Dietary Guidelines for End Stage Renal Disease (ESRD) Residents

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Objectives

By the end of today’s presentation, attendees will be able to:

• Understand the nutritional needs of a resident with an ESRD diagnosis.
• Learn about resident rights in LTC
• Understand fluid management and the importance of weight.
• Discuss the importance of medication management to for a person with ESRD.
• Review desirable and appropriate menu choices for LTC residents.
The “BIG 5”

What You Need to Know About the Nutritional Needs of Long-Term Care (LTC) Residents Receiving Dialysis
What is Dialysis?

Dialysis is:

• A treatment, not a cure.
• A treatment that filters and purifies the blood using a machine.
  – This keeps fluids and electrolytes in balance when the kidneys no longer function.
• Prescribed when ESRD is diagnosed and kidneys are performing at only 10-15 percent of normal function.
Resident Rights in LTC

• Per the Centers for Medicare & Medicaid Services (CMS) guidelines, nursing home residents have the right to participate in their healthcare decisions.

• Residents must be fully informed of their medical condition and the risks of their choices and decisions.
What Does this Mean?

Residents have the right to:

• Choose their own diet.
• Refuse an order, including fluid restriction.
• Refuse care.

Nursing home staff:

• **Cannot:**
  – Deny a resident a food or fluid choice if, requested.

• **Can:**
  – Explain the risks of the choice.
  – Offer an alternative choice.
Risk vs. Choice

Partnership and collaboration between nursing homes and dialysis clinics is the best way to meet the dietary needs of residents with ESRD.
Dietary Goals

When working with ESRD patients, it is important to:

• Manage their fluid intake and weight.
• Help them avoid potassium rich foods.
• Limit hidden salts and sugars in their food.
• Give phosphorus binders with food.
• Offer desirable menu alternatives.
• Understand residents have choices.
Did you Know?

• Dialysis treatment is demanding on the body and requires increased protein and calorie consumption.

• Patients are generally unable to move one of their arms for the duration of their multiple-hour treatment.

• Movement of the arm with the fistula could lead to extensive bruising and pain if needles become dislodged.
During dialysis, residents need a sack meal that:

• Is easy to manipulate with one hand.
• Maintains the daily protein and caloric needs of ESRD residents, such as:
  – A quarter meat-based sandwich.
  – Deviled or boiled eggs.
  – Meat rollups with crackers.
  – Tuna salad pocket sandwich.
  – Breakfast burritos.
Fluid Management: What Constitutes a Fluid?

A fluid is:

• Anything intended as a drink regardless of size, shape, consistency, color and/or flavor.

• Any food that may become liquid if left at room temperature, such as:
  – Soup.
  – Jell-O®.
  – Ice cream.
  – Pudding.
Fluid Management: How Much Fluid Should a Person With an ESRD Diagnosis Receive?

- The **textbook answer** is: 1 liter + urinary output volume per 24 hours
- The **rule of thumb** for *most* dialysis patients: 1–1.5 liters per 24 hours
Fluid Management: In Nursing Homes

• Residents are educated and encouraged to follow fluid restrictions, but ultimately have the right to drink what they want.

• Nursing homes do monitor fluid restrictions for residents with ESRD but...
  – Individual consumption is difficult to monitor.
  – Staff can only track fluids that are reported or observed.
Fluid Management: Helping Your Resident with Feelings of Thirst

If a resident with ESRD experiences thirst:

• Assist them with managing their sugar and salt intake.
• Offer sugar-free hard candy, Biotene®, frozen grapes, and/or ice chips.
• Consult your ESRD dietician for more suggestions.
  – We’re here to help!
What is Estimated Dry Weight (EDW)?

• EDW is how much a dialysis patient *should* weigh if there is *no fluid retention* due to renal failure.
• An ESRD patient’s EDW is his/her ideal weight to maintain for appropriate fluid management.
• Dietary intake causes fluctuation in the EDW.
Dialysis Weight vs. LTC Weight

Dialysis Weight:
• Is referred to as Estimated Dry Weight
• Is determined by clinics when patients both:
  – Arrive for treatment.
  – Complete treatment.
• Indicates fluid retention since a patient’s last treatment.
• Is done in kilograms.
  – 1 kilogram = 1 liter of fluid

LTC Weight:
• Is done for residents weekly.
• Is measured in pounds not kilograms.
• Is monitored (weight loss) based on percentage of weight, not EDW.
  – A 5 percent weight loss will spark interventions, e.g., a:
    ▪ Liquid supplement.
    ▪ Snack food.
A Dialysis Weight Story

On December 1st, Sally has an **accurate** EDW = 60kg

### A.

- **Previous Post HD tx wt= 60kg (=EDW)**
- **Fluid/food intake btwn HD tx**
- **Pre HD tx wt= 63kg**
- **3L Fluid removal during HD tx**
- **Post HD tx wt= 60kg (=EDW)**

Throughout December, Sally enjoys LOTS of goodies and she gained actual, solid weight

### B.

- **New ACTUAL EDW due to increased intake= 61.5kg**
- **Fluid/food intake btwn HD tx**
- **Pre HD tx wt= 63kg**
- **3L Fluid removal during HD tx**
- **Post HD tx wt= 60kg**

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This disparity = fluid insufficiency
IE: weakness, dizziness, cramping, hypotension, et al
A Dialysis Weight Story (cont.)

