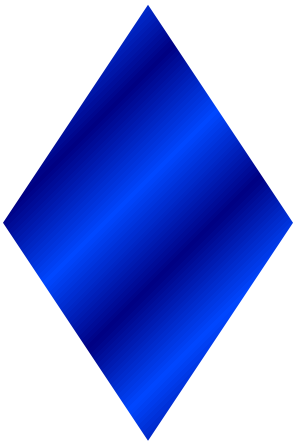
DYSPHAGIA

Resource Directory

Central Pennsylvania Health Care Quality Unit



Dysphagia Resource Directory Disclaimer

The information and educational resources included in this Dysphagia Resource Directory* are designed as general information only and are not all inclusive or intended to replace physical, dental or behavioral health advice.

The samples and examples included are not all-inclusive of every situation and should not be followed strictly as described. They are to be used solely as a reference and resource.

If you believe that you, or someone you support, has physical, dental or behavioral health issues related to dysphagia, please seek professional advice for specific recommendations.

Every person's situation is unique.

**The Southeast Region Dysphagia Summit Task Force Committee*
Philadelphia Coordinated Health Care
Central Pennsylvania Health Care Quality Unit (HCQU)
Becky Dorner & Associates, Inc.
Office for People With Developmental disabilities (OPWDD)

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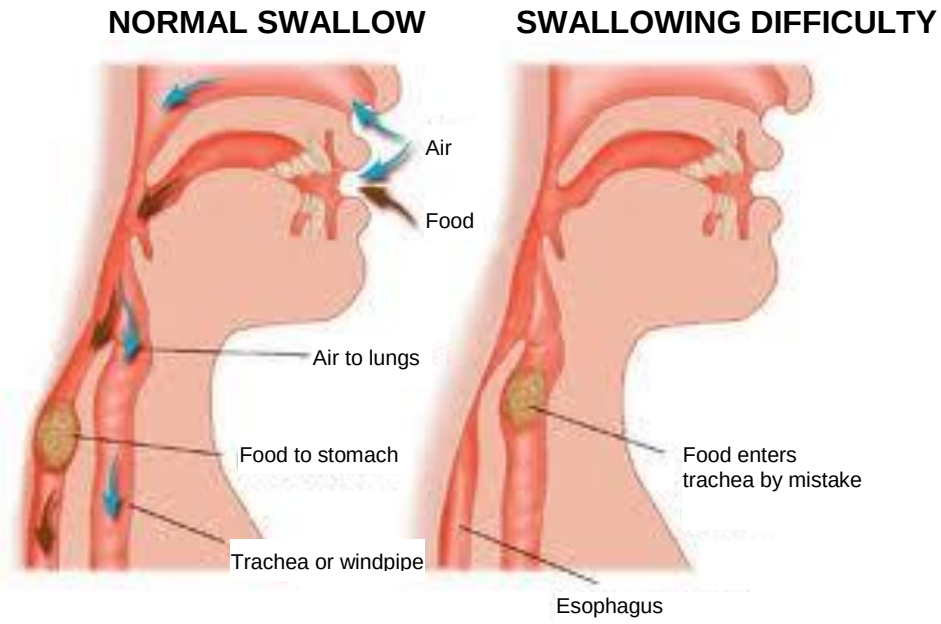
What is Dysphagia?

Pronounced: (dis Fay juh *or* dis Fah juh)

In simple terms, dysphagia is difficulty chewing and/or swallowing. Most of us swallow 1,000 or more times a day without thinking about it, however the swallowing process is quite complicated. *Approximately one million people annually receive a new diagnosis of dysphagia including many people with developmental disabilities (DD)**. Swallowing is a difficult, sometimes impossible, task for some people with DD. In fact, choking and aspiration pneumonia are among the leading causes of death in adults with ID/DD.



Swallowing Phases

Swallowing occurs in phases. These occur rapidly. Impairment at any phase can lead to choking and/or aspiration.

Phase 1 – Oral Preparatory Phase
The mouth recognizes food has arrived and responds with tongue movement. The tongue, together with the teeth/ chewing forms the food into a mass and then moves it to the throat. While this process is occurring the lips are sealed to prevent food or liquid from spilling out.

Phase 2 – Oral Transit Phase
This begins when the tongue starts moving bolus back. It lasts 1 to 1.5 seconds. As bolus moves back, signals are sent to the brain.

Phase 3 – Pharngeal/Throat Phase
The swallowing sequence occurs after the swallow has been triggered and the food or liquid moves into the throat. Once the swallow has been triggered the breathing stops momentarily and the airway is closed to prevent aspiration.

> **Phase 3 Swallow Disorder –**
> Swallow is delayed, incomplete or absent. Food or liquid can then become trapped in the throat. This can then spill into the lungs resulting in aspiration.

Phase 4 – Esophageal Phase
Esophageal propulsion begins via muscle contractions – **Peristalis.** Transit takes approximately 8 to 20 seconds. When bolus enters the stomach, the swallowing process has finished.

> **Phase 4 Swallow Disorder –**
> Pockets or strictures in the esophagus can delay or prevent food from entering the stomach. Regurgitation of food or stomach acid from the esophagus to the pharynx/throat.

