

Dysphagia, Aspiration, and Oral Health Strategies for Individuals with Intellectual and / or Developmental Disabilities

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- Identify signs / symptoms of aspiration and association between poor oral hygiene and aspiration pneumonia
- Identify barriers to oral care
- Identify importance of positioning during oral care
- Identify strategies to promote good oral hygiene
- Identify equipment needed for implementation of oral hygiene
- Identify visual supports and strategies to promote increased independence and safety during oral care



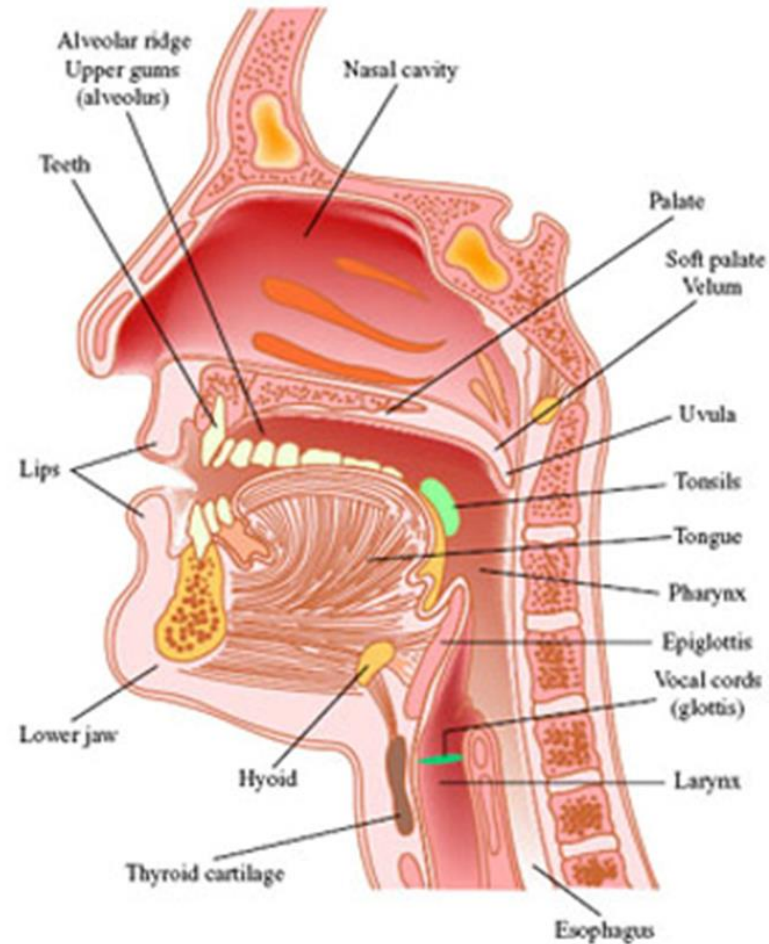
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Nutritional support is anything done to help a person take in or digest food, drink, or medication. It includes anything that is done to assist people who eat by mouth or by enteral tubes due to **dysphagia** or difficulty with self-feeding. Nutritional supports assist a person in being safe, healthy, and independent as possible while enhancing overall function.



Structures of Swallow



Phases of Swallow



Oral Preparatory Phase

- Food, drink, and / or medication enters the mouth and is prepared for swallow



Oral Phase

- The bolus is controlled and moved to the back of the oral cavity



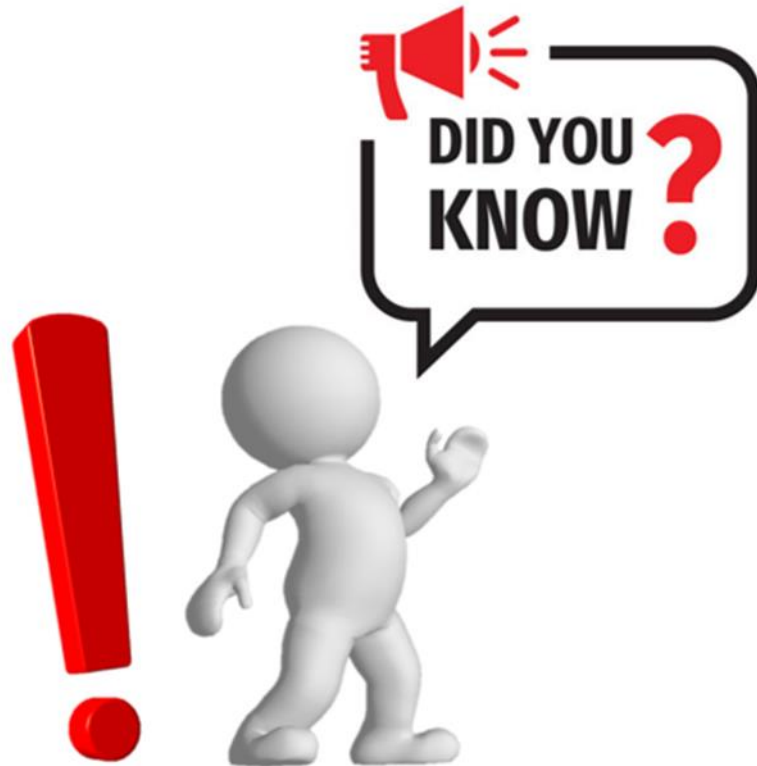
Pharyngeal Phase

- Movement of the bolus from the oropharynx, through the pharynx, and into the esophagus.



Esophageal Phase

- Movement of the bolus continues through the esophagus and into the stomach.



Approximately **60%** of people with IDD experience swallowing issues (dysphagia).

Difficulty swallowing;
Difficulty safely and / or efficiently
moving the bolus from the oral
cavity through the pharynx and
esophagus into the stomach.





Signs of Dysphagia

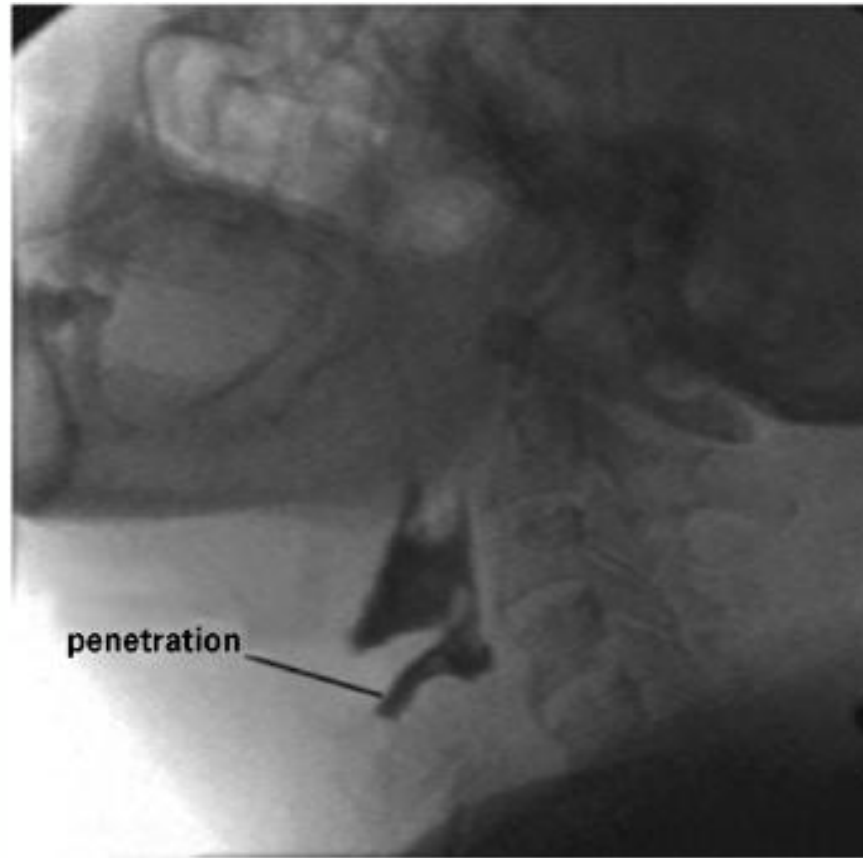
- Extra effort or time needed to chew or swallow (greater than 30 minutes to complete a meal)
- Food or liquid “leaking / spilling” from the mouth or nose
- Difficulty coordinating breathing with eating/drinking
- Coughing / gagging / throat clearing when eating / drinking or changing positions
- Decreased control of oral secretions
- Food / liquid residue in oral cavity after swallow; holding food / drink in mouth
- Weight loss, malnutrition, or dehydration from not being able to eat or drink enough
- Difficulty chewing foods; requires food texture to be modified / foods cut into smaller pieces
- Frequent food/drink refusals or refusals of specific textures
- Report by person of sensation that food or medication “sticks” in throat
- Episodes of pneumonia
- Pain / discomfort when swallowing
- Changes in eating habits

Who is at risk for a swallowing disorder?

- **Neurologic Disorders:** Certain disorders including Developmental Disabilities, CVA, Parkinson's Disease, Cerebral Palsy, Head Injury, Spinal Cord Injury, Multiple Sclerosis; Dementia; ALS; Multiple Genetic Syndromes; Seizure Disorder; Dystonia; Etc.
- **Dental Condition:** Poor oral health or hygiene, broken / missing teeth, poorly fitted or missing dentures
- **Gastroesophageal Disorders:** GERD; Esophageal Strictures; Barrett's Esophagus; Chronic Constipation
- **Altered Level of Alertness:**
- **Medications :** Multiple medications; Medications that alters alertness level, nervous system functioning or has associated dry mouth; Medications for tone; Side effects, Etc.
- **Structural / Functional Abnormalities of Swallowing Mechanism:** Cleft Palate; Thyroid Abnormalities; Limited movement / sensation in structures; Cervical Osteophytes; Impaired oral motor skills; Craniofacial Anomalies, Etc.
- **Musculoskeletal Abnormalities Resulting in Inability to Maintain Optimal Positioning / Postural Alignment:**
- **Other:** Cancer; Disorders of the Respiratory Systems; Muscular Dystrophy; Psychiatric disorders; Infectious Diseases; Tardive Dyskinesia, Dystonia, Etc.

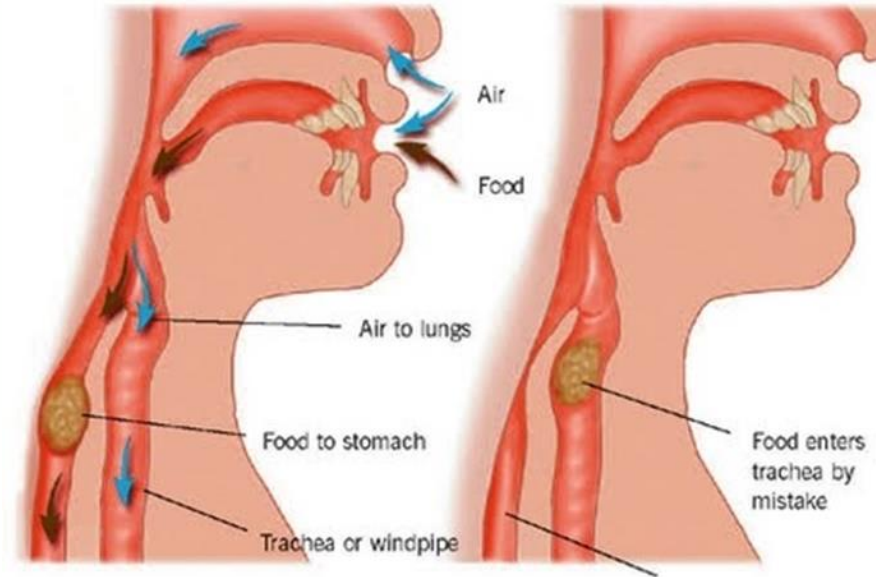
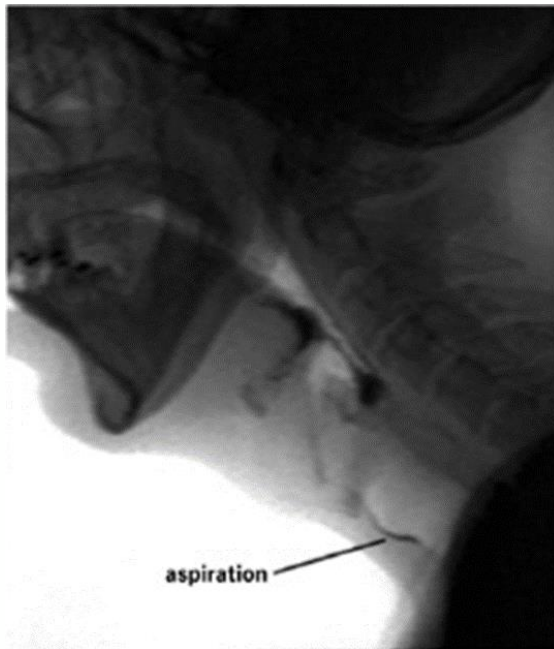
Penetration

