

Module 9

Nutrition and Fluids for People on Dialysis



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- a (10) b (5)
- c (9) c (4)
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Congratulations, you’ve finished the quiz! Here are the correct answers so you can see how you did:

Module 9 – Kidney Quiz Answers





Food! It's a vital part of our culture and our family traditions. Meals are something we look forward to each day. Food is love, comfort, and memories.

We all have favorite foods and things we don't like, foods we learned to like over time, and foods we used to eat but don't eat any more. We may have pounds to lose or weight to gain. We may love to cook or never set foot in a kitchen. But any way we look at it, food is a big part of life.

A chronic illness like kidney failure can require changes in your eating and drinking habits. These lifestyle changes can be hard to understand—and even harder to make! If you have

kidney failure—with or without diabetes, meal planning may even seem almost impossible. As one patient said, *“From what I have read, we are supposed to buy something to eat, throw it in the trash, and eat the box that it came in—everything else is bad for us.”*

Don't worry—we can help! In this module, we'll try to make it clearer for you. Stick with us, and we'll teach you about food and drinks... and give you practical tips to make your life easier. At the end of this module, we'll give you 2 weeks of sample menus to help you plan.

Our goal is to show you how you can take charge of your food and fluids. If you do, you can feel

What if I Have CKD but Not Kidney Failure?

This module is designed to help you learn about meal planning for peritoneal dialysis (PD) or standard in-center hemodialysis (HD)—with or without diabetes. Other types of dialysis, like daily or nocturnal HD, have a near-normal diet.

If you have an early stage of chronic kidney disease (CKD), talk to your doctor about what to eat—and what to avoid. He or she may refer you to a dietitian, who can help you with a meal plan. This meal plan might include:

- **Limiting protein.** Some research shows that you can slow the rate of some CKD by eating less protein. Another reason to eat less protein is avoiding a build-up of urea. Other studies suggest limiting protein may be risky if it leads to malnutrition. Talk to your doctor about what's best for you.
- **Drinking more fluids.** Your doctor may want you to drink plenty of fluids to help flush out wastes. If you have a history of kidney stones, drinking more water is recommended.

- **Taking phosphate binders.** Having too much phosphorus can harm your bones. You may be asked to take phosphate binders—drugs that keep extra phosphorus out of your blood by binding with it and removing it in your stool.
- **Eating less phosphorus.** You cannot avoid all foods with phosphorus, but it is good to learn about how to eat less phosphorus.
- **Limiting salt.** If your blood pressure is high, your doctor may want you to eat less salt to help keep your kidneys working longer.

Your doctor and a renal (kidney) dietitian can help you sort out your meal planning. If you don't have a dietitian, your doctor may be able to refer you to one.

If you want to learn more about what your meal plans might be like when you are on dialysis, keep reading! We'll help you understand what to eat more of and what to eat less of if you choose PD or standard in-center HD.



better, improve your lab results, and have a better quality of life.

Here's a sneak preview of what we'll be covering in this program:

- Nutrition basics
- Getting the right amounts of key nutrients
- Planning meals and eating out
- Strategies for lifestyle changes

So, let's get started.

Your Dietitian

You're not alone in your meal planning. Each dialysis clinic has a registered dietitian who can help you:

- Sort out your best food options.
- Learn how your food choices affect your lab test results.
- Plan meals, fitting in your favorite foods.
- Figure out what to eat in restaurants.



If you already see your dietitian, great! He or she can help you learn how vital it is to make good food choices and help you to stay with your meal plan. If you have not seen your clinic's dietitian yet or you need to know more to help you plan healthy meals, ask your doctor or nurse about setting up a time with the dietitian.

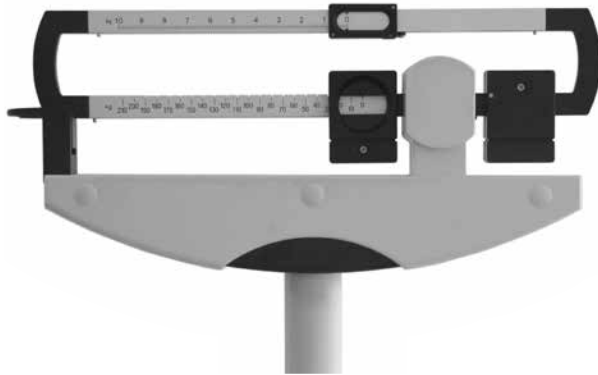
To learn more about the dietitian's role, read Module 3—*Working With Your Health Care Team*.

Calories, Calories, Calories

Most of us have been hearing about calories all our lives—but what *are* they exactly?

Calories are a measure of the energy in a food. Our bodies are like motors that need energy to run. We use food as fuel to give us energy, and we burn energy when we do our daily activities, exercise—even sleep! If we eat more calories





than we burn, we gain weight. If we eat fewer calories than we burn, we lose weight.

How many calories do you need in a day? It depends on how active you are. Studies have shown that most people need between 30 and 35 calories per day for each kilogram of body weight (2.2 lbs). If you don't move around much, are very overweight, or are over the age of 60, you may need fewer calories to keep the same body weight.

If you are *under* age 60, use this formula to find out how many calories you may need in a day:

$$\frac{\text{Weight in pounds}}{2.2} \times 35 = \text{_____ calories}$$

If you are 60 years old or over, use this formula to find out how many calories you may need in a day:

$$\frac{\text{Weight in pounds}}{2.2} \times 30 = \text{_____ calories}$$

Talk with your dietitian to see if he/she suggests this amount or a different amount (depending on your lifestyle).

How many calories do you eat and drink in a day? The best way to find out is to keep track. Keep a diary of every bite of food you eat for a few days, and then talk to your dietitian about your total calories each day.

Gaining weight

If you are on PD, the dextrose (sugar) in your PD fluid adds about 200 to 600 “empty” calories per day. You'll stay healthier if you eat nutritious foods and make the rest of your calories count. And if you have diabetes, your insulin or diabetes pills may need to be adjusted after you start PD because of the sugar in the PD fluid.

If you are on standard in-center HD, you may not have an appetite at first. After a few weeks on HD, your appetite should come back. If it doesn't, you may not be getting enough dialysis (to learn more about adequate dialysis, read Module 10—*Getting Adequate Dialysis*). If you have diabetes, you need to keep a close eye on your weight and activity level—especially if you are using insulin.

Here are some tips to increase your appetite and get you the calories you need. Your dietitian can help you think of others. Choose the tips that you think may work for you:

- Eat six small meals a day instead of three larger ones.
- Take bigger portions of foods that I like and tolerate well.
- If protein foods don't appeal to me right now, I can try them cold—like a chicken salad sandwich.





- ❑ Choose high calorie foods, like meats and casseroles, instead of low calorie foods, like salads or broth.
- ❑ Cook foods in a way that adds calories (like sautéing in oil that is low in saturated fat, like canola or olive oil).
- ❑ Eat in a calm, relaxed atmosphere. Use a pretty plate or a colorful garnish so food is more appealing.
- ❑ Drink fluids that have calories, instead of water, plain tea, or coffee.
- ❑ Use tasteless protein powders or drinks to increase protein. (Protein drinks count as part of my fluid limit.)
- ❑ Eat bland, light-colored foods at cool temperatures—like a turkey sandwich or pasta salad.
- ❑ Choose foods that are easy to chew, like meat-loaf, casseroles, or omelets, rather than steak.
- ❑ Add extra calories to foods I already eat. Ask my dietitian about using olive oil, mayonnaise, low-salt salad dressings, sour cream, or butter. If I don't have diabetes, I can also use jelly, honey, syrup, non-dairy whipped topping, or other high calorie treats most people have to avoid.
- ❑ Avoid foods with strong smells. Leave the room when food is cooked if smells bother me.



- ❑ Drink my fluids after my meal, so they don't fill me up.
- ❑ Talk to my doctor about drugs to improve my appetite (e.g., Marinol® and Megace®).
- ❑ Exercise to increase my appetite.

Losing weight

If you need to lose weight, there are many ways to do it. Fad diets that use food combinations, “fat burning” foods, or certain food colors have not been shown to work.

Your best bet is to talk with your dietitian about what has and has not worked for you. He or she can help you find a way to reach your weight loss goal and stay healthy at the same time. In the meantime, here are some tips to reduce calories. Which ones do you want to try?

- ❑ Order salad dressing on the side. Dip my fork in the salad dressing, then spear a lettuce leaf to save 3 to 5 teaspoons of fat.
- ❑ Chill gravies, sauces, and soups, then remove the hardened fat—or use a fat separating ladle.
- ❑ Buy lean cuts of meat and try roasting, broiling, or grilling to cut fat.
- ❑ Watch serving sizes on breads, chips, and crackers—if I stick to one serving, I can still have my treat, and save lots of calories.
- ❑ Have just one cookie or a thin sliver of cake or pie. Sometimes a small treat can head off a big binge. If you have diabetes, learn what foods make your blood sugar go up, and choose options that don't.
- ❑ Plan for dessert once or twice a week, and look forward to it!





- ❑ Bake onion rings, chicken, and fish instead of frying them. Try butter-flavored cooking spray to add fried flavor.
- ❑ Poach chicken or fish in wine, water, or homemade low-salt broth.
- ❑ Avoid creamed, fried, scalloped, au gratin, or battered vegetables—instead, try steaming, stewing, or boiling them, and seasoning with fresh herbs, Mrs. Dash[®], lemon juice, or vinegar.
- ❑ Eat just the filling and skip the crust when I have pie—the crust is where most of the calories are. Fruit pies are healthier than cream pies.
- ❑ Drink water instead of soda (within my limits).

What's a Carbohydrate?

Carbohydrates (“carbs”) are starches that turn into sugar in your body. Sugar is a fuel your cells use for energy.

Not all carbs are the same, and they're not all used in the same way in your body. Simple carbs are sugars:

- White or brown sugar (sucrose)
- Honey or syrups
- Fruit sugar (fructose)
- Milk sugar (lactose)

Complex carbs also break down into sugar. Foods with complex carbohydrates may contain more vitamins, minerals, and some fiber (all of which are good for you). These foods include:

- Breads, pastas, cereals, and rice
- Fruits and vegetables



Diabetes and carbohydrates

If you have diabetes, the glycemic index or glycemic load are ways to tell how much a carb food might raise your blood sugar. In general, carbs with lots of fiber, like oatmeal, are less likely to raise blood sugar. Others, like pasta, rice, corn, and white bread, tend to raise your blood sugar. To keep your blood sugar stable, eat about the same amount of food at about the same time each day.

Giving Yourself Insulin on PD

If you are on PD and use regular insulin, you may be able to stop giving yourself injections. Instead, you may be able to add the insulin to your PD bags. Ask your doctor about how to adjust your insulin dose. Your PD nurse can show you how to inject the bags. Other types of insulin besides regular cannot be given in PD bags.



Many dietitians prefer to use carb counting instead, because it is easier to learn and remember. Food labels require a listing of carbs. Your dietitian will help you learn what you need to know to get the right amount of carbs in your meal plan.

Some Fats Are Good

Fats get a lot of bad press, and many of us eat more fat than we should. But our bodies need fat to produce energy, protect organs from injury, keep a constant temperature, and help absorb some vitamins.

People on dialysis are at a higher risk of heart disease. And with diabetes, this risk is even higher. This means that choosing *heart-healthy fats* is even more important for you than it is for everyone else.

What's heart-healthy? Fats that are liquid at room temperature (unsaturated) are less likely to form artery-clogging plaques that can damage your heart. Fats that are solid at room temperature, like meat fat, margarine, and butter, are saturated, and it's best to eat less of these.

Which of these unsaturated fats do you think you might add to your meal plan?



- ❑ Olive oil (good on salads or for frying)
- ❑ Canola oil
- ❑ Sesame oil (highly flavored—good in stir fries)
- ❑ Walnut or avocado oil—good in salad dressings
- ❑ Fatty fish—salmon, tuna, herring
- ❑ Safflower or sunflower oil
- ❑ Corn oil
- ❑ Cottonseed oil
- ❑ Soybean oil

What if I'm a Vegetarian?

Most vegetable sources of protein, like beans, soy, and grains, also have very high levels of potassium and/or phosphorus. The biggest challenge of being a vegetarian on dialysis is getting enough high quality protein to avoid malnutrition and muscle wasting—without getting harmful levels of potassium and phosphorus. It can be done, though you'll need to work closely with your dietitian.

How easy this is depends on whether you will eat any sources of animal protein (eggs, chicken, fish, dairy). Track your lab tests to see if you are succeeding, and talk to your dietitian about how to make your vegetarian meal plan work for you.

Here is what one vegetarian patient says:

“Since I will not eat red meat no matter what, I made the choice to fix two meals each noon and evening. Often that means simply adding some broiled red meat to my husband's plate with small portions of whatever vegetable (with or without soy/tofu entree) I have. When I fix fish for myself he uses that for his protein, and when I fix poultry for him I may eat a bite or two of it.” –Sam





What's the Beef with Protein?

Your body needs protein for healthy muscles, bones, hair, and skin. Your cells, organs, and muscles are protein structures, made of building blocks called amino acids. Your body can make some amino acids, but not all of them. The amino acids your body can't make, you get by eating protein foods in animal or plant forms.

You may hear talk of “high quality” or “high biological value” protein vs. “low quality” or



Using Protein Supplements

If you need more protein, check with your dietitian. Many high protein foods are also high in phosphorus. Your dietitian will help you adjust your food choices and your phosphorus binder for the best results. Some protein powders are safe for you to use—again, check with your dietitian. He or she is likely to suggest a powder based on whey protein. These powders can be added to regular *or* sugar-free (no added sugar) foods like:

- Pudding or cream pie fillings
- Applesauce
- Shakes, fruit juice, or milk
- Low-sodium soups

An easy way to use protein powder is to mix 1-2 tablespoons with a little bit of water to make a paste. Then add the paste to your choice of foods. Here are three shake recipes you can try:

Power Shake

For 1 serving (13 grams protein), blend:

- 1 cup **unfortified** rice milk (look in the “natural foods” aisle of your grocery store)
- 1 tablespoon protein powder

- 1 packet original or no sugar added Carnation® Instant Breakfast®

Fruity Frozen Dessert

For five, 4-oz servings (8 grams protein per serving), blend:

- 1/2 cup protein powder
- 1/2 teaspoon vanilla
- 1/2 cup hot water
- 1/2 cup drained regular or low/no sugar canned peaches

Then mix in:

- 4 oz Cool Whip® Lite, Fat Free, or Sugar Free

Divide into five small paper cups and freeze.

Fruit Smoothie

For 2 servings (5 grams protein per serving), blend:

- 1/2 cup fresh or frozen (regular or unsweetened) whole strawberries
- 1 cup **unfortified** rice milk
- 4 teaspoons sugar or sugar substitute
- 2 tablespoons protein powder



“low biological value” protein. High quality protein sources have more of the essential amino acids, which humans cannot make. Some forms of “high quality” protein are:

- Beef, pork, and lamb
- Chicken, turkey, and other birds
- Fish, shrimp, and other seafood
- Eggs
- Soy (e.g., tofu, tempeh, and edamame)

Some forms of “low quality” protein are:

- Nuts
- Dry beans and peas
- Some grains (e.g., amaranth, buckwheat, enriched cornmeal, quinoa, brown rice, and dark rye)

Most healthy Americans eat more protein than their bodies really need. But many people with kidney failure lose their desire for protein foods. PD can cause some protein loss through the membrane. And standard in-center HD causes your body to break down protein faster than usual. So, you may need to make an effort to get enough protein.

If you don’t eat enough protein—and you lose protein from dialysis—your body will start to use the protein in your muscles for fuel. This can cause muscle wasting over time. Muscle wasting leads to:

- Severe fatigue
- Loss of mental alertness
- A higher risk of infections
- Weight loss

If you are at a friend’s house or a restaurant, how do you know how much protein you’re getting in a serving? Here’s an easy way to remember:

- A matchbook-size portion is about 1 ounce



- A deck of cards-size portion is about 3 ounces



- A paperback book-size portion is about 8 ounces

Your monthly lab tests are another way to know if you’re getting enough protein. Serum albumin is a test that measures protein in your blood. You should strive for an albumin level greater than 4 grams per deciliter (4.0 g/dL).

Research has shown that albumin levels greater than 4.0 g/dL are linked with longer life for people on dialysis. Albumin levels lower than 4.0 g/dL are linked with a higher risk of death.

To learn more about blood tests, read Module 7 —*Understanding Kidney Lab Tests*.





Getting the Right Amount of Sodium

Your body needs sodium for healthy nerves and to balance fluid levels. Less than 1,000 milligrams (mg) of sodium per day is needed to do these tasks. But most of us take in more than 5,000 mg per day!

Salt is the most common source of sodium in our foods. It's the second most common additive in processed food today, and is the main way we get sodium. As much as 75% of the sodium we eat comes from salt added to foods by manufacturers.