Medical Conditions That May Be Associated with Swallowing Disorders

- Surgical revisons of the head and neck as the result of diseases such as cancer
- Head injury
- Stroke
- Multiple sclerosis
- Parkinson's Disease
- Amyotrophic lateral sclerosis
- Myasthenia Gravis
- Muscular dystrophy
- Huntington's chorea
- Cerebral Palsy
- Poor dentition
- Repeated pneumonias
- Dementia
- People who are on medications that cause sedation, impair cognition, or decrease production of salvia
- Any disease or injury that directly affects the oral mechanism, or damage to the brain that causes neurological impairment of swallowing

Other Conditions That May Cause Difficulty with Swallowing

Eosinophilic Esophagitis

Overview – Eosinophilic Esophagitis (also known as EoE) is a disease characterized by the presence of a large number of a special type of white blood cell, the eosinophil, that can cause inflammation in the esophagus. This inflammation can lead to stiffening or narrowing of the esophagus, which can lead to difficulty swallowing (dysphagia) or food getting stuck in the esophagus. Reflux of stomach acid contents into the esophagus can also cause eosinophils as well as inflammation in the esophagus. In EoE, the eosinophils are present even after acid reflux has been treated. Although eosinophils may be found in the rest of the gastrointestinal tract in a healthy person, when present in the esophagus, this usually suggests an abnormal condition.

While EoE was previously thought to be a rare disease, it has recently been recognized as one of the most common causes of difficulty swallowing and food impaction in young adults. It is thought that the disease may be increasing similar to the increases seen in other allergic disorders such as asthma and allergic rhinitis. EoE affects males three times more often than females.

Symptoms – The most common presenting symptoms in adults are difficulty swallowing solid food and food impactions in which food gets lodges in the esophagus and is unable to pass into the stomach. If patients develop a food impaction, an endoscopy is often needed to help relieve this obstruction. Most adults with symptoms are between the ages of 20 to 40. Other less common symptoms include heartburn and chest pain.

Diagnosis – Currently, the only way to diagnose this condition is by performing an upper endoscopy with biopsy (taking tiny pieces of tissue) of the esophagus. In EoE, the eosinophils are limited to the esophagus and are not present in the stomach or duodenum. The esophagus can also appear normal in adult pateints with EoE. Since gastroesophageal reflux disease is much more common that EoE in the adult population and can also be the cause of eosinophils in the esophagus, it is important to distinguish the two.

Currently the cause of EoE has not been clearly identified. Some studies have suggested an allergic reaction to environmental and food allergens. There may also be a genetic cause that may lead to EoE in some patients. A history of allergic conditions such as allergic rhinitis, asthma, eczema or food allergy has been seen in up to 70% of adults with EoE either by history or positive allergy testing.

Treatment – Currently, there is no one accepted therapy for all patients with EoE. Although dietary therapy is the most common treatment of pediatric EoE, this has not been widely accepted among gastroenterologists who treat adult patients. Many adult pateients are initially treated with acid-blocking medications to rule out GERD. If this does not improve symptoms or tissue changes of the esoinophils, then steroids taken using an asthma inhaler, but swallowed rather than inhaled by the patient, have been tried with good, although limited results.

Dietary treatment may consist of an elimination diet, a “six-food-elimination diet” or a targeted-elimination diet, usually for six weeks. After this point, if the disease improves, foods aer reintroduced one at a time to help identify the food trigger.

Current studies suggest that it is a chronic, reoccuring condition.

Some Signs and Symptoms of Possible Swallowing Problems

- More than one episode of gagging, coughing, or choking during or after eating or drinking.
- Gurgley or wet voice during or after eating/drinking.
- Swallowing food whole.
- Frequent upper respiratory infections and/or pneumonia.

Some Important Steps…

If you suspect an individual may be experiencing swallowing difficulties:

- Gather information (signs and symptoms observed) and document them according to your agency policy (if applicable).
- Discuss observations/concerns with the individual's primary care practitioner (PCP) and ask for a prescription for a swallowing evaluation.
- Locate a speech pathologist who performs swallowing evaluations and accepts the person's Insurance (*Note: services are usually available through outpatient services at community hospitals*). Check the managed care organization/health maintenance organization (MCO/HMO) directory or ask for a recommendation from the PCP.
- Obtain an evaluation to determine if there is a swallowing problem and if further evaluation is needed.

Dysphagia Eating, Drinking and Swallowing Checklist Screening Form

Individual Name _____

Date of Completion_____

Instructions: The purpose of this checklist is to document information gathered about the eating, drinking and swallowing habits of the person you support. Please circle **Yes** or **No** for each item, and give the completed checklist to the person who coordinates medical care for the individual, or the individual's primary care physician.

Type of setting where form is completed (i.e., home, day program, employment site, etc.):

_____

Challenging Eating & Drinking Habits (consider behavioral supports if any are checked)

Yes	No	Steals food
Yes	No	Hides food
Yes	No	Generally grabs food
Yes	No	Takes in too much food and/or liquid at one time (i.e., doesn't stop and take a breath or unable to limit bite/sip size) †
Yes	No	Eats while moving around environment
Yes	No	Eats with a tablespoon
Yes	No	Excessive length of time to complete meal

Risky Swallowing & Eating Concerns

Yes	No	Loss of food or drink out of mouth during or after meals
Yes	No	Holding or pocketing food/liquids†
Yes	No	Swallow foods whole†
Yes	No	Inadequate chewing†
Yes	No	Repeated attempts to swallow†
Yes	No	Watery eyes/nose during or after eating
Yes	No	Difficulty swallowing medication (i.e., unable to swallow large or multiple pills: gags, spits out, pocket/hold pills in mouth) †

Yes No Poor positioning risk factor (tilts head back/leans forward while eating and drinking)

Yes No Episodes of coughing/choking during or after meals†

Yes No Wet/gurgley voice during or after meals (if possible, listen to the person say “ah” or vocalizing) †

Yes No Increased congestion/secretions following meals†

Yes No Excessive throat clearing†

Yes No Increased temperature of an unknown cause (temperature spikes) †

Yes No Frequent upper respiratory infections/pneumonia†

Yes No Vomiting††

Yes No Burping or indigestion (i.e., sour breath) ††

Yes No Weight loss††

Yes No Regurgitation (during or following meals) ††

Yes No Complaint or indicate discomfort when swallowing††

Yes No Shortness of breath while eating or drinking††

Other observations/comments:

_____

_____

_____

Form completed by: _____

Title(s): _____

Others present: _____

_____

†Indicates see PCP to consider possible tableside and/or video swallow evaluation
††Indicates see PCP for appropriate referral

****To be completed by the person coordinating medical care for the individual****
(if applicable)

Living arrangement (i.e., home, residential agency, family living, etc.):_____

_____

Current diet/liquid level consistency: _____

Dentition (i.e., edentulous, dentures, etc.): _____

Oral hygiene routine _____ independent? _____ dependent? _____ with assistance?