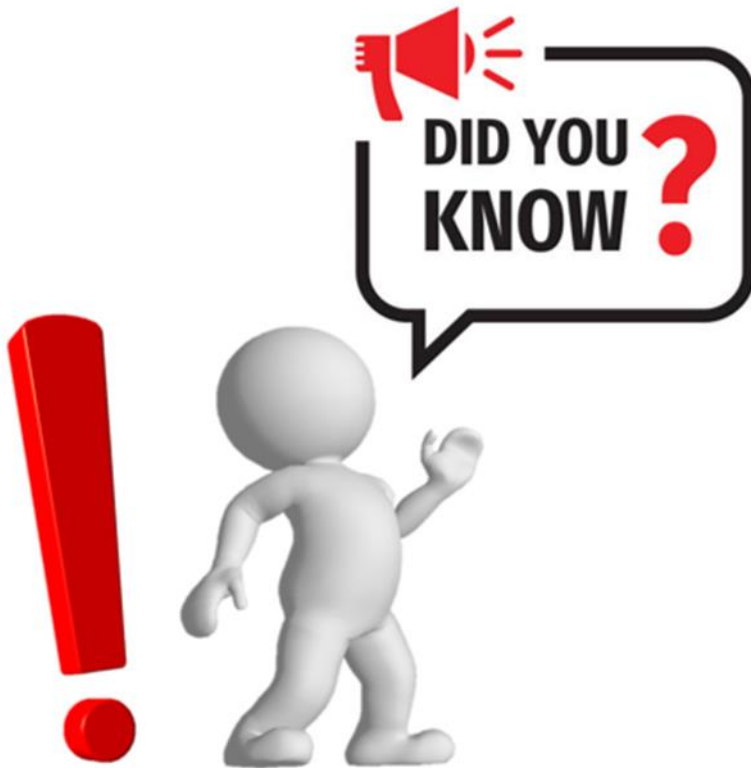
Laryngeal penetration is defined as passage of materials into the larynx, but not past the vocal folds



Aspiration

- When food, drink, medication, saliva, refluxed material (gastric contents), or other foreign objects pass through the level of the vocal folds
- Can lead to respiratory problems including aspiration pneumonia and possibly death





Aspiration is one of the five major health issues known as “**The Fatal Five**” that are commonly linked to deaths within the IDD population.

Aspiration can be **difficult to identify / diagnose** in the IDD population. Signs / symptoms often go unrecognized and may be linked to a significant number of preventable deaths.



Signs of Aspiration

- Coughing / gagging (persistent or does not usually occur) i.e. coughing when eating / drinking; coughing when changing positions
- Choking (unable to cough, breath, speak, turns red / blue)
- Watery eyes
- Clear nasal drainage
- Weight loss / Malnutrition
- Challenging behaviors related to mealtime
- Facial grimacing / Red face
- Signs of pain / discomfort around mealtime
- Wet, gurgly vocal quality
- Unexplained fever
- Repeated swallowing
- Meal refusal
- Pneumonia
- Dehydration

Note: Silent Aspiration can occur when food / liquid / saliva / medications / refluxed material enter the airway with no overt signs / symptoms.



- ✓ Dysphagia (difficulty swallowing)
- ✓ Poor positioning
- ✓ Head / neck hyperextension
- ✓ Breathing while food or liquid in mouth
- ✓ Talking/laughing while eating
- ✓ Eating/drinking too quickly
- ✓ Overloading oral cavity—Having too much food in the mouth
- ✓ Reflux
- ✓ Large consecutive swallows (Gulping liquids or food)
- ✓ Improper food texture or liquid consistency
- ✓ Medical Conditions

- DEATH
- Choking / Airway Blockage
- Aspiration Pneumonia
- Dehydration
- Malnutrition
- Decreased enjoyment of eating / drinking (discomfort / fear)
- Embarrassment or isolation in social situations



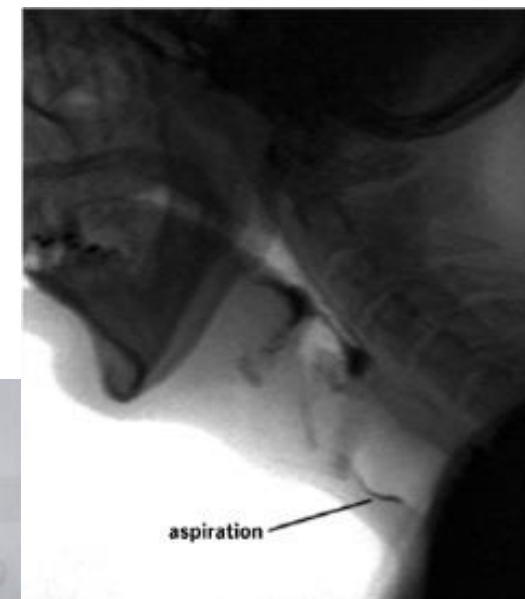
Risk Factors for Aspiration Pneumonia

- Dependence for feeding
- Dependence for oral care
- Poor oral hygiene or poor oral health
- Limited or infrequent ambulation
- Compromised respiratory system
- Impaired cough function
- Previous aspiration pneumonia
- Impaired health status (compromised immune system)
- Gastrointestinal disease
- Smoking

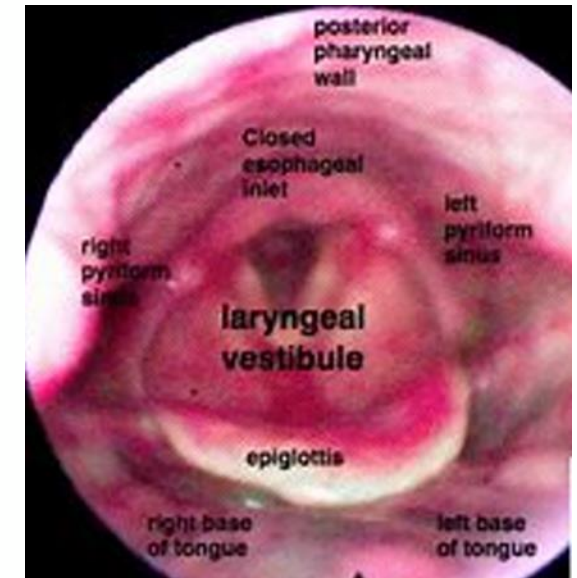


Swallow Study

- A Videofluoroscopic Swallow Study is a radiographic procedure ordered by doctor and typically conducted in the Radiology Department by the Speech Therapist.
- Participants are given a variety of foods / liquids mixed with barium which allows for food / drink to be visible on the screen during the study in a controlled environment.
- A Swallow Study
 - Allows SLP to visual structures / function during the swallow
 - View swallow in live time
 - View aspiration, determine cause, and patient response
 - Assess different compensatory strategies / therapeutic interventions
 - Make recommendations to promote safety and efficiency and decrease risks associated with aspiration.



- **Fiberoptic Endoscopic Assessment of Swallowing (FEES)**
 - a portable procedure that may be completed in outpatient clinic space or at bedside by passing an endoscope transnasally.
 - provides the opportunity for more frequent evaluation without concerns of radiation exposure and can be used within therapeutic contexts and for diagnostic therapy to assess current progress and effectiveness of therapy.
 - Unlike assessment via the VFSS, FEES does not permit visualization of either the oral or the esophageal phase of swallowing.



- The primary goals of dysphagia intervention include:
 - Safely support adequate nutrition and hydration and return to safe and efficient oral intake (including incorporating the patient's dietary preferences and consulting with family members/caregivers to ensure that the patient's daily living activities are being considered)
 - Determine the optimal feeding methods/technique to maximize swallowing safety and feeding efficiency;
 - Minimize the risk of pulmonary complications;
 - Reduce patient and caregiver burden while maximizing the patient's quality of life; and
 - Develop treatment plans to improve safety and efficiency of the swallow.

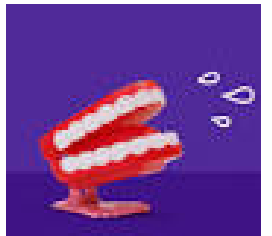


Dysphagia Intervention may include any of the following:

- Biofeedback
- Diet modifications
- Adaptive Eating Equipment
- Swallowing Maneuvers / Exercises
- Mealtime Strategies
- Positioning Techniques
- Sensory Stimulation / Intervention
- Electrical Stimulation
- Medical Management / Consultation with Other Professionals

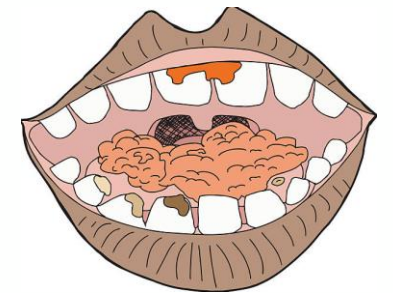
Benefits of Chewing

- Breaks down food and mixes with enzymes to aid in digestion
- Breaks down nutrients for greater absorption
- Breaks down larger pieces of food into smaller, more manageable pieces to decrease risks association with aspiration / choking
- Triggers production of hydrochloric acid in the stomach
- Increases ability to absorb nutrients
- Helps to suppress hunger and increase satiety
- Increases saliva production
- Helps with development of mandible
- Reduces bacterial overgrowth and fermentation in the gut which helps to reduce gas, bloating, indigestion, and constipation
- Releases serotonin and can assist in relaxation and stress reduction



Barriers to Proper Chewing

- Missing teeth
- Misaligned teeth
- Poor oral health / Damaged teeth
 - Cavities
 - Abscesses
 - Bruxism leading to worn surfaces
 - Pica / chewing on inedible items
 - Other oral health concerns
- TMJ issues
- Fatigue
- Mouth breathing
- Oral Motor / Swallowing concerns
- Pain / Discomfort
- Neurological / Structural / Musculoskeletal Abnormalities
- Reflexes / Tone
- Sensory issues: Temperature / Texture / Taste aversions
- Behavioral concerns: Eating too quickly, Taking large bites

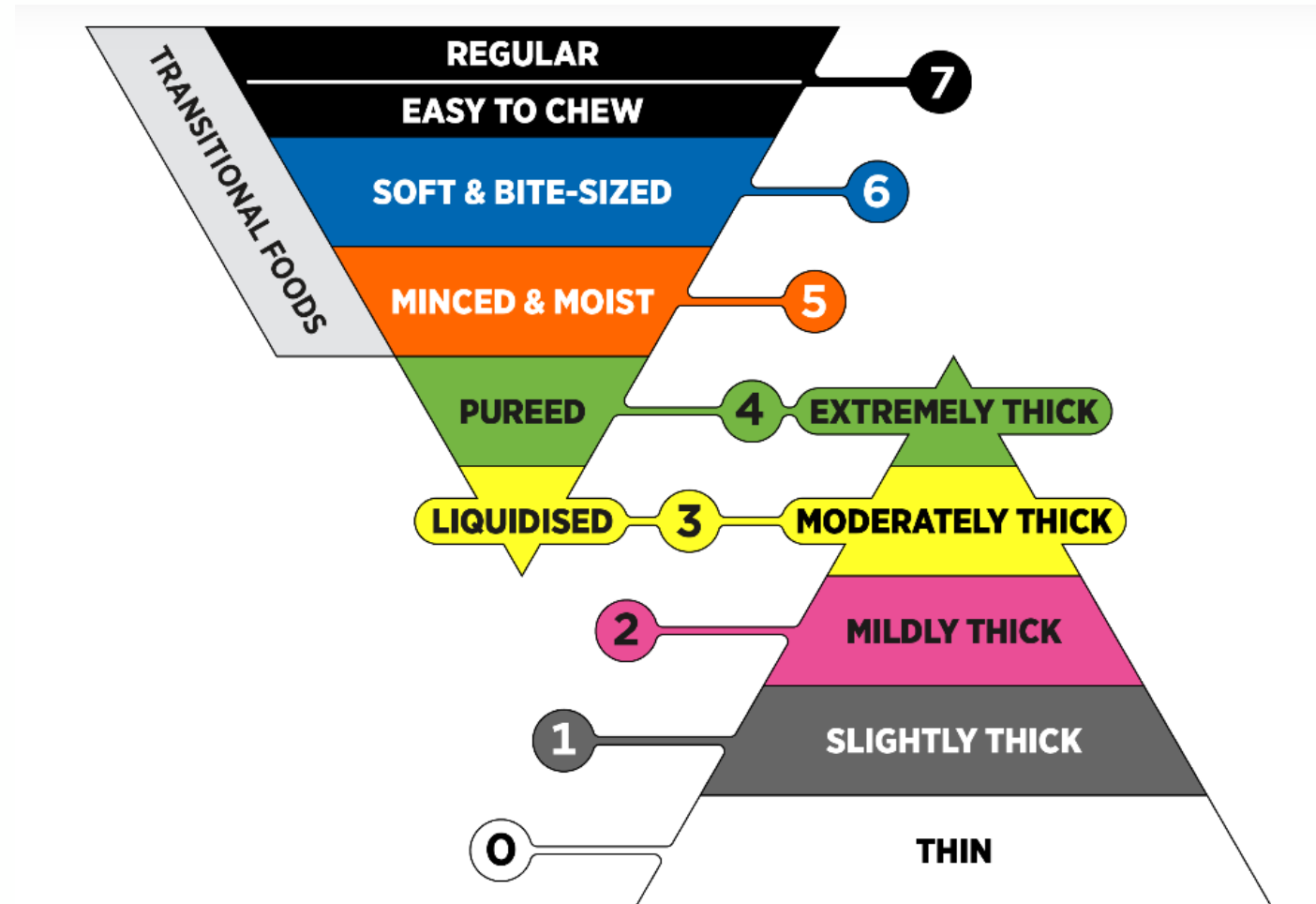


Diet Modifications



Modifications to the texture of the food may be implemented to allow for safe and efficient oral intake. This may include changing the viscosity of liquids and/or softening, chopping, or pureeing solid foods.