The bottom line: most of us like salty flavors. Sodium enhances the flavors of foods, and many of us eat way too much salt because of this.

Diets high in sodium put you at risk for high blood pressure, heart disease, and stroke. If you have diabetes, you have an even higher risk of heart disease and stroke—especially if you have high blood pressure. Eating less salt will help you reduce those risks and stay healthier.

Sodium acts like a magnet to attract fluid. It makes you thirsty, and it holds extra fluid in your body like a sponge. Many people on dialysis struggle with thirst—but learning to eat less salt can help a lot.

“I started having a problem a year before dialysis. My body was hanging on to sodium, which made me very thirsty, and I had problems with edema. I'm now on dialysis and watch my sodium very carefully, and it helps a lot. I prepare simply made foods from scratch, so I have complete control over what I put in my mouth. It's surprising the amount of hidden sodium in processed foods! This is a short list of things that have been banned from my pantry: buttermilk baking mix, canned soups, dry soup mixes, any mix that ends in 'Helper', tomato

and vegetable juices, and snack foods such as chips and pretzels with salt.”

A diet high in sodium may also cause headaches and make you feel sluggish. If you do **PD**, you may be able to have **3,000 to 4,000 mg/day** of sodium. Ask your doctor and dietitian to be sure.

If you do **standard in-center HD**, this treatment does not remove all of the extra fluid that is inside of and between your cells. So, you will need to limit sodium to just **1,200 to 2,000 mg/day** if you choose this treatment option.

Your doctor and dietitian will help you to learn how much sodium you can have each day.

Surprising Sources of High Sodium

Sometimes foods we don't even think of as “salty” can have high amounts of sodium. Here are a few high-sodium foods you may not have thought of:

Food	Sodium	Serving Size
Spinach Souffle	770 mg	1 cup
2% fat cottage cheese	746 mg	1 cup
Pancakes from dry mix	576 mg	3 pancakes
Swanson® Natural Goodness™ Chicken Broth (33% less sodium and 100% fat free)	570 mg	1 cup





Starfruit Is Hazardous to People on Dialysis

Starfruit, also called carambola, looks pretty sliced in a fruit salad. But if you are on dialysis, research shows that starfruit contains a nerve toxin that can cause agitation, confusion, and even death. So enjoy low and moderate potassium fruit—but avoid starfruit!



The good news is, most people get used to eating less salt in a few weeks—and say that food tastes better without it. You can taste the *real* flavor of the food, not just the salty taste.

Here are some ideas for eating less sodium. Choose the ones that look like they might work for you:

- ❑ Read all food labels! Packaged foods must list how much sodium is in each serving. Some foods don't taste salty—but have a lot of sodium. A low sodium product has less than 140 mg per serving. Choose a cereal that has less than 280 mg of sodium per serving and TV dinners that have less than 600 mg of sodium per dinner.
- ❑ Cook without salt. One teaspoon of salt has 2,130 mg of sodium!

Fresh Meats May Have Added Potassium or Phosphorus

Watch out! Some fresh meats have been “enhanced” by injecting them with fluid that may have potassium or phosphorus. Meat processors do not have to tell you what they have added—but they do have to tell you if something has been added. Read the label.

- ❑ Limit processed foods like microwave dinners, canned foods, seasoning packets, hard cheeses, pickles and olives, hot dogs, and other deli meats.
- ❑ Avoid salt substitutes. Most use potassium instead of sodium, and potassium is also limited in a kidney meal plan.
- ❑ Read over-the-counter drug labels. Some have lots of sodium.
- ❑ Use herbs and spices to flavor my food. Rub the herbs in my hands to release more flavor, and increase the amounts I use. Garlic powder (not garlic salt) works very well.
- ❑ Use vinegar and lemon juice to flavor my food instead of salt.
- ❑ Add my own ideas:

Potassium: Key to Feeling Good and a Healthy Heart

In your body, potassium helps your nerves “talk” to your muscles, including your heart. Too much or too little potassium can make your heart skip beats—or even stop!

Your monthly lab tests will check your potassium levels to be sure they stay in the safe range. Track your lab results and work with your dietitian to learn how to adjust your food choices, if you need to.

Potassium comes mainly from fruits and vegetables. It is also found in nuts, dried beans, dairy products, and meats. Your body uses what it needs and healthy kidneys remove the rest. Since your kidneys are not working well, extra potassium can build up in your body.



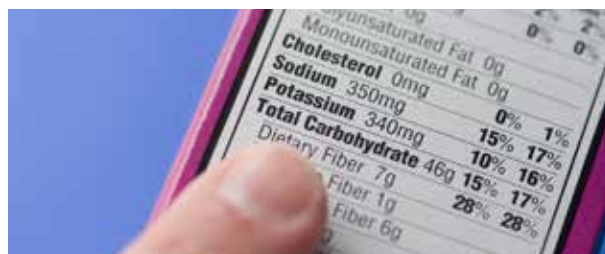


As someone on dialysis, you are likely to have a daily potassium limit. People on **PD** may have between **3,000 and 4,000 mg/day** (on PD you do daily exchanges and may even need to eat more foods with potassium). People on **HD** may have between **2,000 and 3,000 mg/day**. Ask your dietitian and your doctor how much potassium you can have each day.

Your lab tests will tell you if you are on track. For most people on dialysis, potassium should be less than 6.0 mEq/L. If your labs are good, then you know you're doing okay. If your potassium is high, write down what you're eating for a week, so you can sit down with your dietitian and figure out how you can do better.

For more information about lab tests and signs of too much or too little potassium, read Module 7—*Understanding Kidney Lab Tests*.

Food labels can give you a lot of information about what's in your food. The law requires packaged foods to have labels that tell you about calories, fat, sodium, carbohydrates, protein, and certain nutrients like vitamin A, vitamin C, calcium, and iron.



But, food labels don't have to tell you how much potassium is in a food. Some do, but you may need another source for this.

Where can you find out how much potassium is in a food? And how much sodium? And calories? And phosphorus (we'll talk about that next)? There are three ways for you to learn, and which

one you choose will depend on how much you want to know—and how much work you are willing to do to learn it.

- 1 You can **get a list of common foods** with high levels of phosphorus, potassium, or sodium. We'll give you some lists at the end of this module, and you can ask your dietitian. If the foods on these lists are the ones you like to eat, this may be all the help you need to stay healthy.
- 2 You can **use a reference book of food values** to look up exact values of favorite foods that are not on the lists. This way, you can make good choices and fit in foods you love in safe amounts. Since you don't need the book very often, you can borrow it from a library. You may find that a slice or two of pizza is a treat you can fit into your meal plan.
- 3 You can **design your own plan** by looking up foods in a food value book and making a daily chart. Some patients like to do this because it helps them feel more in control—and lets them eat foods that are not on the lists. Looking up foods takes a lot of time at first, but you'll start to learn which foods to enjoy in small amounts and which ones you can safely eat more of.

Food Value Books

At the end of this module, we'll list some resources, including food value books. These books tend to be a bit costly (\$35 to \$40) and the type is small, but they offer a detailed breakdown of nutrition. If you can't afford a new book, used copies may be found at used bookstores, on the internet, or at your library. Your dietitian can suggest a book for you. Also, many fast food restaurants offer food value information free of charge.



Module 9 – Nutrition and Fluids

If you make your own plan, ask your dietitian to look it over to be sure you haven't missed anything.

Here are sample meal plans created by using a food value book and choosing favorite foods. We'll give

Sample Meal Planning Grid for Person on PD

Breakfast	Protein	Phosphorus	Potassium	Sodium	Fluid
Egg Beater® Omelet (abt 1/3 cup) with 1/2 cup mushrooms and 1 oz shredded cheddar cheese	18 g	173 mg	278 mg	356 mg	—
Cinnamon raisin bagel with 1 oz cream cheese	11.2 g	121 mg	176 mg	386 mg	—
1/2 cup raspberries	.7 g	18 mg	93 mg	—	—
12 oz coffee, brewed	.6 g	11 mg	174 mg	8 mg	12 oz
Lunch	Protein	Phosphorus	Potassium	Sodium	Fluid
<i>Hamburger sandwich:</i>	—	—	—	—	—
Hamburger bun	4.1 g	27 mg	40 mg	206 mg	—
Hamburger patty, 3 oz, pan-broiled	20.9 g	179 mg	297 mg	67 mg	—
1 tbsp low-sodium catsup	.3 g	5 mg	57 mg	3 mg	—
1 oz cheddar cheese	7g	143 mg	27 mg	174 mg	—
<i>Side salad:</i>	—	—	—	—	—
1/2 cup looseleaf lettuce	.4 g	8 mg	55 mg	8 mg	—
2 slices tomato (1/3 tomato)	—	5 mg	49 mg	1 mg	—
2 tbsp ranch dressing	.3 g	48 mg	19 mg	245 mg	1 oz
16 oz water	—	—	—	—	16 oz
Dinner	Protein	Phosphorus	Potassium	Sodium	Fluid
1/2 chicken breast, roasted	29.2 g	210 mg	240 mg	70 mg	—
1 cup sliced carrots; frozen, boiled, drained	.8 g	45 mg	280 mg	86 mg	—
Dinner roll with 1 tsp butter	3 g	35 mg	40 mg	177 mg	—
2 1/4" square brownie	2.7 g	57 mg	83 mg	175 mg	—
1/2 cup chocolate ice cream	2.5 g	71 mg	164 mg	50 mg	4 oz
16 oz water	—	—	—	—	16 oz
Total	101.7 g	1156 mg	2072 mg	2012 mg	49 oz
Recommended	50 g+	800-1200 mg	3000-4000 mg	3000-4000 mg	32-64 oz 1 liter + daily output

Source: Bowes & Church's *Food Values of Portions Commonly Used* (19th Edition) by Jean A. T. Pennington and Judith Spungen, 2010.





you a day's meal planning chart at the end of this module, so you can create your own. (Please note that "g" stands for grams, "mg" stands for milli-

grams, and "oz" stands for ounces.) Each fruit and vegetable has potassium. But if you look in a food values book, the amount of potassium can change

Sample Meal Planning Grid for Person on Standard In-center HD

Breakfast	Protein	Phosphorus	Potassium	Sodium	Fluid
Scrambled Egg Beaters® (about 1/3 cup)	10 g	—	140 mg	180 mg	—
Blueberry muffin (2 oz)	3.7 g	83 mg	70 mg	251 mg	—
1 cup fresh strawberries	1 g	35 mg	220 mg	1 mg	—
8 oz coffee, brewed	—	7 mg	116 mg	5 mg	8 oz
Lunch	Protein	Phosphorus	Potassium	Sodium	Fluid
<i>Turkey sandwich:</i>					
1.4 oz turkey	7 g	68 mg	126 mg	426 mg	—
2 slices tomato (1/3 tomato)	—	5 mg	49 mg	1 mg	—
Lettuce (1/4 cup iceberg)	—	3 mg	20 mg	1 mg	—
1/2 tbsp Kraft® Mayo Light	—	5 mg	4 mg	60 mg	—
2 slices whole wheat bread	7.2 g	114 mg	138 mg	264 mg	—
2.6 cup cheese popcorn	2.6 g	101 mg	73 mg	249 mg	—
1 cup peaches, canned in juice	1.6 g	42 mg	320 mg	10 mg	—
8 oz grape juice	—	35 mg	263 mg	13 mg	8 oz
Dinner	Protein	Phosphorus	Potassium	Sodium	Fluid
4 oz baked Atlantic cod	25 g	156 mg	276 mg	88 mg	—
1 cup frozen corn, boiled and drained	4.2 g	130 mg	382 mg	2 mg	—
1 cup lettuce salad (iceberg)	—	11 mg	78 mg	6 mg	—
1 tbsp sweet and sour salad dressing	—	—	5 mg	33 mg	—
Cherry pie (1/8 pie)	—	36 mg	101 mg	308 mg	—
1/2 cup chocolate ice cream	2.5 g	71 mg	164 mg	50 mg	4 oz
16 oz water	—	—	—	—	16 oz
Total	64.8 g	902 mg	2545 mg	1948 mg	36 oz
Recommended	50 g+	800-1200 mg	2000-3000 mg	1200-2000 mg	36 oz

Source: Bowes & Church's *Food Values of Portions Commonly Used* (19th Edition) by Jean A. T. Pennington and Judith Spungen, 2010.



a lot, depending on how a food is prepared. We'll give you a chart of many fruits and vegetables and their food values at the end of this module.

These charts can help you a lot—IF you pay attention to serving sizes. Have you ever seen a snack-sized bag of chips that only has 110 calories per serving, but there are 3 servings in the bag? Eating three servings can turn even a low potassium food into a high potassium mistake!

Serving sizes work the other way, too. If a favorite food is very high in potassium, you may still be able to enjoy it—in a smaller serving. When you learn about how much potassium fruits and vegetables have, you may want to try out some new foods—and make some new favorites. As one patient said:

“After 17 years of hemodialysis, I know the diet inside and out, and for me, it was essential to learn how to fit those favorite foods into my diet. I feel it was safer and easier to do this than to cut them out entirely and feel deprived, maybe going on a binge and eating too much of the ‘real thing.’ I learned how to calculate the food composition of what I was eating over the entire day (even without my handy-dandy computer program). This let me have foods I loved which were high in potassium or sodium

by creating recipes that used less of the high items, and changing what I ate the rest of the day to fit in my special treat. This way, I was able to feel less restricted and less different from those I was eating with.”

It can be easier to make a PD or standard in-center HD diet work for you (even with diabetes) if you make educated trade-offs. Your dietitian can help you learn how.

“Don't think of any food as ‘off limits.’ Pizza with cheese is not off limits. It just means you may have smaller amounts and you will need to calculate your potassium intake for the rest of the day according to your daily allotment. It's not ‘cheating’—it's being aware of your limits and knowing how much you can ‘afford’ safely.”

Watching what you eat is not the only factor in good potassium control—you also need good dialysis. If your Kt/V or URR (measures of dialysis adequacy) are not in the target range, extra potassium may build up in your body. To learn more about measures of dialysis adequacy read Module 10—*Getting Adequate Dialysis*.

What Is Phosphorus?

Phosphorus is the second most common mineral in the body (after calcium). Its job is to help your body use energy, and to build strong bones and teeth. Like potassium, extra phosphorus is removed by healthy kidneys. When your kidneys don't work, phosphorus can build up in your body. This will cause severe itching for some people.

Renal bone disease can be a long-term problem of some types of dialysis. Over time, losing calcium from the bones makes them weak, frail, and painful. When calcium and phosphorus are out of balance, the parathyroid glands in your neck make too much parathyroid hormone (PTH).





Too much PTH causes even more calcium to be pulled out of your bones—it's a vicious cycle.

But renal bone disease does not have to happen. If you keep your calcium and phosphorus levels in the safe range, the cycle won't start, and your bones and whole body can stay healthy. To learn more about how to avoid renal bone disease read Module 16—*Long-term Effects of Dialysis*.

Ask your dietitian about what your calcium, phosphorus, calcium-phosphorus product, and PTH levels should be. Each lab is a little different, but the normal ranges for a person on dialysis are something like this:

- **Calcium:** 8.4 to 10 mg/dL
- **Phosphorus:** 3.5 to 5.5 mg/dL
- **Calcium-phosphorus product:** less than 55
- **Intact PTH:** 150 to 300 pg/mL

How can you keep your calcium and phosphorus in the safe range? You have three tools you can use. One is taking phosphate binders. Another is making careful food choices. Your monthly blood tests will tell you if you are succeeding. The third is to get a kidney transplant or get more dialysis (e.g., by doing nocturnal HD).

Phosphorus is very common in most foods. In fact, it's so common that it would be almost impossible to keep safe phosphorus levels just by eating the right foods. Taking phosphate binders allows you to choose from a wider range of foods.

Phosphate binders are drugs that remove the extra phosphorus to your stool. Binders can be antacids, like Tums[®], or may be special drugs for this purpose only, like Renagel[®], PhosLo[®], Fosrenol[®], Renvela[®], or others. Talk with your doctor and dietitian about how many



phosphate binders you need to take with meals and snacks.

Take your binders within 5 to 10 minutes of eating snacks and meals. Take fewer binders with a snack or small meal, and more binders with a big meal. They'll help you keep your bones healthy.

Antacids

Not all antacids are good binders. Some antacids that are calcium-based may be used safely by people on dialysis to bind extra phosphorus. But some—like Roloids[®], Milk of Magnesia[®], Mylanta[®], and many others—may contain aluminum or magnesium. These can build up to toxic levels in people on dialysis. Always read labels and ask your doctor, pharmacist, or dietitian before taking any over-the-counter products.



You can't manage phosphorus just by watching what you eat—but it helps a lot. Phosphorus is found in high-quality protein foods, like meats and dairy products and in low-quality protein foods, like nuts and dried beans.

