Understand nurse aide skills needed to provide for residents’ nutrition, hydration, and elimination needs.
This indicator introduces the nurse aide to the **basic principles of nutrition**. It includes ChooseMyPlate.gov, **therapeutic diets**, **adaptive devices**, **alternative methods of feeding**, providing **drinking water and nourishments**, **feeding a resident**, and **measuring/recording intake and output**.
There is intentional repeat of some HSII course content in Nursing Fundamentals.

Repeating course content distributes learning over time and increases long term memory.

Academic and skill competence must be maintained at a very high level for direct resident care.

Be GREEN. Recycle knowledge and build on it!
Food is broken down by the gastrointestinal system into small substances called nutrients.
Nutrients are absorbed into the body for use.
Nutrients

1. Protein
2. Carbohydrates
3. Fats
4. Vitamins
5. Minerals
6. Water
Nutrient - Protein

Builds and repairs tissue
Nutrient - Carbohydrates

- Supplies fuel for the body’s energy needs
- Supplies fiber necessary for bowel elimination
Nutrients - Fat

- Source of stored energy
- Helps body use certain vitamins
- Conserves body heat
- Protects organs from injury
- Holds kidneys place
Nutrients – Vitamins

• Necessary for carrying out and maintaining specific body functions
Nutrients – Minerals

• Necessary for carrying out and maintaining specific body functions
Nutrients - Water

- The most essential nutrient for life
- Without it a person can only live a few days
- Assist in digestion and absorption of food
- Helps maintain normal body temperature
- Largest component of blood plasma
No one food contains ALL the NUTRIENTS needed for good health.

_Soooooo..._

Eating a variety of foods is needed to sustain good health.
Nutrition guides typically divide foods into food groups and recommend daily servings of each group for a healthy diet.
A food group is a collection of foods that share similar nutritional properties or biological classifications.
Vegetable Group

Make half your plate fruits and vegetables.

Vary your vegetables.
Fruits Group

Make half your plate fruits and vegetables.
Grains Group

Make at least half your grains whole grains.
Make **lean** choices.

51+ years old, need 5 ½ ozs. daily for men and 5 ozs. for women.
Dairy Group

Switch to fat-free or low-fat (1%) milk.

Men and women over 51 years old need 3 cups of dairy group each day.
Two overarching concepts:

Maintain calorie balance over time to achieve and sustain a healthy weight.
A calorie is a unit of energy.
Calories

Taken from: How Stuff Works
Two overarching concepts:

Focus on consuming nutrient-dense foods and beverages.
Nutrient Dense

Foods that have high nutritional content as well as “energy”
Empty Calories

Calories contained in food that provide “fuel” but few or no nutrients.
Factors That Influence Caloric Need

- Age
- Sex
- Size and activity level
- Climate
- State of health
- Amount of sleep obtained
Effects of Good Nutrition

- Promotes physical and mental health
- Provides increased resistance to illness
- Produces added energy and vitality
- Aids in the healing process
- Assists one to feel and sleep better
Signs of Good Nutrition

- Healthy, shiny looking hair
- Clean skin and bright eyes
- A well-developed, healthy body
- An alert facial expression
- An even, pleasant disposition
Signs of Good Nutrition

- Restful sleep patterns
- Healthy appetite
- Regular elimination habits
- Appropriate body weight
Signs of Poor Nutrition

- Hair and eyes appear dull
- Irregular bowel habits
- Weight changes
- Osteoporosis and other diseases
Signs of Poor Nutrition

- Lack of interest - mental slowdown
- Skin color and appearance poor
• **Anemia** leading to:
  - tired feeling
  - shortness of breath
  - increased pulse
  - problems with digestion
  - pale skin
  - poor sleep patterns
  - headaches
BASIC NUTRITION

