When you have chronic kidney disease, nutrition is an important part of your treatment plan. Your dietitian will help you plan your meals with the right foods and in the right amounts.

Nutrients affected the kidneys at this stage are:
protein, sodium, potassium, phosphorus, vitamins, and fluid.

- When kidney function is too low, dialysis treatments are started
- There are two types of dialysis:
  o Hemodialysis (HD)
  o Peritoneal Dialysis (PD)
- Both types of dialysis clean the wastes (extra electrolytes and minerals) and extra fluid out of the blood.

**PERITONEAL DIALYSIS**

- Peritoneal dialysis occurs daily.
- Sodium and phosphorus need to be limited in the diet to avoid build up in the blood. Potassium and fluid may or may not be restricted based on your blood work and fluid balance.

To be used in conjunction with advice from a Registered Dietitian.
1. PROTEIN

- Some protein is removed from your body with each PD exchange. Your body needs more protein when you are on dialysis.
- Eating the right amount of protein helps to:
  - build muscle & repair tissues
  - fight infection
- Protein comes from:
  - wild meats
  - red meats
  - poultry (chicken, turkey, and duck)
  - fish and seafood
  - eggs
  - milk and cheeses
  - tofu
  - legumes and beans

- Note: Milk, cheese, legumes (dried peas, dried beans, and lentils), soy beverage and processed meats are high in phosphorus. These foods should be limited.

2. SODIUM

- Limiting sodium intake to 2000 –3000 mg (about 1 teaspoon of salt) per day may help to:
  - reduce fluid build up your body (swelling of the ankles, fingers, eyes),
  - control thirst
  - control blood pressure
- Sodium is a mineral and is found in most foods but is especially high in:
  - Table salt & sea salt
  - Salty seasoning (soy sauce, teriyaki sauce, garlic salt, seasoning salt)
  - most canned food and some frozen foods
  - processed meats (e.g. ham, bacon, sausage, cold cuts)
  - salty snack foods (e.g. chips, crackers, pickles)
  - most restaurant and take out foods (MSG)
  - canned or dehydrated soups (packaged noodle soup)
**Tips**
- eat food closest to their natural state (unprocessed)
- Read food labels for sodium content:
  - Try fresh or dried herbs & spices instead of table salt
  - Add a dash of hot pepper sauce
  - Use lemon juice or vinegar
  - Try no-added salt spice blends (e.g. Mrs. Dash®, McCormick’s No Salt Added®)
  - Avoid salt substitutes (e.g. Half salt® or No-Salt®)
- Ask your server to have foods prepared without salt at restaurants

**3. POTASSIUM**
- Potassium in your blood is removed with each PD exchange.
- Potassium is not restricted in your diet unless the level of potassium in your blood is high.

**4. PHOSPHORUS**
- Also known as phosphate
- Is a mineral that works with calcium to form strong bones and teeth
- In the later stages of kidney disease, phosphorus starts to build up in your blood. Calcium is then pulled from your bones into your blood. This causes serious problems like:
  - Damage to the heart & other organs
  - Poor blood circulation
  - Bone pain & weakness
  - Skin sores
- Phosphorus is found in most foods. Large amounts are found in:
  - Dairy products (e.g. milk, cheese, yogurt & ice cream)
  - Soy beverages
  - Dried beans and peas (e.g. kidney beans, split peas, lentils)
  - Nuts and seeds
  - Other beverages (e.g. colas, beer, cocoa)
  - Chocolate
  - Baking powder
  - Whole grains, especially bran

- The Dietitian will discuss ways to help lower phosphorus intake
- The Doctor may prescribe a phosphate binder medication to help control this level in your blood

**TIPS**

- Use non-dairy creamers and milk substitutes in place of milk to help lower the amount of phosphorus in your diet
- Rice Dream Original® is low in phosphorus.

**5. VITAMINS & SUPPLEMENTS**

- When your diet is limited you will need to take a special vitamin pill made for people with kidney disease
- Do not take over-the-counter vitamin supplements
- Do not take over-the-counter Vitamin D or calcium supplements unless recommended by your kidney doctor
- Check with the kidney doctor and/or pharmacist about herbal medications
6. **FLUID**
   - fluid intake may or may not be limited and will depend on:
     - your 24hr urine volume collection
     - if you have fluid build up (hands, leg, feet, chest)

**OTHER THINGS TO THINK ABOUT**

**ENERGY**
   - Comes from the foods you eat
   - Eating the correct amount of calories helps to give you energy
     (Your Dietitian will help you with this)
   - With peritoneal dialysis, your body will absorb some of the
     calories from the peritoneal dialysis solution (dianeal). These extra
     calories may result in weight gain

**FATS**
   - Provide energy and are part of a healthy diet

**TIPS**
   - Use vegetable oils such as canola, olive and soybean
   - Choose non-hydrogenated soft margarines (tubs) as these are low
     in saturated and trans fats
   - Limit intake of butter, hard margarines, lard and shortening
SAMPLE DIET CHANGES IN PERITONEAL DIALYSIS

<table>
<thead>
<tr>
<th>MEAL</th>
<th>No Restrictions</th>
<th>Low-Salt, Potassium, Phosphorus and High Protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>BREAKFAST</td>
<td>Orange juice</td>
<td>½ cup canned fruit/fresh</td>
</tr>
<tr>
<td></td>
<td>Bran cereal</td>
<td>Rice Krispies®</td>
</tr>
<tr>
<td></td>
<td>Milk</td>
<td>½ cup of milk</td>
</tr>
<tr>
<td></td>
<td>Coffee with milk</td>
<td>1 boiled egg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 slice white/rye toast with peanut butter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coffee with non-dairy creamer</td>
</tr>
<tr>
<td></td>
<td>Canned Pea soup</td>
<td>Homemade low salt soup</td>
</tr>
<tr>
<td></td>
<td>Pastrami sandwich</td>
<td>Unsalted crackers</td>
</tr>
<tr>
<td></td>
<td>Salad (lettuce, tomato, cucumber, celery)</td>
<td>Roast beef sandwich (2-3 ounces beef)</td>
</tr>
<tr>
<td></td>
<td>Banana</td>
<td>Salad (lettuce, cucumber, tomato, celery)</td>
</tr>
<tr>
<td></td>
<td>Milk</td>
<td>½ cup grapes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water/hot beverage/non-cola soda</td>
</tr>
<tr>
<td></td>
<td>Ham</td>
<td>5-6 ounces pork roast</td>
</tr>
<tr>
<td></td>
<td>Canned peas</td>
<td>½ cup frozen or fresh peas</td>
</tr>
<tr>
<td></td>
<td>Frozen fried potatoes</td>
<td>½ cup homemade boiled potatoes/ 1 small baked</td>
</tr>
<tr>
<td></td>
<td>Orange</td>
<td>potato</td>
</tr>
<tr>
<td></td>
<td>Milk</td>
<td>1 dinner roll, margarine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water/hot beverage/non-cola soda</td>
</tr>
<tr>
<td>SNACK</td>
<td>Crackers, &amp; cheese sausage</td>
<td>½ sandwich (1-2 ounces meat or fish or egg) on</td>
</tr>
<tr>
<td></td>
<td>Cola</td>
<td>white or rye bread</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water/hot beverage/ non-cola soda</td>
</tr>
</tbody>
</table>