N.C. Nurse Aide I Curriculum

MODULE J

Nutrition
Objectives

- Describe nutrition and fluid requirements for the older adult.
- Identify basic nutrients.
- Explain how to read and use information from a Nutrition Facts label.
- Explain the use of the U.S. Department of Agriculture’s (USDA’s) MyPlate.
Objectives

- Identify special diets ordered for the older adult based on particular illnesses or conditions.
- Calculate dietary intake, fluid intake, and output.
- Discuss nurse aide responsibilities related to dysphagia and prevention of aspiration, hydration and prevention of dehydration.
- Explain the nurse aide’s role in enteral and parenteral nutrition.
**Important Terms**

- **Nutrition** – when the body takes in and uses foods and fluids to maintain health

- **Nutrients** – substance found in food and fluids used for growth and maintenance of health

- **Malnutrition** – the lack of proper nutrition because of lack of food intake, improper diet, or impaired use of food
Good Nutrition - Importance

- Promotes physical and mental health
- ↑ resistance to illness
- Produces energy and vitality
- Aids in healing
- Assists one to feel and sleep better
- Helps avoid or manage common diseases
Characteristics of Good Nutrition

- Healthy body
- Alert expression
- Healthy, shiny hair
- Clear skin and bright eyes
- Healthy appetite
- Regular elimination
- Restful sleep
Characteristics of Poor Nutrition

- Changes in weight
- Poor skin color and appearance
- Dull looking hair, eyes and skin
- Irregular elimination
- Poor sleep
- Abnormal conditions
- Tired
Nutrients

- Water
- Fats
- Carbohydrates
- Proteins
- Vitamins
- Minerals
Water
- Sources – butter, oil, fatty meat, etc

- Good source of energy and flavors food

- May † cholesterol levels leading to heart disease
- Supplies energy and helps body use fats
- Certain carbohydrates add fiber to diet that help with elimination

- Sources – breads, fruits, candy, sugary soft drinks
Proteins

- Needed by every cell to help grow new and help with repair of tissue

- Sources – meats, cheese, beans, etc
Vitamins and Minerals

- Help the body function normally

- Vitamins A and C
- Calcium
- Iron
Nutrition Facts Label
Serving Size

Nutrition Facts

Label

DHSR/HCPR/CARE NAT I Curriculum - July 2013
4 Methods to Determine Serving Size

- Weighing the food
- Counting pieces or measuring with a device (measuring cups or spoons)
- Using the hand as a frame of reference
- Using common objects as frames of reference
Serving Sizes Using the Hand

- 3 Ounces (meat, poultry, fish)
- 1 Cup (rice, fruit, veggies, cereal, pasta, baked potato)
- 1 Ounce (nuts, raisins, small candies)
Serving Sizes Using the Hand

1 Ounce (chips, popcorn, pretzels)

1 Ounce or 1 Tablespoon (peanut butter, hard cheese)

1 Teaspoon (cooking oil, mayo, butter, sugar)
Serving Sizes Using Common Objects
Determining Serving Size of Stick Pretzels

1 Serving Equals

- 1 ounce
- 28 grams
- 28 pretzels
1 Serving Size of Stick Pretzels Equals 1 Ounce

2 Handfuls of Stick Pretzels Equal 1 Ounce
1 Serving Size of Stick Pretzels Equals 28 Grams
1 Serving Size of Stick Pretzels Equals 28 Pretzels

1 Pretzel, 2 Pretzels, 3 Pretzels, ETC.
Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container about 2

Amount Per Serving
Calories 250 Calories from Fat 110

% Daily Value*
Total Fat 12g 18%
  Saturated Fat 3g 15%
  Trans Fat 3g
Cholesterol 30mg 10%
Sodium 470mg 20%
Total Carbohydrate 31g 10%
  Dietary Fiber 0g 0%
  Sugars 5g
Proteins 5g

Calories
2,000 2,500

Total Fat Less than 65g 80g
  Saturated Fat Less than 20g 25g
  Cholesterol Less than 300mg 300mg
  Sodium Less than 2,400mg 2,400mg
  Total Carbohydrate 300g 375g
  Dietary Fiber 25g 30g

For educational purposes only. This label does not meet the labeling requirements described in 21 CFR 101.9

Calories
Nutrition Facts Label

Percent Daily Values
Percent Daily Values

If a food is low in a nutrient, it will have 5% of the Daily Value or less

- Can be good or bad, depending on if you want more of or less of a nutrient
- Nutrients you should get less of: fat, cholesterol, and sodium
Percent Daily Values

If a food is high in a nutrient, it will have 20% of the Daily Value or more

- Can be good or bad, depending on if you want more of or less of a nutrient
- Nutrients you should get more of: minerals, fiber, and vitamins
Percent Daily Values Summary

Get More of These

Get Less Of These

- Total Fat: 12g (18%)
- Saturated Fat: 3g (15%)
- Trans Fat: 3g
- Cholesterol: 30mg (10%)
- Sodium: 470mg (20%)
- Total Carbohydrates: 18g
- Dietary Fiber: 0g (0%)
- Sugars: 5g
- Protein: 3g

- Vitamin A: 4%
- Vitamin C: 2%
- Calcium: 20%
- Iron: 4%
Activity #1J Understanding and Using the Nutrition Facts Label Activity Sheet Answers

What government agency responsible for Nutrition Fact Labels? FDA

Where are they found?
1. Foods
2. Beverages

How many calories does this food have per serving? 250

If a food or beverage is high in a nutrient, it will have 20% or more of the Daily Value.

Which nutrients should you get more of?
1. Dietary fiber
2. Minerals, such as calcium and iron.
3. Vitamins, such as A and C.

