



Nutrition



BEACON
Specialized Living

Objectives

Cover Six Key Nutrients and Food Groups

Understand How Menus Work at Beacon

Learn About Swallowing and Dysphagia

Learn Your Role at the Meal Table

Basic Nutrition

Is the foundation of good health. By eating a variety of foods in the proper amounts, we can provide the essential fuels for healthy body functions.

Nutrients are needed to:

- Supply energy for growth
- Maintain and repair the body
- Regulate body processes

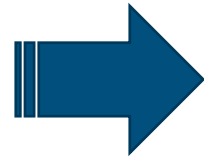


6 Key Nutrients

Carbohydrates

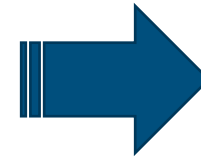
Sources: fruits, bread and grains, starchy vegetables, and sugars.

- Whole grains in fruit are full of fiber.
- Reduces the risk of heart disease.
- Maintains normal blood glucose levels.



Proteins

- Responsible for the building and repair of body tissues.
- Breaks down into amino acids.
- Cannot be synthesized in the body.
- 10-35% of daily calories should come from lean protein sources like low-fat meat, dairy, beans, or eggs.



Fats

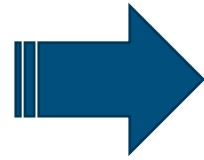
- Increases the absorption of fat-soluble vitamins.
- 20-35% of daily intake
- Omega-3s help with development and growth.
- Limit intake of saturated fat.
- Smart choices include nuts, seeds, and avocados.

6 Key Nutrients

Vitamins

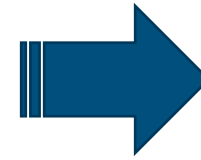
Are necessary for the synthesis of collagen which provides structure to blood vessels, bone, and ligaments.

- Rich sources include citrus fruits, strawberries, and peppers.
- Vitamin D: Maintains calcium homeostasis. Is found in food sources or synthesized by the sun.



Minerals

- Sodium (Salt): Maintains fluid volume outside of the cells. It is important to keep intake under 2,400 milligrams per day.
- Potassium: Prevents the excess rise of blood pressure. Rich sources include bananas, potatoes, and tomatoes.
- Calcium: Maintains and builds strong bones and teeth. Daily intake should include 3 servings of calcium-rich foods per day. These include dairy products like milk, low-fat cheese, and yogurt.



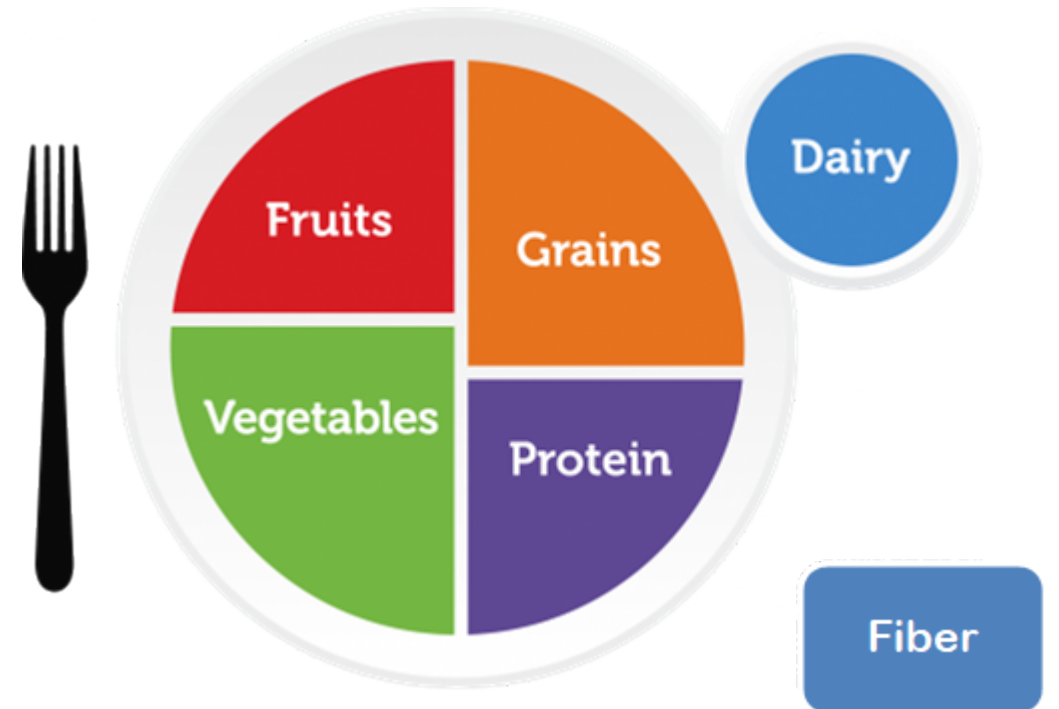
Water

- Required amount depends on body mass.
- Maintains and transports nutrients throughout the body. Is also used for waste removal.
- Bodies can get 20% of water requirements from solid food.
- The digestion process provides around 10% of the total required water necessity.