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Liquid Consistency



Normal (thin) fluids flow quickly and require good muscle control and coordination for safe swallows. Thickened fluids flow slower therefore allowing people more time to swallow safely.

THIN FLUIDS (non thickened)

They run quickly through the prongs of the fork with little or no coating.

NECTAR THICK

They coat the fork and quickly sink through the prongs. Effort is required to drink this level with a standard straw.

HONEY THICK

They coat the fork and slowly sink through the prongs. Using a spoon may be the best way to take this fluid level.

PUDDING THICK

They remain on the fork and hold together well. A spoon is necessary to consume this level.



Advantages / Disadvantages of Thickened Liquids

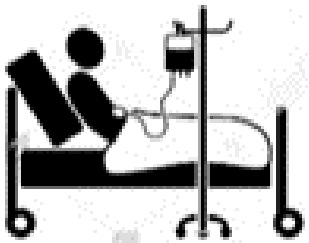
Advantages	Disadvantages
Improved physiological and functional swallow	No definitive evidence of reduced risk of pneumonia over time
Reduced aspiration detected by imaging	Impaired bioavailability of medications
	Adverse effects on Health Related Quality of Life
	Risk of malnutrition and dehydration
	Reduced palatability
	Reports of inability to quench thirst
	Cost
	Aspiration of thickener may be harmful to lungs, if aspirated

- The Free Water Protocol may assist some patients who consume thickened liquids in staying better hydrated and enjoying a better quality of life.
- Based on theory that water has a neutral pH and is typically free of bacteria and other substance which may lead to respiratory infections and possible pneumonia
- Since our bodies are composed mostly of water, lung mucosal tissue can absorb small amounts of clean water without significant harm
- Individuals are evaluated by SLP for candidacy, and Protocol is ordered by physician
- General Guidelines:
 - Good oral hygiene / Provide oral care / Brush morning, night, & after each meal / snack
 - Only thickened liquids are consumed during meals / snacks
 - Wait at least 30 minutes after meals / snack to drink water
 - May have water only without thickener between meals / snacks
 - Follow specialized guidelines



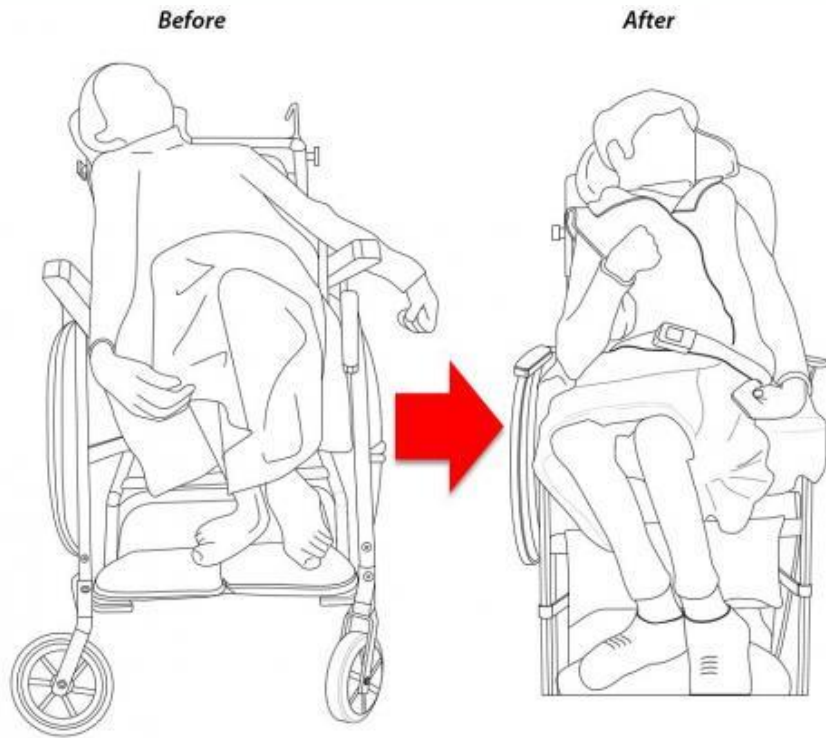
Mealtime Positioning

All people who receive enteral (tube) and / or oral meals should be **properly positioned** in their chair / seating system in an attempt to achieve **optimal digestion and independence** during mealtime and to **decrease risks** associated with aspiration.



The following should occur for the optimal position to be achieved:

- Reposition individual prior to beginning meal.
- Pelvis is properly centered and positioned all the way back into the seat and against the back of the chair.
- Pelvic belt is secured across pelvis/upper thighs.
- Trunk is upright and centered on seat back. Secure chest strap if present.
- Feet are supported by foot rest on wheelchair, foot stool, or floor.
- Head is supported in neutral, upright position or slight chin tuck (Chin slightly down toward chest)
- Wheelchair should be as upright as possible and not tilted unless otherwise indicated.
- Wheelchair wheels should be locked during the meal.
- Individuals should be seated as close to the table as possible.
- Individuals who can sit in a regular chair should be encouraged to do so.
- **NOTE:** If difficulty achieving or maintaining position, consider consultation with OT / PT may be needed.



- If individual shows difficulty eating (i.e. signs or symptoms of aspiration, spillage of food, etc.), STOP MEAL, check their position.
- Reposition during the meal as needed to maintain the optimal position. If repositioning is necessary, do not tilt the chair back to reposition while person is having difficulty. Request assistance to reposition if needed.
- If an individual must eat while in bed, position as upright as possible with head supported in neutral position. Pillows or wedges may be needed to help maintain position.
- Everyone should sit upright for at least 30 minutes following oral or enteral (tube) meals intake to ensure adequate digestion. If an individual has a diagnosis of reflux they should remain upright for at least 45 – 60 minutes after the meal or longer if indicated by their doctor.



Intended to promote safety, efficiency, and independence when eating

Types of adaptive mealtime equipment may include:

- Cups
- Utensils
- Plates
- Dycem
- Modified Chairs
- Footstools



Adaptive Eating Equipment:



Medication Administration

- Dysphagia can cause difficulty swallowing medications
- Some medications may cause / exacerbate dysphagia
- Physician should be notified of difficulty swallowing medications.
- Medications may be administered in alternate form, as ordered by physician, including crushed, liquid, dissolvable, with food, etc.
- Follow person-specific guidelines.



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Once food textures, liquid consistency, adaptive eating equipment needs, nutritional/hydration needs, compensatory strategies, and/or positioning guidelines have been established, it is necessary to implement person-centered Mealtime Guidelines to maximize independence, safety, and health.



Note: It is important to always follow specialized eating techniques as outlined in the person's specific plan.

Mealtime Guidelines may be beneficial for clients who have dysphagia and may require specialized, person-center strategies / guidelines to assist with...

- Obtaining Food / Drink and/or Bringing Food / Drink to the Mouth
- Mastication and /or Bolus Formation, Manipulation, and Transfer
- Maintaining Optimal Position
- Bite Size or Rate Regulation
- Clearing Mouth Between Bites and After Meals / Reducing Oral Residue
- Maintaining Alertness; Addressing Endurance Needs (Fatigues Easily); Decreasing Distractions
- Coughing During Oral Intake
- Hearing and Vision Limitations
- Sensory Issues
- Decreasing Risks Associated with Aspiration / Choking
- Promoting independence



MEALTIME GUIDELINES

Jane Doe

Diet Texture: **PURE** (see handout) Liquid Consistency: **THIN** (see handout)

Mealtime Equipment:

- Straw
- Teaspoon
- Food Processor



Mealtime Positioning:

- Upright in **wheelchair** for all meals / snacks / medications
- Wheelchair should be positioned in the most upright position
- Ensure wheelchair is **not positioned too close to table** as Jane has potential to lean forward and hit her head
- Remain upright for at least **30-45 minutes after** meals / snacks / medications



Mealtime Guidelines:

- Requires **total assistance** to eat / drink & must be supervised throughout meal
- Caregiver providing assistance should be seated at eye level with Jane
- If caregiver must stand, present food at the level of her lips with chin parallel to the floor



- Offer **small bites** no larger than **one level** teaspoonful

Alternate solids/liquids:

- Encourage small sips of drink after every 2-3 bites of food
- Position **straw in front of mouth just behind lips** and encourage one small sip. If needed, pinch straw or remove straw from mouth between sips.
- Small sips of drink should last no longer than **2 seconds**



- Check for **leftover food in mouth** on top of mouth, cheeks, and back of tongue and mouth after each bite and encourage additional swallows or offer liquids until mouth is clear.



- **May slow down** and need to take short breaks during the meal



- o If fatigue and/or falling asleep during meal is noted, stop meal; give a rest break; and offer meal when wakes up when alert
 - o Consider offering smaller meals more frequently throughout the day

- If **coughing** is noted, stop the meal / snack. Monitor closely. Do not offer food / drink while coughing.



****See handout for signs / symptoms of aspiration.**

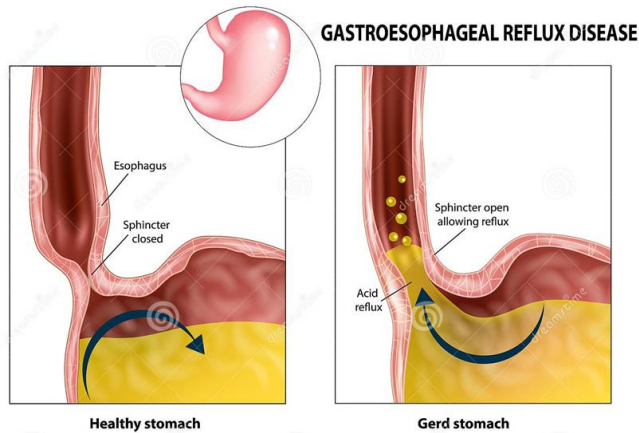
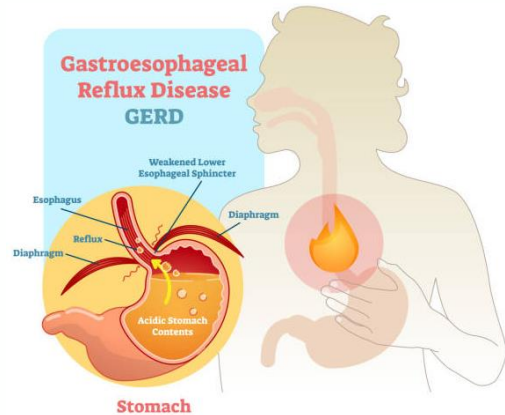
Monitor temperature, and report all concerns to Mrs. Doe (Jane's mother)

- **End meal with several sips of thin liquids** with rest breaks between each sip (remove straw from mouth, wait several seconds, then provide additional presentations)