HAVE WE GOTTEN IT?
LET'S CHECK AND SEE

STICK DIAGNOSTICS

Student Name A

Student Name B
Influences on nutrition and dietary habits

1) Aging
2) Culture
Nutritional Challenges of Geriatrics

- Metabolism slows
- muscles weaken
- body moves slow
- activity is reduced
- reduced activity decreases appetite.
Nutritional Challenges of Geriatrics

• Loss of vision affects the way food looks, which can decrease appetite.
• The aging process and some medications weaken the sense of smell and taste which can decrease appetite.
Nutritional Challenges of Geriatrics

- Less saliva production affects chewing and swallowing.
Nutritional Challenges of Geriatrics

• Dentures and poor dental health make chewing difficult.
Nutritional Challenges of Geriatrics

- Digestion takes longer and it is less efficient.
• Constipation interferes with appetite.
Factors Influencing Dietary Practices

- Personal preference
- Appetite
- Finance
- Illness
- Culture
The diets of Chinese, Japanese, Koreans and people from Far East include rice and tea.

The diets of Spanish-speaking people include spicy dishes containing rice, beans and corn.
Culture and Dietary Practices

- The **Italian** diet includes spaghetti, lasagna, and other pastas.
- **Scandinavians** have a lot of fish in their diets.
Culture and Dietary Practices

- **Americans** eat a lot of meat, fast foods, and processed foods
- Use of sauce and spices are culturally related
Culture and Dietary Practices

- Days of **fasting** when all or certain foods are avoided
- **Christian Science** - avoid coffee/tea and alcohol

- **Roman Catholic** - avoid food one hour before communion, observe special fast days
Culture and Dietary Practices

- **Muslim/Moslem** - avoid alcohol, pork products
- **7th Day Adventist** - avoid coffee/tea, alcohol, pork and some meats, caffeine
Culture and Dietary Practices

- **Baptists** – some avoid coffee, tea and alcohol
- **Greek Orthodox** - fast days, but usually “forgiven” when ill
Culture and Dietary Practices

- **Conservative Jewish faith**
  - Prohibits shellfish, non-kosher meats such as pork
  - Requires special utensils for food preparation
Culture and Dietary Practices

- **Conservative Jewish faith**
  - Forbids cooking on Sabbath
  - Forbids eating of leavened bread during Passover
Culture and Dietary Practices

- Conservative Jewish faith
  - Forbids serving milk and milk products with meat
  - Strict rules regarding sequence in which milk products and meat may be consumed
Therapeutic, Modified, or Special Diets
• Help body organs to maintain and/or regain normal function

• Treat metabolic disorders by regulating amount of food
Therapeutic, Modified or Special Diets

- Add or eliminate calories to cause a change in body weight
- Assist with digestion of food by taking foods out of diet that irritate digestive system
- Restrict salt (sodium) intake to prevent or decrease edema
Types of Therapeutic, Modified or Special Diets

- Clear liquid
- Full liquid
- Bland
- Low residue
- Controlled carbohydrate (Diabetic)
- Low fat/low cholesterol
Types of Therapeutic, Modified or Special Diets

- High fiber
- Low calorie
- High calorie
- Sodium restricted
- High protein
- Mechanical soft, chopped, pureed
Diet Cards

List:
• the resident’s name
• Information about special diets
• Food allergies
• Likes and dislikes
Residents with high blood pressure, heart disease, kidney disease, or retention may be placed on a low-sodium diet.

Salt packets will not be on the food tray.

Common abbreviations: “NAS” (no added salt) and Low Na (low sodium)
Residents with severe kidney disease may be on a low protein diet.

Proteins breakdown into substances that can harm the kidneys.

Extent of protein restriction will vary depending on the stage of kidney disease.
Fluid-Restricted Diets

Residents with severe heart or kidney disease may need fluid restriction.

Measure and document exact amounts of fluid intake. Report excesses to the nurse.

Do not offer additional fluids or foods that contain fluids. Notify the nurse if the resident complains of thirst.

Common abbreviation is “RF” (restrict fluids)
Low-Fat/Low-Cholesterol Diets

- Residents with high levels of cholesterol, gall bladder disease, diseases that interfere with fat digestion, and liver disease may be placed on these diets.

