Brigham Young University

Renal Diet

After considering all the complications of dialysis sample menu and hand outs were made in order to potentially teach a patient the importance of a low potassium, phosphorus, and sodium diet while undergoing dialysis, and to help them select foods that meet these requirements.

Sample Dialysis Diet Menu

Breakfast

2 slices toast with 4 teaspoons butter**
Scrambled eggs** (2 egg whites, 1 whole egg)

Morning Snack

1 medium apple
1.5 ounces cream cheese

Lunch

1 cup alfredo**, with ground beef
1 slice garlic bread**

Afternoon Snack

2 deviled eggs**

Dinner

4.5 ounces meatloaf
½ cup mashed potatoes* made with whole milk
4 teaspoons butter**
¼ cup broccoli*, cooked
1 large brownie with non-dairy whipped topping

Fluids

3.5 cups of fluid come from food in this diet. An additional 2.7 cups of water can be dispersed throughout the day. To quench thirst suck on sour candies, lemonade ice cubes, or chew Quench gum.

* Leach out potassium by soaking in large amounts of water before cooking, and then cook in five times the normal amount of water and drain off liquid.

** Make with low sodium options, but do not use salt substitutes containing potassium. Use herbs and seasonings to add flavor without adding sodium.

Phosphorus

What is it?

Phosphorus is a mineral that is part of bone structure, muscle contraction, nerve conduction, and normal kidney function.

What goes wrong?

In kidney failure and dialysis the body is not able to get rid of phosphorus, which causes it to build up in the blood. This can lead to calcification of soft tissues, itching, and bone disease.

How does diet help?

Because phosphorus cannot get out of the blood once it is in, it is important to limit intake. This can be done by monitoring and limiting high phosphorus foods as well as taking phosphorus binders at meals. Keep daily intake at about 1 high, 2-3 medium and 2-3 low phosphorus foods. Talk with your dietitian to create a diet plan best for you and talk with your doctor about phosphorus binders.

Dairy

Low	Medium	High
2.3 oz. Go-Gurt (60 mg)	1 cup soy yogurt (100 mg)	1 cup milk (273 mg)
1 oz. Neufchatela cheese (40 mg)	1 oz. camembert cheese (95 mg)	1 cup soy milk (130 mg)
1 TBS parmesan cheese (40 mg)	1 oz. fetta cheese (95 mg)	1 oz. American cheese (144 mg)
1 oz. soy cheese (60 mg)	1 oz fontina cheese (95 mg)	1 cup cottage cheese (360 mg)

Protein

Low	Medium	High
1 large egg white (5 mg)	1 large egg (85 mg)	3 oz. turkey breast (160 mg)
5 canned anchovies (50 mg)	3 oz. orange roughy (140 mg)	3 oz. chicken breast (150 mg)
	3 oz. smoked whitefish (112 mg)	3 oz. beef patty (170 mg)

Fruits*

Low	Medium	High
1 cup apple juice (50 mg)	5 dried pears (100 mg)	1 cup dried peaches (190 mg)
1 medium apple (15 mg)	1 cup prunes (75 mg)	1 cup dried mixed fruit (200 mg)
1 cup raspberries (40 mg)		1 peach (190 mg)

*Many fruits and vegetables are low in phosphorus

Vegetables*

Low	Medium	High
1 cup acorn squash (50 mg)	1 cup asparagus (115 mg)	1 cup sundried tomato (153 mg)
1 cup lettuce (11 mg)	1 cup hearts of palm (95 mg)	1 cup black beans (241 mg)
1 cup zucchini squash (56 mg)	2.8 oz. artichoke (108 mg)	1 cup brocoli (121 mg)

Grains

Low	Medium	High
1 slice banana bread (35 mg)	1 large bagel (105 mg)	2 oz. biscuit, butter milk (205 mg)
1 cup croutons (35 mg)	1 slice french toast (82 mg)	2 oz. cornbread (226 mg)
1 slice wheat bread (25 mg)	6 crackers w/cheese filling (112 mg)	1 English muffin, ww (180 mg)

Tips for reducing phosphorus

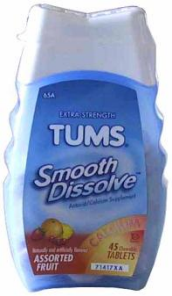
* Get protein from sea food, eggs, and chicken
* Limit milk, nuts, chocolate, and organ meats
* Take Tums with meals

More Resources

http://www.davita.com/phosphoruschallenge/

http://www.eatright.org/Shop/Product.aspx?id=4858

http://www.case.edu/med/ccrhd/phosfoods/



Potassium

What is it?

Potassium is a mineral important for nerve conduction that is found in many fruits and vegetables.

What goes wrong?

When on dialysis, potassium builds up in the body between treatments. Increased potassium levels may cause heart and neurological problems, making it important to regulate potassium.

How does diet help?

By restricting the intake of potassium rich foods, patients on dialysis can greatly decrease the buildup of potassium between treatments.