Type of oral hygiene products used (i.e., paste, mouth wash, toothbrush, swab, etc.):

_____

Yes No Any aspiration precautions/guidelines?

Yes No Any adaptive feeding equipment used?

If yes, what type(s)? _____

Yes No Current or past diagnosis of dysphagia?

Yes No Current or past diagnosis of GERD?

Other medical/psychiatric diagnoses (list all): _____

_____

_____

Current medications, list all including "over-the-counter" (attach list if necessary):

_____

_____

_____

Form reviewed by: _____

Title(s): _____

Action Taken:

_____

_____

- *Don't forget to include any issues noted in the ISP*
- *Don't forget to take completed form to PCP at Annual Physical*

Red Flags for Swallowing Difficulty

Patient:_____ID: _____ Room:_____

Reported by: _____ Date:_____

Form instruction: Check appropriate ☐ for observations. Report and submit to nursing and speech language pathologist *.

Difficulty managing a solid bolus

- ☐ Cannot bite off a piece of solid food
- ☐ Does not chew solids
- ☐ Chews very slowly
- ☐ Avoids solid foods requiring chewing
- ☐ Food particles fall “all over” mouth
- ☐ Pocketing of food
- ☐ Difficulty moving bolus to the back of the mouth
- ☐ Takes a long time to swallow
- ☐ Extra oral loss (food or liquid falling out)
- ☐ Coughing or gagging before, during or after a swallow
- ☐ Wet voice quality after the swallow
- ☐ Hoarse voice after the swallow
- ☐ Residuals in oral cavity after the swallow

Difficulty managing a liquids bolus

- ☐ Inability to extract liquids from a straw
- ☐ Extra oral loss (food or liquid falling out)
- ☐ Takes a long time to swallow
- ☐ Coughing before, during or after the swallow
- ☐ Wet voice quality after the swallow
- ☐ Hoarse voice after the swallow

Other

- ☐ Nasal regurgitation
- ☐ Difficulty in managing oral secretions
- ☐ Gets distracted from eating/needs to be reminded food is in mouth
- ☐ Difficulty taking oral medications
- ☐ Inability to maintain upright or semi-reclined position
- ☐ Inability to maintain neutral head position
- ☐ Teeth or dentures are missing or not aligned
- ☐ Complains of pain or discomfort when swallowing

** These are only suggestions and should not replace the assessment and due diligence of qualified healthcare professionals.*

† Med-Diet, Inc. Plymouth, MN. Adapted from Evaluation and Treatment of Swallowing Disorders*, Jerilynn Logemann, 1983 Pro-ed, Inc., pp 40-42.*

Risk Assessment

Name: _____

Address: _____

_____

Date: _____

Assessor: _____

	YES	NO		YES	NO
• Chews with mouth open?			21. Engages in self injurious or other abnormal behaviors around meals?		
• Dependent on someone to perform their oral care needs?			22. Unable to swallow or spit after oral intake?		
• Consumes solid foods or liquids in large volumes? (Big portions, gulping)			23. Had a weight change of plus or minus 5% in 1 month?		
• Currently taking a medical nutritional supplement?			24. Diagnosed with pneumonia 2 or more times in the past year?		
• Ability to bite is poor because of missing teeth or poor occlusion?			25. Ruminates?		
• Currently has texture or fluid modified diet?			26. Fatigues during meals?		
• Vocalizes or laughs with food in mouth?			27. Unable to close lips around drinking glass?		
• Unable to express themselves verbally?			28. Refused 5 or more meals within 1 week in the last month?		
• Consumes meal in 10 minutes or less?			29. Has pocketing or holds food in mouth?		
• Is distracted when eating? (Laughing, vocalizing, talking)			30. Seating position does not provide adequate support when eating?		
• Has uncoordinated movements of tongue, lips, or teeth?			31. Has visual or auditory impairment that interferes with oral intake?		
• Has skin breakdown in the last year related to positioning, brace or orthotic?			32. Has their bed elevated?		
• Refuses liquid?			33. Coughs numerous times during or after oral intake?		
• Diagnosed with GERD?			34. Spits out food?		
• Drools or loses saliva at most or all times?			35. Exhibits self stimulation behavior during meal times?		
• Receives crushed and/or liquid medication?			36. Has albumin less than 3.0?		
• Loses food from mouth while eating?			37. Had a choking episode in the last year?		
• Uses adaptive equipment during meal time and medication provision?			38. Has Pica?		
• Is physically dependent on staff for oral intake?			39. Pools saliva and will not swallow it?		
• Neck support has decreased in the last year?			40. Gags during meals?		

Medications

Certain medications may affect the way people chew or swallow. Medications may irritate the esophagus; weaken muscle tone which in turn may cause a swallowing problem. It is important that when dysphagia is diagnosed that the physician review the medications to determine if there may be side effects causing the swallowing issue/dysphagia.