Other common high phosphorus foods include cola drinks and chocolate. Phosphorus is also found in processed foods, like breakfast cereals (especially whole-grain cereals). You may need to limit phosphorus in foods to about 800 to 1,200 mg/day.

Does this mean you can never eat these foods again? No. If you want a food that is high in phosphorus, try to eat smaller portions, take extra binders, and plan the rest of your food for the day to save some “room.”

We'll give you a chart of high phosphorus foods at the end of this module that you can use as a resource.

Which Vitamins Do I Need?

People on dialysis have different vitamin needs than the general population. Dialysis “washes out” some vitamins. Other vitamins may build up in your body to unsafe levels (see box on next page).

Your doctor may prescribe a supplement, and it is likely to be a special vitamin just for people on dialysis. Check with your doctor before taking any over-the-counter vitamins, herbal supplements, or folk remedies. Our chart, below, will tell you a little more about each vitamin.

Vitamin or Mineral	What It Does for You	How Much You Need (specific to people on dialysis)
Vitamin A	Helps with eyesight, bone and tissue growth, and immunity to illness	0
Vitamin B ₁ (thiamin)	Helps energy production, nerve function, and carbohydrate use	1.0 < 5.0 mg/day
Vitamin B ₂ (riboflavin)	Helps turn nutrients from food into energy your body can use	1.2 < 1.7 mg/day
Vitamin B ₃ (pantothenic acid)	Helps energy use, use of foods, and hormones	4.0 < 7.0 mg/day
Vitamin B ₆ (pyridoxine, pyridoxal, pyridoxamine)	Helps protein use, helps the body form red blood cells, and helps form DNA	10 mg/day
Vitamin B ₁₂ (cobalamin)	Helps maintain healthy nerves and red blood cells, and helps form DNA	2 mcg/day
Vitamin C (ascorbic acid)	Helps form the structure of bones, cartilage, muscle, and blood vessels	60 mg/day
Vitamin D (calciferol)	Helps body absorb calcium and phosphorus	Different for everyone
Vitamin E (tocopherol)	Helps protect cells against damaging free radicals	0
Vitamin K (menadione)	Helps blood clotting	0
Biotin	Helps your body use protein, folic acid, and other vitamins	0.03 < 0.1 mg/day
Folic acid (folate)	Helps form red blood cells and DNA	0.8 < 1.0 mg/day
Niacin (nicotinic acid)	Helps the skin, nerves, and digestive system	13 < 19 mg/day





Don't Get Flooded by Fluids

When your kidneys don't work, it is harder to keep the right fluid balance. Your body is less able to remove extra sodium—and if you eat too much sodium, you will get thirsty. Then when you drink, your body cannot get rid of the extra fluid.

Part of the job of dialysis is to take off extra fluid your kidneys don't remove anymore. This is important, because if you have too much fluid, you may have:

- Swelling in your face, hands, and feet called *edema* (eh-dee'-ma)
- Headaches and low energy
- Trouble breathing from fluid in your lungs
- Heart damage from stretching your heart with too much fluid
- High blood pressure that can lead to a stroke

But PD or standard in-center HD can't do all of the fluid removal—you have to help, too. Some people on PD and most people on standard in-center HD have some type of fluid limit. (Daily and nocturnal HD remove much more fluid, so using those treatments may mean that you don't need a fluid limit.) How much fluid you can have each day will depend on how much urine you make.

PD and fluids

Most people on PD have some kidney function left—so they still make some urine. Over time, this kidney function (called *residual kidney function*) often drops. How much fluid you can have each day will depend on how much urine you make. So it is important to measure your kidney function to be sure you are getting enough dialysis.

How Much Vitamin C Is Too Much?

Some people believe large doses (megadoses) of vitamin C are healthy. But if you are on dialysis, getting too much may hurt you. Vitamin C breaks down in the body into a crystal called *oxalate*. Healthy kidneys remove extra oxalate, but dialysis is much less effective. If you are on dialysis, oxalate may build up and cause bone and joint deposits and pain. This is why you should limit vitamin C pills to 60 mg/day, which is generally the amount in multivitamins for kidney patients. If you do daily or nocturnal HD, you may be able to have more vitamin C because these treatments remove twice as much or more oxalate as PD or standard in-center HD.



How Do I Know If I Have Edema?

Edema (eh-dee'-ma) is fluid build-up in the body. If you have edema, you may notice that your shoes or your rings don't fit. Your eyesight may change. It may be harder to breathe (some people have mistaken fluid in the lungs for asthma). If you have a lot of extra fluid, your ankles or legs may even dent when you press on them with a finger. This is called "pitting edema."



If your kidney function drops, you may need more PD—and/or less fluids.

Do your exchanges as prescribed, and watch your dwell times—you can reabsorb the dialysate and gain fluid weight if you dwell too long. Be alert for signs of edema, and tell your PD nurse, doctor, or dietitian if:

- You have fluid build-up.
- Your weight goes up a lot very quickly.
- You are using more 4.25 strength solution than you did before.
- You have headaches.

To learn about getting enough PD, read Module 10—*Getting Adequate Dialysis*.

HD and fluids

Limiting fluids will make standard in-center HD much easier on you. You'll have fewer painful



muscle cramps and be less likely to feel “washed out” after a treatment. Your dietitian will tell you how much fluid you may have each day. Many people on HD need to limit fluids to about 36 ounces a day.

Water is heavy! A liter of water weighs one kilo (2.2 lbs). With no kidney function, your fluid limit on standard in-center HD will be about 1 liter per day, or just under 32 ounces. Between dialysis treatments, you would be able to drink 2 liters and gain 2 kilos, or 4.4 lbs. If you weigh yourself at the same time each day, wearing the same clothes, you'll know if you are on track. (If you make some urine—or do daily or nocturnal HD—you will be able to drink more fluids.)

Here are some easy, proven ways to limit fluids and deal with thirst, without drinking too much. Which ones do you want to try?

- Drink only when I am thirsty, and just enough to quench my thirst.
- Be aware of all the fluids in my diet. A fluid is anything liquid at room temperature. This means ice cream or Jello®, soup, gravy, etc.
- Drink from small cups or glasses.
- Eat a piece of cold or frozen fruit.
- Eat soups or cereal with a fork instead of a spoon to save fluids.
- A little ice can quench thirst more than the same amount of liquid. I'll try freezing regular or diet ginger ale or apple juice into slushes or popsicles.
- Rinse my mouth with cold water or swish mouthwash and spit it out.
- Suck on a piece of regular or sugar-free hard candy, an ice cube, a lemon wedge, frozen grapes, or chew regular or sugar-free gum to stimulate saliva.





- ❑ Suck on a piece of regular or sugar-free peppermint candy, which will help quench my thirst *and* keep my breath fresh!
- ❑ Check with my doctor or pharmacist to see if any of my medications cause thirst or dry mouth.
- ❑ Each day fill a jar with the water equal to my daily fluid limit. Each time I drink, I'll pour that amount out of the jar. I'll be able to see how much I have left. Spread out my fluids evenly throughout the day.
- ❑ If I am gaining too much weight, I'll measure all my fluids for a day or two so I'll know just how much I have been drinking.
- ❑ Avoid high-sodium or very sweet foods.

Meal Planning/Eating Out

Making up meal plans won't always be a lot of work. Each plan you put together helps you learn, and after a while, it does get easier.

Of course, planning meals isn't the only thing to think about. Someone has to cook! The busier we all are, the more we tend to rely on fast foods or convenience foods. Trouble is, most of these foods have a lot of sodium, phosphorus, and potassium. (They're costly, too.)

Cooking from scratch can take time, but there are ways to make it easier. Here are a few ideas. Which ones do you think might work for you?

- ❑ Keep a list of meals that are quick to fix (like omelets), so I can eat something healthy in a hurry, with little effort.
- ❑ Adapt favorite recipes so I can eat foods I like.
- ❑ Cook ahead for the week and put meal-sized portions in the freezer. I can heat them up quickly all week.

- ❑ Read food labels and find some convenience foods that will fit into my healthy meal plans.
- ❑ Add my own ideas:

Another way to get meals besides cooking them yourself is to eat at a friend's home or go to a restaurant. You can eat out and still stick with a standard in-center HD meal plan—it just takes some thought. Restaurant food is often salty and in large portions.

When you eat out, you'll be more likely to get a kidney friendly meal if you ask for what you want! As a customer, it's okay for you to say that you don't want added sugar, salt, or *monosodium glutamate* (MSG, a flavor enhancer often used in Chinese food), in your food, or that you want dressings on the side. Restaurants are service businesses, and they get more repeat customers if they make you happy.





These days, many restaurants have “heart-healthy” or “low fat” menu choices. These may have less salt. You still need to be alert to limit foods that are extra-high in potassium, like beans, avocados, oranges, bananas and plantains, dried fruits (figs, raisins, and currants), and chocolate. (Very often, the foods sold as “low fat” have more salt and sugar, and the ones touted as “low salt” have more fat. Salt, sugar, and fat add flavor.)

Before you order, ask the waiter how the food is prepared. Be aware of foods that include salt, soy sauce, tamari, MSG, etc., because these will make you more thirsty. If the food is made fresh for each order, they can leave these seasonings out. If a big batch is made up, you may want to make another choice.

If you would like to order a menu item that has something you wish to avoid, ask for a substitute item. For example, if you would like a chicken dish that contains cheese and tomatoes, you might ask to replace them with mustard.

In general it's a good idea to avoid these high sodium foods in restaurants:

- Soups
- Heavily marinated items
- Cream sauces and gravies
- Soy sauce and ketchup
- Salad dressings
- Deep fried foods
- Salt-cured meats (including cold cuts, sausage, bacon, etc.)
- All salt (including sea salt, garlic salt, etc.)

Good choices include:

- Salads
- Oil and vinegar or lemon juice
- Vegetables (low to moderate potassium)
- Fruits (low to moderate potassium)
- Breads
- Grilled or baked foods



Remember your binders! Some people keep spare containers of binders in the glove box of their car, in a purse, and in their pocket, just in case.

Did you know that just one fast food fried chicken breast may have 1,190 mg of sodium? A fast food fish sandwich may have 1,330 mg of sodium. And a small cheeseburger at some fast food restaurants may have 750 mg of sodium. No wonder they super-size the drinks! Fast food is meant to be fast—not always healthful.

Still, if you're careful, you can find food that won't leave you thirsty for the next 2 days. In your Personal Plan at the end of this module, we've put together some lists of fast food items that have less than 600 mg of sodium (about 1/3





of your daily limit if you are on standard in-center HD, or 1/5 of your daily limit if you are on PD), although they still may contain a lot of fat and/or sugar. Ask for the nutritional facts at your favorite places, or check the company website.

The key to eating out on a dialysis meal plan is to be prepared. But once in a while, we all have a splurge. When you do, don't feel too guilty about it—just try to forgive yourself and get back on track.

In just a moment, we'll show you your Personal Plan for this module. Be sure to look at the Additional Resources section when you're done—we've included cookbooks, food guides, and links to other sites that have a wealth of information to help you fit a dialysis meal plan into your life.

Before we go to your Personal Plan though, let's take a quick look at some strategies for change.

Strategies for Lifestyle Changes

We eat to have energy, but what we eat and when has to do with our culture, families, personal habits, stress, and lots of other reasons. How long it will take you to apply what we've covered will depend on what obstacles you must overcome in your own life.

As you think about using the ideas in this module, what obstacles do you need to overcome in order to succeed?

Think of one person on your health care team and one person in your personal life who could help you overcome these obstacles. Write their names here:

Health care team member:

Friend or family member:

Consider your options

One of the main goals of this module is to help you learn what choices you have about your food and fluids. You can look at this information in two ways:

- 1 You can feel cheated, restricted, and victimized by your kidney disease.
- or -
- 2 You can look at your food choices as a chance to feel better, have a higher quality of life, and be able to do more of what you enjoy.

Same picture—different ways of looking at it. It's all how you choose to see your options.

Plan ahead

A very practical way to bring about the change you want is learning to plan ahead.

- Plan out what your meals are going to be (daily or weekly).
- Make a shopping list and stick to it (this will save you money, too).
- Think through how you will prepare the meals.
- Decide where you will eat—home, restaurant, picnic, someone else's home, etc.

Once you get into the habit of planning meals, it will seem natural to keep it up. A small investment of time and effort brings a great return.



Keep a nutrition and health journal

Keeping a journal will help you keep track of how you feel, based on what you eat, how much you weigh, what questions you have, and what you learn.

Use a notebook to write down:

- Daily food and beverage intake. Include portion sizes and how the foods were made. You can copy pages of the planning charts at the end of this module and use them to help you figure out how you're doing.



- Your notes about dialysis, exercise, meal planning, what you've learned from your own reading about CKD and nutrition, etc.
- Your weight, taken the same time each day, wearing the same clothes.
- Symptoms you want to mention to your doctor (e.g., itchy skin may mean too much phosphorus).
- Questions about food choices, preparation, etc. to ask your dietitian.

Keep sight of your goal: To stay healthy

Keeping healthy means doing more than just following doctor's orders. The meal planning ideas we've covered must become *yours!* That means making a commitment to yourself to follow through. If you do, it will help to keep you on track as you seek to live well with your kidney disease. For extra help on motivation, read Module 4—*Following Your Treatment Plan*, and Module 5—*Coping with Kidney Disease*.

It's time to wrap up this module on nutrition and fluids for people with kidney failure. But before we do, we want to give you a personal plan to help you get a start on some of the most important ideas in this module. We encourage you to put it where it will remind you of the goals toward which you're working.





Personal Plan for _____

Nutrition and Fluids for People on Dialysis

If I learn how to take charge of my food and fluids, I can feel better, improve my lab results, and have a better quality of life.

Nutrition Basics: Calories

A measure of the energy in a food.

To help myself **gain or lose weight**, I plan to:

Nutrition Basics: Carbohydrates

Starches that turn into sugar in my body and provide energy. Found in sugars, grain products, fruits, and vegetables. If I have diabetes, I need to talk with my dietitian about making good carb choices that won't make my blood sugar go up.

Nutrition Basics: Fats

Provide energy, protect organs from injury, help to maintain a constant body temperature, and aid absorption of some vitamins. To keep my heart healthy, I will try to use more unsaturated fats, which are liquid at room temperature, including:

Nutrition Basics: Protein

Needed for muscle, bone, teeth, and hair development. High-quality protein comes from animal sources. Low-quality protein comes from vegetable sources. At my monthly lab tests, my albumin level should be greater than 4.0 g/dL.

- A matchbook-size portion is about 1 ounce
- A deck-of-cards-size portion is about 3 ounces
- A paperback-book-size portion is about 8 ounces

Getting the Right Amount of Sodium

My body needs sodium (found in salt) for healthy nerves and to balance fluid levels. But a high-salt diet may put me at risk for high blood pressure, heart disease, and stroke. Eating less sodium will help me to be less thirsty and may make standard in-center HD more comfortable. When I start eating less sodium, in a few weeks I'll get used to it and food will taste better!

Here are my ideas for eating less sodium:

Potassium: Key to Feeling Good and a Healthy Heart

In my body, potassium helps my nerves "talk" to my muscles, including my heart. Too much or too little potassium can make my heart skip beats—or even stop! My potassium level should be less than 6.0 mEq/L for my monthly blood tests.

The best way I can check my potassium intake is to:

- Ask my dietitian at each monthly lab test what my level is.
- Choose low- to moderate-potassium fruits and vegetables.

In general, I will choose low and moderate options, and limit high potassium vegetables and fruits to small amounts.



Personal Plan for _____ (continued)

What Is Phosphorus?

Phosphorus helps my body use energy, and builds strong bones and teeth. But too much weakens my bones. If I keep my calcium and phosphorus levels in the safe range, the cycle won't start, and my bones can stay healthy. Safe ranges for my blood tests may be:

- Calcium: 8.4 to 10.0 mg/dL
- Phosphorus: 3.5 to 5.5 mg/dL
- Calcium-phosphorus product: less than 55
- Intact PTH: 150 to 300 pg/mL

I can keep my phosphorus in the safe range by taking my phosphate binders within 5 to 10 minutes of all meals and snacks, and by choosing lower phosphorus foods. I may need to limit my daily phosphorus intake to about 800 to 1,200 mg/day.

