

# NC Department of Health and Human Services NC Nurse Aide I Curriculum

## Module J Nutrition and Fluids

July 1, 2024

# Objectives

1. Describe OBRA requirements for serving food
2. Identify basic nutrients
3. Explain the use of MyPlate
4. Describe special diets, fluid balance and imbalance
5. Discuss medical conditions and precautions related to nutrition and fluid intake
6. Identify dietary practices of various religions

# OBRA Dietary Requirements Nursing Homes

OBRA requires the following for each resident:

- Dietary and nutritional needs are met
- Diet is nourishing, well-balanced, and tastes good
- Meals are provided at least 3 times a day, and a snack is offered at bedtime
- Food preferences are offered and substituted if food served is refused
- Assistive devices and utensils are provided as needed

# OBRA Dietary Requirements Nursing Homes

OBRA requirements for meals:

- Appetizing, smells good and looks good
- Varied in color and texture
- Served at the correct temperature
- Served promptly
- Prepared to meet individual needs

# Nutrition

When the body takes uses foods and fluids to:

- Promote physical and mental health
- Increase resistance to illness
- Produce energy and vitality
- Aid in healing
- Assist one to feel and sleep better
- Help avoid or manage common diseases



# Characteristics of Poor Nutrition

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

# Age-Related Changes Affecting Nutrition

- Fewer calories needed
- Vitamin and mineral requirements change
- Medications may affect ability to chew
- Constipation may occur
- Taste and smell diminish
- Teeth/dentures affect ability to chew
- Saliva and gastric juices decrease
- Appetite and thirst decrease
- May require assistance with dining

# Nutrients

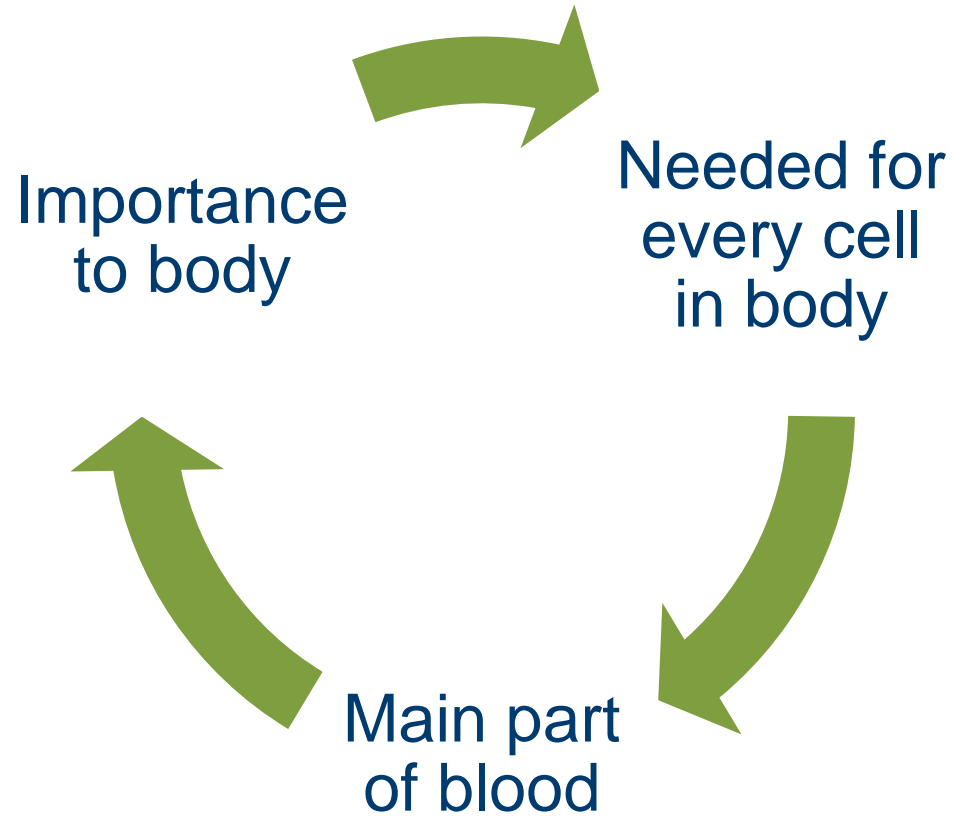
Substances found in food and fluids used for growth and maintenance of health:

- Water
- Fats
- Carbohydrates
- Proteins
- Vitamins
- Minerals





# Water



# Fats

- A good source of energy
- Gives flavor to food
- Important for the absorption of certain vitamins
- Sources of fat include butter, oil, and fatty meat
- Plant-based dietary sources of fat include olives, nuts, and seeds
- Certain fats may increase cholesterol levels and lead to heart disease