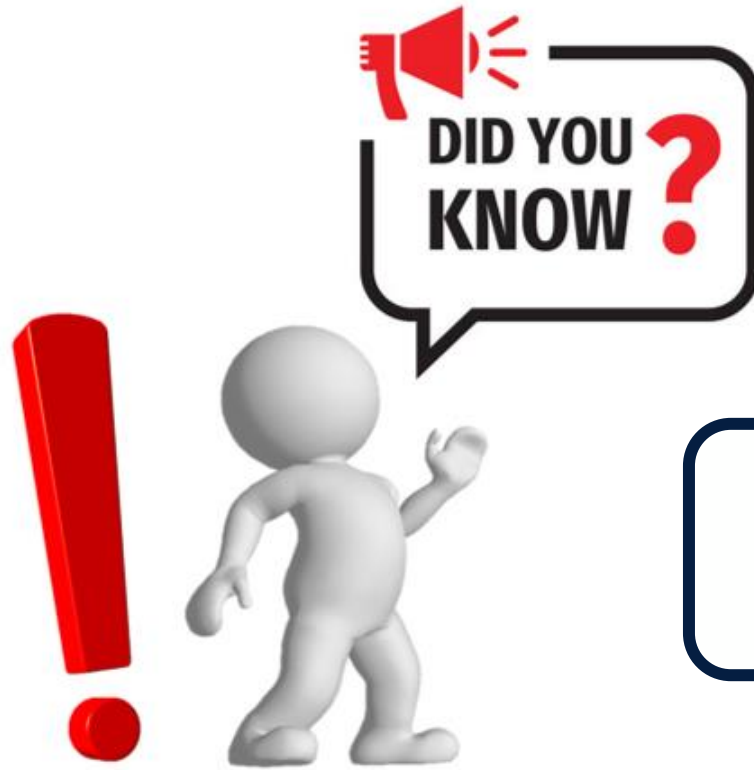


- Throughout meal **monitor** for signs / symptoms of **aspiration** (see handout), and report all concerns to mother

Sample of Mealtime Guidelines



- Food or drink that is in the stomach and comes back up the esophagus and / or into the pharynx and sometimes into the oral cavity.
- This refluxed material **includes stomach acid** that can burn the esophagus, pharynx, oral cavity and can be aspirated. Some people refer to GERD as heartburn or reflux.
- People with reflux are **at high risk for aspiration.**



The prevalence of **GERD** in patients with IDD has been found to be approximately **50%**.

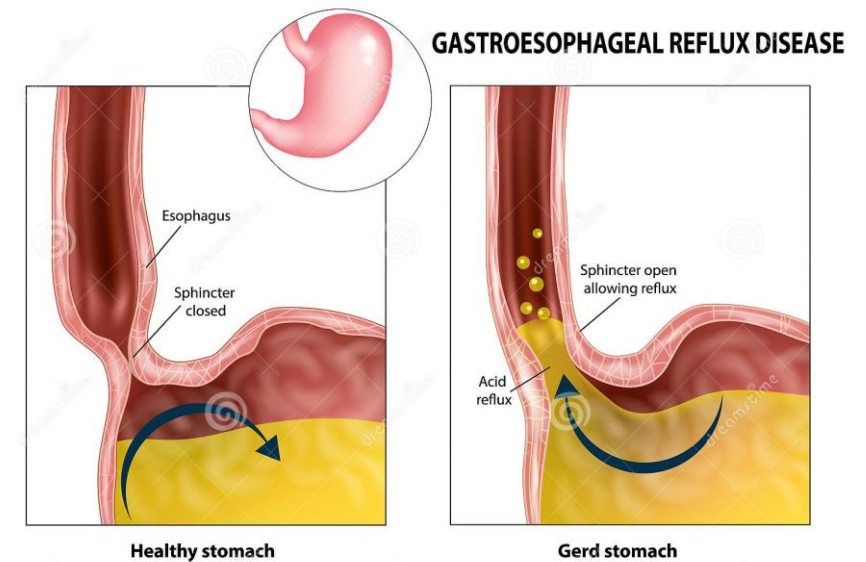
Signs / Symptoms of GERD:

- Heartburn
- Bitter / acid taste in throat / mouth
- Difficulty swallowing
- Repeated swallowing / feeling something “stuck” in throat
- Coughing toward the end or after the meal
- Vomiting at the end or after the meal
- Sudden increase in saliva in mouth
- Gets full quickly
- Morning hoarseness and cough



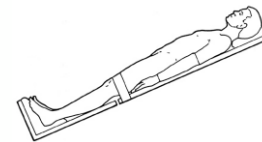
- Meal refusal or eating only a small amount
- Persistent hiccups / belching
- Persistent bad breath
- Preference to liquids or smooth textures
- Abdominal pain / bloating
- Black, tarry stools
- Unexplained / undesired weight loss
- Increased agitation after eating; self injurious behaviors after eating, increased hand mouthing after eating
- Dental erosion

- Consultation with physician (Primary Care Physician / Gastroenterologist)
- Diagnostic Studies
- Medications
- Medical Interventions
- Positioning Recommendations
- Dietary Interventions
- Reflux Precautions



Strategies To Manage GERD

- Consult with Primary Care Physician and / or Gastroenterologist
- May be prescribed medications to treat GERD
- Discuss medications that may irritate the GI system (alcohol, aspirin, & non-steroidal, anti-inflammatory drugs) with doctor
- Maintain a healthy weight
- Avoid smoking and alcohol
- Consider diet modifications
- Avoid tight fitting clothing
- Monitor portion size – don't overeat
- Change bed position (i.e. reverse trendelenberg)
- Relax and eat slowly – don't rush
- Try sleeping on left side at night
- Avoid eating 2-3 hours before bed
- Remain upright at least 45-60 minutes or longer as indicated in plan of care or ordered by physician
- Identify foods that may increase signs / symptoms of reflux



- According to the National Institute of Dental and Craniofacial Research, people with Intellectual / Developmental Disabilities have more untreated caries and a higher prevalence of gingivitis and other periodontal disease than the general population.
- Poor oral hygiene can not only lead to dental caries and gum disease but also has been linked to heart disease, some cancers, diabetes, dementia, etc.
- Good oral hygiene is **extremely** important in the prevention of aspiration pneumonia. Evidence shows a strong correlation between poor oral hygiene and the incidence of aspiration pneumonia.
- In 2016, the US Department of Veterans Affairs began the Hospital-Acquired Pneumonia Prevention by Engaging Nurses (HAPPEN) project, which provides standardized oral care to veterans in hospital or in long term care settings. The HAPPEN project decreased pneumonia rates 40–60% in participating sites and is estimated to save over \$40,000 per patient, shortened length of stay, reduced need for long-term care, and improved patient safety and quality of life.
- Research specific to people with intellectual / developmental disabilities is very limited.



- Oral hygiene guidelines should be included in treatment plans
- Training should be provided for clients and caregivers on importance of oral hygiene and implementation of strategies to promote good oral hygiene
- Oral hygiene should be viewed as a medical intervention
- Ensure proper oral hygiene is provided daily as recommended by dentist, dental hygienist, or other health care professional
 - ADA recommends twice daily for at least two minutes with a soft bristle toothbrush and fluoride toothpaste
 - Recommendations for frequency may vary depending upon person's needs
 - Frequency recommendations may increase with illness / altered levels of consciousness / risk for aspiration / ventilator use, etc.



Barriers to Oral Care & Treatment

- Perception that oral care is a comfort measure only and not medically necessary.
- Low priority due to lack of time
- Inadequate and / or inappropriate oral care supplies
- Lack of appropriate education / training about oral care
- Lack of inclusion of oral care guidelines in the plan of care
- Underlying conditions which may result in resistance /adverse reactions to oral care (i.e. medical conditions, dysphagia, sensory issues, dental concerns, behavioral concerns, bite reflex, etc.)
- Limitations in cognitive / communication skills (i.e. difficulty following directions, understanding procedures and importance, communicating problems related to oral health)
- Dependence on caregivers for assistance with oral care
- Access to dental services in the community (Provider, Funding, Transportation, etc.)
- Funding – income / insurance
- Identifying Dentists with skills, experience, equipment, hospital privileges to work with people with IDD



- **Tooth decay** is common in people with developmental disabilities. This may be due to poor oral hygiene, and teeth may be crowded or malformed, making them more difficult to keep clean, poor nutritional intake.
- **Periodontal (gum) disease** occurs more often and at a younger age in people with developmental disabilities. Difficulty performing effective brushing and flossing may be an obstacle to successful treatment and outcomes.
- **Malocclusion** occurs in many people with developmental disabilities, which can make chewing and increase the risk of periodontal (gum) disease, dental caries, and oral trauma.
- **Damaging oral habits** such as bruxism, clenching, pocketing of food, mouth breathing, tongue thrusting, chewing on inedible objects may be a concern for people with developmental disabilities.
- **Oral malformations** may cause enamel defects, high lip lines with dry gums, and variations in the number, size, and shape of teeth.
- **Trauma and injury** to the mouth from falls or accidents may occur in people with due to physical limitations, balance issues, seizure disorders, etc.
- **Prescription drugs** may cause dry mouth, swelling of the gums, or other changes that make it more difficult to achieve and maintain oral health.

Resources for Dental Service Funding

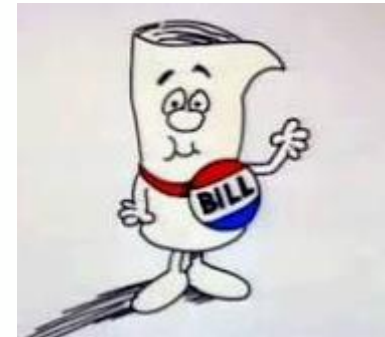
Funding for dental services for people with IDD:



- Traditional Medicaid
 - Dental cleanings and outpatient hospital stays requiring anesthesia are not covered.
 - Adult Denture Plan (ADP) for adults that is limited to an exam, diagnostic radiograph, and preapproved dentures and/or partial and denture combination. Any necessary restorations or extractions are not covered.
 - A set of dentures is limited to one set every 5 years for adults who are 18-20 yrs. old, and every 8 years for adults age 21 and older. However, individuals diagnosed with severe to profound I/DD typically do not tolerate the construction process and are not able to wear / tolerate and maintain dentures.
- Some of the Bayou Health Plans / Medicaid Managed Care Organizations (MCOs) include dental services; however, those services vary depending upon plan and are typically very limited in services and providers.
- Family Support Funds the Regional Local Governing Entities (LGE) have been utilized in the past to cover some dental care needs.

Resources for Dental Services Funding

- Louisiana Act 450 of 2021 Regular Session signed into Law on 06-23-2021:
 - Act 450 of the 2021 Regular Session was signed into law by Governor John Bel Edwards on June 23, 2021. The Act provides for the coverage of comprehensive dental care for adults 21 years of age and older with developmental or intellectual disabilities who are enrolled in the New Opportunities Waiver, Residential Options Waiver or the Supports Waiver. Coverage will begin on July 1, 2022.
 - The following services will be provided through the contracted Dental Benefit Plan Managers:
 - Diagnostic services
 - Preventive services
 - Restorative services
 - Endodontics
 - Periodontics
 - Prosthodontics
 - Oral and maxillofacial surgery
 - Orthodontics
 - Emergency care
 - In order to provide additional support to these individuals, LDH has added the following allowable CDT code to its fee schedule. D9997 dental case management – patients with special health care needs Special treatment considerations for patients/individuals with physical, medical, developmental or cognitive conditions resulting in substantial functional limitations or incapacitation, which require that modifications be made to delivery of treatment to provide customized or comprehensive oral health care services



- Contracted Providers for Qualified Medicaid enrollees with Waiver Benefits:
 - DentaQuest:
 - 1-800-508-6785
 - Via email at: LouisianaProviders@DentaQuest.com
 - Provider portal: <https://govservices.dentaquest.com/>
 - MCNA:
 - 1-855-701-6262
 - Via email at: LA_PR_Dept@mcna.net
 - Provider Portal: <https://portal.mcna.net/>

- Washes away oral debris/residue
- Prevents bacterial attachment to teeth
- Production stimulated by mastication / chewing
- Attacks oral pathogens and neutralizes acid
- Breaks down foods (Amylase - starches; Lipase-triglycerides)
- Forms cohesive bolus
- Buffers acid production / Esophago-Salivary Reflex (“water-brash”)
- Follows circadian rhythm – peaks during day, and decreases during sleep
- Reduced salivary output may lead to increased oral flora/bacteria
- Lemon glycerol, hydrogen peroxide, and alcohol-based products have been linked to decreased saliva production
- Glycerin may also be linked with increased bacteria growth
- Saliva can be aspirated