Phosphorus in Foods

Meat: Higher Phosphorus

- Beef roasts, steaks, ribs 3 oz (136-231 mg)
- Beef liver, pan-fried, 3 oz (412 mg)
- Chicken breast, roasted, ½ breast (210 mg)
- Crab 3 oz, cooked (109-240 mg)
- Cod 3 oz, baked (117-190 mg)
- Pork chops, ribs, roasts, 3 oz (166-242 mg)
- Turkey breast, roasted, 3 oz (178 mg)

Meat: Lower Phosphorus

- Bacon, 1 oz (40 mg – watch the sodium)
- Beef tongue 3 oz (123 mg)
- Beef tripe 3 oz (56 mg)
- Chicken thigh, 1 leg (91-108 mg)

- Egg (96 mg per egg)
- Ground beef 3 oz patty (165 mg)
- Pork chitterlings 3 oz (56 mg – may be high in sodium)
- Pork feet, fresh 3 oz (70 mg)
- Shrimp 3 oz, cooked (116 mg)

Dairy: Higher Phosphorus

- Hot chocolate (with milk) 8 oz (262 mg)
- Eggnog 8 oz (277 mg)
- Cultured buttermilk, reduced fat 8 oz (201 mg)
- Chocolate milk 8 oz (252 mg)
- Swiss cheese 1 oz (159 mg)
- Yogurt, whole, plain 6 oz (162 mg)
- Cheddar cheese 1 oz (143 mg)

Dairy: Lower phosphorus

- 1% fat milk 4 oz (116 mg)
- 2% fat milk 4 oz (138 mg)
- Whole milk 4 oz (111 mg)
- Mozzarella 1 oz (115 mg)
- Goat cheese 1 oz (105 mg)
- Cream cheese 2 tbsp (32 mg)

Other

- Beer 12 oz (50 mg)
- White or red wine 3.5 oz (19-24 mg)
- Cola drinks 12 oz (41-62 mg)
- Chocolate —milk 3 oz (174 mg)





Personal Plan for _____ (continued)

Don't Get Flooded by Fluids

Part of the job of dialysis is to take off extra fluids my kidneys don't remove any more. This is important, because if I have too much fluid, I may have:

- Headaches and low energy
- Swelling in my face, hands, and feet (edema)
- Trouble breathing from fluid in my lungs
- Heart damage from stretching my heart with too much fluid
- High blood pressure that can lead to a stroke

If I am on PD, I will ask my doctor about checking my kidney function to be sure I am getting enough PD. If my kidney function drops, I may need more PD—and/or less fluids. I will be alert for signs of edema and tell my PD nurse or doctor if I:

- Have fluid build-up
- Notice a lot of sudden weight gain
- Use more 4.25 strength solution than I did before
- Have headaches

Which Vitamins Do I Need?

Dialysis changes my need for vitamins. (I should not take more than 60 mg/day of vitamin C, for example.) I will check with my doctor before taking any over-the-counter vitamins and herbal supplements. My doctor will prescribe a multivitamin for me that has the right amounts of each vitamin.

Meal Planning and Eating Out

To plan meals that I can look forward to, I can:

- 1 Mix and match foods from the lists I get in this module or from my dietitian.

- 2 Look up a few favorite foods in a food values book to see how I can add them into my healthy meal plan.
- 3 Look up the foods I want to eat and make charts so I can have custom menus that work for me.

I can also use the daily meal planning grid (page 9-31) and food value charts (pages 9-32 to 9-35) to see if I want to try to put my own meal plans together.

When I plan to eat out at a restaurant, I will:

- Ask the restaurant to prepare food to meet my needs.
- Ask the waiter/waitress about ingredients and how the food is made.
- Avoid high sodium and high potassium choices.
- Avoid soups, heavily marinated foods, and cream sauces.
- Bring my phosphate binders with me.

I will try to avoid fast foods. When I go to a fast food restaurant, I will try to limit my sodium.

Strategies for Lifestyle Changes

I will try to see my food and fluid choices as chances to feel better and improve my quality of life.

- I will plan ahead for meals by making a shopping list and thinking about how I will prepare my foods.
- I will think about keeping a nutrition and health journal.
- I will take responsibility for my nutrition and fluid plan.



Personal Plan for _____ (continued)

The two people I will ask to help me reach my goals are: _____
and _____

Lower-sodium Fast Food Options

Here are some of the lower-sodium foods that I can order (keeping in mind that I may feel best if I keep my sodium to 1,200 to 2,000 mg/day or less if I am on standard in-center HD, or 3,000 to 4,000 mg/day or less if I am on PD.):

Arby's®

- Croissant with scrambled egg (400 mg sodium)
- Gourmet chocolate chunk cookies (2) (320 mg sodium)
- Apple or cherry turnover, iced (200-210 mg sodium)
- Vanilla shake, regular size (390 mg sodium)
- Chocolate shake, regular size (450 mg sodium)

Burger King®

- French toast sticks - 5 sticks, with syrup (450 mg sodium)
- Cini-mini's with icing (400 mg sodium)
- Fruit-topped oatmeal (290 mg sodium)
- Hamburger (490 mg sodium)
- Whopper Jr.® - no cheese (530 mg sodium)
- Garden salad, no dressing (50 mg sodium)
- Chicken Tenders® 4 pieces (310 mg sodium)
- Dutch apple pie (310 mg sodium)
- Hershey's sundae pie (220 mg sodium)
- Oreo or Oreo Brownie sundae (390 mg sodium)
- Peach & granola sundae (170 mg sodium)
- Strawberry shake (130 mg sodium)

Dairy Queen®

- Grilled chicken wrap (450 mg sodium)
- Breaded mushrooms (500 mg sodium)
- Vanilla cone, medium (140 mg sodium)
- Chocolate malt, small (250 mg sodium)
- Small Blizzard (180-430 mg sodium)
- Peanut Buster® Parfait (350 mg sodium)
- Medium sundae (130-390 mg sodium)
- Buster Bar® (220 mg sodium)
- Strawberry shortcake (370 mg sodium)
- Chocolate Dilly® Bar (70 mg sodium)
- Small shake (190-370 mg sodium)

Hardee's®

- Hamburger (480 mg sodium)
- Onion rings (470 mg sodium)
- Apple turnover (260 mg sodium)

Jack In The Box®

- French toast sticks - 4 sticks (530 mg sodium)
- Spicy corn sticks (140 mg sodium)
- Hamburger deluxe (540 mg sodium)
- Beef taco, (320 mg sodium)
- Shakes & desserts (260-560 mg sodium)

Kentucky Fried Chicken®

- Caesar side salad with parmesan garlic croutons, no dressing (250 mg sodium)
- KFC Snacker®, Honey BBQ (470 mg sodium)
- Drumstick - grilled - (290 mg sodium)
- Drumstick - original recipe (310 mg sodium)
- Whole wing - original recipe (380 mg sodium)
- Chicken breast - original recipe, no skin or breading (580 mg sodium)





Personal Plan for _____ (continued)

- Drumstick - extra crispy (360 mg sodium)
- Whole wing - extra crispy (410 mg sodium)
- Biscuit (530 mg sodium)
- Coleslaw (135 mg sodium)
- Green beans (260 mg sodium)
- Corn on the cob, 5.5 inch piece (5 mg sodium)
- Macaroni salad (430 mg sodium)
- Apple turnover (160 mg sodium)
- Lil' Bucket™ parfait (140-240 mg sodium)
- Oreo cookie and creme pie slice (210 mg sodium)

McDonalds®

- Apple dippers, with caramel dip (35 mg sodium)
- Snack size fruit & walnuts (60 mg sodium)
- Fruit & maple oatmeal (160 mg sodium)
- Cinnamon Melts (370 mg sodium)
- Fruit 'n Yogurt parfait (85 mg sodium)
- Chicken McNuggets® (6) no sauce (540 mg sodium)
- Honey packet (1) - (0 mg sodium)
- Sweet 'n Sour sauce (1) - (150 mg sodium)
- Honey mustard sauce (1) - (115 mg sodium)
- Hamburger (520 mg sodium)
- Premium Caesar salad (w/grilled chicken) (580 mg sodium)
- Bacon ranch salad, no chicken (300 mg sodium)
- Side salad, with Newman's Own® ranch dressing (540 mg sodium)
- McDonaldland® cookies (300 mg sodium)
- Caramel apple parfait (85 mg sodium)

- Vanilla reduced fat ice cream cone (60 mg sodium)
- Baked apple pie (170 mg sodium)

Pizza Hut®

- Medium pan pizza, one slice cheese (530 mg sodium)
- Medium pan pizza, one slice pepperoni and mushroom (520 mg sodium)
- Medium pan pizza, one slice Veggie Lover's® (500 mg sodium)
- Medium pan pizza, one slice ham & pineapple (520 mg sodium)
- Medium pan pizza, one slice Italian sausage & red onion (560 mg sodium)
- Medium Thin 'n Crispy® pizza, one slice cheese (550 mg sodium)
- Medium Thin 'n Crispy® pizza, one slice pepperoni and mushroom (540 mg sodium)
- Medium Thin 'n Crispy® pizza, one slice ham & pineapple (540 mg sodium)
- Medium Thin 'n Crispy® pizza, one slice Veggie Lover's® (530 mg sodium)
- Medium hand-tossed pizza, one slice Veggie Lover's® (530 mg sodium)
- Medium hand-tossed pizza, one slice cheese (550 mg sodium)
- Medium hand-tossed pizza, one slice pepperoni & mushroom (540 mg sodium)
- Medium hand-tossed pizza, one slice ham & pineapple (550 mg sodium)
- 12" Fit n' Delicious Pizza™, one slice, ham, red onion, and mushroom (550 mg sodium)



Personal Plan for _____ (continued)

- 12" Fit n' Delicious Pizza™, one slice, chicken, red onion, green pepper (510 mg sodium)
- Breadstick, 1 piece (260 mg sodium)
- All American crispy or bone out wings (no sauce) (500 mg sodium)
- Apple pie (2 pies) (190 mg sodium)
- Chalupa Supreme® steak (570 mg sodium)
- Avocado ranch dressing (50 mg sodium)
- Caramel apple empanada (310 mg sodium)
- Mexican rice (200 mg sodium)
- Nachos (370 mg sodium)
- Cinnamon twists (200 mg sodium)

Subway®

- Grilled chicken & baby spinach salad (330 mg sodium)
- Veggie Delite® 6 inch sub (310 mg sodium)
- Oven roasted chicken salad (270 mg sodium)
- Roast beef salad (450 mg sodium)
- Bacon egg & cheese muffin melt (550 mg sodium)
- Egg & cheese muffin melt (460 mg sodium)
- Cookies & desserts (70-290 mg sodium)

Taco Bell®

- Fresco crunchy taco (310 mg sodium)
- Grilled steak soft taco (550 mg sodium)
- Crunchy taco (290 mg sodium)
- Crunchy Taco Supreme® (320 mg sodium)
- Gordita supreme, chicken (510 mg sodium)
- Volcano taco (410 mg sodium)
- Gordita Supreme steak or beef (550 mg sodium)
- Hot sauce & salsa (35-80 mg sodium)
- Beef soft taco (510 mg sodium)
- Chicken soft taco (460 mg sodium)
- Original chicken flatbread sandwich (580 mg sodium)

Wendy's®

- Chicken nuggets 5 pieces, no sauce (460 mg sodium)
- Sweet & sour or barbecue sauce - 1 package (120 mg sodium)
- Jr. hamburger w/ketchup (540 mg sodium)
- Apple pecan chicken salad, half-size, no dressing (580 mg sodium)
- Caesar side salad with caesar dressing and croutons (515 mg sodium)
- Apple slices (0 mg sodium)
- Vanilla or chocolate Frosty™ small (135-140 mg sodium)
- Wild berry frosty shake small (170 mg sodium)
- Oreo frosty parfait (190 mg sodium)
- Caramel apple frosty parfait (140 mg sodium)

(SOURCE: NUTRITIONAL GUIDES PROVIDED ON CORPORATE WEBSITES, MARCH 2012; ADDITIONAL NUTRITIONAL INFORMATION ON THESE AND OTHER ITEMS IS AVAILABLE ONLINE OR AT YOUR LOCAL RESTAURANT.)





Daily Meal Planning Grid

Breakfast	Protein	Phosphorus	Potassium	Sodium	Fluid
Lunch	Protein	Phosphorus	Potassium	Sodium	Fluid
Dinner	Protein	Phosphorus	Potassium	Sodium	Fluid
Total					
Recommended	___ g	___ mg	___ mg	___ mg	___ oz



Module 9 – Nutrition and Fluids

Food Value Chart: Vegetables & Legumes (Note: Each symbol (■) = about 60 mg)

Vegetable	Serving	Sodium	Potassium	Phosphorus
Acorn squash (mashed)	½ cup	■	■■■■■	■
Alfalfa sprouts	1 cup	■	■	■
Artichokes (fresh)	1	■■	■■■■■■■	■■
Arugula	½ cup	■	■	■
Asparagus (fresh, cooked)	6 stalks	■	■■■	■
Avocado (raw)	1 cup sliced	■	■■■■■■■■■■■	■
Baked beans (homemade)	1 cup	■■■■■■■■■ ■■■■■■■■■	■■■■■■■■■ ■■■■■■■	■■■■■
Bamboo shoots (canned)	1 cup	■	■■	■
Beet greens (fresh)	½ cup	■	■■	■
Beets (fresh, cooked)	½ cup sliced	■	■■■■	■
Bell pepper (yellow, raw)	1 large	■	■■■■■■■	■
Black beans (boiled)	1 cup	■	■■■■■■■■■	■■■■
Blackeyed peas (canned)	1 cup	■■■■■■■■■■■	■■■■■■■	■■■
Broccoli (florets, raw)	1 cup	■	■■■■	■
Brussel sprouts (boiled)	½ cup	■	■■■■	■
Butternut squash (mashed)	½ cup	■	■■■	■
Cabbage, green (boiled)	½ cup shredded	■	■■	■
Cabbage, red (boiled)	½ cup shredded	■	■■■	■
Carrot (raw)	1, 7.5"	■	■■■■	■
Carrot (cooked)	½ cup sliced	■	■■■	■
Cauliflower (cooked)	1 cup	■	■■■	■
Cauliflower (raw)	1 cup	■	■■■■■	■
Celery (raw)	1 stalk	■	■■	■
Chickpeas (canned)	1 cup	■■■■■■■■■■■	■■■■■■■	■■■■
Chili peppers, green (canned)	½ cup	■■■■■■■■■	■■■	■
Chili peppers, green (raw)	1 pepper	■	■■■	■
Collard greens (cooked)	1 cup	■	■■■■	■
Corn (canned)	½ cup	■■■■	■■	■
Corn (frozen)	½ cup	■	■■■	■
Corn (creamstyle, canned)	½ cup	■■■■■	■■■	■
Edamame (soybeans) (raw)	½ cup	■	■■■■■■■■■■■	■■■■
Eggplant (cooked)	½ cup	■	■	■
Falafel (1, 2 ¼" diameter pattie)	1 pattie	■	■■	■
Garbanzo beans (canned)	1 cup	■■■■■■■■■■■	■■■■■■■	■■■■
Great northern beans (canned)	1 cup	■	■■■■■■■■■ ■■■■■■■	■■■■■
Green onions	½ cup	■	■■	■
Green beans (fresh, cooked)	1 cup	■	■■■	■
Green beans (canned)	½ cup	■■■	■	■
Hearts of palm (canned)	½ cup	■■■■■	■■	■





Food Value Chart: Vegetables & Legumes (continued)

Vegetable	Serving	Sodium	Potassium	Phosphorus
Hominy (canned)	1 cup	■■■■■	■	■
Hummus	1 tbsp	■	■	■
Kale (cooked)	½ cup	■	■■	■
Kidney beans (canned)	1 cup	■■■■■■■■■■	■■■■■■■■■■	■■■■
Leeks (cooked)	1 leek	■	■■	■
Lentils (cooked)	1 cup	■	■■■■■■■■■■	■■■■■
Mushrooms (canned)	½ cup	■■■■■	■■	■
Mushrooms (common white, raw)	½ cup	■	■■	■
Mustard greens (cooked)	½ cup	■	■■	■
Nopales (cooked)	1 cup	■	■■■■	■
Okra (cooked)	8 pods	■	■■	■
Onions (raw)	½ cup	■	■■■	■
Peas (canned)	½ cup	■■■	■■	■
Peas (frozen)	½ cup	■	■■	■
Pinto beans (canned)	1 cup	■■■■■■■■■■	■■■■■■■■■■	■■■■
Potato (baked, with skin)	1 medium	■	■■■■■■■■■■ ■■■	■■
Potato (baked, no skin)	1 medium	■	■■■■■■■■■■	■■
Potatoes (mashed, homemade)	½ cup	■■■■■	■■■■■	■
Pumpkin (canned)	½ cup	■	■■■■	■
Radish (red, raw)	½ cup sliced	■	■■	■
Refried beans (canned)	1 cup	■■■■■■■■■■ ■■■■■	■■■■■■■■■■	■■■■
Romaine lettuce	1 cup	■	■■	■
Sauerkraut (canned)	¼ cup	■■■	■	■
Shitake mushrooms (cooked)	4	■	■	■
Spaghetti squash (cooked)	1 cup	■	■■■	■
Spinach (canned)	½ cup	■	■■■■■	■
Spinach (fresh)	½ cup	■	■■	■
Summer squash (cooked)	½ cup sliced	■	■■■	■
Summer squash (raw)	½ cup sliced	■	■■	■
Sweet potato (baked, with skin)	1 medium	■	■■■■■■■■■■	■
Sweet potato (mashed, homemade)	½ cup	■	■■■■■	■
Swiss chard (cooked)	½ cup	■■■	■■■■■	■
Tempeh (cooked)	3.5 oz	■	■■■■■	■■■■
Tofu (raw, regular)	3 oz	■	■■	■■
Tofu (raw, firm)	3 oz	■	■■■■	■■■
Tomatillo (raw)	1 medium	■	■	■
Tomato (red, raw)	1	■	■■	■
Water chestnuts (canned)	½ cup sliced	■	■	■
Zucchini (cooked)	½ cup	■	■■■■	■
Zucchini (raw)	½ cup	■	■■	■