Percent Daily Value tells you if a food or beverage is high or low in a nutrient.

If a food or beverage is low in a nutrient, it will have 5% or lower of the Daily Value.

Which nutrients should you get less of?
1. Fats
2. Sodium
3. Cholesterol
## Activity #2J Evaluation of Various Foods & Beverages

**Using the Nutrition Facts Label**

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<tr>
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<th>Food/Beverage #1</th>
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<th>Food/Beverage #3</th>
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ChooseMyPlate.gov
USDA’s MyPlate 2000 Calorie Daily Food Plan

- Vegetables – 2 ½ cups every day
- Fruits – 2 cups every day
- Grains – 6 ounces every day
- Dairy – 3 cups every day
- Protein – 5 ½ ounces every day
Vegetables
Fruits
Grains
Dairy
Protein
Activities
Age Related Changes Affecting Nutrition

- Fewer calories
- Requirements change
- Drug effects
- Teeth and smell ↓
- Saliva and gastric juices ↓
- Appetite and thirst ↓
- Constipation
- May need assistance
The Diet Card

- Prepared by dietitian based on doctor’s order
- Each resident’s meal has its own
- At a minimum, lists room number, name, and type of diet
- The nurse aide who delivers the meal tray must verify that the **RIGHT** resident is receiving the **RIGHT** meal tray, with the **RIGHT** diet on it.
Regular Diet

- Ordered by the doctor
- A basic, well-balanced diet
- Without limits or restrictions
Special Diets

- Also called therapeutic or modified diet
- Ordered by doctor and planned by dietitian with input from resident
- May restrict or totally eliminate certain foods or fluids
- Diets may be advanced
Advanced Diet

- Food is gradually reintroduced to the resident
- Reasons – surgery or medical condition

Resident may start out NPO (nothing by mouth) → ice chips → clear liquids → full liquids → mechanical soft → regular diet
Other Forms of Nutrition

- Enteral nutrition – feeds the resident through a feeding tube into the gastrointestinal tract
- Intravenous (IV) Fluids – feeds the resident through a vein
Alternative and Supplemental Feedings

- Sometimes given when resident needs extra protein, calories, and fluids
- Examples?

Nurse aide’s responsibility?
OBRA Dietary Requirements
Dysphagia and Aspiration

- Dysphagia is difficulty in swallowing
- With dysphagia, there is a danger in aspiration
  - Causes of dysphagia?
  - Signs and symptoms?
  - Nurse aide’s role in prevention of aspiration?
- Needed to survive
- Death can occur if you get too little or too much
- Take in water by drinking fluids and eating foods
- Lose water via urine, feces, vomit, perspiration and lungs, plus drainage from wounds or liquids from stomach suctioning

**Water**
- Needed for good health
- Amount of fluid taken in
  = the amount of fluid lost
- Intake = output

Fluid Balance
Dehydration

Fluid intake < fluid output → dehydration

Resident does not take in enough fluid causing tissues to lack water

- When does it occur?
- Nurse aide’s role?
- Warning signs of potential dehydration?
- Signs/symptoms of dehydration?
Edema

Fluid intake > fluid output → edema

Resident does not excrete enough fluid causing tissues to swell with water

- Nurse aide’s role
- Signs/symptoms of fluid overload
Intake and Output (I & O)

- Residents who have certain diseases or special diets may need to have intake and output measured.
- Staff records amounts of food and fluids taken in and eliminated within 24-hour time periods.
- Fluids are measured in milliliters (mL) or cubic centimeters (cc).
Measuring Intake

- Fluids taken in are measured and recorded using milliliters (mL) or cubic centimeters (cc)
- Equivalents
  - 1 mL = 1 cc
  - 1 fluid ounce = 30 mL
- To convert ounces to milliliters or cubic centimeters, you multiply by 30
Measuring Intake

There are 16 fluid ounces in this cup

How many milliliters (mL) are in the cup?
Measuring Intake

- 16 fluid ounces in the cup
- 1 fluid ounce = 30 milliliters (mL)
- $16 \times 30 = 480$ milliliters (mL)
There are 480 mL in this cup

If a resident drinks ½ cup of milk from this cup, how many mL did the resident take in?
Measuring Intake

There are 480 mL in this cup

If a resident drinks $\frac{1}{2}$ cup of milk from this cup, resident’s intake is **240 mL of milk.**
Measuring Intake

There are 8 fluid ounces in this cup.

How many milliliters (mL) are in the cup?
Measuring Intake

- 8 fluid ounces in the cup
- 1 fluid ounce = 30 milliliters (mL)
- $8 \times 30 = 240$ milliliters (mL)
There are 240 mL in this cup

If a resident drinks 1/3 cup of milk from this cup, how many mL did the resident take in?
Measuring Intake

There are 240 mL in this cup

If a resident drinks 1/3 cup of milk from this cup, the resident’s intake is **80 mL of milk**.
Measuring Intake

List of container sizes available, based on facility

- Typically includes small glass, large glass, cereal bowl, milk carton, soup bowl

- Calculate amount taken in based on total amount container holds and how much of the fluid was taken in
Measuring Intake

- Fluids taken by mouth that are measured include:

- Other fluids taken in, counted as intake, and measured by nurse include:
  - Intravenous fluids
  - Tube feedings
Dietary consumption for each meal is typically documented in percentages and based on facility policy.
Measuring Output

- Fluids are measured and documented using milliliters (mL) or cubic centimeters (cc)
- Graduates – containers that measure fluid in milliliters/cubic centimeters

What types of fluids are measured?
The End