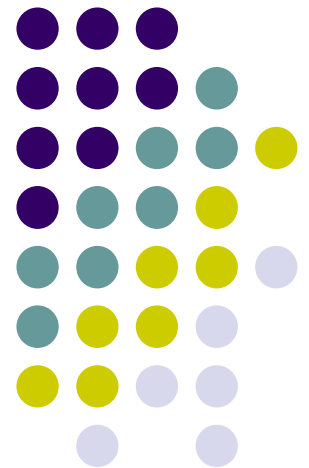


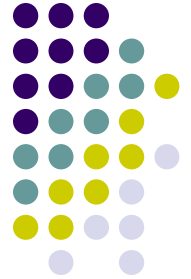
Renal Diet and Kidney Disease

Hospital Cafeteria

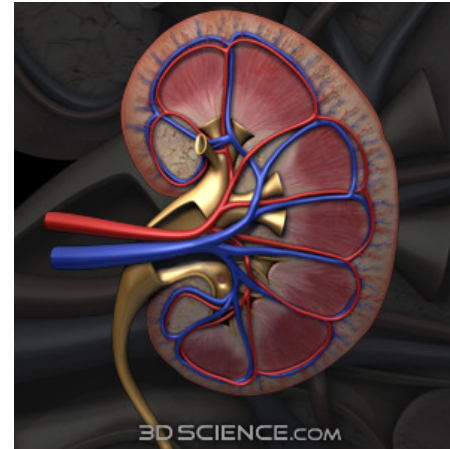
Amy Harris, RD and Alicia Smith,
Clinical Manager



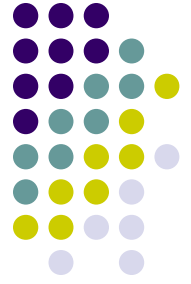
The Kidneys



- Filter blood in tiny units inside the kidneys called nephrons
- The kidneys remove waste products like urea and extra water which are excreted as urine
- Waste builds up if kidneys don't filter properly

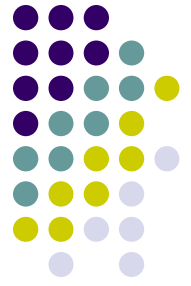


Kidney Disease



- Results from damage to nephrons
- Damage occurs gradually over years
- Happens in both kidneys
- No obvious symptoms until late stages

Common causes of kidney disease



- Diabetes – The sugar stays in the blood and acts like a poison
- High blood pressure – Can damage the small blood vessels in the kidney
 - Kidneys cannot filter waste well
- Heredity – May run in the family



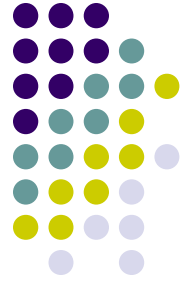
Treating kidney disease



- No cure
- To make kidneys last longer:
 - Keep blood sugar under control
 - Control blood pressure
 - Minimize heart attack and stroke risks

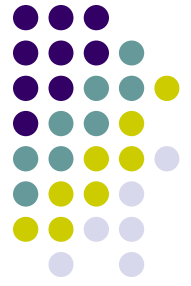


Complete kidney failure

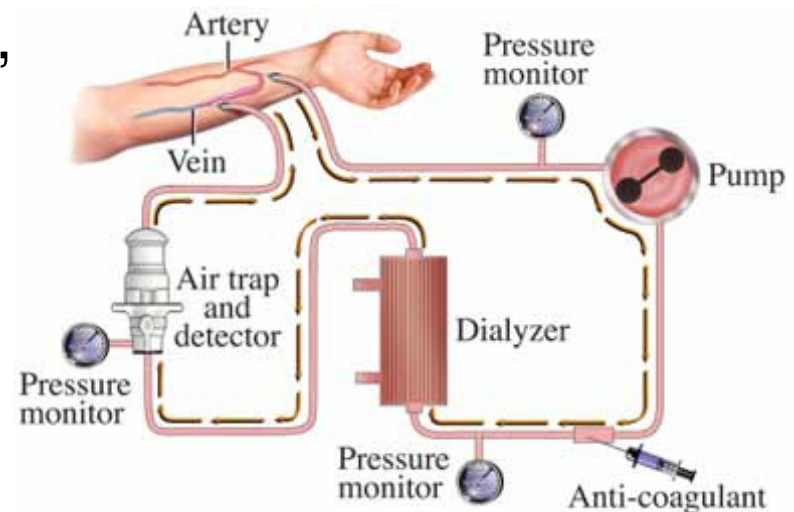


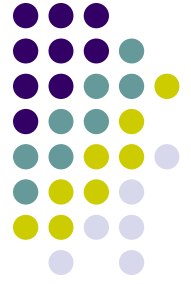
- Body fills with extra water and waste products-- called uremia
- Hands and feet may swell
- Feel tired and weak
- Untreated uremia leads to seizures, coma, death
- May need dialysis or kidney transplantation