Food Value Chart: Fruits (Note: Each symbol (■) = about 60 mg)

Fruit	Serving	Sodium	Potassium	Phosphorus
Apple (fresh)	1	■	■■	■
Applesauce (unsweetened)	½ cup	■	■■	■
Apricot (fresh)	1	■	■■	■
Apricot (canned in light syrup)	½ cup halves	■	■■■	■
Banana (fresh)	1 medium	■	■■■■■■■	■
Blackberries (fresh)	½ cup	■	■■	■
Blueberries (fresh or frozen)	1 cup	■	■■	■
Cantaloupe (fresh)	1 cup	■	■■■■■■■	■
Casaba melon (fresh)	1 cup	■	■■■■■	■
Cherries, sour (fresh)	1 cup	■	■■■	■
Cherries, sour (canned in water)	½ cup	■	■■	■
Cherries, sweet (fresh)	1 cup	■	■■■■	■
Cherries, sweet (canned in water)	½ cup	■	■■■	■
Cranberry sauce (jellied, canned)	½" slice	■	■	■
Currants (dried)	½ cup	■	■■■■■■■■■	■■
Dates (dried)	8	■	■■■■■■■	■
Figs (dried)	1	■	■■	■
Fruit cocktails (canned in water)	½ cup	■	■■	■
Grapefruit (fresh)	½ medium	■	■■■	■
Grapes (fresh, seedless)	1 cup	■	■■■■■	■
Honeydew melon (fresh)	1 cup	■	■■■■■■■	■
Kiwi (fresh)	1 medium	■	■■■■	■
Lemon (fresh)	1 medium	■	■	■





Food Value Chart: Fruits (*continued*)

Fruit	Serving	Sodium	Potassium	Phosphorus
Lime (fresh)	1 medium	■	■	■
Mandarin oranges (canned in light syrup)	½ cup	■	■■	■
Mango (fresh)	1 medium	■	■■■■■	■
Nectarine (fresh)	1 medium	■	■■■■■	■
Orange, navel (fresh)	1 medium	■	■■■■■	■
Papaya (fresh)	1 medium	■	■■■■■■■■■■■■■■■	■
Passion fruit (fresh)	1 medium	■	■	■
Peach (fresh)	1 medium	■	■■■	■
Peaches (canned in water)	1 cup	■	■■■■■	■
Pear (fresh)	1 medium	■	■■■	■
Pears (canned in water)	1 cup halves	■	■■■	■
Pineapple (fresh)	1 cup	■	■■■	■
Pineapple (canned in juice)	1 cup	■	■■■■■	■
Plantain (cooked)	1 cup slices	■	■■■■■■■■■■■■■■■	■
Plum (fresh)	1 medium	■	■■■	■
Prickly pear (fresh)	1 medium	■	■■■■■	■
Prunes (dried)	2	■	■■■	■
Raisins (seeded)	½ cup	■	■■■■■■■■■■■■■■■	■
Raspberries (fresh)	1 cup	■	■■■	■
Strawberries (fresh or frozen)	1 cup	■	■■■■■	■
Tangerine (fresh)	1 medium	■	■■■	■
Watermelon (fresh)	1 cup	■	■■■	■

Source: Bowes & Church's *Food Values of Portions Commonly Used* (19th Edition) by Jean A. T. Pennington and Judith Spungen, 2010.



Two Week Sample Menu for People on Peritoneal Dialysis (Provides 100 grams of Protein)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Scrambled Eggs, 2+ White Toast, 1 slice Margarine, 1 tsp. Grapefruit Juice Coffee/Tea	Cheerios®, ½ cup with Non-Dairy Creamer, ½ cup White Toast, 1 slice Margarine, 1 tsp. Orange Juice Coffee/Tea	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Maple Syrup, 4 tbsp. Strawberry/Banana Juice Coffee/Tea	Cornflakes, ½ cup with Non-Dairy Creamer, ½ cup Bagel, 1 Jam/Jelly, 2 tsp. or Cream Cheese, 2 tsp. Grapefruit, 1 whole Coffee/Tea
LUNCH	Sliced Turkey Sandwich (1): Turkey, 4 oz. Sourdough Bread, 2 slices Mayonnaise, 1 tbsp. Tomatoes, 2 slices Lettuce, 1 leaf Orange, 1 medium Regular/Diet Sprite®	Hamburger (1): Lean Beef Patty, 4 oz., on a Hamburger Bun Tomatoes, 2 slices Lettuce, 1 leaf Chopped Onion, 1 tbsp. Sliced Mushrooms, ¼ cup Orange Sherbet, ¾ cup Iced Tea	Grilled Salmon, 4 oz. Mexican Pasta, 1 cup** Corn Bread Roll, 1 Margarine, 1 tsp. Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Kiwi, 1 Regular/Diet Sprite®	Tuna Sandwich (1): Low Sodium/Water Packed Tuna, flaked, 4 oz. Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1 tbsp. Swiss Cheese, 1 oz. Hard Bread Roll, 1 Apple, 1 medium Regular/Diet Root Beer
DINNER	Broiled Garlic Shrimp, 4 oz.* Rice, ½ cup Asparagus, 4 spears Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Regular/Diet Root Beer	Oven-Baked Chicken, 4 oz. Baked Potato, 1 small Margarine, 2 tsp. Carrots, ½ cup Applesauce, ½ cup Crystal Light®	Salisbury Steak, 4 oz., with: Sliced Mushrooms, ½ cup Chopped Onions, ¼ cup Dinner Roll, 1 Margarine, 1 tsp. Artichokes, ½ cup Jell-O®, ½ cup Lemonade	Baked Pork Chop, 4 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Fresh Apricots, 4 Iced Tea
SNACK	Graham Crackers, 2 squares Canned Figs, 3 medium	Tuna Salad, ¼ cup Crackers, unsalted tops 6	Baked Apple with: Sugar, 2 tsp. Margarine, 2 tsp. Cinnamon, 1 tsp.	Chili Wheat Treats, ½ cup*

*Living Well on Dialysis **Southwest Cookbook *Egg substitute/egg whites can be used in place of whole eggs





Two Week Sample Menu for People on Peritoneal Dialysis (Provides 100 grams of Protein) (continued)

	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Oatmeal, ½ cup made with: Non-Dairy Creamer, ½ cup Raisins, 2 tbsp. Coffee/Tea <i>(Optional: add 1 tsp. of protein powder to oatmeal)</i>	Mushroom Omelet: Eggs, 2+ Sliced Mushrooms, green peppers, onions, ¼ cup White Toast, 2 slices Margarine, 2 tsp. Tangerine Juice Coffee/Tea	English Muffin Sandwich (1): English Muffin, 1 Scrambled Eggs, 2+ Natural Cheese, 1 oz. Watermelon, cubed, 1 ¼ cup Coffee/Tea
LUNCH	Egg Salad Sandwich (1): Hard Boiled Eggs: 3 whites, 1 yolk Mayonnaise, 1 tbsp. Chopped Celery, 1 tbsp Lettuce, 1 leaf White Toast, 2 slices Plum, Red, 1 Regular/Diet 7-Up®	Roast Beef Sandwich (1): Roast Beef, 4 oz. White Bread, 2 slices Mayonnaise, 1 tbsp. Green Beans, ½ cup Banana, 1 medium Regular/Diet Root Beer	Lemon Curry Chicken Salad, 1 cup* Crackers, Unsalted Tops, 6 Sorbet, ¾ cup Iced Tea
DINNER	Baked Cod, 4 oz. in: Margarine, 1 tsp. Lemon Juice, 2 tbsp Black Pepper, ½ tsp. Baked Potato, 1 small, with: Margarine, 1 tsp. Chives, 1 tsp. Mustard Greens, ½ cup Sourdough Bread, 1 slice Margarine, 1 tsp. Fresh Peach, 1 Iced Tea	Chicken and Rice, 1 cup** Zucchini, ½ cup Cantaloupe, 1/3 melon Regular/Diet Sprite®	Beef Stew, ½ cup** Noodles, ½ cup Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Fresh Pear Crystal Light®
SNACK	Sorbet, ¾ cup Graham Crackers, 2 squares	Cheese Crisp, 1 made with: Flour Tortilla, 1, 6-inch Natural Cheese, 1 oz.	Cinnamon Crispies, 1 tortilla*

*Living Well on Dialysis **Southwest Cookbook *Egg substitute/egg whites can be used in place of whole eggs



Two Week Sample Menu for People on Peritoneal Dialysis (Provides 100 grams of Protein) (continued)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Fried Eggs, 2 White Toast, 2 slices Margarine, 2 tsp. Orange Juice Coffee/Tea	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Maple Syrup, 4 tbsp. Grapefruit, 1 whole Coffee/Tea	Oatmeal, ½ cup made with: Non-Dairy Creamer, 1 cup Maple Syrup, 1 tbsp. Cinnamon, ½ tsp. White Toast, 1 slice Margarine, 1 tsp. Honeydew Melon, cubed, 1 cup Coffee/Tea	Grape-Nuts® Flakes, ½ cup Non-Dairy Creamer, ½ cup Hard Boiled Egg, 1 White Toast, 1 slice Margarine, 1 tsp. Cranberry Juice Coffee/Tea
LUNCH	Chicken, 4 oz. on an Onion Roll with: Mayonnaise, 1 tbsp. Tomatoes, 2 slices Lettuce, 1 leaf Carrot Sticks, ½ cup Lemonade	Grilled Cheese Sandwich (1): White Bread, 2 slices Natural Cheese, 2 oz. Low Sodium Tomato Soup, with water, ½ cup Celery Sticks, ½ cup Low Sodium Dressing, 1 tbsp. Vanilla Pudding (cooked, not instant), ½ cup Iced Tea	Egg Salad Sandwich (1): Hard Boiled Eggs: 3 whites, 1 yolk Mayonnaise, 1 tbsp. White Toast, 2 slices Tomatoes, 2 slices Sliced cucumbers, ½ cup Apple, 1 medium Regular/Diet 7-Up®	Tuna Pasta Salad: Shell Pasta, 1 cup Tuna, ¾ cup Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1tbsp. Radishes, sliced, ¼ cup Tomatoes, 2 slices Orange Sherbet, ¾ cup Iced Tea
DINNER	Roast Beef, 4 oz. Mashed Potatoes, ½ cup Margarine, 1 tsp. Steamed Carrots & Peas, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Watermelon, cubed, 1 ¼ cup Iced Tea	Baked Pork Chop, 4 oz. Noodles, ½ cup Margarine, 1 tsp. Spinach, ½ cup Applesauce, ½ cup Lemonade	Scampi Linguini, ½ cup* (double shrimp in recipe) Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Iced Tea	Roast Beef, 4 oz. French Bread, 2 slices Margarine, 2 tsp. Sautéed Broccoli, ½ cup in: Olive Oil, ½ tsp. Thyme, ½ tsp. Caramel Custard, ½ cup** Regular/Diet Root Beer
SNACK	Vanilla Wafers, 6 Fruit Cocktail, ½ cup	Chicken Salad, ¼ cup Crackers, Unsalted Tops, 6	Strawberry Ice Cream, ½ cup*	Graham Crackers, 2 squares Strawberries, ½ cup

*Living Well on Dialysis **Southwest Cookbook +Egg substitute/egg whites can be used in place of whole eggs





Two Week Sample Menu for People on Peritoneal Dialysis (Provides 100 grams of Protein) (continued)

	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Scrambled Eggs, 2+ Bagel, ½ Cream Cheese, 1 oz. Melon, cubed, 1 cup Coffee/Tea	Cream of Wheat, ½ cup made with: Non-Dairy Creamer, ½ cup Raisins, 2 tbsp. Fresh Fruit Salad, ½ cup Sourdough Toast, 1 slice Margarine, 1 tsp. Coffee/Tea <i>(Optional: add 1 tbsp. of protein powder to Cream of Wheat)</i>	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Maple Syrup, 4 tbsp. Sausage Patty, 1 oz.: Lean Ground Pork, 1 oz. Black Pepper & Ground Cumin Coffee/Tea
LUNCH	Sliced Turkey Sandwich (1): Turkey, 4 oz. Rye Bread, 2 slices Mayonnaise, 1 tbsp. Tomatoes, 2 slices Lettuce, 1 leaf Papaya, ½ cup Regular/Diet Root Beer	Roast Beef Sandwich (1/2): Roast Beef, 2 oz. White Bread, 1 slice Mayonnaise, ½ tbsp. Low Sodium Vegetable Soup, 1 cup Crackers, Unsalted Tops, 6 Green Salad, ½ cup Oil & Vinegar Dressing, 1 tbsp. Iced Tea	Stir-Fried Chicken and Vegetables: Cubed Chicken, ½ cup Zucchini, Carrots, Onions Egg Fried Rice, 1 cup* Chinese Almond Cookies, 3 cookies* Apple Cider
DINNER	Hamburger (1): Lean Beef Patty, 4 oz. on a Hamburger Bun Mustard, 1 tbsp. Catsup, 1 tbsp. Lettuce, 1 leaf Coleslaw, ½ cup Banana, 1 medium Iced Tea	Broiled Skinless Chicken Breast, 4 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Fresh Pear, 1 Regular/Diet Sprite®	Broiled Halibut, 4 oz., in: Lemon Juice, 2 tbsp. Cilantro, 2 tbsp. Black Pepper, ¼ tsp. Asparagus, 4 spears Dinner Roll, 1 Margarine, 1 tsp. Fresh Apricots, 4 Lemonade
SNACK	Unsalted Popcorn with Melted Margarine, 3 cups popped Cran-Raspberry Juice	Cottage Cheese, ½ cup Pineapple, ½ cup	Jell-O®, ½ cup, topped with Cool Whip®, 2 tbsp.

