### **End Stage Renal Disease**

### **Teaching Project**

### Romney Randa & Sherri Hoyt

### Our patient

- 61 year old diabetic female
- diagnosed with ESRD and is awaiting a kidney transplant
- she is going to be discharged and has expressed some concerns about eating the foods to minimize complications and maintaining good nutrition
- her husband is going to join in the teaching session

### What is Chronic Kidney Disease?

- progressive, irreversible loss of kidney function
- CKD is kidney damage or GFR <60 mL/min for longer than 3 months
- End Stage Renal Disease is diagnosed when the GFR is <15 mL/min
- This requires dialysis or transplantation
- Diabetes and HTN are two of the main causes of Chronic Kidney Disease
  - o Diabetes is about 2/3 of the cases
  - o HTN is about 1/3 of the cases
- Increased occurances of CKD is due to increased risk factors such as aging population, obesity, and increased cases of diabetes and HTN
  - o 1 out of every 9 Americans has CKD
  - o over half a million are receiving treatment for ESRD (dialysis/transplant)
- despite all of the technology, ESRD has high mortality rate because kidney dysfunction is not always evident until significant damage has already occurred.

### Clinical Manifestations

- as renal system deteriorates, all body systems are affected
- clinical manifestations are due to the retention of substances such as urea, creatinine, phenols, hormones, electrolytes, water, and many other substances.
- ESRD-weakness/fatigue, increase blood pressure, pittingedema, priorbital edema, increased CVP, pericarditis, SOB, depressed cough, thick sputum, ammonia odor to breath, metallic taste, mouth/gum ulcerations, anorexia, n/v, withdrawn, behavior changes, depression, anemia, bleeding tendencies, increased potassium, dry/flaky skin, pruritis, ecchymosis, purpura, yellow-gray skin color, cramps, renal osteodystrophy, and bone pain.

### **Nursing Care Plan**

### **Nursing Diagnosis**

**Knowledge Deficit** 

Related to New Diagnosis of End Stage Renal Disease

As Evidenced By Client stated she is not sure how to come up with a menu that adheres to the appropriate diet for her disease

### **Expected Client Outcome**

After teaching session the client will correctly identify food choices within the renal dietary guidelines

### **Nursing Interventions**

Plan dietary choices with client within restrictions

Plan oral fluid choices with client within restrictions

Educate client support system regarding dietary guidelines

Refer client to dietician for additional nutritional counseling as appropriate

#### **Evaluation**

Goal met.

Client has displayed knowledge of food and beverage choices within the renal dietary guidelines in planning a sample menu.

# FOODS YOU SHOULD AVOID ...

### High Potassium Foods:

- Chosolate
- · Coffee
- Dried bears
- Fruits
  - O Apricots
  - O Bananas
  - O Cantaloope
  - O Pranges
  - O Watermelon
- Salt Sabstitate
- Végetables
  - O Avioades
  - O Peas
  - O Potatoes
  - O Pampkin
  - o Tomatoes

### High Sodiam Foods:

- · Chips and enach foods
- Prepackaged Dinners
  - O Dinners
  - O Soupe



### <u>High Phosphorous Foods:</u>

- Dairy Products
  - O Cheese
  - O Cream Soups
  - O loe cream
  - O Mill
  - O Padding
  - 0 Yagart
- Legamés
- Nate and seeds
  - O Almonde
  - O Casheas
  - 0 Peanats
  - O Peoans
  - O Pamphins seeds
  - O Sanflower seeds
- 🖲 Ûthers
  - O Dark colas
  - O Chiocolate
  - O Carnel
  - O Molasses
  - O Dried Fruit
- Whole grains

Remember, any foods that turn into liquid at room temperature count toward your fluid intale!!!