- Diets permit skim milk, low fat cottage cheese, fish, white meat of turkey and chicken, veal, and vegetable fats. Use of monounsaturated fats such as olive oil, canola, and peanut oils are encouraged.

- Do not offer additional fluids or foods that contain fluids. Notify the nurse if the resident complains of thirst.

- Common abbreviation is “Low-Fat/Low-Chol”
Modified Calorie Diets

- Residents may need to reduce calories to lose weight or increase calories to gain weight.

- Do not offer residents on a low-cal diet extra food. Check with the nurse.

- Common abbreviation is “Low-Cal/High-Cal”
Dietary Management of Diabetes

- Calories and carbohydrates are carefully controlled.
- Fats and proteins are regulated.
- Amounts of food are determined by energy needs.
- Diabetics must eat all the food served on the tray.
- Do not offer other foods without the nurse’s approval.
Dietary Management of Diabetes

- Meal tray may contain artificial sweeteners

- Common abbreviations for diabetic diets are “NCS” no concentrated sweets and the amount of calories allowed followed by “ADA” (American Diabetic Association)
Diets Modified in Consistency

- Liquid Diet
- Soft Diet and Mechanical Soft Diet
- Pureed Diet
Liquid Diets

Ordered short term for medical condition or before or after a test or surgery.

Liquid food is anything that is in the *liquid state at room temperature.*
Liquid Diets

“Clear Liquids”
- Clear juices
- Broth
- Gelatin
- Popsicles

“Full Liquids”
Clear liquids plus:
- Cream soups
- Milk
- Ice cream
Soft and Mechanical Soft Diets

Makes food easier to chew and swallow

SOFT DIETS
High fiber foods, fried foods, spicy foods, raw vegetables and fruits and some meats will be restricted. Food is chopped or blended.

MECHANICAL SOFT DIETS
Food choices are not limited. Only the texture of the food is changed.
Pureed Diets

This diet does not require that a resident chew his/her food.

Food is chopped, blended, or ground into a thick paste of baby food consistency.
• Serve the **RIGHT** resident the **RIGHT** tray containing the **RIGHT** therapeutic diet at the **RIGHT** temperature in the **RIGHT** environment with the **RIGHT** attitude.
THERAPEUTIC DIETS
HAVE WE GOTTEN IT?
LET’S CHECK AND SEE

Student Name A
Student Name B

STICK DIAGNOSTICS
Devices and alternate methods used to take in nutrients
Adaptive Devices

- Food Guards
- Divided Plates
- Built-up handled utensils
- Easy grip mugs/glasses

Residents have to be taught how to use these devices.
**Parenteral Fluids**

*(Intravenous Infusion - IV)*

- Fluids administered through vein. IVs help hydrate but have little nutritional value
- **Responsibility of licensed nurse**
• Observations to report
  – Near-empty bottle/bag
  – Change in drip rate
  – Pain at needle site, and/or redness and/or swelling, if observable
  – Loose, non-intact, or damp dressing
Liquid formula administered into the stomach through a tube by licensed nurse

- Nose to stomach - nasogastric tube
- Directly into stomach – gastrostomy tube - “PEG tube” (Percutaneous Endoscopic Gastrostomy)
- Mitts may be ordered to prevent resident from dislodging tube
Enteral Feeding

PEG tube
Residents unable to take nutrients by mouth can consent to enteral feeding.