*Living Well on Dialysis **Southwest Cookbook + Egg substitute/egg whites can be used in place of whole eggs



Two Week Sample Menu for People on Peritoneal Dialysis with Diabetes (Provides 100 grams of Protein)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Scrambled Eggs, 2+ White Toast, 1 slice Margarine, 1 tsp. Cranberry Juice Coffee/Tea	Cheerios®, ½ cup with Non-Dairy Creamer, ½ cup White Toast, 1 slice Margarine, 1 tsp. Orange Juice Coffee/Tea	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Low-Sugar Syrup, 2 tbsp. Strawberry/Banana Juice Coffee/Tea	Cornflakes, ½ cup with Non-Dairy Creamer, ½ cup Bagel, 1 Sugar-Free Fruit Spread, 2 tsp. or Cream Cheese, 2 tsp. Grapefruit, 1 whole Coffee/Tea
LUNCH	Sliced Turkey Sandwich (1): Turkey, 4 oz. Sourdough Bread, 2 slices Mayonnaise, 1 tbsp. Tomatoes, 2 slices Lettuce, 1 leaf Orange, 1 medium Diet Sprite®	Hamburger (1): Lean Beef Patty, 4 oz., on a Hamburger Bun Tomatoes, 2 slices Lettuce, 1 leaf Chopped Onion, 1 tbsp. Sliced Mushrooms, ¼ cup Orange Sherbet, ¾ cup Iced Tea	Grilled Salmon, 4 oz. Mexican Pasta, 1 cup** Corn Bread Roll, 1 Margarine, 1 tsp. Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Kiwi, 1 Diet Sprite®	Tuna Sandwich (1): Low Sodium/Water Packed Tuna, flaked, 4 oz. Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1 tbsp. Swiss Cheese, 1 oz. Hard Bread Roll, 1 Apple, 1 medium Mineral Water
DINNER	Broiled Garlic Shrimp, 4 oz.* Rice, ½ cup Asparagus, 4 spears Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Mineral Water	Oven-Baked Chicken, 4 oz. Baked Potato, 1 small Margarine, 1 tsp. Carrots, ½ cup Applesauce, ½ cup Crystal Light®	Salisbury Steak, 4 oz., with: Sliced Mushrooms, ½ cup Chopped Onions, ¼ cup Dinner Roll, 1 Margarine, 1 tsp. Artichokes, ½ cup Jell-O®, ½ cup Sugar-Free Lemonade	Baked Pork Chop, 4 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Fresh Apricots, 4 Iced Tea
SNACK	Graham Crackers, 2 squares Canned Figs, 3 medium	Tuna Salad, ¼ cup Crackers, unsalted tops 6	Unsalted Popcorn with Melted Margarine, 3 cups popped	Chili Wheat Treats, ½ cup*

*Living Well on Dialysis **Southwest Cookbook + Egg substitute/egg whites can be used in place of whole eggs





Two Week Sample Menu for People on Peritoneal Dialysis with Diabetes (Provides 100 grams of Protein) (continued)

	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Oatmeal, ½ cup made with: Non-Dairy Creamer, ½ cup Raisins, 2 tbsp. Coffee/Tea <i>(Optional: add 1 tbsp. of protein powder to oatmeal)</i>	Mushroom Omelet: Eggs, 2+ Sliced Mushrooms, green peppers, onions, ¼ cup White Toast, 2 slices Margarine, 2 tsp. Tangerine Juice Coffee/Tea	English Muffin Sandwich (1): English Muffin, 1 Scrambled Eggs, 2+ Natural Cheese, 1 oz. Watermelon, cubed, 1 ¼ cup Coffee/Tea
LUNCH	Egg Salad Sandwich (1): Hard Boiled Eggs: 3 whites, 1 yolk Mayonnaise, 1 tbsp. Chopped Celery, 1 tbsp Lettuce, 1 leaf White Toast, 2 slices Plum, Red, 1 Diet 7-Up®	Roast Beef Sandwich (1): Roast Beef, 4 oz. White Bread, 2 slices Mayonnaise, 1 tbsp. Green Beans, ½ cup Banana, 1 medium Mineral Water, 4 oz.	Lemon Curry Chicken Salad, 1 cup* Crackers, Unsalted Tops, 6 Sorbet, ¾ cup Iced Tea
DINNER	Baked Cod, 4 oz. in: Margarine, 1 tsp. Lemon Juice, 2 tbsp Black Pepper, ½ tsp. Baked Potato, 1 small, with: Margarine, 2 tsp. Chives, 1 tsp. Mustard Greens, ½ cup Sourdough Bread, 1 slice Margarine, 1 tsp. Fresh Peach, 1 Iced Tea	Chicken and Rice, 1 cup** Zucchini, ½ cup Cantaloupe, 1/3 melon Diet Sprite®	Beef Stroganoff, ½ cup Noodles, ½ cup Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Fresh Pear Crystal Light®
SNACK	Sorbet, ¾ cup Graham Crackers, 2 squares	Cheese Crisp, 1 made with: Flour Tortilla, 1, 6-inch Natural Cheese, 1 oz.	Angel Food Cake, ½ cake

*Living Well on Dialysis **Southwest Cookbook +Egg substitute/egg whites can be used in place of whole eggs



Two Week Sample Menu for People on Peritoneal Dialysis with Diabetes (Provides 100 grams of Protein) (continued)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Scrambled Eggs, 2+ White Toast, 2 slices Margarine, 2 tsp. Orange Juice Coffee/Tea	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Low Sugar Syrup, 2 tbsp. Grapefruit, 1 whole Coffee/Tea	Oatmeal, ½ cup made with: Non-Dairy Creamer, ½ cup Sugar Substitute, to taste Cinnamon, ½ tsp. White Toast, 1 slice Margarine, 1 tsp. Honeydew Melon, cubed, 1 cup Coffee/Tea	Grape-Nuts® Flakes, ½ cup Non-Dairy Creamer, ½ cup Hard Boiled Egg, 1 White Toast, 1 slice Margarine, 1 tsp. Cranberry Juice Coffee/Tea
LUNCH	Chicken, 4 oz. on an Onion Roll with: Mayonnaise, 1 tbsp. Tomatoes, 2 slices Lettuce, 1 leaf Carrot Sticks, ½ cup Sugar-Free Lemonade	Grilled Cheese Sandwich (1): White Bread, 2 slices Natural Cheese, 2 oz. Low Sodium Tomato Soup, with water, ½ cup Celery Sticks, ½ cup Low Sodium Dressing, 1 tbsp. Plum, 1 medium Iced Tea	Egg Salad Sandwich (1): Hard Boiled Eggs: 3 whites, 1 yolk Mayonnaise, 1 tbsp. White Toast, 2 slices Tomatoes, 2 slices Sliced Cucumbers, ½ cup Apple, 1 medium Diet 7-Up®	Tuna Pasta Salad: Shell Pasta, 1 cup Tuna, ¾ cup Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1tbsp. Radishes, sliced, ¼ cup Tomatoes, 2 slices Orange Sherbet, ¾ cup Iced Tea
DINNER	Roast Beef, 4 oz. Mashed Potatoes, ½ cup Margarine, 1 tsp. Steamed Carrots & Peas, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Watermelon, cubed, 1 ¼ cup Iced Tea	Baked Pork Chop, 4 oz. Noodles, ½ cup Margarine, 1 tsp. Spinach, ½ cup Applesauce, ½ cup Sugar-Free Lemonade	Scampi Linguini, ½ cup* (double shrimp in recipe) Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Iced Tea, 4 oz.	Roast Beef, 4 oz. French Bread, 2 slices Margarine, 2 tsp. Sauteed Broccoli, ½ cup in: Olive Oil, ½ tsp. Thyme, ⅓ tsp. Diet Jell-O®, ½ cup, topped with Cool Whip®, 2 tbsp. Mineral Water
SNACK	Vanilla Wafers, 6 Fruit Cocktail, ½ cup	Chicken Salad, ¼ cup Crackers, Unsalted Tops, 6	Quick 'N Easy Chocolate Ice Cream, ½ cup***	Graham Crackers, 2 squares Strawberries, ½ cup

*Living Well on Dialysis **Southwest Cookbook +Egg substitute/egg whites can be used in place of whole eggs





Two Week Sample Menu for People on Peritoneal Dialysis with Diabetes (Provides 100 grams of Protein) (continued)

	THURSDAY	FRIDAY	SATURDAY	
BREAKFAST	Scrambled Eggs, 2+ Bagel, 1 Cream Cheese, 1 oz. Melon, cubed, 1 cup Coffee/Tea	Cream of Wheat, ½ cup made with: Non-Dairy Creamer, ½ cup Raisins, 2 tbsp. Fresh Fruit Salad, ½ cup Sourdough Toast, 1 slice Margarine, 1 tsp. Coffee/Tea <i>(Optional: add 1 tbsp. of protein powder to Cream of Wheat)</i>	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Low Sugar Syrup, 2 tbsp. Sausage Patty, 1 oz.: Lean Ground Pork, 1 oz. Black Pepper & Ground Cumin Orange Juice Coffee/Tea	
LUNCH	Sliced Turkey Sandwich (1): Turkey, 4 oz. Rye Bread, 2 slices Mayonnaise, 1 tbsp. Tomatoes, 2 slices Lettuce, 1 leaf Papaya, ½ cup Mineral Water	Roast Beef Sandwich (1/2): Roast Beef, 2 oz. White Bread, 1 slice Mayonnaise, ½ tbsp. Low Sodium Vegetable Soup, 1 cup Crackers, Unsalted Tops, 6 Green Salad, ½ cup Oil & Vinegar Dressing, 1 tbsp. Iced Tea	Stir-Fried Chicken and Vegetables: Cubed Chicken, ½ cup Zucchini, Carrots, Onions Egg Fried Rice, 1 cup* Chinese Almond Cookies, 3 cookies* Mineral Water	
DINNER	Hamburger (1): Lean Beef Patty, 4 oz. on a Hamburger Bun Mustard, 1 tbsp. Catsup, 1 tbsp. Lettuce, 1 leaf Coleslaw, ½ cup Banana, 1 medium Iced Tea	Broiled Skinless Chicken Breast, 4 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Fresh Pear, 1 Diet Sprite®	Broiled Halibut, 4 oz., in: Lemon Juice, 2 tbsp. Cilantro, 2 tbsp. Black Pepper, ¼ tsp. Asparagus, 4 spears Dinner Roll, 1 Margarine, 1 tsp. Fresh Apricots, 4 Sugar-Free Lemonade	
SNACK	Unsalted Popcorn with Melted Margarine, 3 cups popped Cran-Raspberry Juice + Diet 7-Up®, ¼ cup each	Cottage Cheese, ½ cup Pineapple, ½ cup	Diet Jell-O®, ½ cup, topped with Cool Whip®, 2 tbsp.	

*Living Well on Dialysis **Southwest Cookbook + Egg substitute/egg whites can be used in place of whole eggs



**Two Week Sample Menu for People on Hemodialysis
(Provides 80 grams of Protein)**

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Scrambled Eggs, 2+ White Toast, 1 slice Margarine, 1 tsp. Cranberry Juice, 4 oz. Coffee/Tea, 8 oz.	Cheerios®, ½ cup with Non-Dairy Creamer, ½ cup White Toast, 1 slice Margarine, 1 tsp. Coffee/Tea, 8 oz.	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Maple Syrup, 4 tbsp. Grape Juice, 4 oz. Coffee/Tea, 8 oz.	Cornflakes, ½ cup with Non-Dairy Creamer, ½ cup Bagel, 1 Jam/Jelly, 2 tsp. or Cream Cheese, 2 tsp. Grapefruit, 1 half Coffee/Tea, 8 oz.
LUNCH	Sliced Turkey Sandwich (1): Turkey, 3 oz. Sourdough Bread, 2 slices Mayonnaise, 1 tbsp. Lettuce, 1 leaf Tangerine, 1 medium Regular/Diet Sprite®, 4 oz.	Hamburger (1): Lean Beef Patty, 3–4 oz., on a Hamburger Bun Lettuce, 1 leaf Chopped Onion, 1 tbsp. Sliced Mushrooms, ¼ cup Orange Sherbet, ¾ cup Iced Tea, 4 oz.	Grilled Salmon, 3 oz. Mexican Pasta, 1 cup** Corn Bread Roll, 1 Margarine, 1 tsp. Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Grapes, 15 medium Regular/Diet Sprite®, 4 oz.	Tuna Sandwich (1): Low Sodium/Water Packed Tuna, flaked, 4 oz. Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1 tbsp. Hard Bread Roll, 1 Apple, 1 medium Regular/Diet Root Beer, 4 oz.
DINNER	Broiled Garlic Shrimp, 3 oz.* Rice, ½ cup Asparagus, 4 spears Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Regular/Diet Root Beer, 4 oz.	Oven-Baked Chicken, 4 oz. Mashed Potatoes, ½ cup Margarine, 2 tsp. Carrots, ½ cup Applesauce, ½ cup Crystal Light®, 4 oz.	Salisbury Steak, 4 oz., with: Sliced Mushrooms, ½ cup Chopped Onions, ¼ cup Noodles, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Green Beans, ½ cup Jell-O®, ½ cup Lemonade, 4 oz.	Baked Pork Chop, 3 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Canned Apricots, 3 halves Iced Tea, 4 oz.
SNACK	Graham Crackers, 2 squares Canned Pears, 3 halves	Vanilla Wafers, 6 Fruit Cocktail, ½ cup	Baked Apple with: Sugar, 2 tsp. Margarine, 2 tsp. Cinnamon, 1 tsp.	Chili Wheat Treats, ½ cup*

*Living Well on Dialysis **Southwest Cookbook + Egg substitute/egg whites can be used in place of whole eggs





Two Week Sample Menu for **People on Hemodialysis** (Provides 80 grams of Protein) *(continued)*

	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Oatmeal, ½ cup made with: Non-Dairy Creamer, ½ cup Raisins, 2 tbsp. Coffee/Tea, 8 oz. <i>(Optional: add 1 tbsp. of protein powder to oatmeal)</i>	Mushroom Omelet: Eggs, 2+ Sliced Mushrooms, green peppers, onions, ¼ cup White Toast, 2 slices Margarine, 2 tsp. Cranberry Juice, 4 oz. Coffee/Tea, 8 oz.	English Muffin Sandwich (1): English Muffin, 1 Scrambled Eggs, 2+ Natural Cheese, 1 oz. Grapefruit, 1 half Coffee/Tea, 8 oz.
LUNCH	Egg Salad Sandwich (1): Hard Boiled Eggs: 2 whites, 1 yolk Mayonnaise, 1 tbsp. Chopped Celery, 1 tbsp Lettuce, 1 leaf White Toast, 2 slices Strawberries, ½ cup Regular/Diet 7-Up®, 4 oz.	Roast Beef Sandwich (1): Roast Beef, 3 oz. White Bread, 2 slices Mayonnaise, 1 tbsp. Green Beans, ½ cup Apple, 1 medium Regular/Diet Root Beer, 4 oz.	Lemon Curry Chicken Salad, 1 cup* Crackers, Unsalted Tops, 6 Sorbet, ¾ cup Iced Tea, 4 oz.
DINNER	Baked Cod, 4 oz. in: Margarine, 1 tsp. Lemon Juice, 2 tbsp Black Pepper, ½ tsp. Baked Potato (without skin), 1 small: Margarine, 2 tsp. Chives, 1 tsp. Mustard Greens, ½ cup Sourdough Bread, 1 slice Margarine, 1 tsp. Canned Peaches, ½ cup Iced Tea, 4 oz.	Chicken and Rice, 1 cup** Zucchini, ½ cup Canned Plums, ½ cup Regular/Diet Sprite®, 4 oz.	Beef Stew, ½ cup** Noodles, ½ cup Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Canned Pears, 2 halves Crystal Light®, 4 oz.
SNACK	Sorbet, ¾ cup Graham Crackers, 2 squares	Cheese Crisp, 1 made with: Flour Tortilla, 1, 6-inch Natural Cheese, 1 oz.	Cinnamon Crispies, 1 tortilla*

*Living Well on Dialysis **Southwest Cookbook *Egg substitute/egg whites can be used in place of whole eggs



**Two Week Sample Menu for People on Hemodialysis
(Provides 80 grams of Protein) (continued)**

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Fried Eggs, 2 White Toast, 2 slices Margarine, 2 tsp. Apple Juice, 4 oz. Coffee/Tea, 8 oz.	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Maple Syrup, 4 tbsp. Grapefruit, 1 half Coffee/Tea, 8 oz.	Oatmeal, ½ cup made with: Non-Dairy Creamer, 1/2 cup Maple Syrup, 1 tbsp. Cinnamon, ½ tsp. Blueberries, ½ cup White Toast, 1 slice Margarine, 1 tsp. Coffee/Tea, 8 oz.	Grape-Nuts® Flakes, ½ cup Non-Dairy Creamer, ½ cup White Toast, 1 slice Margarine, 1 tsp. Cranberry Juice, 4 oz. Coffee/Tea, 8 oz.
LUNCH	Chicken, 3 oz. on an Onion Roll with: Mayonnaise, 1 tbsp. Lettuce, 1 leaf Carrot Sticks, ½ cup Lemonade, 4 oz.	Grilled Cheese Sandwich (1): White Bread, 2 slices Natural Cheese, 2 oz. Celery Sticks, ½ cup Low Sodium Dressing, 1 tbsp. Vanilla Pudding (cooked, not instant), ½ cup Iced Tea, 4 oz.	Egg Salad Sandwich (1): Hard Boiled Eggs: 2 whites, 1 yolk Mayonnaise, 1 tbsp. White Toast, 2 slices Sliced cucumbers, ½ cup Apple, 1 medium Regular/Diet 7-Up®, 4 oz.	Tuna Pasta Salad: Shell Pasta, 1 cup Tuna, ½ cup Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1tbsp. Green Peppers, Radishes, sliced ½ cup Orange Sherbet, ¾ cup Iced Tea, 4 oz.
DINNER	Roast Beef, 3 oz. Mashed Potatoes, ½ cup Margarine, 1 tsp. Steamed Carrots & Peas, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Grapes, 15 medium Iced Tea, 4 oz.	Baked Pork Chop, 4 oz. Noodles, ½ cup Green Beans, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Applesauce, ½ cup Lemonade, 4 oz.	Scampi Linguini, ½ cup* Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Iced Tea, 4 oz.	Roast Beef, 3 oz. French Bread, 2 slices Margarine, 2 tsp. Sautéed Broccoli, ½ cup in: Olive Oil, ½ tsp. Thyme, ¼ tsp. Caramel Custard, ½ cup** Regular/Diet Root Beer, 4 oz.
SNACK	Vanilla Wafers, 6 Fruit Cocktail, ½ cup	Crackers, Unsalted Tops, 6 Flavored Cream Cheese, 2 oz.	Strawberry Ice Cream, ½ cup*	Graham Crackers, 2 squares Strawberries, ½ cup

*Living Well on Dialysis **Southwest Cookbook *Egg substitute/egg whites can be used in place of whole eggs





Two Week Sample Menu for **People on Hemodialysis** (Provides 80 grams of Protein) *(continued)*

	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Scrambled Eggs, 2+ Bagel, 1 Cream Cheese, 2 oz. Canned Peaches, 2 halves Coffee/Tea, 8 oz.	Cream of Wheat, ½ cup made with: 1% Milk, ½ cup Raisins, 2 tbsp. Sourdough Toast, 1 slice Margarine, 1 tsp. Coffee/Tea, 8 oz. <i>(Optional: add 1 tbsp. of protein powder to Cream of Wheat)</i>	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Maple Syrup, 4 tbsp. Sausage Patty, 1 oz.: Lean Ground Pork, 1 oz. Black Pepper & Ground Cumin Grape Juice, 4 oz. Coffee/Tea, 8 oz.
LUNCH	Sliced Turkey Sandwich (1): Turkey, 3 oz. Rye Bread, 2 slices Mayonnaise, 1 tbsp. Lettuce, 1 leaf Fruit Cocktail, ½ cup Regular/Diet Root Beer, 4 oz.	Roast Beef Sandwich (1/2): Roast Beef, 2 oz. White Bread, 1 slice Mayonnaise, ½ tbsp. Low Sodium Vegetable Soup, 1 cup Crackers, Unsalted Tops, 6 Fresh Fruit Salad, ½ cup Apples, Grapes, Mandarin Oranges Iced Tea, 4 oz.	Stir-Fried Chicken and Vegetables: Cubed Chicken, ½ cup Zucchini, Carrots, Onions Egg Fried Rice, 1 cup* Chinese Almond Cookies, 3 cookies* Apple Cider, 4 oz.
DINNER	Hamburger (1): Lean Beef Patty, 3-4 oz. on a Hamburger Bun Mustard, 1 tbsp. Catsup, 1 tbsp. Lettuce, 1 leaf Coleslaw, ½ cup Apple, 1 medium Iced Tea, 4 oz.	Broiled Skinless Chicken Breast, 3 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Dinner Roll, 1 Margarine, 1 tsp. Pineapple, ½ cup Regular/Diet Sprite®, 4 oz.	Broiled Halibut, 4 oz., in: Lemon Juice, 2 tbsp. Cilantro, 2 tbsp. Black Pepper, ¼ tsp. Steamed Green Beans, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Canned Apricots, 3 halves Lemonade, 4 oz.
SNACK	Unsalted Popcorn with Melted Margarine, 3 cups popped Cran-Raspberry Juice, ½ cup	Graham Crackers, 2 squares Canned Pears, 2 halves	Jell-O®, ½ cup, topped with Cool Whip®, 2 tbsp.

