# Chapter 20

## Assisting With Nutrition and Fluids

#### **Basics of Nutrition**

- Food and water:
  - Are physical needs
  - ➤ Are necessary for life
- A poor diet and poor eating habits:
  - Increase the risk for diseases and infection
  - Cause healing problems
  - > Affect physical and mental function
    - · This increases the risk for accidents and injuries.

### **Basic Nutrition**

- Nutrition is the processes involved in the ingestion, digestion, absorption, and use of foods and fluids by the body.
  - Good nutrition is needed for growth, healing, and body functions.
- A nutrient is a substance that is ingested, digested, absorbed, and used by the body.
  - Nutrients are grouped into fats, proteins, carbohydrates, vitamins, minerals, and water.

## **MyPlate**

- The MyPlate food guidance system encourages smart and healthy food choices and daily activity.
  - The kind and amounts of food to eat daily
  - > Gradual improvement
  - Physical activity
  - > Variety
  - > Moderation
  - The right amount from each food group band
    - · Grains, vegetables, fruits, milk, meat and beans, and oils

#### **Nutrients**

- Protein is the most important nutrient.
  - ➤ It is needed for tissue growth and repair.
- Carbohydrates provide energy and fiber for bowel elimination.
- Fats provide energy.
  - They add flavor to food and help the body use certain vitamins.
- Vitamins are needed for certain body functions.
- Minerals are needed for bone and tooth formation, nerve and muscle function, fluid balance, and other body processes.
- Water is needed for all body processes.

# Factors Affecting Eating and Nutrition

- Many factors affect nutrition and eating habits.
  - > Age
  - > Culture
  - > Religion
  - > Appetite
  - > Personal choice
  - Body reactions
  - > Illness
  - Disability

## **OBRA Dietary Requirements**

- The Omnibus Budget Reconciliation Act of 1987 (OBRA) has requirements for food served in nursing centers:
  - Each person's nutritional and dietary needs are met.
  - > The person's diet is well-balanced.
    - It is nourishing and tastes good.
  - Food is appetizing.
  - > Hot food is served hot and cold food is served cold.
  - > Food is served promptly.

# Serving Food

- Food is prepared to meet each person's needs.
- Other foods are offered if the person refused the food served.
  - Substituted food must have a similar nutritional value to the first foods served.
- Each person receives at least 3 meals a day.
- A bedtime snack is offered.
- The center provides needed assistive devices and utensils.

## **Special Diets**

- Doctors may order special diets for:
  - A nutritional deficiency
  - > A disease
  - Weight control
  - > To remove or decrease certain substances in the diet
- Regular diet, general diet, and house diet mean there are no dietary limits or restrictions.

#### The Sodium-Controlled Diet

- Certain diseases and drugs cause the body to retain extra sodium. Sodium causes the body to retain water.
- With too much sodium:
  - > Tissues swell with water.
  - > There is excess fluid in the blood vessels.
  - > The heart has to work harder.
- Sodium control decreases the amount of sodium in the body.
- Sodium-controlled diets involve:
  - Omitting high-sodium foods
  - Not adding salt when eating
  - Limiting the amount of salt used in cooking

## Diabetes Meal Planning

- Diabetes is a chronic illness in which the body cannot produce or use insulin properly.
- Diabetes is usually treated with insulin or other drugs, diet, and exercise.
- The meal plan involves:
  - > Food preferences
  - Calories needed
    - The same amounts of carbohydrates, protein, and fat are eaten each day.
  - Eating meals and snacks at regular times

## The Dysphagia Diet

- Dysphagia means difficulty swallowing.
  - A slow swallow means the person has difficulty getting enough food and fluids for good nutrition and fluid balance.
  - An unsafe swallow means that food enters the airway (aspiration).
    - Aspiration is breathing fluid, food, vomitus, or an object into the lungs.
- Food thickness is changed to meet the person's needs.

# The Dysphagia Diet, cont'd.

- When feeding a person with dysphagia, you must:
  - Know the signs and symptoms of dysphagia.
  - > Feed the person according to the care plan.
  - Follow aspiration precautions.
  - Report changes in how the person eats.
  - ➤ Observe for signs and symptoms of aspirations.
    - Report choking, coughing, difficulty breathing during or after meals, and abnormal breathing or respiratory sounds at once.

#### Fluid Balance

- Water is needed to live.
- Water is ingested through fluids and foods.
- Water is lost through:
  - Urine, feces, and vomit
  - The skin (perspiration)
  - The lungs (expiration)

## Fluid Balance, cont'd.

- Fluid balance is needed for health.
  - The amount of fluid taken in (intake) and the amount of fluid lost (output) must be equal.
  - If fluid intake exceeds fluid output, body tissues swell with water. This is called edema.
  - Dehydration is a decrease in the amount of water in body tissues.
    - Fluid output exceeds intake.
- An adult needs 1500 milliliters (mL) of water daily to survive.
  - > 2000 to 2500 mL are needed for normal fluid balance.

