Caring for Your Kidneys

Janice Baker, RDN, CDE, CNSC, BC-ADM

Registered Dietitian/Nutritionist
Certified Diabetes Educator
Certified Nutrition Support Clinician
Board Certified- Advanced Diabetes Management
DIABETIC NEPHROPATHY
KIDNEY DISEASE

PROTEIN IN URINE
SECRETION OF PROTEINS
DILATED AFFERENT ARTERIOLE
CONstricted EFFERENT ARTERIOLE (HIGH PRESSURE)

UNHEALTHY GLOMERULUS
PROTEIN MOLECULES SPILL INTO THE URINE BECAUSE OF DAMAGE OF CAPILLARY WALL

KIDNEY
NEPHRONs
GLOMERULUS
URINE
NORMAL GLOMERULUS
CAPILLARY KEEPS PROTEIN MOLECULES IN THE BLOOD
Why Is Nutrition Important?

- Managing your diet can slow the progression of your kidney disease.
- The need for dialysis can be delayed.
- Help make up for loss of kidney function.
- Your diet affects health & how you feel.
Controlling Your Diet

- Protein
- Potassium
- Sodium
- Phosphorus
- Fluid
Proteins

- Proteins keep your body tissue healthy.
- Proteins must be eaten each day
High Quality Proteins

- Animal Proteins
  1. Dairy (Milk and Cheese)
  2. Meat (Beef, Pork)
  3. Poultry (Chicken, Turkey)
  4. Fish
  5. Eggs
Lower Quality Proteins

- Plant Proteins
  - 1. Vegetables
  - 2. Breads
  - 3. Cereals
Potassium

Potassium is a mineral that helps muscles and nerves work the right way.

Your biggest muscle – Your Heart

Damaged kidneys can cause a build up of potassium in your body.

Medications can affect potassium levels in the body- ask your doctor and pharmacist.
Major Sources of Potassium Include

- Milk
- Potatoes
- Tomatoes
- Bananas
- Oranges
- Dried Fruit
- Legumes
- Nuts
- Salt Substitute
- Chocolate
Sodium

= Sodium Chloride
= Salt
Salt is 40% Sodium and 60% Chloride
Sodium is a mineral that is important in controlling your blood pressure.
But I Don’t Use Salt!

- Sodium is a natural part of food.
- Salt is found in most processed foods.
- It takes time to adjust to the taste of food without salt.
Alternatives to Salt

- Try Food Seasonings.
- Try Food Flavorings.
- Examples:
  1. Lemons
  2. Limes
  3. Spices
  4. Seafood Seasoning
  5. Italian Seasoning
  6. Vinegars
  7. Peppers
Healthy kidneys remove fluids as urine.

As kidney function declines, you make less urine and fluids build up in your body.

Check for fluid and sodium retention.

You may need to restrict your fluid intake.
Phosphorus is a mineral which combines with calcium to keep bones and teeth strong.

You need the right amount of calcium and phosphorus.
Controlling Calcium / Phosphorus

-you will need to control the phosphorus in your diet.
-this means moderating your intake of dairy foods.
Controlling Calcium / Phosphorus

You may need to take a phosphate binder or a calcium supplement.
1. Tums
2. PhosLo
3. Renagel/Renvela
4. FosRenol
Do I Need to Limit Calories?

-Calories are needed in your diet for energy and maintaining body weight.

-It is important to eat enough Calories every day- unintended weight loss is a concern.
Diabetes and Kidney Disease

- Diabetes = leading cause of kidney disease
- Manage blood sugar, blood pressure, cholesterol
- Dietary goals: Limit sodium to < 3000 mg/day
- Balance (not eliminate) carbohydrates
- Regular healthful meals and activity
- Take medications as directed
- Diabetes Education by a CDCES
- Medical Nutrition Therapy with an RDN
What About Vitamins?

- You may need a special vitamin for people with kidney problems.
- Ask your doctor.
- Natural does not mean safe
- Be careful with any over the counter supplements, detox products- danger!
What About Herbs?

- Ask your doctor.
- Some herbs can be harmful to people with kidney problems.
- Natural does not mean safe.
What About Over-the-counter Medications?

- Ask your doctor.
- Ask the pharmacist.
- Some over-the-counter medications may not be safe for people with kidney problems.
How Will I Know If I Am Eating the Right Way?

- Weight changes
- Blood pressure
- Swelling of hands and feet
- Blood testing
- Appetite
All of the foods in your diet are easy to find in your grocery store.

Read the food labels.
1. Protein
2. Sodium
3. Phosphorous
4. Potassium
Dining Out

- You can do it.
- Ask for sauces, gravies on the side
- Ask for substitutions or a la carte items
How Is Your Diet Different for Each Treatment Option?

<table>
<thead>
<tr>
<th>Treatment Option</th>
<th>Diet Restrictions</th>
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</thead>
<tbody>
<tr>
<td>Early Kidney Disease</td>
<td>May need to moderate your intake of protein, sodium, potassium, phosphorus</td>
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<tr>
<td>Hemodialysis</td>
<td>Diet and fluid restricted</td>
</tr>
<tr>
<td>Peritoneal Dialysis</td>
<td>May have fewer restrictions for proteins, fluids, potassium</td>
</tr>
<tr>
<td>Transplantation</td>
<td>Few restrictions</td>
</tr>
<tr>
<td></td>
<td>Usually no restrictions for proteins, fluids, and potassium</td>
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<tr>
<td></td>
<td>May need to restrict Calories</td>
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<tr>
<td></td>
<td>May need Cholesterol Lowering Diet.</td>
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</tbody>
</table>
Plan your meals for the day

Plan meals for the day
Plan meals for the week
Follow easy recipes
Check nutrition levels (calories, fat, carbohydrates, calcium, phosphorus, potassium, sodium)
Print a food record for your doctor and dietitian
In Conclusion

- Diet changes for kidney disease **must** be individualized.
- Talk to your doctor and registered dietitian.
- Medical Nutrition Therapy for kidney disease is covered by most insurances including Medicare with a doctor's referral.
QUESTIONS