My Plate

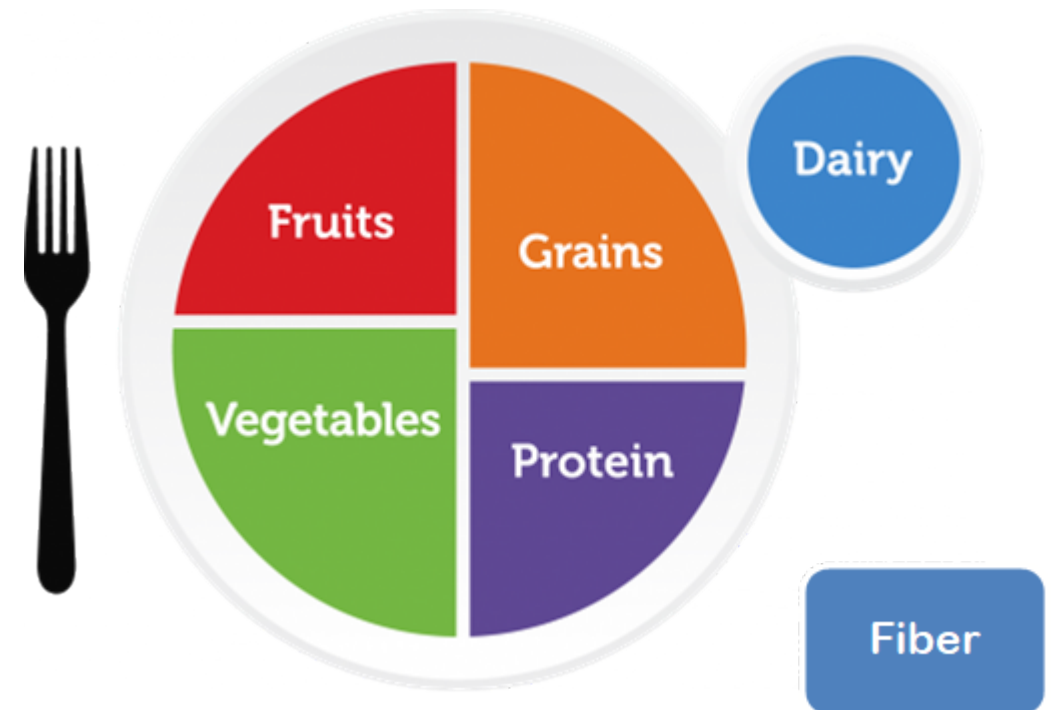
The USDA has developed My Plate to act as an updated individual-centered breakdown from the food pyramid.

- It is not a rigid prescription.
- Adjustable for individual circumstances.
- Offer a variety of food.
- Based on height, weight, build, and age.



My Plate - Grains

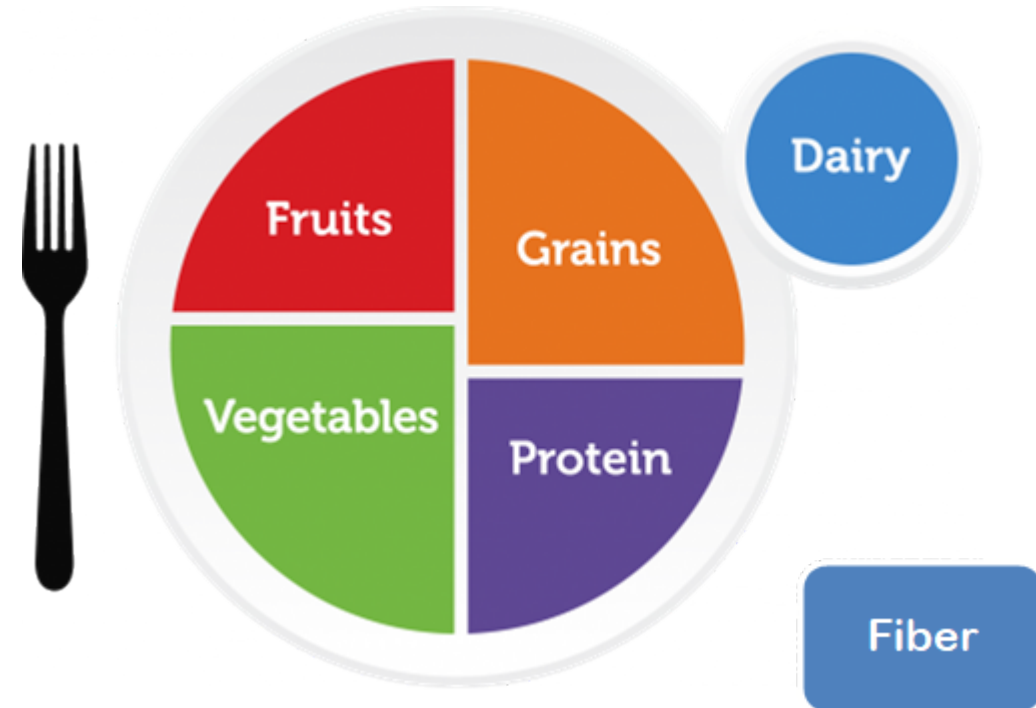
- USDA recommends $\frac{1}{2}$ of serving to be made up of whole grains (like oatmeal or brown rice).
- At least 3oz a day
 - 1oz = 1 Slice of Bread
 - 1oz = 1 Cup of Cereal
 - 1oz = $\frac{1}{2}$ Cup Cooked Pasta