The physician along with the pharmacist should review the person's treatment plan to determine safe administration of medication. Sometimes recommendation of a liquid may be too thin or a suspension too thick. There may also be a speech language pathologist consulted.

When new medications are ordered it is important to monitor for any changes in the person including chewing/swallowing changes. If changes occur this should be reported to the physician immediately.

People react differently to medications and even if the person is ordered a medication which is not included in the following information, observation for dysphagia should still be done.

Medications Which May Cause Problems With Swallowing

Xerostomia (dry mouth) is a side effect of many medications. Dryness in the mouth can impair the bolus (food) transport and it also may decrease salivary gland performance which aids in neutralization of esophageal acid. Medications which help in lowering blood pressure, slowing the heart rhythm, preventing nausea and vomiting, and used to treat depression may cause this condition. Some examples of these medications are *Prozac, Paxil, Zestril, Reglan, Compazine, Benadryl, Sudafed* and *Elavil*.

People who have a mental health illness may be treated with antipsychotic medications. These medications may cause abnormal involuntary movements. These movements can affect chewing and swallowing. Some examples of these medications are *Seroquel, Zyprexa, Risperdal, Lithium, Haldol,* and *Clozaril.*

There are cancer therapeutic agents which may cause damage to the esophagus. They may also cause opportunistic infections (such as herpes virus infection, thrush) which can affect chewing and swallowing.

Medications which weaken the lower esophageal sphincter muscle (LES) of the stomach may increase gastric reflux which may lead to esophageal strictures (narrowing of the esophagus) and damage to swallowing parts used in the esophageal phase of swallowing. Some food examples which may cause this are chocolate, peppermint, coffee and alcohol. Medications which may cause these are sedative and narcotic agents. These are generally used during sedation. Some medications are *Atropine, Theophylline, Neurotensin,* and *Progesterone.*

There are also medications which change acidity in the body. Some of these medications are antibiotics. Medications such as *Doxycycline, Tetracycline, Ascorbic Acid,* and *Ferrous Sulfate* are a few.

Medications which may build up in the blood stream may also cause toxicity causing a decrease in mental awareness and muscle weakness. Some of these medications are anticonvulsants. A few examples include: *Tegretol, Depakote,* and *Dilantin.*

Remember: Anytime a medication is prescribed, it is important to observe for changes – especially difficulty in eating and drinking – and report these changes promptly. It is also important to complete the *Eating, Drinking, and Swallowing Checklist* when there are medication additions, changes in dosages, changes in mental condition and changes in medical conditions.

Medications and Dysphagia/Swallowing Risks

[Some of the medications that can impact swallowing and why this happens]

Dysphagia as a Side Effect of Medication

- Medications that affect the smooth and striated muscles of the esophagus that are involved in swallowing may cause dysphagia.

Medications with anticholinergic or antimuscarinic effects	
Benztropine mesylate (Cogentin)	Given for movement related effects caused by some psychotropic meds
Oxybutynin (Ditropan)	Improved bladder capacity
Propantheline (Pro-Banthine)	Inhibits the release of stomach acid
Tolterodine (Detrol)	Affects bladder capacity

- Medications that cause dry mouth (xerostomia) may interfere with swallowing by imparing the person's ability to move food.

Medications that Cause Dry Mouth (xerostomia)	
ACE Inhibitors used for high blood pressure	Captopril (Capoten) Lisinopril (Prinivil, Zestril)
Antiarrythmics cardiac preparations	Disopyramid (Norpace) Mexiletine (Mexitil) Procainamide (Procan)
Antiemetics used for nausea	Meclizine (Antivert) Metoclopramide (Reglan) Prochlorperazine (Compazine)
Antihistamines and decongestants used for cold symptoms	Chlorpheniramine (Chlor-Trimeton) Diphenhydramine (Benadryl) Pseudoephedrine (Sudafed)
Calcium channel blockers for chronic chest pain due to angina	Amlodipine (Norvasc)
Diuretics given to get rid of excess fluid in body	Ethacrynic adic (Edecrin)
SSRIs (Selective serotonin reuptake inhibitors) antidepressant medications	Citalopram (Celexa) Fluoxetine (Prozac) Nefazodone (Serzone) Paroxetine (Paxil) Sertraline (Zoloft) Venlafaxine (Effexor)
see also Antipsychotic/Neuroleptic medication listed below	

- Local anesthetics such as Novocain, which is often used for dental work, may temporarily cause a loss of sensation that may affect swallowing before it wears off.

- Antipsychotic/Neuroleptic medications given for treatment of psychiatric disorders may affect swallowing. Many of them produce dry mouth and some of them can cause movement disorders that impact the muscles of the face and tongue which are involved in swallowing.

Antipsychotic/Neuroleptic Medications	
Chlorpromazine (Thorazine)	Olanzapine (Zyprexa)
Clozapine (Clozaril)	Quetiapine (Seroquel)
Fluphenazine (Prolixin)	Risperidone (Risperdal)
Haloperidol (Haldol)	Thioridazine (Mellaril)
Lithium (Eskalith, Lithobid)	Thiothizene (Navane)
Loxapine (Loxitane)	Trifluoperazine (Stelazine)

Dysphagia as a Complication of the Therapeutic Action of the Medication

- Medications that depress the Central Nervous System (CNS) can decrease awareness and voluntary muscle control that may affect swallowing.