Dialysis procedure



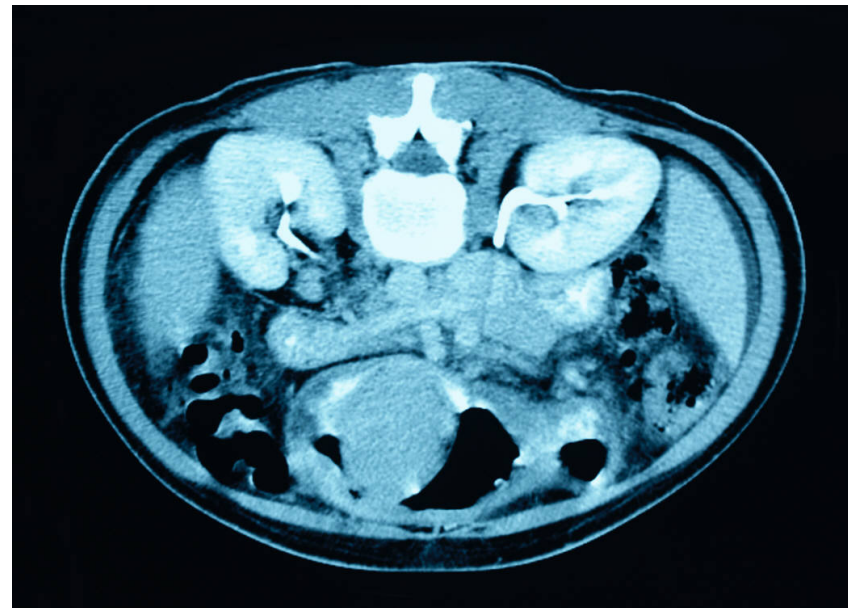
- Dialysis is indefinite until a transplant is received
- Hemodialysis - Veins in the arm, leg, or neck are used
- An artificial kidney machine is used occasionally
- Peritoneal dialysis— Abdomen
- A tube is inserted into the stomach, a small section sticks out for use in dialysis - permanent



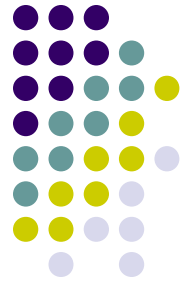


Renal Diet

- Renal definition = Of the ***kidneys***. A renal disease is a disease of the kidneys. Renal failure means the kidneys have stopped working properly
- Want to limit:
 - Protein
 - Phosphorus
 - Potassium
 - Sodium

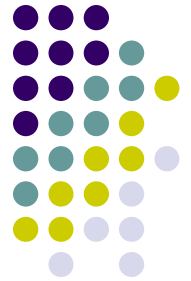


Renal Diet cont.



- Too much **protein** means waste products build up in the body
- Too much **phosphorus** may cause loss of calcium from the bones making them weak
- **Potassium** can build up in the blood
- **Sodium** relates to high blood pressure which is a cause of kidney disease

Foods to limit on a renal diet



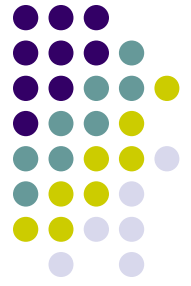
- Protein
 - Meat
 - Poultry (chicken)
 - Fish
 - Eggs
 - Dairy products (milk, cheese, yogurt)



KS2713
'Food Icons' Disc
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Foods to limit on a renal diet cont.

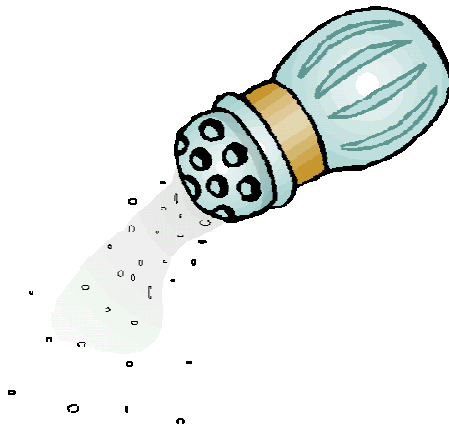


- Phosphorus
 - Dairy Products
 - Beans
 - Peas
 - Nuts
 - Cocoa
 - Beer
 - Cola drinks

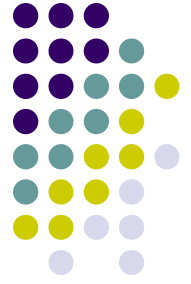
Foods to limit on a renal diet cont.



- Potassium
 - Fruits
 - Vegetables
- Sodium
 - Table salt
 - Canned foods
 - Processed meats
 - Soups
 - Salted snacks



Sample diet for a patient with renal failure

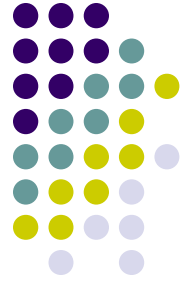


Sample Menu

<u>Breakfast</u>	<u>Lunch</u>	<u>Dinner</u>
1/2 cup cereal	Roast beef sandwich	3 oz. Baked chicken
1/2 cup milk	2 slices bread	1/2 cup rice
1 slice toast	2 oz. roast beef	Gravy
Sugar, margarine	Margarine/mayo	Green beans
1/2 grapefruit	Sliced apple	1 cup milk
	1/2 cup lemonade	Angel food cake w/ nondairy whipped topping
	Sugar cookie	

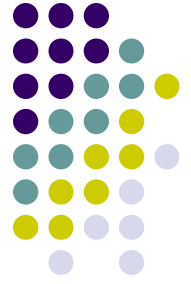
Calories= ~2000 Potassium= 1250 mg
Protein= 55 grams Sodium= 877 mg

Failure to follow a renal diet



- Will make the kidneys work harder
- May cause total renal failure to happen sooner
- Will lead to the need for dialysis treatment
- May require a kidney transplant

Reference page



- http://www.nkdep.nih.gov/patients/kidney_disease_information.htm#1
- <http://kidney.niddk.nih.gov/kudiseases/pubs/kdictionary/P-T.htm#R>
- <http://kidney.niddk.nih.gov/kudiseases/pubs/kdd/index.htm>
- <http://www.andrew.cmu.edu/user/sorensen/learn.htm>
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