My Plate - Vegetables

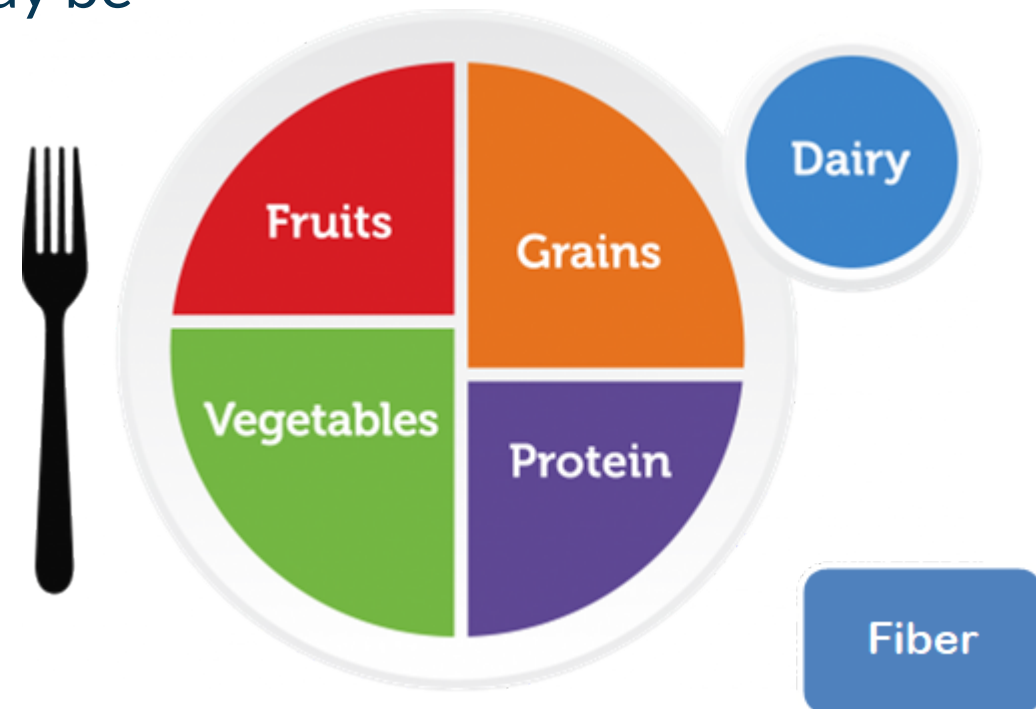
- Choose darker green or orange vegetables.
- Dried beans and lentils are also good choices.
- Weekly Recommended Servings*
 - Dark Greens = 1 ½ Cups
 - Red and Oranges = 5 ½ Cups
 - Beans and peas = 1 ½ Cups
 - Starchy Veggies = 5 Cups
 - Other = 4 Cups

*Based on 2000 calorie/day diet.



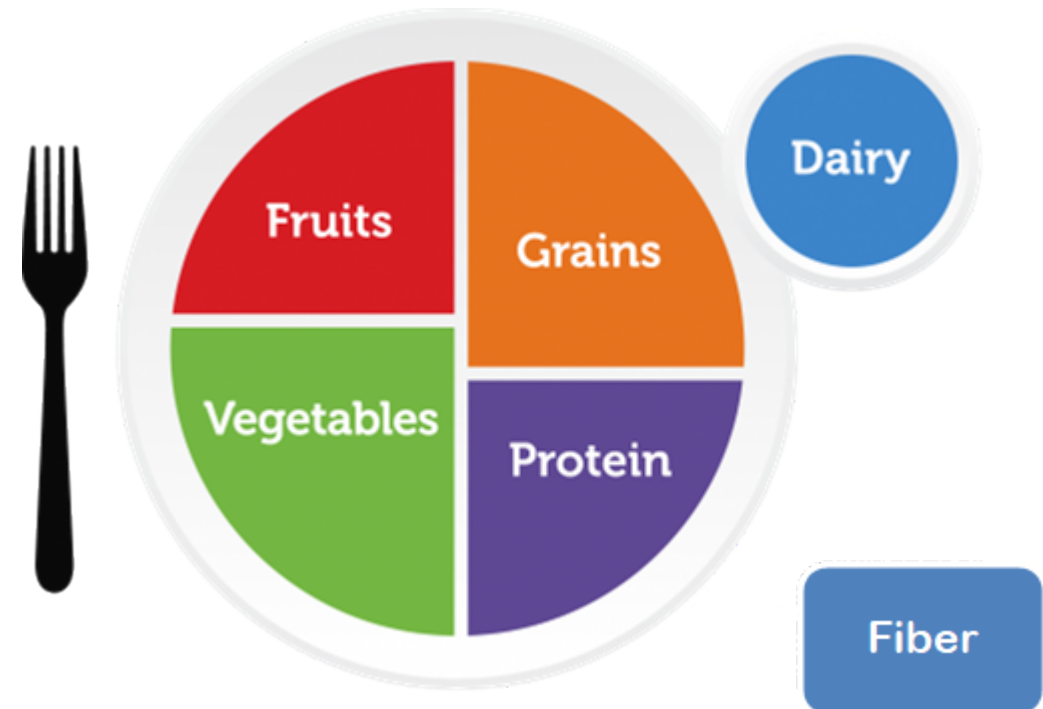
My Plate - Fruits

- Can be fresh, frozen, canned, or dried.
- Watch out for added sugars in fruit juices.
- High in natural sugars, servings may be modified for prescribed diets.