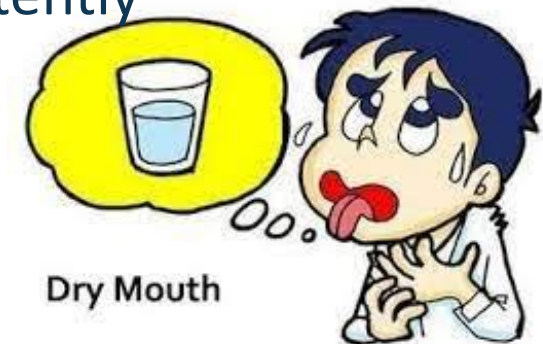


Excessive Salivation

- Excessive salivation, drooling, sialorrhea is common and often results from a variety of issues including hypersecretion of saliva, dental issues, dysphagia, positioning, medications, decreased sensation, GI disorders, neurological disorders, changes in tone, macroglossia, other associated medical issues, etc.
- Treatment involves a team approach: Client / Caregivers, Physicians, Dentists / Hygienists, Speech-Language Pathologists, Occupational Therapists, Physical Therapists, etc.
- Prior to treatment, complete a thorough review of Medical History and implement a person-centered approach
- Many treatments / medications may have adverse side effect and should be reviewed clearly and simply with clients and caregivers

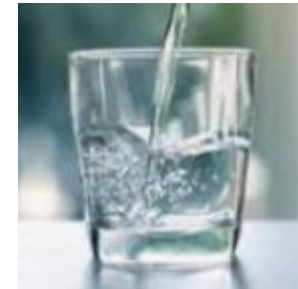


- Can cause difficulties with tasting, chewing, swallowing, and speaking
- May increase your chance of developing dental decay and other infections in the mouth and body
- Dry mouth may result from several issues including side effect of some medications, dehydration, disease, radiation therapy, chemotherapy, poor nutritional status, or other medical issues
- Alcohol and caffeine may exacerbate dry mouth
- Symptoms of dry mouth may include: sticky, dry feeling in the mouth, a burning feeling in the mouth, a dry feeling in the throat, cracked lips, a dry, rough tongue, mouth sores, bad breath, or an infection in the mouth
- May increase risks associated with aspiration pneumonia
- Be mindful that recommendations to treat dry mouth do not inadvertently increase risks associated with aspiration.



Xerostomia

- Goal of treatment is to identify possible cause, relieve symptoms, and prevent complications
- Review medical history and medications. Make sure recommended interventions do not place person at increased risk for aspiration / choking or other medical condition.
- Interventions may include the following and often offer temporary relief:
 - Drinking water throughout the day to stay well hydrated
 - Sucking on ice chips
 - Using lip lubricants
 - Chewing sugar-free gum or sucking on sugar-free candy
 - Avoiding irritants, such as alcohol, tobacco, caffeine
 - Using a humidifier at night
 - Salivary stimulants medications (Be mindful of potential side-effects)
 - Artificial Saliva / Oral Moisturizers
- Communicate with clients and caregivers regarding treatment and needs / feedback



- Plaque is a fairly colorless sticky film that continuously forms on your teeth. It is made up of bacteria which forms a sticky coating or biofilm on teeth.
- The bacteria in plaque feed on carbohydrates and sugars. As the bacteria metabolize the sugars, acid is produced. The acids can damage tooth enamel and the roots of teeth which may lead to tooth decay.
- Plaque also contributes to gum disease which can lead to tooth loss in its later stages
- This bacteria may also lead to infections in the mouth and lungs.
- The good news is that with good daily oral hygiene and regularly scheduled dental visits, the growth of plaque can be reduced and kept to a minimum to maintain a healthy mouth.



Possible Supplies for Oral Hygiene

- Gloves / Protective Eyewear
- Soft toothbrush
- Toothpaste
- Water
- Clean Towels
- Cup and basin
- Gauze / Toothettes
- Mouthwash, if listed in plan
- Petroleum free lip balm, if listed in plan
- Suction toothbrush and suction machine, if listed in plan
- Denture cleaning supplies, if wears dentures
- Cleaning supplies
- All supplies should be labeled with the client's name if lives with roommates



Positioning for Daily Oral Hygiene

- Proper positioning is important to promote independence and access and to decrease risks associated with aspiration:
- **Options include**
 - Standing
 - Seated in standard chair
 - Upright in wheelchair –
 - Wheelchair should be as upright as possible (not reclined).
 - Check positioning prior to tooth brushing - reposition as needed.
 - If unable to transfer from bed,
 - Sit on side of bed, or
 - Position upright in bed (e.g. elevate head of bed; use wedges / pillows)
 - Use wedges / pillows behind and on either side of person to help maintain position
- Ensure head / neck is in a neutral position (e.g. parallel with floor) or slightly tucked toward chest – DO NOT TILT HEAD BACK to brush teeth



Transfer to Dental Chair

- Ensure a clear path and adequate room for patient and caregivers to safely ambulate / transfer / propel wheelchair
- If patient needs to transfer from a wheelchair to the dental chair, ensure brakes are locked on wheelchair prior to transfer and proper support is provided. Request assistance from caregivers, as needed.
- Some patients may require special equipment to transfer including sliding boards, gait belts, and / or lifts / slings.
- Some patients will be unable to transfer to the dental chair.
- Talk with patient and caregivers about how to safely transfer / assist with transfer prior to visit in order to better prepare for visit and accommodate needs



Positioning for Dental Procedures

The following should occur for the optimal position to be achieved:

- Reposition individual prior to beginning examination.
- Pelvis should be properly centered and positioned all the way back into the seat and against the back of the chair.
- Pelvic belt should be secured across pelvis/upper thighs, if remains in wheelchair.
- If individual is positioned in dental chair, without pelvic positioning belt, remain within arm's reach – individual may be at risk for falls due to athetoid movements, increased tone, seizure disorder, impulsivity, etc.
- Trunk should be upright and centered on seat back. Secure chest strap, if present or needed.
- Feet should be supported by foot rest on wheelchair, foot stool, floor, or dental chair.
- Head should be supported in neutral, upright position or slight chin tuck (Chin slightly down toward chest)
- Wheelchair / dental chair should be as upright as possible and not tilted unless otherwise indicated.
 - If must tilt for dental procedures, limit time reclined
 - Inform individual prior to tilting / reclining chair / beginning procedure
 - Ask individual to swallow before tilting / reclining and / or consider use of oral suction to decrease secretions prior to tilting and frequently throughout procedure to decrease risks associated with aspiration.
 - Offer breaks, as available
- Consider positioning in side-lying when possible
- Wheelchair wheels should be locked during the procedure if remains in wheelchair.

NOTE: If difficulty achieving or maintaining position, consider consultation with OT / PT may be needed.



Positioning Equipment for Dental Services



Neck Support. The Size 11 Vac-Pac and its U-shape cutout supports the patient's neck while keeping the respiratory area accessible.

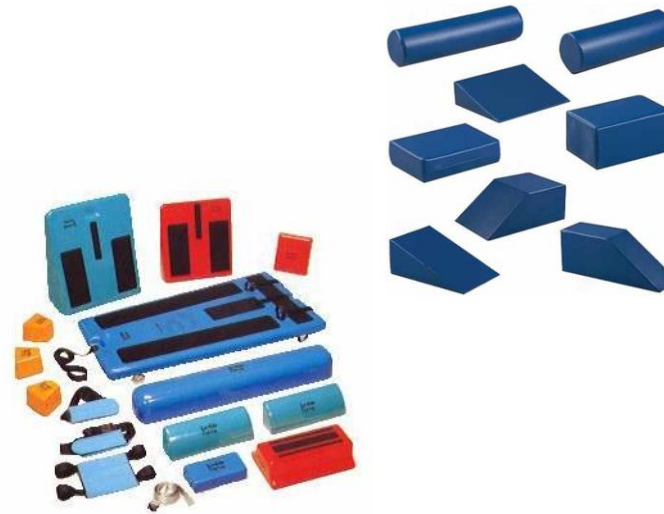


Head Immobilization. The Size 11 Vac-Pac provides stability to the head and facial region during plastic and ophthalmic surgeries.

- Custom Tilt in Space Wheelchairs
- Positioning Aids
 - Wedges / Pillows / Etc.
 - Vac-Pac Positioning System or Other Vacuum Positioning System
 - Alternate seating



QUICKIE
Live without limits.



Size 23
18 in W x 20 in L
(45.7 x 50.8 cm)



Size 30
28.7 in W x 35.5 in L
(72.9 x 90.2 cm)



Size 31
38.7 in W x 35.5 in L
(98.3 x 90.2 cm)



Size 32
46.7 in W x 35.5 in L
(118.6 x 90.2 cm)



Size 11
16 in W x 12 in L
(40.6 x 30.5 cm)



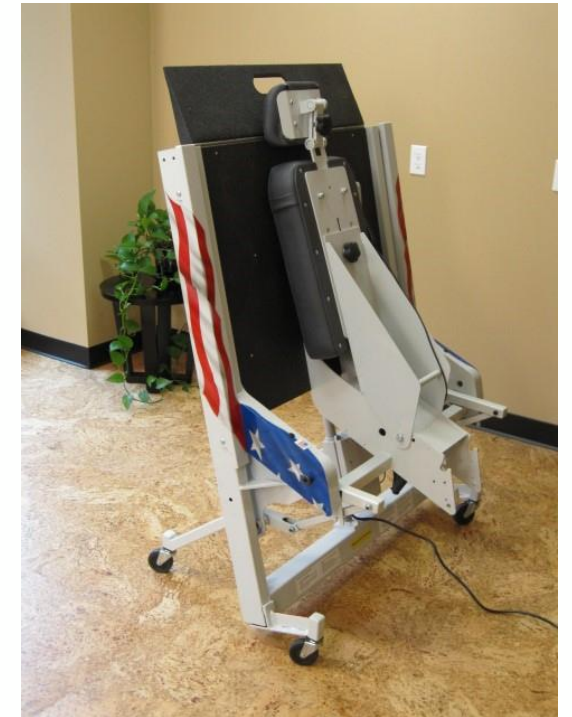
Size 35
34.5 in W x 28 in L
(87.6 x 71.1 cm)



Size 40
30 in W x 76 in L
(76.2 x 193.1 cm)

- **Versatilt System:**

- The Versatilt allows patients in wheelchairs to be tilted, while in their wheelchairs, to a degree that is optimal for providing professional patient care in the best ergonomic positions possible.
- Accommodates most manual and motorized wheelchairs.
- The patient can be reclined up to 65 degrees. It requires floor space of 36 by 60 inches, and it can be folded into an 18-inch deep space for storage.
- 750# weight capacity



Toothpaste

- When using toothpaste, very little is needed. Use no more than a pea-size amount of toothpaste.
- For some people with difficulty swallowing (dysphagia) or sensory concerns,
 - Low foaming toothpaste may be recommended or
 - Toothpaste may not be recommended for all. Brushing teeth with water alone still helps remove the sticky film of germs.
- Due to sensory issues and / or personal preferences, different flavored toothpastes (e.g. unflavored, mint, strawberry, bubble gum, etc.) may be tried to increase acceptance of oral hygiene.
- Dentist may recommend specific types of toothpaste based upon person's needs. Consult with dental professional regarding specific recommendations.

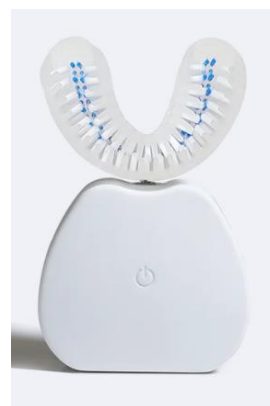


Toothpaste Aids



Specialized Toothbrushes

- Toothbrush with **soft bristles** are often recommended for oral hygiene. Assess the size of the clients mouth, may benefit from smaller toothbrush
- **Electric or battery-operated toothbrushes** may be recommended to improve cleaning of mouth, sensory-related issues, or encourage independent brushing by easing brush manipulation.
- **Built-up handled toothbrushes** may be used to help people be able to hold their toothbrush and brush their teeth with greater independence.
- **Universal Cuffs** may be utilized to help people hold their toothbrush and brush teeth more independently.



Specialized Toothbrushes

- **Multi-Sided Toothbrushes** may be utilized for people who briefly tolerate toothbrushing in efforts to brush the most surface in the least amount of time.
- **Suction Toothbrushes** are utilized for people who are at high risk for aspiration. Medicaid will cover the bedside suction machine with physician's orders and appropriate code. Suction toothbrushes are considered Specialized Medical Equipment and may be covered via waiver funds with a Letter of Medical Necessity from physician or therapist.
- Consult with Dentist / Dental Hygienist / Occupational Therapist and / or Speech-Language Pathologist for questions/ concerns related to specialized toothbrushes.