- Depressed
- Comatose
- Swallowing problem (stroke, Alzheimer’s or other medical conditions)
- Disorders of digestive tract
• Ensure that there is no tension on tubing, no kinks, no coils, and tube not underneath resident.
• Keep resident’s nose clean and free of mucus
• Keep tube secure
• Perform frequent oral care with nasogastric or PEG tube
Immediately report:

- Redness or drainage around the opening
- Skin sores or bruises
- Cyanotic skin
- Resident complaints of chest pain or nausea
- Choking
- Tube falls out
- Feeding pump alarm sounds
- Resident’s inclined position changes
ALTERNATE WAYS TO GET NUTRIENTS
HAVE WE GOT IT?
LET'S CHECK AND SEE

Student Name A

Student Name B

STICK DIAGNOSTICS
Fluid Balance
(Hydration)
Fluid Needs

Under normal conditions:

Eight 8-ounce glasses of water/fluids a day

64 ounces daily
Fluid (Hydration) Balance

Consume 2-1/2 to 3-1/2 quarts daily

• eating
• drinking

Eliminate 2-1/2 to 3-1/2 quarts daily

• urine
• perspiration
• water vapor through respirations
• stool
Fluid Imbalances

Edema – too much fluid in the body

Dehydration – too little fluid in the body
Edema

Fluid intake exceeds fluid output - fluid retention

Caused by:

• Kidney or failure
• Heart failure
• Excessive salt intake
Edema

Signs of Edema:

- Weight gain
- Swelling of feet, ankles, hands, fingers, face
- Decreased urine output
- Shortness of breath
- Collection of fluid in abdomen (ascites)
Residents’ weights must be accurate!

Fluid retention can be detected by weight gain.
SKILL
Weighing a resident
Dehydration

Fluid output exceeds fluid intake

- Common problem of long-term care residents
Dehydration

• Signs
  – thirst
  – decreased urine output
  – parched or cracked lips
  – dry, cracked skin
  – fever
  – weight loss
  – concentrated urine
  – tongue coated and thick
Dehydration

• Causes of dehydration
  – poor fluid intake
  – diarrhea
  – bleeding
  – vomiting
  – excessive perspiration
Special Fluid Orders

Force Fluids “FF” means to encourage the resident to drink more fluids.

Restrict Fluids “RF” means to limit the amount of fluids to the amount set by the physician.

NPO means nothing by mouth

Thickened liquids help prevent choking
Special Fluid Orders

Force fluids

- Offer fluids in small quantities
- Offer fluids *(resident preference)* without being asked on every contact with resident
- Remind resident of importance of fluids in bodily functions
RESTRICTED FLUIDS

• Remind resident of the restriction
• Measure and record exact amount of fluid intake
• Report excesses to the nurse
• Do not offer additional fluids or foods that contain fluids
• Tell nurse if resident complains of thirst
• Abbreviation is “RF”
N P O

• Nada per os or nothing by mouth
• Resident is not allowed anything to eat or drink!
• NEVER OFFER FOOD OR DRINK OR WATER TO A RESIDENT WHO IS NPO
• NPO residents will be getting IVs or tube feedings
• NPO is ordered before surgery and some tests
THICKENED LIQUIDS

• Improves the ability to control fluids in the mouth and throat. For residents with swallowing problems.
• If ordered, must be used with all liquids.
• Do not offer water, water pitcher, or other liquids to a resident who must have thickened liquids.
• Three basic consistencies are:
  – Nectar thick; like a thick juice such as tomato
  – Honey thick; pours slowly like honey
  – Pudding thick; must be consumed with spoon
Related SKILL
Providing Fresh Drinking Water

- Fresh water should be provided periodically throughout day
- Encourage to drink 6-8 glasses daily if appropriate
- Offer fluids on every resident encounter unless ordered otherwise.
Training Lab Assignment
Engage in the Skill Acquisition Process for:

**SKILL 6.01A**

Provide fresh drinking water
What is pagophagia?
Ice craving is a condition called pagophagia, or compulsive eating of ice. This is a form of pica, a condition in which people crave and eat non-food substances like ice, chalk, paper, laundry soap, starch, hair, dirt, clay, or paint.

There are several reports linking the craving of ice to iron-deficiency anemia (low blood count as a result of an iron-deficiency). In fact, there’s even a website called “All About Chewing Ice,” which also has a support group for people with this condition.