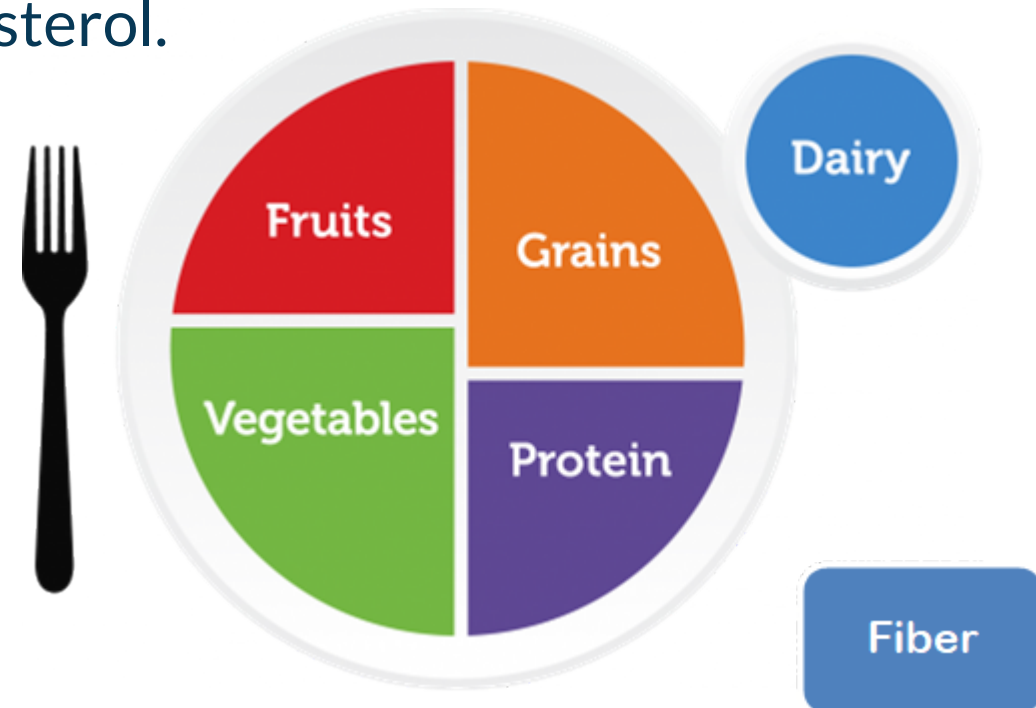
My Plate - Dairy

- Choose low-fat or fat-free when possible.
- For calcium lactose residents who still consume lactose, look for calcium-fortified products.



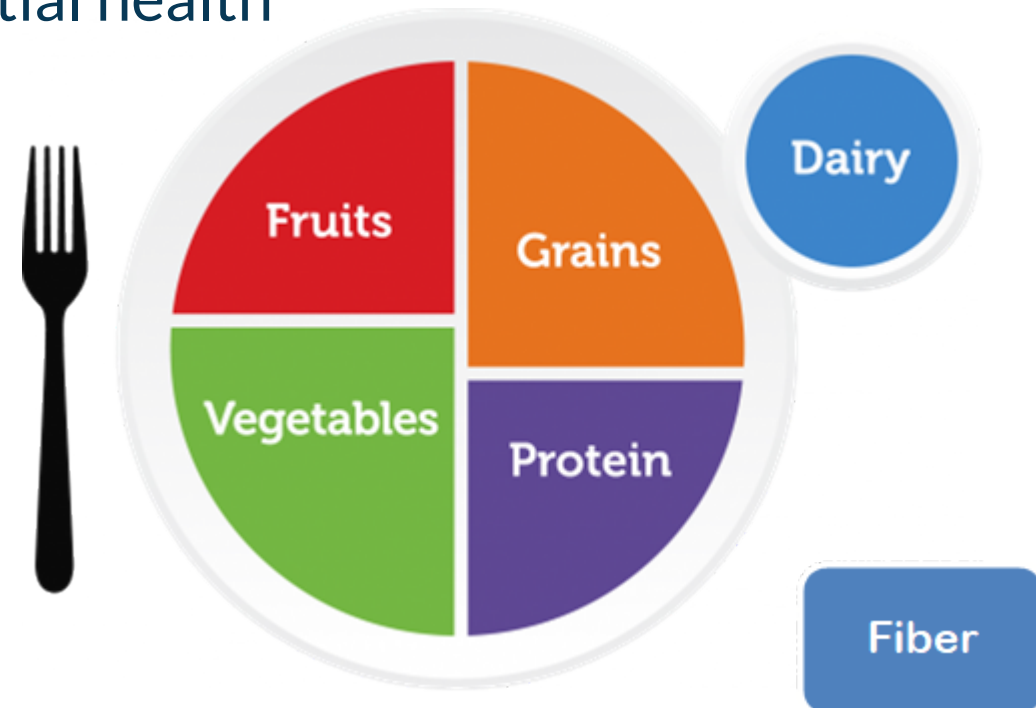
My Plate - Protein

- Look for lean meats (low fat).
- Vary with fish, nuts, beans, peas, and seeds to give the protein benefits with less cholesterol.