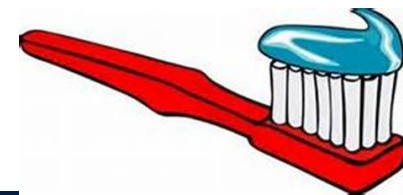
Mouth Props

- Tools used to keep the mouth open to support access during dental procedures
- Be aware of advantages and disadvantages of use
- May result in increased difficulty swallowing when in use and increase risks associated with aspiration
- May be considered restrictive – ensure proper authorization prior to use



General Brushing Tips

- Consider creating written instructions and / or visual supports for “How to Brush Teeth”
- Many people with IDD face multiple challenges related to oral care
- Oral care should be performed where individual is most comfortable – does not necessarily have to be in the bathroom
- Talk with client. Inform client of what will be happening prior to starting process. Try to make process predictable. Include client in planning.
- Encourage independence throughout tooth brushing. If the individual is able to perform some steps of tooth brushing independently (e.g. with verbal / tactile / visual cues, with demonstration, with hand over hand assistance, hand under hand assistance, etc.), encourage maximum independence
- Provide demonstration and encourage client / caregiver to provide return demonstration with feedback
- Replace the toothbrush when bristles become frayed, after three months, or following a contagious infection. A frayed or damaged toothbrush is not effective.
- Recognize that some people are sensitive to water temperature during tooth brushing. If sensitive to cold water, try room temperature or slightly warm water for tooth brushing.



General Brushing Tips

- Approach the individual at eye level and maintain eye contact
- Offer encouragement and feedback throughout tooth brushing process
- Encourage to brush each quadrant of the mouth (e.g. upper right, lower right, upper left, lower left, upper front, lower front), and expel (e.g. spit out) / wipe out the excess saliva and foam from the mouth after each quadrant.
- Offer short breaks, as needed, after brushing each quadrant
- Set the environment for success. Have all supplies ready.
- Be patient, understanding, respectful, and aware of individual needs. Allow adequate time. Do not rush.



- People without teeth still need to brush their gums daily to remove / reduce bacteria in their mouths to reduce risks associated with aspiration.
- Use soft-bristled toothbrush, brush sides and top of gums, tongue, and roof of mouth.
- Provide guidelines for brushing, use of mouthwash, and frequency
- Consider developing written instructions and / or visual supports for “How to Clean Mouth / Gums” for clients and caregivers

Who said you had to
have teeth to brush?
My gums are
squeaky clean.



- May report difficulty eating, drinking, talking with dentures
- May result in increased likelihood of laryngeal penetration due to changes in oral control and sensation
- May be difficult for people with IDD to communicate fit, discomfort, pain, difficulty eating, etc.
- Recognize that change is difficult for many people with IDD
- Bite force with dentures may be reduced as compared to natural teeth which may result in reduced mastication of bolus
- Be careful with hot foods / liquids
- Encourage to start with drinking and / or eating small bites of soft foods that require minimal chewing and progress, as tolerated, to more texture
- Give clear recommendations / guidelines for wear schedule and what to expect. Consider use of visual supports / social stories.
- Encourage to stay hydrated to prevent dry mouth
- Discuss importance of good oral hygiene and daily care of dentures:
 - Give simple, clear instructions / visual supports for care of dentures
 - Remind to continue to brush gums, tongue, palate, etc. with a soft bristle brush as least twice daily
- Be patient – the adjustment to wearing dentures takes time



Oral Swabs & Toothettes

- Evidence shows that these products by themselves do not adequately remove plaque and biofilm.
- Simple toothbrushing is the best method to remove plaque.
- Disposable oral care swabs and toothettes are not reusable. They are intended for single use to remove food debris from mouth after meals / snacks and / or for application of mouth moisturizer.
- Choking hazard if sponge is dislodged or broken from biting.
- These products are useful in cleaning oral cavity of debris before tooth brushing, moistening mouth, and applying mouthwash, etc.



Flossing

- Flossing presents a significant challenge for many people with IDD
- May only floss a portion of teeth or none at all
- Be cautious when recommending Water Flossers, especially for people at high risk for aspiration or have sensory concerns



- Develop Oral Hygiene Guidelines / Visual Supports.
- Encourage individuals to rinse after brushing, if able.
- Monitor to ensure mouthwash / rinse is not swallowed
- Not all individuals are able to effectively utilize mouthwash and expel from oral cavity. If individual cannot use mouthwash, consider alternate method of use:
 - Wipe oral cavity with a damp wash cloth or gauze wrapped around the end of a toothbrush.
 - Wet toothette or toothbrush; remove excess mouthwash; swipe oral cavity
 - Consider use of spray bottle to spray a small amount in oral cavity and wipe excess.
 - Be mindful of risks associated with aspiration when recommending
- The dentist may prescribe a special rinse for some people.
 - Fluoride rinses can help prevent cavities.
 - Chlorhexidine rinses may help to reduce bacteria that cause gum disease.
 - Provide clear instructions for use and follow-up.

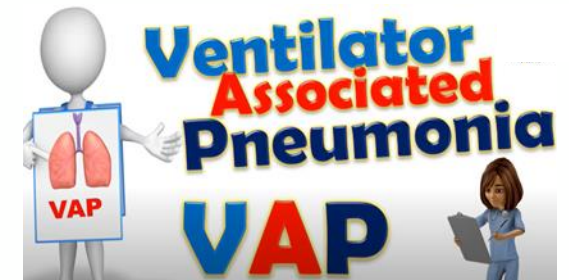


People Who Eat by Tube

- Bacteria still builds up in mouths of people who do not eat anything by mouth.
- Brush at least twice daily or as otherwise recommended by dentist or other health care professional
- Good oral hygiene is **extremely** important in the prevention of aspiration pneumonia. Many people who eat by tube are already at high risk for aspiration. Good oral hygiene is critical to their overall health and safety.
- Dry mouth can be exacerbated due to reduced salivary flow for people who do not eat by mouth. Reduced salivary flow may increase the risk of tooth decay.



- Growing evidence that demonstrates oral care is an important factor in decreasing risks of VAP
- Use of Chlorhexidine in conjunction with standard oral care and toothbrushing have been shown to decrease risks associated with VAP including length of hospitalization and mortality rate
- Evidence sites pros and cons regarding use of Chlorhexidine
- Additional research is needed to formulate evidence-based guidelines for patients on ventilators

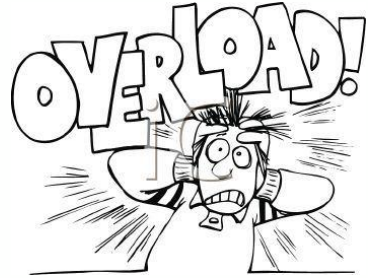


When prescribing medications, be knowledgeable about:

- Medical History
- Interactions
- Side effects
- Method of administration



Sensory Processing & Integration



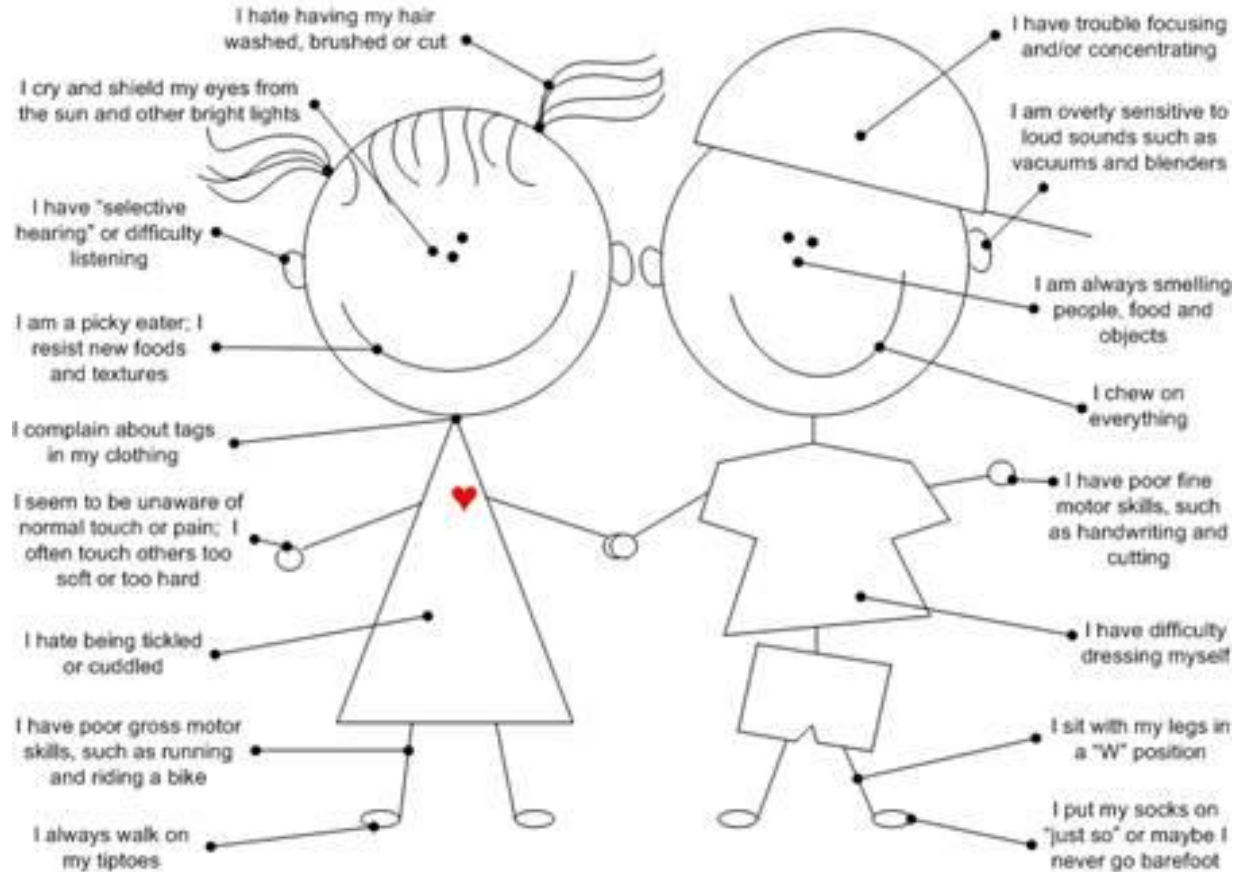
I Can't do this....



Look Out....



DO YOU KNOW ME?



I'm going to fall !!!



© Johnny Sajem * www.ClipartOf.com/1048860

Da....



Mr. Sensitive



© Ron Leishman * www.ClipartOf.com/1044018

- People with sensory issues may avoid and / or seek certain foods, such as:
 - Crunchy foods
 - Spicy / salty / sweet / sour foods
 - Bland foods
 - Hot or cold foods
 - Chewy / gummy foods
 - Certain colored foods
 - Certain textures – crunchy, smooth, wet, dry, etc.
 - Foods with strong smells
- Preferences are often limited making mealtime challenging
- Interdisciplinary team, including SLP, OT, RD, Psychologist, may work together to address issues

Sensory stimulation techniques vary and may include thermal-tactile stimulation (e.g., using iced spoon / swab, cold laryngeal mirror, cold bolus) or tactile stimulation applied to the tongue, around the mouth, and/or in the oropharynx.

Patients who are tactically defensive may need approaches that reduce the level of sensory input initially, with incremental increases as tolerance improves.

Sour boluses and changes in sizes of bolus may also be utilized.

The opportunity for sensory stimulation may be needed for those with reduced responses, overactive responses, or limited opportunities for sensory experiences.

Sensory stimulation may prime the swallow system for the subsequently presented bolus to lower the threshold needed to initiate a swallow response and improve the timeliness of the swallow.