# Carbohydrates

Supplies energy and helps body use fats

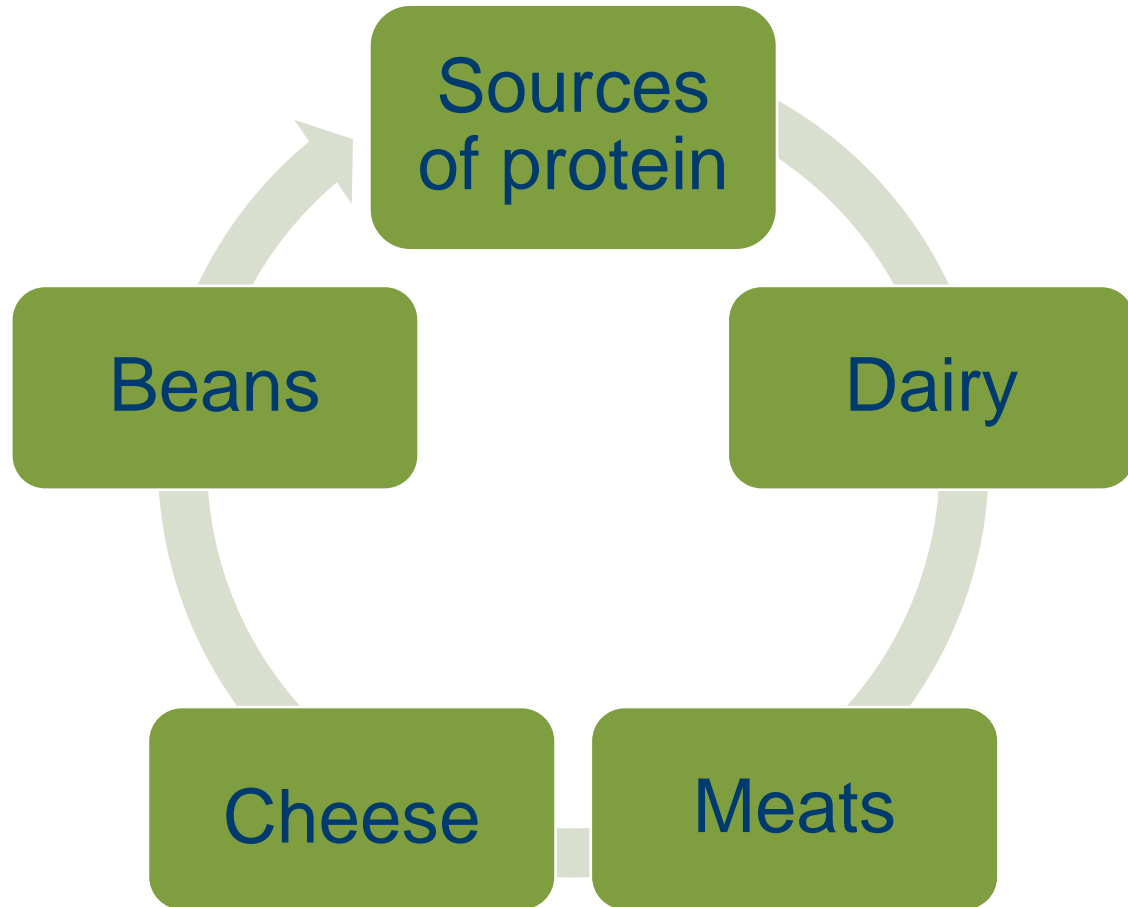
Sources of carbohydrates:

- Breads
- Fruits
- Candy
- Sugary soft drinks



Certain carbohydrates add fiber to the diet that help with elimination

# Protein



# Vitamins



Vitamins help the body function normally



The body gets vitamins from each of the food groups



13 essential vitamins

# Minerals

Minerals help the body function normally



Calcium keeps bones and teeth strong



Iron helps blood carry oxygen to all parts of the body

# Calories

- Energy value of food or beverage
- Number of calories in one serving size

| <b>Nutrition Facts</b>   |                    |
|--|--------------------|
| 8 servings per container   |                    |
| <b>Serving size</b>  | <b>1 cup (68g)</b> |
| <b>Amount per serving</b>  |                    |
| <b>Calories</b>  | <b>370</b>         |
| <b>% Daily Value*</b>  |                    |
| <b>Total Fat</b> 5g  | <b>7%</b>          |
| Saturated Fat 1g   | <b>5%</b>          |
| <i>Trans</i> Fat 0g  |                    |
| <b>Cholesterol</b> 0mg   | <b>0%</b>          |
| <b>Sodium</b> 150mg  | <b>6%</b>          |
| <b>Total Carbohydrate</b> 48g  | <b>15%</b>         |
| Dietary Fiber 5g   | <b>14%</b>         |
| Total Sugars 13g   |                    |
| Includes 10g Added Sugars  | <b>20%</b>         |
| <b>Protein</b> 12g   |                    |
| Vitamin A 10mcg  | 20%                |
| Vitamin C 1mg  | 100%               |
| Vitamin D 1mcg   | 50%                |
| Vitamin E 2mcg   | 100%               |
| Riboflavin 5mcg  | 75%                |
| Folic Acid 200mcg  | 60%                |
| Thiamin 2mcg   | 35%                |
| Vitamin B12 5mcg   | 100%               |
| Zinc 7mg   | 50%                |
| Biotin 300mcg  | 100%               |
| Calcium 50mcg  | 25%                |
| Phosphorus 90mcg   | 90%                |
| Magnesium 400mcg   | 100%               |
| Chromium 75mcg   | 80%                |
| Potassium 5g   | 100%               |
| <small>* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.</small> |                    |

# Serving Size

Serving sizes are given in familiar measurements (cups, slices or pieces):

- Information on the label is based on one serving of the food or beverage
- Label shows the number of servings in the package or container
- Be aware of consumption

|                           |                    |
|---------------------------|--------------------|
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| <b>Calories</b>           | <b>370</b>         |
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# Serving Size Using Common Objects

## Deck of Cards

- 3 ounces of meat, poultry, or fish

## Baseball

- 1 cup rice, fruit, veggies, cereal, or pasta

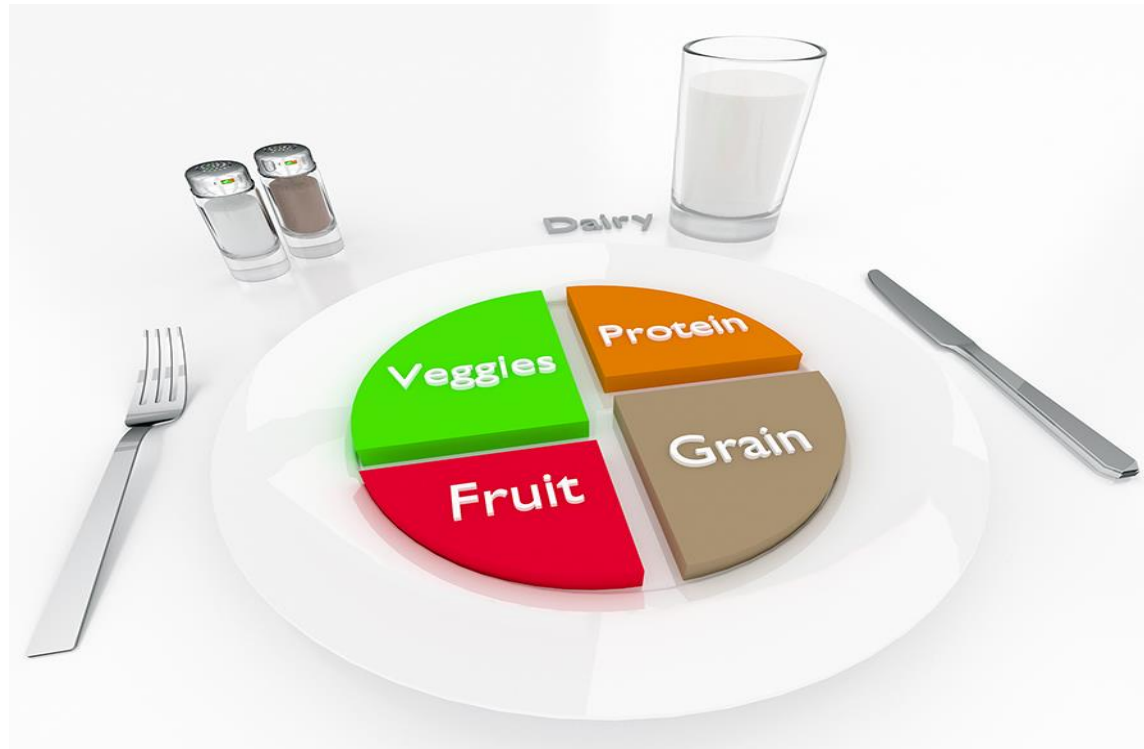
## Tennis Ball

- 1 medium sized fruit

## Postage Stamp

- Stick of butter sliced

# My Plate Activity Plan



# Providing Water for Residents

- Residents need fresh drinking water
- Before providing water, check with care plan or nurse
- Follow facility's procedure regarding time schedule and process