Residents often crave ice.
When residents ask for ice….

GET IT!

Unless ordered otherwise.
Measuring Fluids

- Fluids measured in milliliters (ml) which is metric measure

\[ 30 \text{ ml} = 1 \text{ ounce} \]

**DO NOT MEASURE IN CCs**
REMEMBER

30 ml = 1 ounce
Physician orders intake and output

**INTAKE** includes:

– All liquid taken by mouth
– Food items that turn to liquid at room temperature
– Tube feedings into stomach through nose or abdomen
– Fluids given by intravenous infusion
Measure/Record Intake & Output

- OUTPUT includes
  - Urine
  - Liquid stool
  - Emesis
  - Drainage
  - Suctioned secretions
  - Excessive perspiration
Related SKILL
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 6.01B
Measure and record intake and output
FLUID BALANCE, MEASURING I & O, PROVIDING DRINKING WATER

HAVE WE GOTTEN IT?
LET'S CHECK AND SEE

STICK DIAGNOSTICS

Student Name A

Student Name B

Nursing Fundamentals 7243
Preparing Residents for Meals
Preparing Residents for Meals

• Make meals an enjoyable and sociable experience
• Provide pleasant environment
  – Clean area
  – Odor-free area
  – Adequate lighting
• Flowers/decorations and music add interest to dining area
Preparing Residents for Meals

• **Because eating is a social activity of daily living**…

• **Do not enclose the bedbound resident with privacy curtains when feeding them.**
Preparing Residents for Meals

- All residents clean and dressed for meals
- Hair combed
- Oral care provided
- Encourage to use bathroom or urinal/bedpan
- Cleanse and dry incontinent residents
Preparing Residents for Meals

• Resident’s face and hands washed before meal – rewash residents’ hands and mouth after meals

• Provide for comfort
  – Raise head of bed
  – Position in chair
  – Transport to dining area

• Provide clothing protector *if appropriate*
Clothing Protector:
• Offer but do not insist, residents’ have the right to refuse
• Using the term “bib” decreases the residents dignity by treating them like children
Preparing Residents for Meals

- Check to be certain resident receives right tray and has correct diet
- Food should be attractively served and placed within reach
- Check tray to see that everything needed is there
• Assist resident as needed with:
  – cutting meat
  – pouring liquids
  – buttering bread
  – opening containers
General Guidelines
Assisting with Meals

- Orient blind residents to food placement on the plate according to face of clock
- Approach residents from non-effected side
- Alternate fluid and food
General Guidelines
Assisting with Meals

• Residents should be encouraged to do as much as possible for themselves
• Provide time for resident to complete meal
• Display pleasant, patient attitude while assisting
General Guidelines
Assisting with Meals

- Remove tray when meal finished
- Tell nurse is not eating
- Observe and record amount eaten in %
- Record fluid intake if ordered
- Assist to position of comfort
General Guidelines
Assisting with Meals

• Call signal and supplies positioned within reach
• Area should be left clean and tidy
• Hands washed before and after care of each resident
Related SKILL
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 6.01C
Assisting with dining/feeding resident who cannot feed self
Supplementary Nourishments

- Ordered by physician
- Serve as directed by supervisor
- Provide necessary eating utensils, straw and/or napkin
Supplementary Nourishments

• Usually served:
  – **Midmorning**
  – **Mid-afternoon**
  – **Bedtime**
Supplementary Nourishments

Serve **on schedule** so the next meal is not jeopardized by decreased resident appetite.
Types of Nourishments

- Milk
- Juice
- Gelatin
- Custard, ice cream, sherbet
- Crackers
- Nutritional supplementation products (e.g., Ensure, etc.)
Related SKILL
SKILL 6.01D
serving supplementary nourishments.
Serving meals and supplements

Have we got it?
Let's check and see

Student Name A
Student Name B

Stick diagnostics

Nursing Fundamentals 7243
Understand nurse aide skills needed to provide for residents’ nutrition and hydration needs.