Medications that Depress the CNS	
Antiepileptic drugs: for seizures	Carbamazepine (Tegretol) Gabapentin (Neurontin) Phenobarbital Phenytoin (Dilantin) Valproic acid (Depakote)
Benzodiazepines: antianxiety drugs	Alprazolam (Xanax) Clonazepam (Klonapin) Clorazepate (Tranxene) Diazepam (Valium) Lorazepam (Ativan)
Narcotics: for pain relief	Codeine (Tylenol #3) Fentanyl (Duragesic) Propozyphene (Darvon, Darvocet)
Skeletal muscle relaxants: relieves muscle spasms and relaxes muscles	Baclofen (Lioresal) Cyclobenzaprine (Flexeril) Tizanidine (Zanaflex)

Medications That Can Cause Esophageal Injury and Increase Risk

- Some medications that cause dysphagia because of injury to the esophagus caused by local irritation. This can happen because the person is in a reclining position shortly after taking the medication or because an inadequate amount of fluid is taken with the medication. In both instances, the medications remain in the esophagus too long, potentially causing damage and affecting swallowing.

Drugs that may cause esophageal injury	
Acid-containing products	Clindamycin (Cleocin) Doxycycline (Vibramycin) Erythromycin (Ery-tabs, E-mycin) Tetracycline (Sumycin)
Aspirin	Bayer aspirin and generic brands
Bisphosphonates: given for osteoporosis	Alendronate (Fosamax)
Iron containing products	Feosol Feratab Slow-FE Fer-Iron, etc.
Methylxanthines: bronchodilators	Theophylline (Theo-Dur, Uindur, Slo-Bid)
Nonsterodial anti-inflammatory drugs: relieves pain	Ibuprofen (Advil, Motrin) Naproxen (Aleve, Naprosyn)
Potassium chloride supplements	K-Dur K-tabs Klor-Con Slow K, etc.
Vitamin C (ascorbic acid) supplements	Allbee with C Vitamin C tabs, etc.

- Other medications such as high dose steroids and chemotherapeutic (anti-cancer) preparations may cause muscle wasting or damage to the esophagus and may suppress the immune system making the person susceptible to infection.

References: Balzer, KM, PharmD, "Drug-Induced Dysphagia," *International Journal of MS Care,* page 6, Volume 2 Issue 1, March 2000 (http://www.mscare.com/a003/page_06.htm)

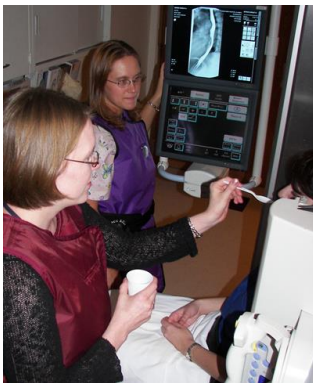
How to Obtain a Dysphagia Evaluation

- The first step in the process for obtaining a diagnosis of Dysphagia is the recognition and reporting of a problem or the identification of a risk. 75% of dysphagia sufferers are undiagnosed. There are three (3) screening forms available (pages 11, 13, 17) for your resource. You may also contact your HCQU nurse or a licensed staff in your agency if available. Always follow your agency's policy.
- Once a problem is reported or a risk is identified, an appointment should be scheduled with your primary care physician to meet and review the concerns.
- The primary care physician will determine if referrals to consulting specialists are indicated and/or if there is a need for diagnostic testing.
- A referral may be made to a gastroenterologist, an ENT (Ear, Nose and Throat) specialist, a speech therapist and/or a dentist. Other referrals may be necessary depending on the individual needs of each person.
- Diagnostic testing can involve a tableside speech evaluation and/or a video fluoroscopic swallow study. Other diagnostic testing may be recommended depending on the findings of each consultant.
- After all specialist visits and testing is completed a diagnosis of dysphagia and specific type (oral, pharyngeal, or esophageal) should be confirmed or ruled out.
- The diagnosis of Dysphagia should be reviewed at least annually by the primary care physician.
- When an individual has a diagnosis of Dysphagia, this process should be repeated whenever a new problem is recognized and reported and/or whenever a new risk is identified per the *Eating, Drinking and Swallowing Checklist.*

Diagnosis

Report symptoms to physician.
Complete medical examination.

Bedside Evaluation
A speech therapist observes an individual during a meal for positioning, feeding techniques, chewing and swallowing. From this information additional guidelines and treatment techniques can be devised.



Video Fluoroscopy/Swallow Study
This study is conducted by a radiologist and speech therapist together. The individual eats food and liquids of different consistencies, containing barium. During this study the actual swallow process is recorded on a videotape and can be evaluated. From this information guidelines and treatment techniques can be devised.

Fiberoptic Endoscopic Evaluation of Swallowing
A flexible tube is passed through the nose and into the throat. The person then eats food or liquid that has been dyed green or blue. The therapist can then watch happens to the material before and after the swallow is triggered. Not as much information is obtained as with the Video Fluoroscopy.

Role of the Speech-Language Pathologist

Evaluation

- Take a careful history of medical conditions and symptoms.
- Look at the strength and movement of the muscles involved in swallowing.
- Observe feeding to see consumer's posture, behavior, and oral movements during eating and drinking.
- May perform mealtime dysphagia assessment and evaluate swallowing.

Treatment

- Recommend exercises, positions, or strategies to help the consumer swallow more effectively when possible.
- Recommend specific food and liquid textures that are easier and safer to swallow.
- Make recommendations to other disciplines as needed.
- Inservice and/or train staff when needed with client-specific feeding recommendations and guidelines.

Tips on How to Make Sure an Individual Benefits From a Swallowing Evaluation:

- Make sure to inform the scheduler if the person uses a wheelchair.
- Provide the speech pathologist with a complete medical background/history including any previous swallowing evaluations, progress/therapy notes and mealtime plans (if applicable).
- If applicable, bring along or have available any assistive or augmentative devices that the individual uses to communicate.
- Arrange for appropriate staff to accompany the individual during the appointment.
- Ask questions about the evaluation process, results, and recommendations presented if you are unclear. Also obtain contact information in case future questions arise.
- Make sure a copy of the swallowing evaluation and/or specific feeding/swallowing guideline is received before leaving the appointment or visit.
- Send a copy of the swallowing evaluation to the PCP and obtain any diet orders.
- Assure that staff is trained on the recommended feeding/swallowing guideline specifically outlined for the individual by the speech pathologist and written as an order by the PCP. Training can be provided by a community Speech-Language Pathologist (therapist), dietician or occupational therapist.