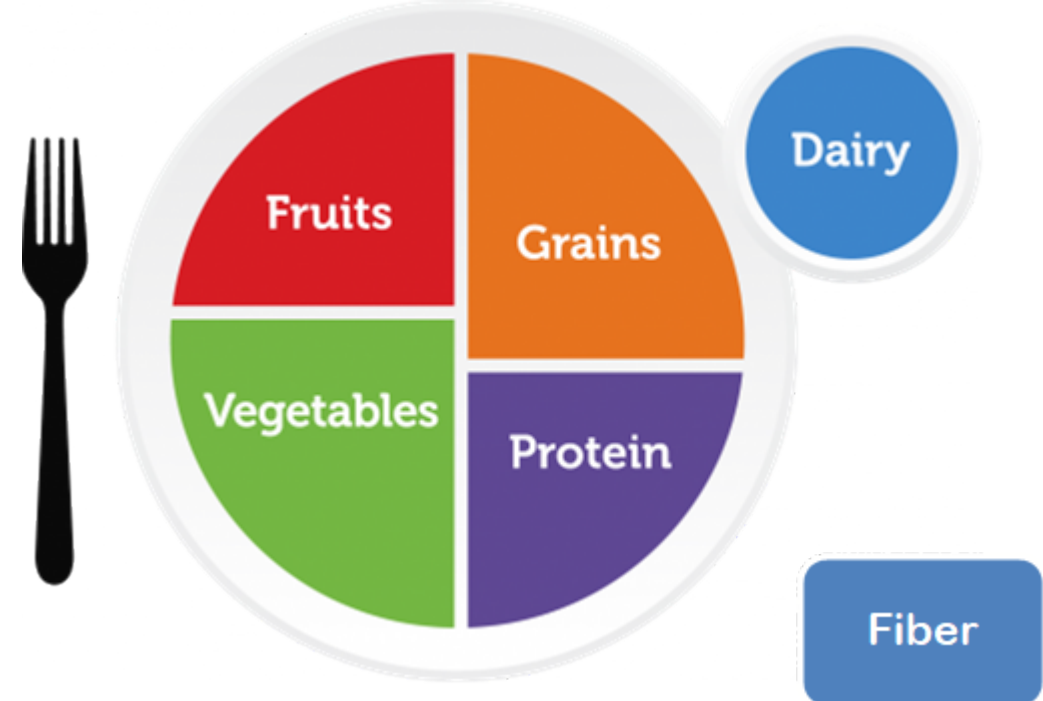
My Plate – Fats and Oils

- Are an essential nutrient.
- However, is not considered a basic food group by the USDA.
- Consume sparingly to reduce potential health problems.



My Plate – Fiber

- Part of plant meal that when ingested are resistant to the digestive enzymes inside the small intestine.
- They are also a type of carbohydrate that does not contain a lot of sugar.
- Works similar to a sponge and attracts water. So, adequate fluids need to be taken with fiber to avoid constipation.
- Maintains regular bowel elimination and helps control blood sugar and cholesterol.



Fluid Intake

Fluid intake for most adults is 64 oz. per day

- Plain water is best suited.
- Watch out for caffeine as it can dry out the body.
- Make sure to balance the intake of fiber and fluids as a large amount of fiber can have adverse effects.
- Prune juice is a good promoter of bowel movement.

My-25 Menus

- Are a critical component to maintain overall health for all Resident diets.
- Can help translate nutritional information into meal options.

Factors Taken into Consideration

- The Director of Nutrition Services will work with My-25 and the home to create all menus using Resident's dietary needs, food allergies, and preference feedback.
- Provisions are made for special diets as prescribed by appropriate medical and dental personnel.
- Provisions are also made for special diets whose beliefs require their adherence to religious dietary laws.

Shopping and Meal Prep

- Home Managers/Supervisors shall assign shopping for supplies using the home's PEX card.
- Any changes or substitutions will be noted on the menu sheet. The My-25 portal will be updated with the specific food changed to one of approximate equal nutritional value.
- The Dining Room is a public area of the home and shall be open to Residents at all times of the day.
- Food or meals shall never be withheld as punishment.
- No punishment shall be given for not eating all food served. Track the food eaten in the Consumer Consumption Log.

Snacks

Should be a planned part of the My-25 Menu.

Can be served occasionally and should be low in fat and high in fiber.

Snack Choice Considerations

- Individual Nutrient needs
- Dietary Guidelines
- Dental Health
- Chewing Ability

Nutrition Related Issues



Changes in Appetite

- Includes fluctuation and refusal.
- Make sure to document and notify a dietitian as applicable.

Food Acceptance

- Can be due to health changes or medication side effects.
- The household environment can also affect their taste. (Temperature, stress, etc)

Food Recalls

- The Nutrition Services Director will monitor and track.
- All affected programs will be contacted.
- Dispose of the product as directed.

Nutrition Related Issues



Unsafe Eating Practices

Disordered eating is a spectrum between what is considered “normal” eating and an eating disorder. It may include:

- Fasting
- Binge Eating
- Skipping Meals
- Avoiding a type of food or food group
- Self-induced vomiting
- Laxative, diuretic, or enema misuse
- Steroid and creatine use
- Diet pill use

Disordered eating has been linked to feelings of guilt, shame, and failure. They may want to isolate themselves for fear of socializing in situations where people are eating. This can contribute to low self-esteem, social withdrawal, and depression.

Food Allergies

An immune system reaction that occurs after eating a certain food.

Even a small amount of allergy-triggering food can create a reaction sign or symptom such as:

- Hives
- Swollen Tongue, Lips, or Face
- Swollen Airways
- Tingling Sensation in Mouth

If a staff or resident is experiencing a food allergy, get them medical attention immediately.

Alcohol Consumption

Over time, excessive consumption can lead to chronic diseases, including, but not limited to:

- High Blood Pressure
- Heart Disease
- Stroke
- Liver Disease
- Digestive Problems
- Breast, Mouth, Throat, Esophagus, Liver and Colon Cancers

Alcohol is not allowed on Beacon Premises. Residents over the age of 21 are allowed to consume alcohol during community inclusion activities, as long it is done in moderate and safe amounts and does not interfere with their psychotropic medications.

Residents whose behavior plans address alcohol consumption will not be allowed to partake during community inclusion activities in accordance with their plan.

Stages of Swallowing

1

Pre-Oral: Salivation is triggered by sight and smell of food.

2

Oral Preparatory: Food is chewed and mixed with saliva.