Sensory Strategies

- **Visual:**

- Darker room
- Dim lights or natural light (be mindful of glare)
- Avoid overhead fluorescent lights
- Offer sunglasses, soft eye masks, etc.
- Minimize distractions in room
- Visually stimulating items



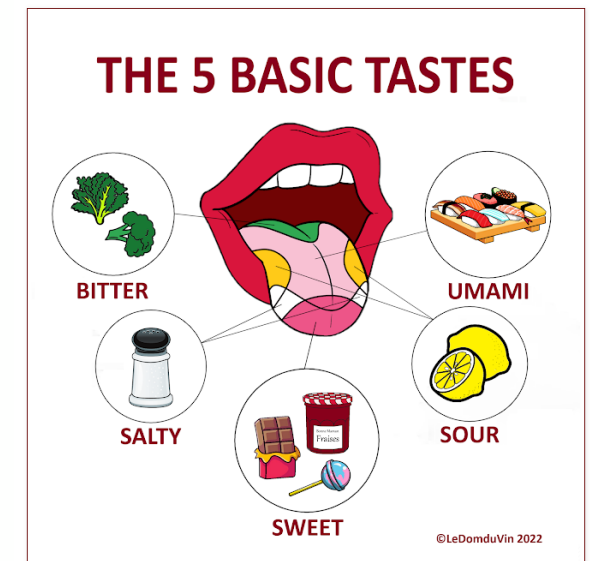
- **Olfactory:**

- Calming scents include lavender, ylang-ylang
- Alerting scents include peppermint and citrus
- Be mindful of scents – perfumes, lotions, cleaning products, etc. may be aversive



- **Taste:**

- Offer unflavored or mild-tasting toothpaste / oral rinse options
- Offer patient's favor / familiar toothpaste flavor
- Encourage patient to choose flavors, if possible
- Explain all procedures ahead of time
- Consider desensitization plan to familiarize with tools, tastes, etc.



Sensory Strategies

- **Auditory:**
 - Quiet room away from activity
 - Soft nature sounds / noise machine
 - Soft music
 - Noise cancelling headphones / Ear pods



Sensory Strategies

- **Tactile:**

- Fidgets / Manipulatives
- Soft vs. Firm Touch



Sensory Strategies

- **Vibration:**

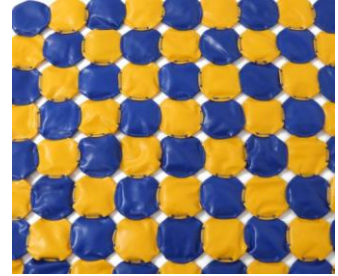
- Consult with physician for use with patients with seizure disorder and / or implants (pace maker, VNS, etc.)



Sensory Strategies

- **Proprioception:**

- Weighted items
- Chewable items



Sensory Strategies

- Alternate Seating:



Toothbrushing / Dentist Visual Supports

Visual Supports, Social Stories, Role Play, and Video Modeling can help people better understand how to brush teeth and increase independence.

- Picture Schedule / Sequences
- Social Stories
- Video Modeling
- Role Play
- Technology Aided Instruction



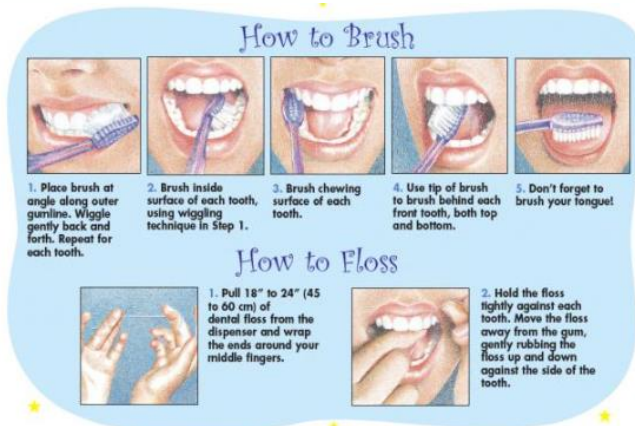
Visuals2Go



Choiceworks



First Then Visual
Schedule



BRUSHING MY TEETH



TOOTHPASTE ON



BRUSH TEETH



RINSE



FLOSS TEETH



MOUTHWASH
OR RINSE




MY TEETH
ARE CLEAN!



I Create Social Stories

Toothbrushing / Dentist Visual Support

 **Brushing Teeth**

1
wet toothbrush

2
toothpaste on brush

3
brush teeth

4
spit in sink

5
rinse toothbrush

☐

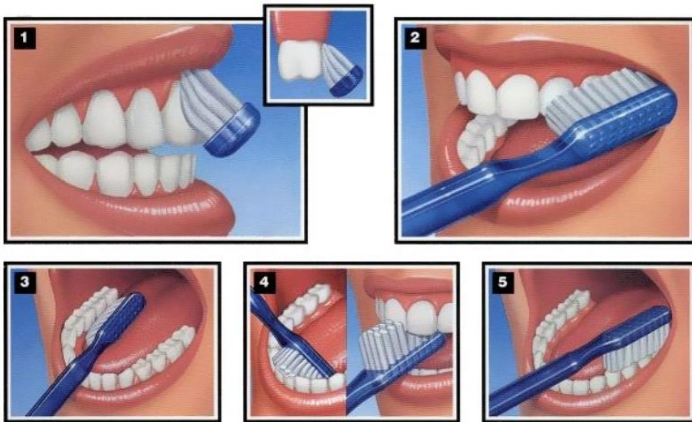
☐

☐

☐

☐

first	then
<input type="text"/>	<input type="text"/>



TO DO

☒ waiting room

☐ sit in dentist chair

☐ open wide

☐ count teeth 1-2-3

☐ Finished! Pick a prize!

Finished

☒


☐

☐


☐



☐

FIRST

 DENTIST

THEN

 play in pool

 **MY BRUSHING CHART** 

MORNING

NIGHT

SUNDAY	<input type="checkbox"/>	<input type="checkbox"/>
MONDAY	<input type="checkbox"/>	<input type="checkbox"/>
TUESDAY	<input type="checkbox"/>	<input type="checkbox"/>
WEDNESDAY	<input type="checkbox"/>	<input type="checkbox"/>
THURSDAY	<input type="checkbox"/>	<input type="checkbox"/>
FRIDAY	<input type="checkbox"/>	<input type="checkbox"/>
SATURDAY	<input type="checkbox"/>	<input type="checkbox"/>

MY BRUSHING CHART

Hello, _____ **I'm Dr. Rabbit!**

Welcome to my brushing challenge! Brush your teeth with fluoride toothpaste at least twice a day, especially after eating breakfast and before bedtime.

KEY








With some help from colored pencils, choose a color to use on the chart, and choose a different one for each family member who likes to brush with you. Check off each time you brush and have your family make check marks when they brush with you!

COLOR: _____ MEMBER'S NAME: _____

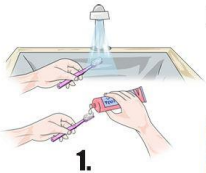
Here is your very own brushing chart to hang up at home. Be sure to check off each time you brush, twice a day, for four weeks. And invite other members of your family to brush with you, too!


You did it!


Brushing My Teeth


1	 get toothbrush	<input type="checkbox"/>
2	 get toothpaste	<input type="checkbox"/>
3	 put toothpaste on brush	<input type="checkbox"/>
4	 brush teeth	<input type="checkbox"/>
5	 rinse toothbrush	<input type="checkbox"/>
6	 put toothbrush away	<input type="checkbox"/>
7	 wipe mouth	<input type="checkbox"/>


KNOW THE CORRECT WAY to BRUSH YOUR TEETH

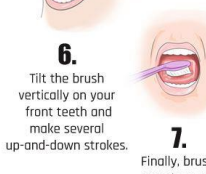
**1.**
Wet your toothbrush and take a pea-sized amount of toothpaste.


**2.**
Place the head of your toothbrush against your teeth at a 45 degree angle.

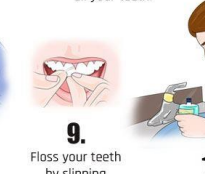
**3.**
Gently brush the outer surfaces of your teeth.


**4.**
Similarly, brush the inner surfaces of all your teeth.


**5.**
Brush the biting surfaces of the teeth.

**6.**
Tilt the brush vertically on your front teeth and make several up-and-down strokes.

**7.**
Finally, brush your tongue.

**8.**
Spit out any excess toothpaste and rinse your mouth with plain water.

**9.**
Floss your teeth by slipping floss between adjacent teeth.

**10.**
Finally, rinse your mouth with a mouthwash.

To explore more, visit
www.Top10HomeRemedies.com

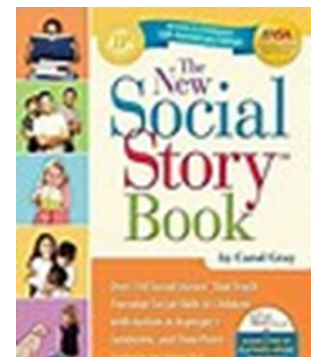
Visual Supports



- A Social Story accurately describes a context, skill, achievement, or concept according to 10 defining criteria. These criteria guide Story research, development, and implementation to ensure an overall patient and supportive quality, and a format, “voice”, content, and learning experience that is descriptive, meaningful, and physically, socially, and emotionally safe for the child, adolescent, or adult with autism.
- Social Stories are a respected evidence-based practice that is employed most frequently with individuals diagnosed with social communication disorders or other disabilities, as well as typically developing children. Each Story addresses a personalized topic via a process and document characteristics that adhere to ten defining criteria that ensure the integrity and safety of the approach.

Carol Gray, Consultant to Children, Adolescents, and Adults with Autism

<https://carolgraysocialstories.com>



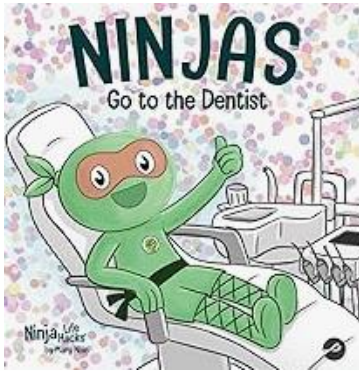
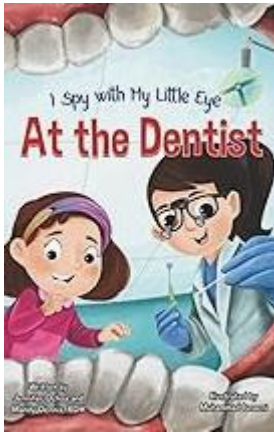
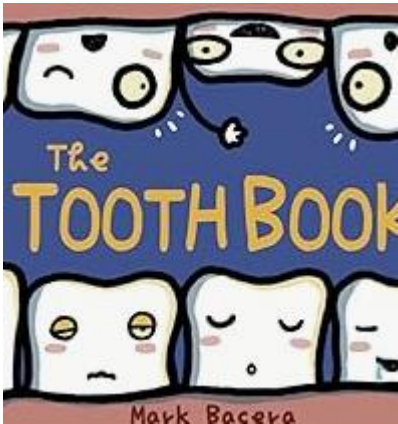
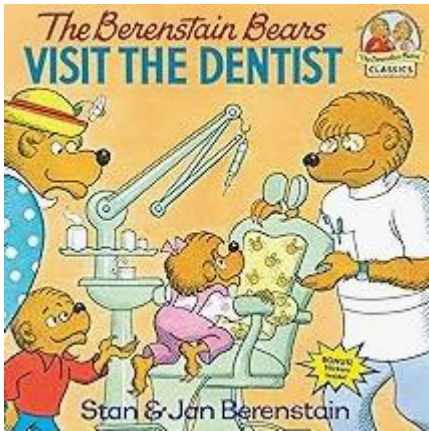
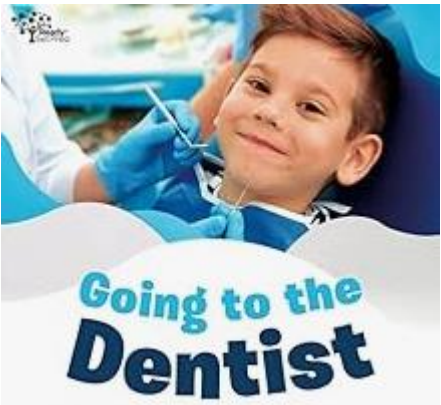
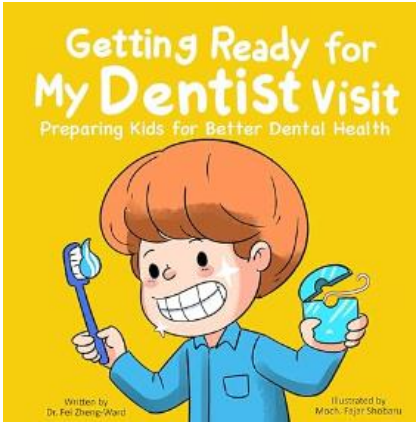
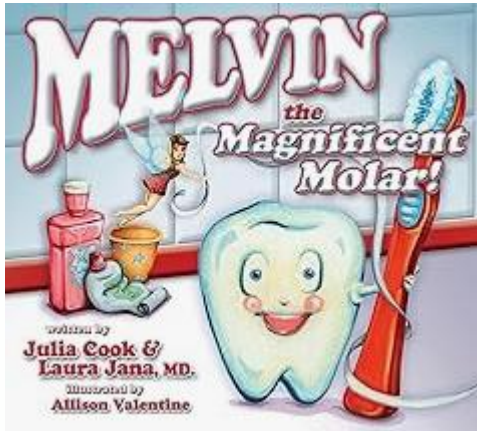
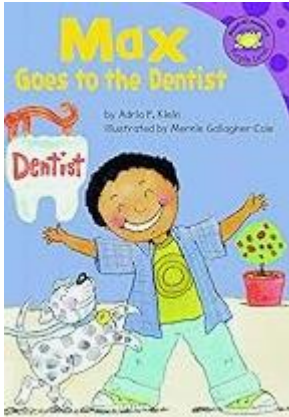
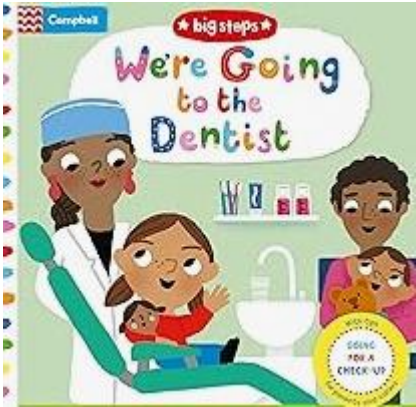
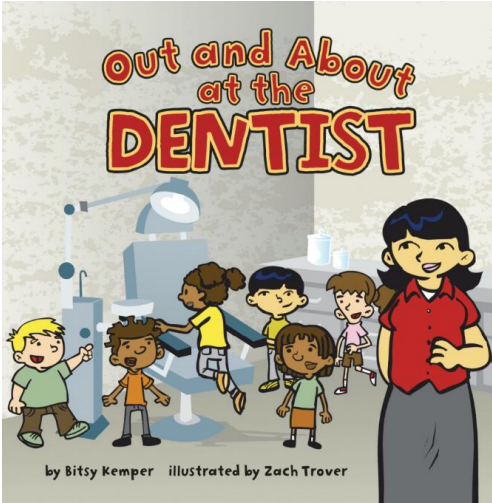
According to the National Professional Development Center on Autism Spectrum Disorders, video modeling is a mode of teaching that uses video recording and display equipment to provide a visual model of the targeted behavior or skill. Types of video modeling include basic video modeling, video self-modeling, point-of-view video modeling, and video prompting.