Creating an Appropriate Plan of Support

- A plan to support the diagnosis of dysphagia should be individualized.
- The plan should be based on the recommendations of the primary care physician and consulting physicians, as well as the outcome of any medical testing/evaluations that were completed (see *How to Obtain a Dysphagia Diagnosis*).
- The plan should identify a specific goal and objective(s).
- The plan should include:
    - Identifying information: date of birth, date of plan
    - Dysphagia diagnosis, specific type (oral, pharyngeal or esophageal)
    - Food allergies, restrictions, foods to avoid
    - Specific diet level (for solids and liquids)
    - Specific instructions for administration of medications, if applicable
    - Body positioning during and after food/liquid intake
    - Level of staff supervision that is necessary during food/liquid intake
    - Additional instructions and/or specific actions to be taken by the caregiver, if applicable
    - Documentation
- The plan should include ongoing observations to measure the progress, stability or the identification of concerns or problems. The *Eating, Drinking and Swallowing Checklist* can assist with this.
- Evaluation of the plan should be completed quarterly with an annual update or follow your agency policy.

Dining Plan

Name: _____

Residence: _____

Revised Date: _____

DIET/FOOD TEXTURE:

◊ _____

◊ _____

FLUID TEXTURE/CONSISTENCY:

◊ _____

◊ _____

SUPPLEMENTS:

◊ _____

◊ _____

EATING/DRINKING STRATEGIES:

◊ _____

◊ _____

SNACKS:

◊ _____

◊ _____

SPECIFIC SKILLS TO MAINTAIN/ACQUIRE:

◊ _____

◊ _____

COMMUNICATION:

◊ _____

◊ _____

Pictures of adaptive equipment should be placed here.

Use a digital camera, polaroid, etc.

Electronically attach or tape polaroid picture.

Pictures of individual in his/her appropriate eating position and staff position during meals (if assistance is needed) should be placed here.

DIET:
Therapeutic aspect of diet. Diet order is medical order. Recommended by speech therapist, dietician and physician.

Fluid Consistency:
Fluid consistency is medical order. Recommended by speech therapist or physician.

Eating/Drinking Strategies:

- Strategies are developed for individual to eat as safely and independently as possible.
- These strategies are developed through a collaborative effort between OT, Speech, Psych, Dietician, and others as needed.

TRIGGERS To Notify Nursing Staff:

- Coughing with signs of struggle (watery eyes, drooling, facial redness)
- Wet Vocal Quality
- Vomiting
- Sudden change in breathing
- Watery eyes
- Weight loss/gain of 5 lbs. in month

IF APPROPRIATE EQUIPMENT IS NOT AVAILABLE OR YOU ARE UNSURE OF HOW TO IMPLEMENT THIS PLAN, CONTACT YOUR SUPERVISOR

Dining Plan²

This form may be reproduced for utilization.

Name: _____

Residence: _____

Revised Date: _____

DIET/FOOD TEXTURE:

◊ _____

◊ _____

FLUID TEXTURE/CONSISTENCY:

◊ _____

◊ _____

SUPPLEMENTS:

◊ _____

◊ _____

EATING/DRINKING STRATEGIES:

◊ _____

◊ _____

SNACKS:

◊ _____

◊ _____

SPECIFIC SKILLS TO MAINTAIN/ACQUIRE:

◊ _____

◊ _____

COMMUNICATION:

◊ _____

◊ _____

Pictures of individual in his/her appropriate eating position and staff position during meals (if assistance is needed) should be placed here.

Pictures of adaptive equipment should be placed here.

Use a digital camera, polaroid, etc.

Electronically attach or tape polaroid picture.

TRIGGERS To Notify Nursing Staff:

- Coughing with signs of struggle (watery eyes, drooling, facial redness)
- Wet Vocal Quality
- Vomiting
- Sudden change in breathing
- Watery eyes
- Weight loss/gain of 5 lbs. in month

IF APPROPRIATE EQUIPMENT IS NOT AVAILABLE OR YOU ARE UNSURE OF HOW TO IMPLEMENT THIS PLAN, CONTACT YOUR SUPERVISOR

Dysphagia Diets

The National Dysphagia Diet is now the standard for dietary treatment of swallowing difficulties since 2002. Due to inconsistencies in ordering dysphagia diets, the National Dysphagia Diet provides diet and fluid texture guidelines for the healthcare professional and consumers.

Converting to New Terms

Current Diets (old terminology)	**New Diets** (order this instead)
Regular **House Diet**	**Level IV** Regular Diet
Consistency Alterations	
Bite Size Pieces Chopped Soft Cut Tender	**Level III** Dysphagia Advanced Diet
Mechanical Soft Ground Fork Mashable Edentulous Soft Jaw	**Level II** Dysphagia Mechanically Altered Diet
Pureed Baby Food Smooth Texture Blenderized	**Level I** Dysphagia Puree Diet

NOTE: All dysphagia diet orders should also include an order for thickness of liquid (thin, nectar-like, honey-like, or spoon-thick)

National Dysphagia Diets

The following solid food texture levels have been recommended based upon the food properties on the food texture scales.