# The Diet Card

- Prepared by dietary department based on doctor's order
- Each resident's meal has its own diet card
- At a minimum, lists the resident's room number, name, type of diet and food allergies
- 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



# Advanced Diet



Food is gradually reintroduced to the resident



Post surgery or a specific medical condition



Resident may start out NPO (nothing by mouth) > ice chips > clear liquids > full liquids > mechanical soft > regular diet

# Special Diets

- Therapeutic or modified diet
- Ordered by the doctor and planned by dietician with input from resident
- May restrict or eliminate certain foods or fluids, based on illness, in preparation for procedures, or to meet nutritional needs

# Other Forms of Nourishment

Residents may be unable to eat due to illness, surgery, or injury

- Intravenous (IV) fluids feed the resident through a vein
- Parenteral nutrition is the intravenous infusion of nutrients administered directly into the bloodstream, bypassing the digestive system
- Enteral nutrition feeds the resident through a feeding tube into the gastrointestinal track
- Nasogastric tube provides nourishment through the nose and directly into the stomach
- Gastrostomy tube provides nourishment into the stomach through the abdomen



# Alternative and Supplemental Nutrients

- Ordered by physician and to serve, as between meals
- Given when a resident needs extra protein, calories, and fluids
- Supplemental nourishment includes: protein supplements, pudding, ice cream, milkshake



Nurse aide's role is to:

- Assist the resident as needed
- Report amount resident ate or drank

# Assisting the Resident with Meals

When a resident pockets food in cheeks:

- Remind resident to chew and swallow
- Touch cheek
- Ask the resident to use his tongue to move the food

Holds food in mouth:

- Ask resident to chew and swallow
- Make sure resident has swallowed before offering more food.

The nurse aide should

- Use assistive devices as ordered.
- Use short, clear verbal cues
- Be aware of signs of aspiration

# Assisting the Resident with Meals

For visually-impaired residents:

- Read menus as needed
- Use an imaginary clock face to explain position of food on plate

For residents who had stroke (CVA):

- Place food on the unaffected or stronger side of mouth
- Make sure food is swallowed
- Place food in resident's field of vision

The nurse aide should be aware of precautions regarding dysphagia.

# Fluid Balance

- Amount of fluid taken in (intake) equals the amount of fluid lost (output)
- Needed to survive and for good health
- Take in water by drinking fluids and eating foods
- Lose water through urine, feces, vomit, perspiration, breathing out, drainage from wounds and suctioning of liquids from stomach
- Death can occur if the body has too much or too little water in the tissues



# Measuring Intake and Output (I&O)

- Fluid intake reflects nutritional status
- Measurement of fluid intake helps prevent or detect complications
- Nurse aide expected to monitor and document special fluid orders
- Medical treatment is planned and evaluated based on results
- Evaluates fluid balance
- Evaluates kidney function

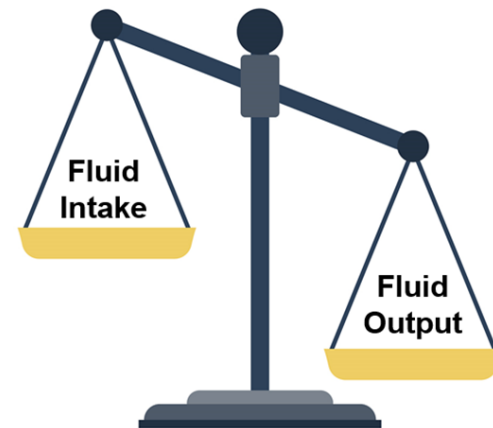


# Special Fluid Orders

- The doctor may order a specific amount and type of fluid a resident must drink a day to maintain fluid balance
- Order is identified on the resident's diet card
  - Encourage fluids (increase fluids)
  - Restrict fluids (limit fluids)
  - Nothing by mouth (NPO) – no fluids or food
  - Thickened liquids (all fluids are thickened)
- Nurse aide must measure and record intake very carefully

# Dehydration

- Occurs when fluid intake is less than fluid output
- Body tissues are lacking in water
- May occur from vomiting, diarrhea, fever, or refusing to drink fluids



# Nurse Aide's Role

- Observe and report signs and symptoms of dehydration
- Determine preferences of fluids and offer
- Assure water pitcher and cup within reach
- Measure and record I&O accurately, if ordered
- Force fluids, if ordered by the doctor



# Food Preferences and Dietary Restrictions

Culture and religion may influence dietary practices, food choices, and food preparation



**The End**