# FOOD YOU CAN EAT ...



# Vegetable:

- Bean Sprouts
- Bell Peppers
- Cabbage
- Carrots
- Cauliflower
- Eggplant
- Green Beans
- Onions

# High In Good Protein:

- · Beef
- Chicken
- Eggs
  - Fish
  - Pork
  - Protein Bars (check with dietician)
  - Tura
  - Turkey
  - Veal

## Fruits:

- Apples
- Berries
- Cherries
- Grapes
- Peaches
- Pears
- Pineapple

# Other:

- Bagels
- Frait Jaices
- Fruit Pies
- Flour tortillas
- Graham Crackers
- Grains and breads
- · Grits
- Non-Dairy frozen desserts
- Pastas
- Rice
- Vanilla Waffers
- White Breads



### **TAKE CONTROL OF YOUR DIET!**

#### **Potassium**

The kidneys are the main site for excretion of potassium. If the kidneys are not functioning properly, potassium levels will increase. Potassium is an important electrolyte for heart function, but too much can be deadly. Limit your potassium intake regularly. You want to avoid too much potassium in your system.

### **Phosphorus**

Again, the kidneys are the main site for excretion of phosphorus. When they do not function correctly, phosphorus levels will increase, and as a result calcium levels decrease (a teeter-totter effect). Calcium is an important conductor for muscle and neuron function. To maintain these levels, you need to monitor your intake of phosphorus. If your doctor has prescribed you any phosphorus binders (Phos-Lo, RenaGel) you must take them with a meal or a snack. As the binders are taken with meals, they will bind to the phosphorus in your stomach and carry them out of your body through the stool. If for some reason your have run out of your binders, or you can not afford them, Tums may be used as a temporary solution. Phosphorus is found in dairy products, legumes, nuts and seeds.

#### Protein

Protein is needed to keep your body healthy to fight infections and heal cuts and bruises. It is important for you to greatly increase your intake of protein on a regular basis. Make sure to eat 7-8 oz. of good protein a day. Sources of good protein are beef, chicken, and eggs.

#### Sodium

There is a saying, "where salt goes water follows!" It is important for you to limit your salt intake to decrease your fluid gains.

#### Fluids

Fluid intake should be limited to 32 oz.=1 qt.=1 L a day. You should be gaining no more than 3-5 lbs. between your treatments on a regular basis. Anything that turns into a liquid at room temperature counts toward your daily fluid intake, including pudding, ice cream, jello, and ice chips. Continuous high fluid gains can cause heart problems.

Increased blood pressure, decreased blood pressure during treatment and inability to putt off all fluid gained, SOB, increased HR

# Smart Snacking Choices for the Dialysis Patient

By Maria Karalis, MBA, RD, LD

Hungry? Not sure what to eat when you get the munchies? The following are some ideas on what to eat in between meals to help you maintain your nutritional well being without all that extra potassium and phosphorus. Each "smart snack" contains less than 130 mg of potassium and less than 80 mg of phosphorus. Check with your renal dietitian

on the number of servings that are appropriate for you.

Smart Snack	Serving Size
Pretzels, unsalted	1 çup
Popcorn, plain or caramel	l-1/2 cups
Bread Sticks	2 each
English muffin	½ muffin
Plain bagel with 1 tbsp. Cream cheese	½ bagel
Graham Crackers	4 squares
Rice or Corn Chex cereal	1 cup
Fruit Cocktail, canned	½ cup
Apple, fresh	l small
Blueberries, fresh	1 cup
Oatmeal or cream of wheat	⅓ cup
Nilla® Vanilla Wafers	10
Shortbread cookies or sandwich cookies	4
Grapes	15 small
Fruit Pie	1/8 pie
Doughnut, plain without nuts or chocolate	1 doughnut
Dry cereal, ready to eat	1 ounce
Fig Newtons®	2 cookies
Angel food cake	l med slice
Pound cake, unfrosted	1 med slice
Popsicle	1 bar
Fruit Juice bar	1 bar
Sorbet	⅓ cup

### Sample Diet

```
Breakfast:
202. 2 eggs
         berries
1c.=802. (Offee
        à precestant white Lunch:
        salad.
        Chicken
  2 to chese
802 Water
Dinner:
402. Fish grilled
rice steamed C+C
 for judtea Snacks:
802 POPCOrn
8 & Sprite
```

### **Websites for Chronic Kidney Disease**

National Kidney Foundation <u>www.kidney.org</u>

Renal Web Patient Education www.renalweb.com

American Association of Kidney Patient <u>www.aakp.org</u>

And remember, if you have any questions or concerns about what you should and should not be eating, you can call your doctor or a dietician.