3

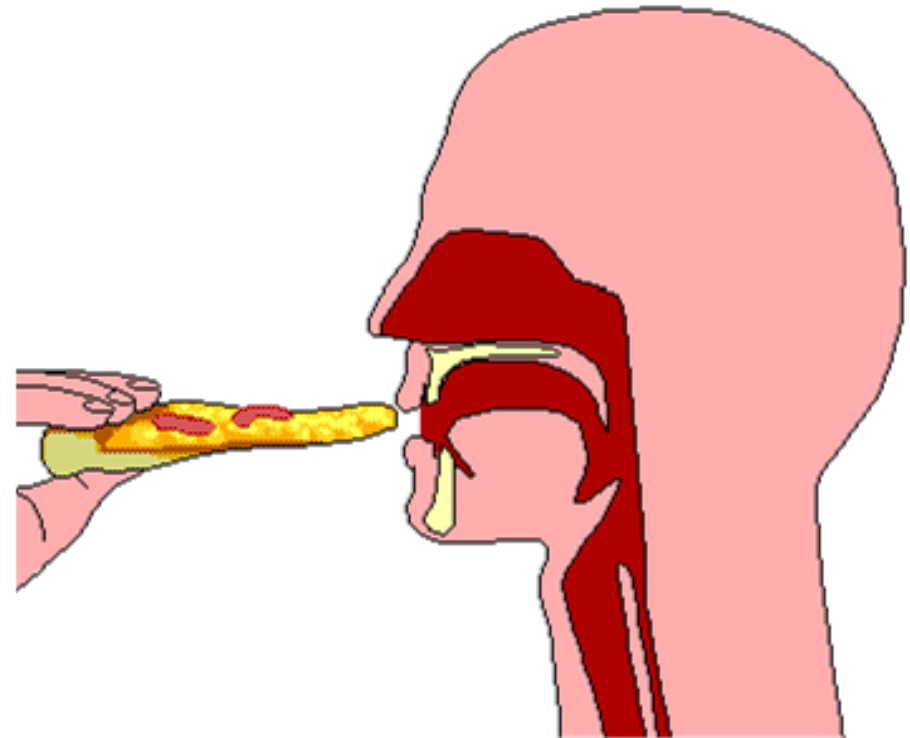
Oral: Food is moved back through the mouth by tongue.

4

Pharyngeal: Food enters upper throat, triggering swallowing.

5

Esophageal: food enters the esophagus and moved to stomach.



Swallowing Issues

- **Dysphagia:** Difficulty or discomfort when swallowing.
- **Aspiration:** Food and/or liquid entering the airway.
- **Food Texture Difficulties**
 - Not able to chew or swallow solid foods.
 - Not able to control two consistencies in the mouth (thin fluids and solids) at the same time.
 - Unable to safely manage thin fluids.
- **Phagophobia:** Fear of swallowing
- **Anxiety induced throat muscle constriction** (aka lump in throat).
- **Tardive Dyskinesia:** Involuntary repetitive movements of the tongue and face that impair the swallowing reflex.
- Those at risk for choking or aspiration due to diagnosis.

The Signs

- | | | |
|--------------------------|-----------------------------|-----------------------|
| • Breathing Difficulties | • Weight Loss | • Cannot Gain Weight |
| • Fever | • Respiratory Infection(s) | • “Gurgly” and “Wet” |
| • Drooling | • Food Pocketing | • Gagging or Coughing |
| • Swallowing | • Excessive Mouth Movements | |

Swallowing Issues

When a Resident Shows Signs

- A medical evaluation is needed.
- Video fluoroscopy may also be done.

Recommendations May Include

- Adaptive eating aids
- Positioning
- Food Consistency
- Altering liquid thickness
- Alter food textures

Foods that May Cause Swallowing Issues

Foods that may cause swallowing issues and should be avoided include:

Mixed Consistency Food

Foods with more than one texture or consistency can prove challenging for someone with dysphagia.

Examples include:

- Cereals that do not blend well with milk.
- Minced meat with thin gravy.
- Bread dipped in soup.

Husks

Foods with husks. Husks are the dry outer covering of some fruits or seeds.

Examples include:

- Multi-grain bread
- Vegetables like sweet corn
- Onions
- Okra

Fibrous or Stringy

Foods with a fibrous or stringy texture.

Examples include:

- Celery
- Green Beans
- Melted Cheese
- Pineapple

Foods that May Cause Swallowing Issues

Foods that may cause swallowing issues and should be avoided include:

Skins, Seeds, and Pulp

Fruit or vegetables with thick skins, seeds, or pips.

Examples include:

- Baked Beans
- Peas
- Grapes
- Tomatoes

Crunchy and Crumbly

Crunchy or crumbly baked items.

Examples include:

- Toast
- Biscuits
- Crackers
- Chips
- Pie Crusts

Hard Food

Examples include:

- Hard Candy
- Tough Meat
- Nuts
- Seeds

Choking

Residents are at risk of choking when:

- Bites of food are too large or poorly chewed.
- Food is too dry.
- Pocketing food in cheeks.
- Residents talk or laugh too much while eating.
- Ill-fitting dentures or dental work.
- Chronic illness causes weakness or dysphasia.

Watch for Signs of Distress

1. Clutching neck with one or both hands.
2. The resident cannot speak.
3. Resident is not breathing.
4. Resident's skin is turning blue.

Choking

If the Resident Cannot Talk or Cough, administer 5 back blows.

If that does not improve the situation, follow your CPR training for abdominal thrusts.

- Stand Behind Them
- Make a Fist
- Pull Up Sharply
- Repeat Sequence

If abdominal thrusts do not work, call 911.

Choking

If something comes up during the back blows or abdominal thrusts, conduct a finger sweep in the resident's mouth.

Use your index and middle finger to grasp the object and pull it out if possible.

When the object is cleared, check the ABCs.