## Fluid Balance, cont'd.

- To maintain fluid balance, the doctor may order the amount of fluid a person can have in 24 hours.
  - Intake records are kept.
  - > Common orders are:
    - Encourage fluids
    - Restrict fluids
    - Nothing by mouth (NPO)
    - Thickened liquids

# Meeting Food and Fluid Needs

- The following can affect appetite and ability to eat:
  - > Weakness, illness, and confusion
  - Unpleasant odors, sights, and sounds
  - An uncomfortable position
  - The need for oral hygiene
  - > The need to eliminate
  - > Pain

## Preparing for Meals

- Preparing patients and residents for meals promotes comfort.
- These dining programs are common in nursing centers:
  - Social dining
  - Family dining
  - > Assistive dining
  - Low-stimulation dining
  - Restaurant-style menus
  - > Open-dining

## Serving Meal Trays

- You serve meal trays after preparing patients and residents for meals.
- If food is not served within 15 minutes:
  - Re-check food temperatures.
    - Follow agency policy.
  - > If not at the correct temperature, get a fresh tray.
    - Some agencies allow re-heating in microwave ovens.

# Feeding the Person

- Serve food and fluids in the order the person prefers.
- Offer fluids during the meal.
- Use teaspoons.
- Tell visually impaired persons what is on the tray.
  - > Use the numbers on a clock for the location of foods.
- When feeding visually impaired persons, describe what you are offering.
- Allow time and privacy for prayer.
- Engage the person in pleasant conversation.
  - > Allow time for chewing and swallowing.
- Sit facing the person.

## Special Diets and Snacks

- Many special diets involve between-meal snacks.
  - They are served upon arrival on the nursing unit.
  - Provide needed utensils, a straw, and a napkin.
  - Follow the same considerations and procedures for serving meal trays and feeding persons.
- Calorie counts
  - > The nurse tells you which persons need calorie counts.
- Patients and residents need fresh drinking water each shift and whenever the pitcher is empty.

## Assisting With Special Needs

- When persons cannot eat or drink because of illness, surgery, or injury, the doctor may order:
  - Nutritional support
  - ➤ IV (intravenous) therapy
- Enteral nutrition is giving nutrients into the gastrointestinal tract through a feeding tube.
  - > Gavage is the process of giving a tube feeding.
  - A naso-gastric (NG) tube is inserted through the nose into the stomach.
  - A gastrostomy tube (stomach tube) is inserted into the stomach.
    - It involves a surgically created opening.

## Reporting Observations

- Report the following at once:
  - Nausea
  - Discomfort during the feeding
  - Vomiting
  - Distended abdomen
  - Coughing
  - Complaints of indigestion or heartburn
  - Redness, swelling, drainage, odor, or pain at the ostomy site
  - > Fever
  - Signs and symptoms of respiratory distress
  - Increased pulse rate
  - Complaints of flatulence
  - > Diarrhea

## **Aspiration**

- Aspiration is a major risk from tube feedings.
  - ➤ It can cause pneumonia and death.
- Aspiration can occur:
  - During tube insertion
  - From tube movement out of place
  - From regurgitation (the backward flow of stomach contents into the mouth)
- To assist the nurse in preventing regurgitation and aspiration:
  - Position the person in Fowler's or semi-Fowler's position before the feeding.
  - Maintain Fowler's or semi-Fowler's position according to the nurse's directions and the care plan.
  - Avoid the left side-lying position.

# Feeding Tubes

- Persons with feeding tubes usually are NPO.
  - > Dry mouth, dry lips, and sore throat cause discomfort.
- These comfort measures are common:
  - Oral hygiene, lubricant for lips, and mouth rinses every 2 hours while the person is awake
  - Cleaning the nose and nostrils every 4 to 8 hours
- NG tubes can irritate and cause pressure on the nose.
  - > They can change nostril shape or cause pressure ulcers.

# IV Therapy

- Intravenous (IV) therapy (IV, IV infusion) is giving fluids through a needle or catheter inserted into a vein.
  - > The doctor orders:
    - The amount of fluid to give (infuse)
    - The amount of time to give it in
  - The RN figures the flow rate.
    - The flow rate is the number of drops per minute (gtt/min).
  - > You can check the flow rate.

## IV Therapy, cont'd.

- Tell the RN at once if:
  - > No fluid is dripping
  - > The rate is too fast
  - > The rate is too slow
  - The bag is empty or close to being empty
- You help meet the safety, hygiene, and activity needs of persons with IVs.
- You are never responsible for:
  - Starting or maintaining IV therapy
  - Regulating the flow rate
  - Changing IV bags
  - > Giving blood or IV drugs