="list-style-type: none"> ▪ Canned fruit in syrup 	<ul style="list-style-type: none"> ▪ Coconut ▪ Vegetables prepared in butter or cream
<ul style="list-style-type: none"> ▪ Snacks (in limited amounts) 	<ul style="list-style-type: none"> ▪ Sorbet ▪ Low fat frozen yogurt ▪ Plain popcorn ▪ Pretzels ▪ Fruits and vegetables 	<ul style="list-style-type: none"> ▪ Homemade cakes, cookies or pies prepared with unsaturated oils ▪ Baked chips 	<ul style="list-style-type: none"> ▪ Ice cream ▪ Chocolate ▪ Potato chips ▪ Buttered popcorn

Keep this card with you to help figure out serving sizes no matter where you are.

SERVING SIZE CARD:

Cut out and fold on the dotted line. Laminate for longtime use.

<p>1 Serving Looks Like ...</p> <p>GRAIN PRODUCTS</p> <p>1 cup of cereal flakes = fist </p> <p>1 pancake = compact disc </p> <p>½ cup of cooked rice, pasta, or potato = ½ baseball </p> <p>1 slice of bread = cassette tape </p> <p>1 piece of cornbread = bar of soap </p>	<p>1 Serving Looks Like ...</p> <p>VEGETABLES AND FRUIT</p> <p>1 cup of salad greens = baseball </p> <p>1 baked potato = fist </p> <p>1 med. fruit = baseball </p> <p>½ cup of fresh fruit = ½ baseball </p> <p>¼ cup of raisins = large egg </p>
<p>1 Serving Looks Like ...</p> <p>DAIRY AND CHEESE</p> <p>1½ oz. cheese = 4 stacked dice or 2 cheese slices </p> <p>½ cup of ice cream = ½ baseball </p> <p>FATS</p> <p>1 tsp. margarine or spreads = 1 dice </p>	<p>1 Serving Looks Like ...</p> <p>MEAT AND ALTERNATIVES</p> <p>3 oz. meat, fish, and poultry = deck of cards </p> <p>3 oz. grilled/baked fish = checkbook </p> <p>2 Tbsp. peanut butter = ping pong ball </p>

For more help counting calories you can go to <http://www.myfitnesspal.com>