- Airway: Is it clear?
- Breathing: Are they breathing and how often?
- Circulation: Check their pulse. What is it?

If the person is not breathing, perform CPR until medical help arrives.

Choking – After the Incident

Write an Incident Report in Clarity as soon as possible and before the shift's end.

- If 2 or more staff observed the incident and have different versions of the events, each must submit their own report.
- If another resident was involved in the incident, do not use full names – use initials.
- Be clear, factual, detailed, complete, and concise. Include facts leading up to the event and follow-up actions that took place. Fill out every box, leave no blanks.
- Reports are to be reviewed by Home Managers and District Directors and sent to the appropriate parties within 24-48 hours of the event.

Make sure to complete your NextStep log before the shift ends and also include all the details.

If the same choking incidents keep happening, report it to your supervisors and Clinical.

Medications and Food

Some food can affect the action of medications.



- Green leafy vegetables can decrease how Aspirin thins the blood due to the high Vitamin K content.
- Grapefruit juice alters the way the body absorbs cholesterol drugs like Lipitor.
- High blood pressure medications (calcium channel blockers) are also affected by grapefruit juice. It changes the way the drug breaks down in the body and can cause high levels in the blood.
- Dairy products (milk, yogurt, and cheese) can decrease the absorption of antibiotics.
- Aged cheeses contain Tyramine which can cause a hypertensive crisis or severe elevations in blood pressure when taken with specific types of antidepressants.
- Ginseng can affect heart medications like Digoxin. It can elevate blood levels as much as 75% and cause Digoxin toxicity.



Medications and Food

To avoid food and medication interactions:

1. Read all the labels on all medications.
2. Follow the physician's and pharmacist's instructions.
3. Inform Health Professionals.
4. Ask questions if you are unsure.

Modified or Special Diets



Modified or Special diets may be ordered to treat a medical, or chronic health condition.

- A physician must prescribe the appropriate diet order, no exceptions.
- A written order must be in place before changing or altering food intake.

Examples:

- DASH – Hypertension
- Low Sugar – Diabetes
- Low Fat – Various Medical Conditions
- Textured – Dysphagia (swallowing difficulties)

Modified or Special Diets

Diet	Description	Example
Pureed	All foods must be smooth. Anything that can pureed is available for this diet. Food should be thick enough to mound on plate with pudding-like consistency. Broth, sauce, or gravy is added to moisten food. Typically using handheld mixers and food processors.	
Minced- Ground/Mechanically Altered	Moist foods that can be easily formed into bolus. All foods need to be soft, cut into small pieces and moist. Should be soft enough to mask with a fork after cooking. Meats are ground and moist. Vegetables no larger than 1/2 inch. Pancakes or cereals are softened with sauce or syrups.	

Modified or Special Diets

Diet	Description	Example
Mechanical Soft	Soft, moist and easy to chew. Meats ground or softened with gravy. Fruits and veggies chopped, soft, or diced. Breads (except bagels) are allowed. Potatoes should be boiled or baked. Most desserts allowed.	
Liquid- Mildly Thick - Nectar	Easily glides off spoon, leaves a coating on the spoon.	

Modified or Special Diets

Diet	Description	Example
Liquid – Moderately Thick - Honey	Drips slowly off spoon similar to honey.	
Liquid – Extremely Thick - Pudding	Thick like pudding, slow to drip off spoon.	

Feeding Tubes

A feeding tube is a medical device used to provide nutrition to residents who are unable to swallow safely or need nutritional supplementation.

Staff working with residents that utilize feeding tubes will be trained more in-depth by a nurse on proper use, procedure, and skills. You will also follow the dietitian, therapist, and medical provider's plan of care instructions.

Feeding Tubes

Possible feeding tube complications include:

Tubes can become clogged. This does not allow the formula to flow smoothly.

- Check for kinks or bends.
- Check if the tube moved in or out more than 1 inch.
- Check for the tube falling out.
- Check for large amounts of fluid leaking around the tube.

Feeding Tubes

Sins of infection or intolerance to the formula include:

- Skin area around the tube shows signs of infection.
 - Red, warm, and/or firm to the touch. May also be tender to touch.
- Sudden increase/decrease in drainage (or drainage smells bad).
- Bloody or coffee ground-like drainage from the tube.
- Nausea and/or vomiting.
- Fever
- Unusual or sudden weight loss/gain.
- Constipation/Diarrhea

Contact Medical/Medical On-Call and Healthcare Providers as outlined during the provider plan and skills training with the nurse.

In emergency situations, call 911 immediately.



Adaptive Equipment

Adaptive feeding devices are valuable tools for mealtime with individuals with feeding or swallowing difficulties. These tools assist individuals with their feeding independence.

- **Non-Skid/Slip Mats:** Help things “stay put”. Assists residents with motor difficulties by holding dishes in place.
- **Specialized Cups/Mugs/Lids:** Come in a variety of options. Assist residents with a limited range of motion and increase the ease of self-feeding and reduce spillage. They can also be bottom-weighted to prevent tipping over.
 - **Nosey Cups:** Reduce neck motion.
 - **Wide Base:** Easier to set down.
 - **Wedge:** Limits flow of liquid.
 - **Closed Handle:** Tremors or weak grasps.
 - **Spouts:** Control the flow of liquid.