Sally’s roommate, Marg, is also on dialysis

A. Previous Post HD tx wt = 60kg (=EDW)

Fluid/food intake btw HD tx

Pre HD tx wt = 63kg

3L Fluid removal during HD tx

Post HD tx wt = 60kg (=EDW)

Marg lost solid weight during a hospitalization in December

B. New ACTUAL EDW due to decreased intake = 58.5kg

Fluid/food intake btw HD tx

Pre HD tx wt = 63kg

3L Fluid removal during HD tx

Post HD tx wt = 60kg

This disparity = EXCESS fluid retention
IE: edema, pleural effusion, dyspnea, hypertension, et al
What is Hyperkalemia?

Hyperkalemia:

• Is too much potassium in the blood, often as the result of kidney failure.

• Is extremely dangerous/potentially deadly.

• Can lead to cardiac events such as:
  – Irregular heart rate.
  – Heart attack.

• Increases risk for falls due to flaccid muscles in the legs.
Recognizing the Signs of Hyperkalemia

Notable signs and symptoms of hyperkalemia include:

• Numbness or tingling in the lips and/or extremities.
• Difficulty standing.
• Loss of grip strength.
• Abnormal heartbeats on auscultation.
• Nausea.
Managing Potassium: Foods to be Avoided or Limited

High potassium foods that should be avoided or limited to one bite include:

- Bananas
- Naval oranges, orange juice
  - Clementines in moderation are okay.
- Avocado
- Melon
- Potatoes
  - All kinds, all forms!
- Tomatoes
  - All forms—cooked or raw!
Managing Potassium: What Can Your ESRD Residents Eat?!

• Plenty of delicious foods!
• Work with your ESRD dietician for dialysis-friendly menu options.
• We’re here to help!
Dialysis clinics often hear that ESRD-appropriate alternatives in LTCs aren’t desirable.

I don’t want a cold sandwich when everyone else is eating spaghetti with red sauce...
Residents with an ESRD diagnosis like to eat well, too. Consider:

• Their preferences when developing menu options, while maintaining clinically-appropriate levels of protein and calories.

• Offering an ESRD-appropriate alternate menu that includes hot alternatives at all meals.
Phosphorus: A Serious Risk

• Phosphorus poses a danger for residents with an ESRD diagnosis.

• Too much phosphorus can cause:
  – Short-term:
    ▪ Itching, skin rash and/or red eyes.
  – Long-term:
    ▪ Bone and/or joint pain with increased potential for fracture.
    ▪ Vascular calcification with increased risk of stroke.
The Importance of Phosphorus Binders

• Residents on dialysis should receive phosphorus binders:
  – *Always*, at the BEGINNING of any meal
  – *Sometimes*, with snacks.

• Phosphorous binders “lock-on” to the phosphorus that is released during the digestion of food.

• The pill(s) MUST be given *concurrently with food intake* for phosphorus binding to occur.
Medication Administration in LTCs: Potential Obstacles to Properly-Timed Dosing

- Nurses often pass medications for 20+ residents.
- Many nursing homes have “open med pass.”
  – A four hour window to provide medication.
- There is limited expertise among LTC nurses regarding dialysis and how timing affects health/medication outcomes.
Best Practices to Take Away

• Nursing homes must honor resident rights, including refusal of recommended diet.
• Work with your registered dietician to create acceptable menu alternatives.
• Fluid and weight management is critical for ESRD patients’ wellbeing.
• “Open med pass” may be contraindicated for some ESRD medications.
• RenalRD Listserv
  http://www.mailman.srv.ualberta.ca/mailman/listinfo/renalrd

• Resources From the National Kidney Foundation
  – Cookbooks for Kidney Patients
    https://www.kidney.org/atoz/content/list-cookbooks-kidney-patients
  – Food Safety is a Must
    https://www.kidney.org/atoz/content/foodsafety
  – Dining Out With Confidence
    https://www.kidney.org/atoz/content/diningout
  – Dietary Guidelines for Adults Starting on Hemodialysis
    https://www.kidney.org/atoz/content/dietary_hemodialysis
Resources (cont.)

– Nutrition and Hemodialysis
  https://www.kidney.org/atoz/content/nutrihemo

– Potassium and Your CKD Diet
  https://www.kidney.org/atoz/content/potassium

– Phosphorus and Your CKD Diet:
  How to Spice Up Your Cooking
  https://www.kidney.org/atoz/content/phosphorus

– Sodium and Your CKD Diet:
  How to Spice Up Your Cooking
  https://www.kidney.org/atoz/content/sodiumckd
Thank you!

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