- *Basic video modeling* involves recording someone besides the learner engaging in the target behavior or skill (i.e. models). The video is then viewed by the learner at a later time.
- *Video self-modeling* is used to record the learner displaying the target skill or behavior and is reviewed later. *Point-of-view video modeling* is when the target behavior or skill is recorded from the perspective of the learner.
- *Video prompting* involves breaking the behavior skill into steps and recording each step with incorporated pauses during which the learner may attempt the step before viewing subsequent steps. Video prompting may be done with either the learner or someone else acting as a model.

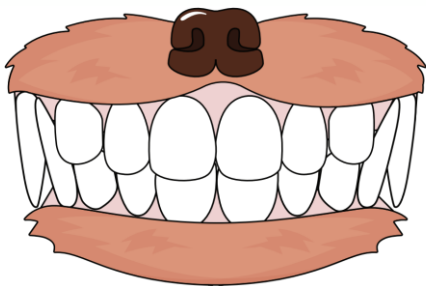


Target the skill for teaching; Have equipment; Plan the recording; Collect Data; Make Video; Arrange Environment for Video; Show Video; Monitor Progress; Troubleshoot; Fade Video and Prompting

- Considering role-playing brushing teeth, going to the dentist, sitting in the dentist chair, shining light in mouth, counting teeth, etc.
- Create an individualized approach to meet the person's needs and abilities
- Provide clear instructions and use visual aids to support understanding
- Provide positive feedback and praise to encourage participation
- Consult with therapists and other professionals to integrate role play into overall treatment plan



Games, Apps, & Videos



Dentist –
Doctor Games



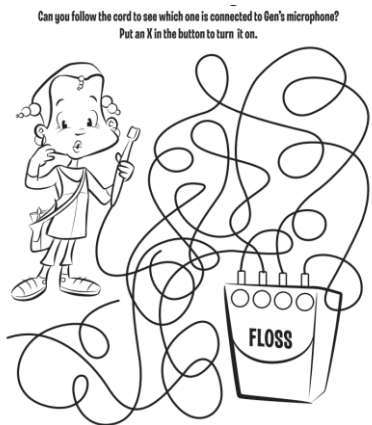
Children's Doctor:
Dentist



My Dentist
Games



Tooth Repair
Simulator: Virtual
Doctor



My Trip to the Dentist!

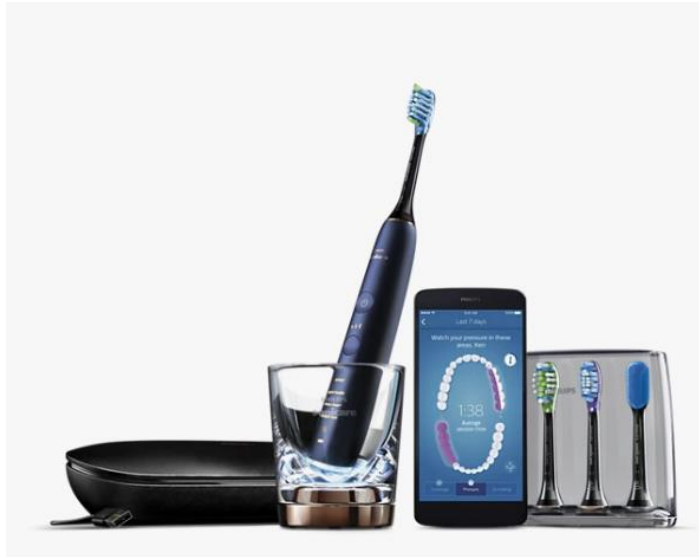
Brought to you by the
Canadian Society for Disability and Oral Health
Dalhousie Student Chapter



A Trip to the Dentist
Sesame Street

Toothbrushing / Dentist Visual Supports

- Smart Toothbrushes



- **Create a person-centered environment:**
 - Complete a comprehensive chart review / intake prior to visit. Be sure to include medical history, medication, positioning, sensory needs, risks associated with aspiration and dysphagia, etc.
 - Offer opportunity for patients to visit office prior to scheduled visit to become more familiar with environment.
 - Use visual supports, social stories, and / or video modeling to help the client better know what to expect at the appointment.
 - Be receptive to client and caregivers thoughts and ideas on how to make the experience a success.
 - Consider and address sensory, positioning, swallowing, and communication needs.
 - Be patient and understand that providing care will likely require extra time.
 - Set the stage for a successful visit. Involve the entire dental team.
 - Encourage family and favorite caregivers to participate in the appointment
- **Limit / Reduce Distractions**
 - Offer quiet, sensory friendly area, dim lights
- **Offer Breaks, as needed**

- **Communicate with patients and caregivers:**
 - Be mindful and respectful
 - Talk with the patient and their caregivers about how the patient's abilities and health may affect oral health care.
 - Explain each procedure / activity at a level the patient can understand.
 - Use visual supports, as needed, to assist with understanding.
 - Allow extra time to explain and discuss issues / concerns. Be patient. Recognize it may require extra time for patients to process and respond
 - Provide simple instructions / recommendations, demonstrate use of instruments prior to use.
 - Speak to the patient directly – ask questions and discuss concerns with patient even if caregivers are present for exam.
 - Use simple, concrete language – avoid jargon.
 - Give one simple instruction at a time.
 - Actively listen to patient.
 - Look and respond to all forms of communication – verbal statements, gestures, ASL, body language, AAC devices, facial expressions, etc. Remember, behavior is communication.
 - Try to be on time – do not make wait for long periods of time. Consider use of visual timers if client needs to wait.
 - Inform patients before touching them, tilting wheelchair, turning on lights / equipment, etc.
 - Communicate with patients in well lit environments where patients can see; multisensory approach; Remove masks to communicate
 - If teaching new task, provide multi-sensory / multi-modality input and encourage return demonstration. For example: Inform client what is going to happen; show client tools that will be used and use simple language to explain and demonstrate how they will be used; encourage clients to hold / touch the tools; ask client if ready to begin.
 - Encourage client to actively participate as much as possible

- The individuals you care for have the same basic dental needs as you, including daily brushing and flossing, regular dental visits, and eating a balanced diet.
- With good oral care at home and routine dental visits, teeth can last a lifetime.
- A healthy mouth is an important part of total health. Teeth that are strong and healthy allow us to eat and chew and to feel confident when interacting with others.
- Good oral hygiene is extremely important in the prevention of aspiration pneumonia
- Making a difference in the oral health of a person with Intellectual / Developmental Disabilities may be a slow process, but with persistence and good oral care, positive results are possible.



REPORT
CONSULT
COMMUNICATE

Dysphagia, Aspiration, & OH
Strategies for Individuals w/ IDD
Dawn Houston, CCC-SLP



?? Questions ??



THANK YOU

Dawn Houston, CCC-SLP

Speech-Language Pathology Supervisor

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- *Toothbrushes* | American Dental Association (ada.org)
- *Home Oral Care* | American Dental Association (ada.org)
- *Oral Health in Healthcare Settings to Prevent Pneumonia Toolkit* | HAIs | CDC
- <https://natus.bynder.com/m/862044c26dd00610/original/Olympic-Vac-Pac-Brochure.pdf>
- *Practical Oral Care for People With Intellectual Disability* (nih.gov)
- *Effectiveness of sensory adaptive dental environments to reduce psychophysiology responses of dental anxiety and support positive behaviours in children and young adults with intellectual and developmental disabilities: a systematic review and meta-analyses* - PMC (nih.gov)
- *Aspiration HS AP OralHealth v2.pdf* (in.gov)
- *How Oral Health Affects Overall Health* (clevelandclinic.org)
- *Countering the poor oral health of people with intellectual and developmental disability: a scoping literature review* - PMC (nih.gov)
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- *Unsafe Chewing: Choking and Other Risks:* <https://leader.pubs.asha.org/doi/10.1044/leader.ftr1.24112019.42>
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- *Disparities in Access to Oral Health Care* - PMC (nih.gov)
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- [Oral Health in Healthcare Settings to Prevent Pneumonia Toolkit | HAIs | CDC](#)
- [Relationship between the oral cavity and respiratory diseases: Aspiration of oral bacteria possibly contributes to the progression of lower airway inflammation - PMC \(nih.gov\)](#)
- [Poor oral hygiene, oral microorganisms and aspiration pneumonia risk in older people in residential aged care: a systematic review - PubMed \(nih.gov\)](#)
- [Impaired oral health: a required companion of bacterial aspiration pneumonia - PMC \(nih.gov\)](#)
- [Oral Hygiene Reduces the Mortality from Aspiration Pneumonia in Frail Elders - PMC \(nih.gov\)](#)
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- <https://www.nidcr.nih.gov/health-info/developmental-disabilities#:~:text=Some%20people%20with%20developmental%20disabilities,for%20maintaining%20good%20oral%20health.>
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- [ESP: Effective Swallowing Protocol: https://swallowtherapy.com/esp/](#)
- [Association of Gastroesophageal Reflux Disease with Dental Erosion: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9667903/](#)
- [Pneumonia: Factors Beyond Aspiration | Perspectives on Swallowing and Swallowing Disorders \(Dysphagia\) \(asha.org\)](#)
- [Aspiration Pneumonia: The More We Learn the Less We Know - Dysphagia Café](#)
- [Predictors of Aspiration Pneumonia in Nursing Home Residents | Dysphagia \(springer.com\)](#)
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- <https://www.aafp.org/pubs/afp/issues/2004/0601/p2628.html>
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 - <https://drive.google.com/file/d/0B86bxhFxYKGzX19DZ2hYVFZGOUU/view>
 - [Social Stories for Going to the Dentist – Pathfinders for Autism](#)
 - [https://www.youtube.com/watch?v=RTm6hs8JDZw#:~:text=Brushing%20Teeth%20\(Voice%20Instructions\)%20-%20Penquis%20ADL%20Tools](https://www.youtube.com/watch?v=RTm6hs8JDZw#:~:text=Brushing%20Teeth%20(Voice%20Instructions)%20-%20Penquis%20ADL%20Tools)
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