Adaptive Equipment



- **Plate Guards:** Also known as food guard or food bumper. Snap on the edge of the plate to help the food go onto eating utensils.
- **Partitioned Plates:** Keep food separate.
- **Scoop Dishes:** Aid in moving food onto the utensil.
- **Utensils:** grip size and utensil weight are determining factors for selection.
 - **Weighted:** Used to stabilize hands for tremors or for weak grips
 - **Built-up Handle:** Available in straight or bendable options. For weak grips.
 - **Coated:** Increase thickness for better detection and protect lips and teeth.
 - **Rocker Knife:** Cuts in rocking motion vs sawing. Decrease wrist strain.
 - **Maroon:** Narrow, shallow spoons. Use with poor lip closure and oral hypersensitivities.

Positioning Techniques

Why is it important?

Poor balance while sitting and core (torso/trunk) control affect the ability to swallow.

Techniques Include (Whether in a wheelchair, bed, or chair.)

- Sit upright to 90 degrees – prop with pillows or assistance wedges, as necessary.
 - Support weak and impaired sides as necessary.
 - Sit as far back in the chair as possible with knees bent at 90 degrees.
 - Feet resting on the floor or on footrests.
- Head in an upright, mid-line position between 75 and 90 degrees.
 - Head tilted forward with chin down.
 - Do not tilt the head back as it makes it more difficult to eat.
- Ensure the chair is the correct height for the table and the plate is not too close/far.

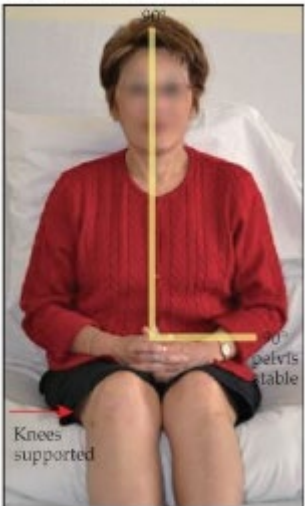
(a) Seated at a table



(b) Propped up in bed



(c) Support for knees and pelvis



Dining Assistance Techniques

- Be sure the resident's mouth is empty before starting.
- Encourage, but do not force, the resident to eat.
- Explain what foods are there and ask what they would like to eat first.
- Use the spoon and only fill it up half-full.
- Give the food from the tip of the spoon.
- Introduce food on the non-inhibited or stronger side of the mouth.
- For blind or confused residents, name each mouthful of food.
- Allow hot foods to cool. Still warn residents when offering warmer food.
- Ensure mouth is empty before offering more food or fluids. Prompt to chew or swallow if needed.



Mealtimes

Mealtimes are a significant part of every resident's day. They satisfy nutritional, social, and emotional needs. They also give residents and staff a chance to interact as a group.

Preparing for Mealtime

- Staff and residents should wash their hands.
- Food should be served within 15 minutes of preparing.
 - This is to ensure food safety.
 - Hot food could cool down.
 - Cold food can also warm up to room temperature.



Mealtimes

Independent Eaters

- Slow Eaters: Use verbal or physical cues to remind or redirect them. You may also need to cut down on area distractions.
- Keep prompts simple and direct.
- Make sure food is within line of sight for residents with visual needs.

Documentation

- Document any food-related issues in NextStep reports.
- Notify Clinical Departments of any re-occurring issues.
- Make sure residents' feedback for My-25 menus are captured for future menu planning.

Food Reinforcer and Rewards

Used as a Reward

- Will be reviewed by the interdisciplinary team.
- Certain foods may not be appropriate for people with diet restrictions.

Inappropriate Food Rewards

- Resident on a special or modified diet may not be allowed food between meals.
- Resident who is on a special or modified diet may not be allowed certain types of food.
- Rewards given directly before a meal may interfere with the mealtime appetite.

Using Meals as a Learning Tool

All staff should serve as role models for residents during mealtimes.

This can be done by setting a good example and give residents an opportunity to learn good manners and eating habits.

- Staff must model the appropriate way to eat.
- Use individual mealtime programs to teach table manners.
- Allow exposure to different foods and eating experiences if possible.
- Encourage residents to assist in meal preparation and menu planning.
- Provide a pleasant mealtime environment.

Choice and Independence



Below are some tips that can allow residents to develop the feeling of choice and independence:

- Menu feedback and requests.
- Assist with shopping or putting away foods if able.
- Assist with portioning and cooking meals.
- Help clean up after mealtime.
- Use math and reading by using labels and directions.

These situations may help build skill development through observation and hands-on experience. For residents that wish, information for formal classes may also be desired.

Choice and Independence



Factors that influence food preferences for residents and staff:

- Ethnic Background and Religion
- Budgets (Past and Current)
- Media Messages
- Regional Availability
- Preparation
- Peer Group and Status
- Cooking and Reading Skills
- Health Condition
- Activity Level and Age
- Eating At Home vs Restaurant
- Holiday Traditions
- Family Preferences
- Medications Altering Taste

Relevant Beacon Policies and Other Resources

Beacon Policies

[RI-005] Use of Alcohol and Drugs

[CTS-001] Nutrition and Food Service

[CTS-002] Kitchen Safety

References

Bareuther, R.D., C. M. (2008). Dangerous Food-Drug Interactions. Today's Geriatric Medicine, 1(4).

<https://www.todaysgeriatricmedicine.com/archive/101308pe.shtml>

Physical Activity. (2021, August 23). Centers for Disease Control and Prevention. <https://www.cdc.gov/physicalactivity/index.html>

Adaptive Feeding Devices. (2020, December 3). National Foundation of Swallowing Disorders. <https://swallowingdisorderfoundation.com/adaptive-feeding-devices/>

Nestle Healthcare Nutrition. (2020, August). Nestle Healthcare Foundation. https://www.aota.org/~media/Corporate/Files/Publications/CE-Articles/CEA_August_2020.pdf