Dysphagia Puree Diet (Level 1)

The Dysphagia Puree (Level 1) Diet is used only for individuals who have severe chewing and/or swallowing problems. This diet uses pureed, homogenous, cohesive, pudding-like food that is in the form of an easy-to-swallow bolus. Food is a moist, pudding-like consistency without particles. It is a nutritionally adequate, easily swallowed diet with minimum chewing. Liquids are served at ordered consistency (nectar-like, honey-like or spoon thick). Thoroughly evaluate individuals before placing on a puree diet, and periodically re-evaluate for ability to advance to the next level dysphagia diet. These guidelines are intended for use with adults. To achieve optimal intakes, diets should be planned with the individual's preferences and cultural norms in mind. To meet 100% of the US RDA/AI for the majority of individuals as defined by the National Research Council, provide adequate nutrients by following these daily guidelines to plan three balanced meals and up to three snacks daily.

Liquid Consistency

Thin (includes all unthickened beverages and supplements)	**Nectar-like**	**Honey-like**	**Spoon-thick**

Foods Allowed	Foods to Avoid
Meats, meat alternatives, and other protein foods: fish, seafood, lean meats, poultry, eggs, cheese, and cottage cheese should be pureed to moist pudding-like consistency (smooth, moist, mashed potato consistency) following an appropriate recipe. May also have braunschweiger, souffles that are smooth and homogenous, softened tofu mixed with moisture, hummus or other pureed legume spread. Pre-prepared pureed shaped meats. Meats are served moistened with sauce or gravy.	Any non-pureed meats or meat alternatives, including cheese: whole or ground meats, fish or poultry, nonpureed lentils or legumes, cheese or cottage cheese, peanut butter (unless pureed into foods correctly), nonpureed fried, scrambled, or hard-cooked eggs.
Fruits **(include a variety, with more fruit than juice as appropriate)** include any that are pureed to a smooth consistency with no pulp, seeds, skins or chunks. Well-mashed fresh bananas. Fruit juices that are thickened to proper consistency. Fruit juice without pulp thickened to proper consistency. Well mashed, ripe bananas, free of lumps. Pre-prepared pureed shaped fruits. If thin liquids are allowed, may also have unthickened fruit juices.	Any non-pureed fruits, or juices that are not at the proper consistency (as ordered by the physician). Juice with pulp. No whole fruits (fresh, frozen, canned, dried).

Foods Allowed	Foods to Avoid
Vegetables **(include more dark green, leafy and orange vegetable choices; and dry beans and peas)** (low fat as appropriate) should be soft, well cooked and pureed using an appropriate recipe, and free from chunks, lumps and/or seeds. All potatoes and other starches should be pureed per appropriate recipes. Potatoes (including mashed potatoes) can be served with gravy, sauce, butter, or margarine to moisten. Tomato paste or sauce without seeds. Tomato or vegetable juice thickened to proper consistency. Pre-prepared pureed shaped vegetables. If thin liquids allowed, may have thin tomato or vegetable juice.	Any non-pureed vegetables; tomato sauce with seeds, thin tomato juice.
Potatoes and Starches mashed potatoes or sauce, pureed potatoes with gravy, butter, margarine, or sour cream. Well-cooked pasta, noodles, bread dressing, or rice that have been pureed in a blender to smooth, homogenous consistency.	All other potatoes, rice, noodles, plain mashed potatoes, cooked grains, non-pureed bread dressing.
Grains/Breads (low-fat as appropriate) should be served pureed, or may be pureed into other foods (in accordance with appropriate recipes), or may be slurried and gelled (through the entire thickness). Commercially or facility-prepared pureed bread products (mixes or pre-prepared, shaped products), *pregelled slurried* breads, pancakes, sweet rolls, Danish pastries, French toast, etc., that are gelled through entire thickness of product. Include as much whole grain/enriched as possible; at least half of grains should be whole) as tolerated. May be purred into other foods (in accordance with appropriate recipes).	Avoid all regular breads, rolls, crackers, biscuits, pancakes, waffles, French toast, muffins, etc. Any non-pureed or non-slurried bread/starch foods.
Cereals (low fat if appropriate) should be smooth, homogenous, cooked and of one consistency (usually cooked cereals such as cream of wheat or rice, or farina). Cereals should be a pudding-like consistency (may have just enough milk to moisten, but blended in well).	Any other cereal including oatmeal. Coarse cooked cereal, dry whole grain, cereal with lumps, chunks, nuts, seeds, or coconut.
Fluids/Beverages (especially water) should be at allowed thickness only (if your physician has ordered thickened liquids) or as allowed by physician's order for Frazier Free Water Protocol. Beverages (including fruit and vegetables juices) should be smooth and of one consistency (without lumps, chunks, seeds, pulp, etc.), based on the consistency ordered by the physician. Beverages may need to be thickened to appropriate consistency. If thin liquids allowed, also may have milk, juices, coffee, tea, sodas, carbonated beverages, nutrition supplements and ice chips.	If thin liquids are restricted, avoid milkshakes, frozen yogurt, eggnog, ice cream, sherbet, gelatin, or any that are liquid at room temperature. Avoid any beverages with lumps, chunks, seeds, pulp, etc.
Soups Soups that have been pureed in a blender or strained. May need to be thickened to appropriate viscosity. If thin liquids allowed, may also have broth and other thin, strained soups.	Soups that have chunks, lumps, etc. Any non-pureed soups, or any soups that are not at the proper consistency (as ordered by the physician).