Dairy

Low	Medium	High
2.3 oz. Go-Gurt (95 mg)	1 cup soy milk (299 mg)	1 cup milk (370 mg)
1 cup soy yogurt (123 mg)	1 cup cottage cheese (194 mg)	3 oz. powdered milk (1552 mg)
1 oz. sour cream (45 mg)	1 oz goat cheese (150 mg)	1 cup fruit yogurt (440 mg)

Protein

Low	Medium	High
6 oysters (150 mg)	3 oz. chicken (195 mg)	3 oz trout (380 mg)
3 oz. corned beef (123 mg)	3 oz turkey (230 mg)	1 cup soy milk (130 mg)
3 oz. beef tripe (36 mg)	3 oz canned tuna (280 mg)	3 oz. beef chuck (309 mg)

Vegetables

Low	Medium	High
1 cup alfalfa sprouts (26 mg)	½ cup boiled beets (260 mg)	1 lrg. Parsnip (580 mg)
½ cup water chesnuts (80 mg)	1 cup green peas (211 mg)	1 cup mashed potatoes (700 mg)
1 cup canned mushrooms (140 mg)	1 cup mixed vegetables (299 mg)	1 cup sweet potatoes (530 mg)
1 cup sweet pepper (97 mg)	1 cup mushrooms (220 mg)	1 cup corn (347 mg)

Fruits

Low	Medium	High
1 medium apple (145 mg)	1 cup blackberries (230 mg)	1 cup grapefruit juice (450 mg)
1 clementine	1 cup cherries	1 avocado

(130 mg)	(240 mg)	(877 mg)
1 fig (116 mg)	4 dried dates (210 mg)	1 cup grapefruit (420 mg)
1 lime (70 mg)	1 cup fruit cocktail (225 mg)	1 cup honeydew (400 mg)

Grains

Low	Medium	High
1 small bagel (145 mg)	1 slice bread (150 mg)	1 lrg. oat bran muffin (700 mg)
1 biscuit (60 mg)	4 oz. fresh pasta (230 mg)	
2 oz. corn bread (75 mg)	1 English muffin (150 mg)	

Tips for reducing potassium

* Soak fruits and vegetables in water before cooking
* Cook produce in 5 times the normal amount of water
* Do not use sodium substitutes

More Resources

http://www.ucsfhealth.org/education/low_potassium_diet/

http://marshfieldclinic.kramesonline.com/HealthSheets/3,S,83184?PrinterFriendly=true

Sodium

What is it?

Sodium is a mineral important for nerve conduction that is found in many different foods. It is especially high in processed snack foods and canned soups.

What goes wrong?

When on dialysis patients have strict fluid restrictions because their kidneys are not able to filter out fluid on a regular basis. Sodium causes increased thirst, which makes it difficult for patients on dialysis who cannot have many liquids. To control the thirst mechanism, sodium must be decreased.

How does diet help?

By decreasing foods high in sodium, it is much easier for patients to follow the fluid restrictions recommended for them while on dialysis because they will have decreased thirst.

Dairy

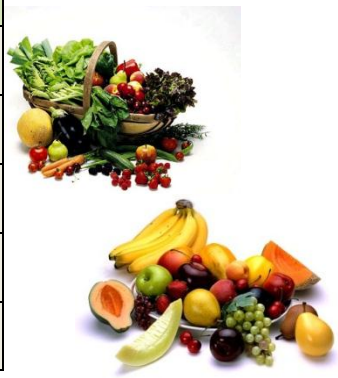
Low	Medium	High
1 TBS cream cheese (50 mg)	1 cup yogurt (118 mg)	1 oz. processed cheese (420 mg)
1 oz. goat cheese (97 mg)	1 cup choolate milk (152)	1 cup cottage cheese (750 mg)
1 TBS parmesan cheese (75 mg)	1 cup milk (127)	1.5 oz. provolone cheese (377 mg)

Protein

Low	Medium	High
3 oz. salmon (50 mg)	2 sardines, canned (121 mg)	3 oz. tunna, canned (340 mg)
.2 oz. pepperoni (99 mg)	.6 oz. Vienna sausage (155 mg)	2 oz. frankfurter (615 mg)
3 oz. ground beef (50 mg)	1 oz. bologna (200 mg)	1.5 oz. sausage (486 mg)

Fruits & Vegetables*

Low	Medium	High
1 cup frozen corn (6 mg)	1 cup mixed vegetables (240 mg)	1 cup mushrooms, canned (700 mg)
1 cup sweet potatoes (15 mg)	10 french fries, frozen (190 mg)	1 cup potato salad (1300 mg)
½ cup carrots, cooked (45 mg)	1 cup mung sprouts (155 mg)	½ cup mashed potatoes (350 mg)
1 cup fruit cocktail (15 mg)		
1 cup watermelon (2 mg)		



***Most fruits and vegetables are low in sodium**

Grains

Low	Medium	High
1 oz. Kudos bar (70 mg)	½ cup cheese puffs (190 mg)	2/3 cup Chex mix (340 mg)
1 rice cake (25 mg)	1 oz. corn chips (170 mg)	10 pretzels (814 mg)
1 slice white bread (100 mg)	1 oz popcorn (175 mg)	1 large bagel (340 mg)

Tips for reducing sodium

* Avoid processed and canned foods
* Eat fresh fruits and vegetables
* Read nutrition labels carefully

More Resources

http://www.ucsfhealth.org/education/guidelines_for_a_low_sodium_diet/

http://my.clevelandclinic.org/healthy_living/nutrition/hic_low-sodium_diet_guidelines.aspx

http://www.gicare.com/Diets/reduced-sodium-diet.aspx