*Living Well on Dialysis **Southwest Cookbook +Egg substitute/egg whites can be used in place of whole eggs



Two Week Sample Menu for People on Hemodialysis with Diabetes (Provides 80 grams of Protein)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Scrambled Eggs, 2+ White Toast, 1 slice Margarine, 2 tsp. Cranberry Juice, 4 oz. Coffee/Tea, 8 oz.	Cheerios®, ½ cup with Non-Dairy Creamer, ½ cup White Toast, 1 slice Margarine, 1 tsp. Coffee/Tea, 8 oz.	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Low-Sugar Syrup, 2 tbsp. Grape Juice, 4 oz. Coffee/Tea, 8 oz.	Cornflakes, ½ cup with Non-Dairy Creamer, ½ cup Bagel, 1 Sugar-Free Fruit Spread, 2 tsp. or Cream Cheese, 2 tsp. Grapefruit, 1 half Coffee/Tea, 8 oz.
LUNCH	Sliced Turkey Sandwich (1): Turkey, 3 oz. Sourdough Bread, 2 slices Mayonnaise, 1 tbsp. Lettuce, 1 leaf Tangerine, 1 medium Diet Sprite®, 4 oz.	Hamburger (1): Lean Beef Patty, 3-4 oz., on a Hamburger Bun Lettuce, 1 leaf Chopped Onion, 1 tbsp. Sliced Mushrooms, ¼ cup Orange Sherbet, ¾ cup Iced Tea, 4 oz.	Grilled Salmon, 3 oz. Mexican Pasta, 1 cup** Corn Bread Roll, 1 Margarine, 1 tsp. Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Grapes, 15 medium Diet Sprite®, 4 oz.	Tuna Sandwich (1): Low Sodium/Water Packed Tuna, flaked, 4 oz. Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1 tbsp. Hard Bread Roll, 1 Apple, 1 medium Mineral Water, 4 oz.
DINNER	Broiled Garlic Shrimp, 3 oz.* Rice, ½ cup Asparagus, 4 spears Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Mineral Water, 4 oz.	Oven-Baked Chicken, 4 oz. Mashed Potatoes, ½ cup Margarine, 2 tsp. Carrots, ½ cup Applesauce, ½ cup Crystal Light®, 4 oz.	Salisbury Steak, 4 oz., with: Sliced Mushrooms, ½ cup Chopped Onions, ¼ cup Noodles, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Green Beans, ½ cup Jell-O®, ½ cup Sugar-Free Lemonade, 4 oz.	Baked Pork Chop, 3 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Canned Apricots, 3 halves Iced Tea, 4 oz.
SNACK	Graham Crackers, 2 squares Canned Pears, 2 halves	Vanilla Wafers, 6 Fruit Cocktail, ½ cup	Unsalted Popcorn with Melted Margarine, 3 cups popped	Chili Wheat Treats, ½ cup*

*Living Well on Dialysis **Southwest Cookbook *Egg substitute/egg whites can be used in place of whole eggs





Two Week Sample Menu for People on Hemodialysis with Diabetes (Provides 80 grams of Protein)(continued)

	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	<p>Oatmeal, ½ cup made with: Non-Dairy Creamer, ½ cup Raisins, 2 tbsp. Coffee/Tea, 8 oz. <i>(Optional: add 1 tbsp. of protein powder to oatmeal)</i></p>	<p>Mushroom Omelet: Eggs, 2+ Sliced Mushrooms, green peppers, onions, ¼ cup White Toast, 2 slices Margarine, 2 tsp. Cranberry Juice, 4 oz. Coffee/Tea, 8 oz.</p>	<p>English Muffin Sandwich (1): English Muffin, 1 Scrambled Eggs, 2+ Natural Cheese, 1 oz. Grapefruit, 1 half Coffee/Tea, 8 oz.</p>
LUNCH	<p>Egg Salad Sandwich (1): Hard Boiled Eggs: 3 whites, 1 yolk Mayonnaise, 1 tbsp. Chopped Celery, 1 tbsp Lettuce, 1 leaf White Toast, 2 slices Strawberries, ½ cup Diet 7-Up®, 4 oz.</p>	<p>Roast Beef Sandwich (1): Roast Beef, 3 oz. White Bread, 2 slices Mayonnaise, 1 tbsp. Green Beans, ½ cup Apple, 1 medium Mineral Water, 4 oz.</p>	<p>Lemon Curry Chicken Salad, 1 cup* Crackers, Unsalted Tops, 6 Sorbet, ¾ cup Iced Tea, 4 oz.</p>
DINNER	<p>Baked Cod, 4 oz. in: Margarine, 1 tsp. Lemon Juice, 2 tbsp Black Pepper, ½ tsp. Baked Potato (without skin), 1 small: Margarine, 2 tsp. Chives, 1 tsp. Mustard Greens, ½ cup Sourdough Bread, 1 slice Margarine, 1 tsp. Canned Peaches, ½ cup Iced Tea, 4 oz.</p>	<p>Chicken and Rice, 1 cup** Zucchini, ½ cup Canned Plums, ½ cup Diet Sprite®, 4 oz.</p>	<p>Beef Stroganoff, ½ cup Noodles, ½ cup Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Canned Pears, 2 halves Crystal Light®, 4 oz.</p>
SNACK	<p>Sorbet, ¾ cup Graham Crackers, 2 squares</p>	<p>Cheese Crisp, 1 made with: Flour Tortilla, 1, 6-inch Natural Cheese, 1 oz.</p>	<p>Angel Food Cake, 1/12 cake</p>

*Egg substitute/egg whites can be used in place of whole eggs

**Southwest Cookbook

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Two Week Sample Menu for People on Hemodialysis with Diabetes (Provides 80 grams of Protein)(continued)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
BREAKFAST	Fried Eggs, 2 White Toast, 2 slices Margarine, 2 tsp. Apple Juice, 4 oz. Coffee/Tea, 8 oz.	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Low-Sugar Syrup, 2 tbsp. Grapefruit, 1 half Coffee/Tea, 8 oz.	Oatmeal, ½ cup made with: Non-Dairy Creamer, 1/2 cup Sugar Substitute to taste Cinnamon, ½ tsp. Blueberries, ½ cup White Toast, 1 slice Margarine, 1 tsp. Coffee/Tea, 8 oz.	Grape-Nuts® Flakes, ½ cup Non-Dairy Creamer, ½ cup White Toast, 1 slice Margarine, 1 tsp. Cranberry Juice, 4 oz. Coffee/Tea, 8 oz.
LUNCH	Chicken, 3 oz. on an Onion Roll with: Mayonnaise, 1 tbsp. Lettuce, 1 leaf Carrot Sticks, ½ cup Sugar-Free Lemonade, 4 oz.	Grilled Cheese Sandwich (1): White Bread, 2 slices Natural Cheese, 2 oz. Celery Sticks, ½ cup Low Sodium Dressing, 1 tbsp. Canned Plums, ½ cup Iced Tea, 4 oz.	Egg Salad Sandwich (1): Hard Boiled Eggs: 2 whites, 1 yolk Mayonnaise, 1 tbsp. White Toast, 2 slices Sliced cucumbers, ½ cup Apple, 1 medium Diet 7-Up®, 4 oz.	Tuna Pasta Salad: Shell Pasta, 1 cup Tuna, ½ cup Mayonnaise, 1 tbsp. Chopped Onions, 1 tbsp. Chopped Celery, 1 tbsp. Green Peppers, Radishes, sliced ¼ cup Orange Sherbet, ¾ cup Iced Tea, 4 oz.
DINNER	Roast Beef, 3 oz. Mashed Potatoes, ½ cup Margarine, 1 tsp. Steamed Carrots & Peas, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Grapes, 15 medium Iced Tea, 4 oz.	Baked Pork Chop, 4 oz. Noodles, ½ cup Green Beans, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Applesauce, ½ cup Sugar-Free Lemonade, 4 oz.	Scampi Linguini, ½ cup* Mixed Green Salad, ½ cup Oil and Vinegar Dressing: Salad/Olive Oil, 2 tsp. Vinegar, 1 tsp. Dinner Roll, 1 Margarine, 1 tsp. Pineapple Tidbits, ½ cup Iced Tea, 4 oz.	Roast Beef, 3 oz. French Bread, 2 slices Margarine, 2 tsp. Sautéed Broccoli, ½ cup in: Olive Oil, ½ tsp. Thyme, ⅓ tsp. Diet Jell-O®, ½ cup, topped with Cool Whip®, 2 tbsp. Mineral Water, 4 oz.
SNACK	Vanilla Wafers, 6 Fruit Cocktail, ½ cup	Crackers, Unsalted Tops, 6 Flavored Cream Cheese, 2 oz.	Quick 'N Easy Chocolate Ice Cream, ½ cup***	Graham Crackers, 2 squares Strawberries, ½ cup

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Two Week Sample Menu for People on Hemodialysis with Diabetes (Provides 80 grams of Protein)(continued)

	THURSDAY	FRIDAY	SATURDAY	
BREAKFAST	Scrambled Eggs, 2+ Bagel, 1 Cream Cheese, 2 oz. Canned Peaches, 2 halves Coffee/Tea, 8 oz.	Cream of Wheat, ½ cup made with: 1% Milk, ½ cup Raisins, 2 tbsp. Sourdough Toast, 1 slice Margarine, 1 tsp. Coffee/Tea, 8 oz. <i>(Optional: add 1 tbsp. of protein powder to Cream of Wheat)</i>	French Toast, 2 slices: Eggs, 2+ White Bread, 2 slices Margarine, 2 tsp. Low-Sugar Syrup, 2 tbsp. Sausage Patty, 1 oz.: Lean Ground Pork, 1 oz. Black Pepper & Ground Cumin Grape Juice, 4 oz. Coffee/Tea, 8 oz.	
LUNCH	Sliced Turkey Sandwich (1): Turkey, 3 oz. Rye Bread, 2 slices Mayonnaise, 1 tbsp. Lettuce, 1 leaf Fruit Cocktail, ½ cup Mineral Water, 4 oz.	Roast Beef Sandwich (1/2): Roast Beef, 2 oz. White Bread, 1 slice Mayonnaise, ½ tbsp. Low Sodium Vegetable Soup, 1 cup Crackers, Unsalted Tops, 6 Fresh Fruit Salad, ½ cup Apples, Grapes, Mandarin Oranges Iced Tea, 4 oz.	Stir-Fried Chicken and Vegetables: Cubed Chicken, ½ cup Zucchini, Carrots, Onions Egg Fried Rice, 1 cup* Chinese Almond Cookies, 3 cookies* Mineral Water, 4 oz.	
DINNER	Hamburger (1): Lean Beef Patty, 3-4 oz. on a Hamburger Bun Mustard, 1 tbsp. Catsup, 1 tbsp. Lettuce, 1 leaf Coleslaw, ½ cup Apple, 1 medium Iced Tea, 4 oz.	Broiled Skinless Chicken Breast, 3 oz. Rice, ½ cup Steamed Broccoli, ½ cup Margarine, 1 tsp. Dinner Roll, 1 Margarine, 1 tsp. Pineapple, ½ cup Diet Sprite®, 4 oz.	Broiled Halibut, 4 oz., in: Lemon Juice, 2 tbsp. Cilantro, 2 tbsp. Black Pepper, ¼ tsp. Steamed Green Beans, ½ cup Dinner Roll, 1 Margarine, 1 tsp. Canned Apricots, 3 halves Sugar-Free Lemonade, 4 oz.	
SNACK	Unsalted Popcorn with Melted Margarine, 3 cups popped Cran-Raspberry Juice + Diet 7-Up®, ¼ cup each	Graham Crackers, 2 squares Canned Pears, 2 halves	Diet Jell-O®, ½ cup, topped with Cool Whip®, 2 tbsp.	

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2-week Menu Recipes

Pork and Egg Fried Rice

Servings: 6 (1 cup each)

Ingredients :

3 tbsp. oil
2 cloves garlic, minced
1/4 cup chopped green onions
1/2 cup cooked chopped pork
4 cups cooked rice
1 tsp. low-sodium soy sauce
1/2 cup frozen green peas
1/4 tsp. dry mustard
6 eggs or 1 1/2 cups low cholesterol egg substitute, scrambled and chopped

Directions:

Heat oil in large skillet over moderate heat. Add garlic and cook until soft. Stir in onions and cook for 2 minutes. Add rice, pork, and soy sauce. Stir and cook for 3 minutes. Add remaining ingredients; cook until heated thoroughly.

Nutrients: (1 serving)

Calories 270
Phosphorus 173 mg
Fat 8 g
Potassium 202 mg
Protein 12 g
Sodium 118 mg

Renal and Renal Diabetic Exchanges:

2 starch
1 meat
1 fat
1 low potassium vegetable

(source: Living Well on Dialysis Cookbook)

Mexican Pasta

Servings: 5 (1 cup each)

Ingredients :

5 ounces fideo (vermicelli) pasta
(break into 1-inch pieces)
1 tbsp. oil
2 tbsp. onion (chopped)
1/4 cup tomato sauce
1 1/2 cups water

Directions:

Heat oil in skillet and fry pasta until golden. Add onion and saute. Stir in tomato sauce and water. Cover and cook over low heat until liquid is absorbed. This traditional dish makes an ideal substitute for beans in the diet. It is easy to prepare, complements many foods, and is low in potassium, phosphorus, and sodium.

Nutrients: (1 serving)

Calories 84
Phosphorus 19 mg
Fat 5 g
Potassium 66 mg
Protein 1 g
Sodium 76 mg

Exchanges:

1 Starch
1 Fat

(source: Southwest Cookbook)





2-week Menu Recipes (*continued*)

Lemon Curry Chicken Salad

Servings: 4 (1 cup per serving)

Ingredients :

1/4 cup oil
4 tbsp. frozen lemonade concentrate, thawed
1/4 tsp. ground ginger
1/4 tsp. curry powder
1/8 tsp. garlic powder
1 1/2 cups cooked, diced chicken
1 1/2 cups grapes, halved
1/2 cup sliced celery

Directions:

In a large bowl, combine oil, lemonade concentrate, and spices. Add remaining ingredients and toss lightly. Chill.

Nutrients: (1 serving)

Calories 307
Phosphorus 119 mg
Fat 20 g
Potassium 235 mg
Protein 17 g
Sodium 57 mg

Renal and Renal Diabetic Exchanges:

2 meat
1 starch
2 fat

(source: Living Well on Dialysis Cookbook)

Beef Stew

Servings: 10

Ingredients :

1 1/2 pounds beef chuck, chopped
10 cups water
1 clove garlic, chopped
2 carrots cut into bite-size pieces
1 potato cut into bite-size pieces
3 stalks celery cut into bite-size pieces
1/2 pound cabbage, cut into bite-size pieces
1/2 cup each of fresh onion
and fresh cilantro, chopped
1/2 cup low-salt tomato sauce

Directions:

Place meat, water, and garlic in a large pot and simmer for about 1 hour. Add remaining ingredients and simmer until vegetables are tender.

Note: For lower potassium, do not drink broth.

Nutrients:

Calories 261
Phosphorus 176 mg
Fat 16 g
Potassium 413 mg
Protein 20 g
Sodium 142 mg

Exchanges:

2 meat
3 vegetable

(source: Southwest Cookbook)



2-week Menu Recipes (*continued*)

Scampi Linguini

Servings: 4 (1/2 cup per serving)

Ingredients :

1 tbsp. olive oil
1 clove garlic, minced
1/2 pound shrimp, peeled and cleaned
1/4 cup dry white wine
1 tbsp. lemon juice
1/2 tsp. basil
1 tbsp. chopped fresh parsley
4 ounces dry linguini

Directions:

Heat oil in large skillet. Add garlic and shrimp. Cook and stir until shrimp turns pink. Add wine, lemon juice, basil, and parsley. Cook 5 minutes longer. Meanwhile, boil linguini in unsalted water until tender. Drain. Serve the linguini topped with the shrimp and any remaining liquid.

Nutrients: (1 serving)

Calories 208
Phosphorus 167 mg
Fat 5 g
Potassium 189 mg
Protein 15 g
Sodium 86 mg

Renal Exchanges:

2 meat	<i>Renal Diabetic Exchanges:</i> 2 meat
1 starch	1 starch
1/2 high calorie	1 low potassium fruit

(source: Living Well on Dialysis Cookbook)

Broiled Garlic Shrimp

Servings: 5 (2 1/2 ounces shrimp per serving)

Ingredients :

1 pound shrimp in shells
1/2 cup unsalted margarine, melted
2 tsp. lemon juice
2 tbsp. chopped onion
1 clove garlic, minced
1/8 tsp. pepper
1 tbsp. fresh parsley, chopped

Directions:

Preheat broiler. Wash, peel, and dry shrimp. Pour margarine in a shallow baking pan and add lemon juice, onion, garlic, and pepper. Add shrimp and toss to coat. Broil for 4 minutes, turn and broil for 3 more minutes. Serve on platter with strained pan juices. Sprinkle with parsley.

Nutrients:

Calories 264
Phosphorus 192 mg
Fat 20 g
Potassium 189 mg
Protein 19 g
Sodium 135 mg

Renal and Renal Diabetic Exchanges:

2 meat
1 starch
1 low potassium vegetable

(source: Living Well on Dialysis Cookbook)





2-week Menu Recipes (*continued*)

Chicken and Rice

Servings: 8

Ingredients :

4 split or 2 whole chicken breasts
1/2 tsp. garlic salt
1 1/2 cups white rice
1/2 cup onion, chopped
oil for cooking
8 ounce can tomato sauce
1/2 cup fresh cilantro, chopped

Directions:

Boil chicken in water with garlic salt. Bone and shred the chicken after it is done. Brown rice and onion in a little oil until rice is toasted. Add chicken, tomato sauce, and cilantro. Add enough water to cover the rice plus 1 1/2 inches. Mix well. Add more garlic salt if desired. Cook until rice is done. Note: For lower sodium, reduce garlic salt.

Nutrients: (1 serving)

Calories 152
Phosphorus 107 mg
Fat 3 g
Potassium 240 mg
Protein 16 g
Sodium 347 mg

Exchanges:

2 meat
1 starch

(source: Southwest Cookbook)

Caramel Custard

Servings: 8 (1/2 cup per serving)

Ingredients :

4 eggs
1 1/4 cups milk
10 ounces sweetened condensed milk
1 tsp. vanilla
1 cup sugar

Directions:

Beat together eggs, both milks, and vanilla. Melt sugar in a large pan, being careful not to let it burn or scorch. Carefully pour egg mixture into the pan. Cook over water like a double boiler and bake at 350° F for 50 minutes to 1 hour or until set. This dish is rather high in phosphorus and potassium and is best for people who have trouble taking in other sources of protein. It is also helpful for those who have problems chewing or swallowing.

Warning: This dish is not for people with diabetes.

Nutrients:

Calories 308
Phosphorus 202 mg
Fat 8 g
Potassium 268 mg
Protein 9 g
Sodium 115 mg

Exchanges:

1 milk
1 fat
1 starch
2 high calorie

(source: Southwest Cookbook)



2-week Menu Recipes (*continued*)

Chinese Almond Cookies

Servings: 24 (3 cookies per serving)

Ingredients :

1 cup unsalted margarine, softened
1 cup sugar
1 egg
3 cups flour
1 tsp. baking soda
1 tsp. almond extract

Directions:

In a medium mixing bowl, cream margarine and sugar. Add egg and beat well. Sift dry ingredients and add to creamed mixture. Add almond extract and mix well. Roll into balls about 3/4 inch in diameter. Press a small hole in the middle of each cookie. Bake at 400° F for 10 to 12 minutes, until cookies are golden brown around the edges.

Nutrients: (1 serving)

Calories 158
Phosphorus 17 mg
Fat 8 g
Potassium 18 mg
Protein 2 g
Sodium 99 mg

Renal Exchanges:

1 starch
1 fat

Renal Diabetic Exchanges:

1 starch
2 fat

(source: Living Well on Dialysis Cookbook)

Chili Wheat Treats

Servings: 8 (1/2 cup per serving)

Ingredients :

1/2 cup unsalted margarine
1 tbsp. chili powder
1/2 tsp. ground cumin
1/2 tsp. garlic powder
dash cayenne pepper
4 cups spoon-size shredded wheat

Directions:

Preheat oven to 300° F. Melt margarine in a 10 x 15-inch baking pan. Stir in spices. Add cereal and toss to coat evenly. Bake for 15 minutes or until crisp. Store in a covered container.

Nutrients: (1 serving)

Calories 184
Phosphorus 82 mg
Fat 12 g
Potassium 104 mg
Protein 3 g
Sodium 107 mg

Renal and Renal Diabetic Exchanges:

1 starch
1 low potassium vegetable
2 fat

(source: Living Well on Dialysis Cookbook)





2-week Menu Recipes (continued)

Cinnamon Crispies

Servings: 4 (1 tortilla per serving)

Ingredients :

1 tbsp. hot water
1/2 tsp. vanilla
1 1/2 tbsp. sugar
1 tsp. cinnamon
4 6-inch flour tortillas
2 tbsp. unsalted margarine, melted

Directions:

Combine water and vanilla in a small bowl; stir well. Combine sugar and cinnamon; stir well. Brush both sides of tortillas with margarine, and then brush each side with water mixture. Sprinkle each side with sugar mixture.

Place tortillas on a wire rack in a jelly roll pan. Bake at 400° F for 6 1/2 minutes or until lightly browned.

Nutrients: (1 serving)

Calories 168
Phosphorus 26 mg
Fat 8 g
Potassium 35 mg
Protein 3 g
Sodium 83 mg

Renal and Renal Diabetic Exchanges:

1 starch
2 fat

(source: Living Well on Dialysis Cookbook)

Strawberry Ice Cream

Servings: 6 (1/2 cup each)

Ingredients :

1 10 ounce package frozen, sweetened strawberries
1 tbsp. lemon juice
1 cup crushed ice
3/4 cup non-dairy coffee creamer
1/2 cup sugar
Few drops of red food coloring

Directions:

Thaw strawberries just until they break into chunks. Place all ingredients in a blender. Blend until smooth and sugar is dissolved. Pour into a covered dish or ice cream maker. Freeze until firm.

Nutrients: (1 serving)

Calories 144
Phosphorus 25 mg
Fat 3 g
Potassium 108 mg
Protein 1 g
Sodium 25 mg

Renal and Renal Diabetic Exchanges:

1 starch
1 low potassium fruit

(source: Living Well on Dialysis Cookbook)



2-week Menu Recipes (*continued*)

Quick 'N Easy Chocolate Ice Cream

Servings: 6

Ingredients :

2 cups Cool Whip®, thawed
1/4 cup Hershey's® chocolate flavored syrup, chilled

Directions:

Fold chilled chocolate syrup gently into thawed Cool Whip®. Refreeze in container or individual covered serving dishes.

Exchanges:

1/2 fruit
1 calorie booster

(source: Creative Cooking for Renal Diabetic Diets)

Beef Stroganoff

Servings: 6 (*1/2 cup per serving*)

Ingredients :

2 cups fresh sliced mushrooms
3/4 cup sliced onions
3 tbsp margarine
1-1/2 lbs round steak
1 cup water
1 tsp dry mustard
1/8 tsp pepper
2 tbsp flour
1/4 cup water
1 cup sour cream

Directions:

Saute mushrooms and onions in large skillet in margarine until soft; remove from skillet and set aside. Slice the meat into strips the size of a pencil, 3 to 4 inches long, and brown in skillet. Reduce heat to simmer. Return vegetables to skillet and add 1 cup water, dry mustard and pepper. Cover and simmer 45 minutes or until meat is tender, adding more water if necessary. Combine flour with 1/4 cup water, stir until smooth. Stir into meat mixture and cook until sauce thickens, about 2 minutes. Reduce heat to low. Just before serving, stir in sour cream. Serve over hot buttered noodles. Makes six 1/2 cup servings.

Exchanges:

3 ounces meat
1 vegetable

(source: Creative Cooking for Renal Diabetic Diets)





Take the Kidney Quiz!

You'll see how much you're learning if you take our quick kidney quiz. It's just 10 questions. How about it? (*Answers are on page 9-2.*)

- 1. The primary source of food energy for our bodies is:**
 - a) Protein
 - b) Carbohydrates
 - c) Vitamins
 - d) Fat
- 2. Unsaturated fats (liquid at room temperature) are better for you because:**
 - a) They have fewer calories
 - b) They are cheaper to buy
 - c) They are heart-healthy
 - d) They are more easily removed by dialysis
- 3. Which of the following is a good source of high quality protein?**
 - a) Chicken
 - b) Dried beans
 - c) Tofu
 - d) Oyster crackers
- 4. A good way to tell if you are getting enough protein is:**
 - a) You are losing weight
 - b) Your hematocrit is greater than 33%
 - c) Your albumin level is greater than 4.0 g/dL
 - d) You crave eggs
- 5. When you are on dialysis, too much potassium in your diet can:**
 - a) Loosen your teeth
 - b) Stop your heart
 - c) Cause bone disease
 - d) Change your eyesight
- 6. Renal bone disease occurs when too much phosphorus in the blood pulls what mineral from the bone?**
 - a) Zinc
 - b) Calcium
 - c) Iron
 - d) Potassium
- 7. Sodium (salt) is limited in the standard in-center HD diet because:**
 - a) Salt makes you thirsty, and may raise your stroke and heart disease risk
 - b) Salt makes you forgetful
 - c) Salt makes you eat too much protein
 - d) Salt makes you sleepy
- 8. One way to keep your phosphorus in the safe range is to eat less phosphorus. The other way is to:**
 - a) Record your daily food and beverage intake
 - b) Track your daily weight
 - c) Take phosphate binders with every meal and snack
 - d) Increase your vitamin intake
- 9. If you want to eat a food that is high in potassium, phosphorus, and/or sodium, which of the following is a good idea:**
 - a) Find a substitute that you don't like much
 - b) Eat lots of the food and ignore your food limits
 - c) Eat a smaller serving of the food as an occasional treat
 - d) Avoid the food all the time
- 10. If someone is on dialysis, taking in too much fluid can cause:**
 - a) Swelling, trouble breathing, heart damage, headaches, and high blood pressure
 - b) Headaches, itchy skin, hair loss, and hearing problems
 - c) Sinus problems, bad breath, ringing in the ears, and body odor
 - d) Weight loss, slurred speech, and uncontrolled sneezing



Additional Resources

In addition to the free Life Options materials you can find at www.lifeoptions.org, the resources below may help you learn more about the topics in this module of Kidney School.

PLEASE NOTE: Life Options does not endorse these materials. Rather, we believe you are the best person to choose what will meet your needs from these or other resources you find. Please check with your local library, bookstore, or the internet to find these items.

Kidney disease cookbooks and recipes:

- 1 ***Cooking for David: A Culinary Dialysis Cookbook***, by Sara Colman, RD, CDE and Dorothy Gordon, BS, RN (Culinary Kidney Cooks, July 2000, ISBN-13: 978-0970161703)
This guide for people with kidney disease comes in a 3-ring binder with a spillproof cover. This up-to-date guide is filled with information on food composition, tips, portions, menus, and easy-to-follow recipes. To order, visit www.culinarykidneycooks.com/order.htm or call (714) 842-4684.
- 2 ***The Gourmet Renal Cookbook (2nd Ed.)***, developed by the patients and health care professionals of the Sol Goldman Renal Therapy Center Dialysis Unit at Lenox Hill Hospital. Features include food value information and professionally-tested recipes. To order, call (212) 434-3266.
- 3 ***The Kidney Helper[®] Cookbook***, by Bob and Nathalie Lutfy, created with Mary Pinto, RD
This large-print cookbook features easy-to-prepare recipes, with food values listed. The book includes tips, many renal resources, plus metric conversion charts. To order, visit amazon.com.
- 4 ***The Renal Family Cookbook***, developed with the cooperation of the medical community and kidney patient population across Canada. The book features a variety of unique recipes that conform to a kidney patient meal plan. To order, visit <http://www.multi-med.com/renal-family-cookbook>, or call toll-free (888) 834-1001.
- 5 ***The Renal Gourmet: Or What to Eat When Your Kidneys Quit***, by Mardelle Peters
This cookbook, written by a kidney patient and analyzed by renal dietitians and a nephrologist, features recipes, information on meal planning and cooking, renal nutrition tips for non- and diabetic dialysis diets, and more. To order, visit www.kidney-cookbook.com/ordering/index.htm.
- 6 ***Kidney Kitchen***, by the NKF. An online resource of recipes designed for diabetic, CKD, and dialysis diets. Available for free, online at www.kidney.org/patients/kidneykitchen.





Food value and nutrition guides:

- 1 ***Bowes & Church's Food Values of Portions Commonly Used (19th Ed.)***, by Jean A. T. Pennington, PhD, RD and Judith Spungen (Lippincott Williams & Wilkins, 2010, ISBN-13: 978-0781781343)
This classic guide to nutrition has been around since 1937. Now completely updated, this easy-to-reference guide features information on the nutritional value of foods and lists more than 8,500 common foods, organized by food groups.
- 2 ***National Nutrient Database***, by the USDA. This database has nutrient lists for foods and you can look for specific nutrients like calcium, phosphorus, thiamine, B vitamins, etc. Lists are available in alphabetical order or by the nutrient content from highest to lowest. Visit the website at <http://ndb.nal.usda.gov/>.

Other resources:

- 1 ***Help, I Need Dialysis!*** by Dori Schatell, MS, and Dr. John Agar (Medical Education Institute, 2012, http://www.lifeoptions.org/help_book, ISBN-13: 978-1937886004)
Easy to read, fully referenced book covers the lifestyle impact of each type of dialysis—including diet and fluid limits. . . for each type of dialysis.
- 2 ***AAKP Nutrition Counter: A Reference for the Kidney Patient***, by the American Association of Kidney Patients (AAKP). If you would like more information, call (800) 749-2257 or download a copy from their website at www.aakp.org/brochures/nutrition-counter/. Other renal diet resources are available at www.aakp.org/aakp-library/dsp_dialysisCats.cfm?cat=7.
- 3 ***Eat Right to Feel Right on Hemodialysis***, by the National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC). If you would like more information, please call toll-free (800) 891-5390, e-mail nkudic@info.niddk.nih.gov, or visit their website at kidney.niddk.nih.gov/kudiseases/pubs/eatright/index.htm. (Also available in Spanish.)

Websites:

- 1 The *DaVita Diet Helper* will let you plan meals for a day or a week on any type of dialysis. Easy and powerful—and free at www.davita.com/diethelper.
- 2 Kidney Helper Potassium and Phosphorus Guides at <http://www.medhelpexpress.com/products/Kidney-HELPER-Potassium-and-Phosphorus-Guides-%252d-Combo-Pack.html>.
- 3 Renal Diet Menu Maker at www.andrew.cmu.edu/~sorensen/.
- 4 The Well-Nourished Patient: links from RenalWeb at www.renalweb.com/topics/out_nutrition/nutrition.htm.
- 5 The National Kidney Foundation has a diet and nutrition info at http://www.kidney.org/atoz/atozTopic_Nutrition-Diet.cfm, including the Kidney Kitchen with recipes for diabetic, CKD, and dialysis diets.



Please Note

Use of Kidney School does not replace the need to talk with your health care team about your care and your options.

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