Foods Allowed	Foods to Avoid
Desserts Smooth puddings, custards, yogurt, pureed desserts and souffles. If thin liquids allowed, may also have frozen malts, yogurt, milkshakes, eggnog, nutritional supplements, ice cream, sherbet, plain, regular or sugar-free gelatin.	Ices, gelatins, frozen juice bars, cookies, cakes, pies, pastry, coarse or textured puddings, bread and rice pudding, fruited yogurt. ***These foods are considered thin liquids and should be avoided if thin liquids are restricted:*** frozen malts, milkshakes, frozen yogurt, eggnog, nutritional supplements, ice cream, sherbet, regular or sugar-free gelatin, or any foods that become thin liquid at either room (70°F) or body temperature (98°F).
Discretionary Calories (Sugars, Fats (SoFAS), Alcohol and Miscellaneous). As appropriate, avoid added fats, saturated fats, trans fats and sugars. Most fat should come from healthy oils. Pureed foods of pudding-like consistency such as smooth puddings, custards, yogurts. Liquids at ordered thickness. Milkshakes, eggnogs, ice cream, and sherbet only if thin liquids are allowed. Pureed desserts, cakes and cookies. Butter, margarine, strained gravy, sauces, mayonnaise, sour cream, cream cheese, whipped topping, salad dressing. Smooth sauces such as white sauce, cheese sauce or hollandaise sauce. Soups must be pureed with no chunks or lumps, thickened to proper consistency if needed. Sugar, artificial sweetener, salt, finely ground pepper, and spices. Ketchup, mustard, BBQ sauce and other smooth sauces. Honey, smooth jellies. Very soft, smooth candy, such as truffles. If thin liquids allowed, smooth chocolate candy with no nuts, sprinkles, etc.	Use in limited quantities to round out the menu for a pleasing appearance and satisfying meals. Any food item with chunks, lumps or particles. Nuts, sprinkles, seeds, coconut, coarse ground pepper, herbs or spices. Sticky or chewy foods. Alcohol in moderation as appropriate. Chunky fruit preserves and seedy jams. Chewy candies such as caramels or licorice.

It is important to make the diet look appealing. The following garnishes can help (as appropriate for the diet ordered):

- Fruits: whipped topping, a sprinkle of powdered gelatin*, cinnamon sugar*
- Meats: gravy, sauce, catsup, mustard, mayonnaise or barbeque sauce*
- Hot Vegetables: cheese sauce or Hollandaise sauce
- Desserts: chocolate syrup*, butterscotch sauce*, whipped topping

Level 1: Dysphagia Pureed Menu

Breakfast
Pureed eggs, pureed sausage, farina (no milk or milk that is blended in well), pureed bread.

Lunch
Pureed turkey with gravy, mashed potatoes with gravy, pureed carrots, pureed cherry pie, pureed bread.

Dinner
Pureed beef macaroni casserole, pureed green beans, pureed peaches, pureed bread.

Recommended Nutritional Composition	
Calories* Approximately 2000	**Fluids** based on individual needs.
Carbohydrates 45-65% of calories	**Sodium**** 2300 mg (higher with processed foods and added salt)
Protein 10-35% of calories	**Calcium** ≥ 1000-1200 mg Vitamin D 600-800 IU
Fat 20-35% of calories <10% from sat. fat <300 mg cholesterol	**Vitamin C** 90 mg
Nutrients may vary day to day, but should average to the above estimates. Additional nutrients will be added if SoFAS, salt and/or alcohol are added to the diet.	

*Based on reference heights and weights, sedentary adult males need 2000-2600 calories and adult females need 1600-2000 calories.
**The goal for all Americans is 2300 mg sodium per day (1500 mg/day for 51+ years and other high risk populations)

- All foods must be the consistency of moist mashed potatoes or pudding.
- Pureed Diet menus follow the foods on the Regular Diet as closely as possible with the main difference being food consistency.
- Use a wide variety of nutrient-dense foods (fruits, vegetables, whole grains, dairy products) rich in vitamins, minerals and dietary fiber.
- Supplement based on individual need: multivitamin or multivitamin with minerals, calcium, vitamin D, and B_{12} in older adults.
- Older adults may need individualized/less restrictive diets especially if intake is poor. Preferences should be honored.
- Dietary Guidelines for Americans goals may be difficult for some people to achieve and should be balanced with individual preferences and cultural norms.

Individualize the diet as needed for best tolerance and safety with swallowing. It is important to make the diet look appealing. The following garnishes can help (as appropriate).

◆ Fruits: whipped topping, a light sprinkle of powdered gelatin, or cinnamon sugar.

◆ Meats: smooth gravy, sauce, catsup, mustard, mayonnaise, or barbeque sauce.

◆ Hot vegetables: smooth Hollandaise sauce or cream sauce.

◆ Desserts: smooth chocolate, butterscotch or strawberry syrup, and/or whipped topping.

Sample Daily Meal Plan for a Well Balanced Diet

Breakfast	Lunch	Dinner
¾ c. Orange Juice ***at ordered thickness*** ½ c. Cooked Oatmeal, ***smooth*** ¼ c. Scrambled Egg ½ c. ***Pureed WW Bread*** 1 tbsp. ***Jelly*** 1 tsp. Margarine* 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***	2 oz. Roast Beef ***chopped or ground with Gravy*** ***½ c. Purreed Buttered*** Rice (may substitute cream of rice cereal) ½ c. ***Well cooked Carrots*** ***¾ c. Vegetable Juice*** ***1 serving Purreed Bread with 1 tsp. Margarine**** *½ c. Fruit Sorbet ***at ordered thickness with #20 scoop Pureed Strawberries*** 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***	6 oz. Vegetable Soup, ***well cooked at ordered thickness*** 3 oz. ***chopped or ground baked Fish with Smooth Tartar Sauce*** ½ c. Mashed Potato ***½ c. Pureed or soft cooked fork mashable Green Beans (No Almonds)*** ***1 serving pureed Bread with 1 tsp. Margarine**** 1 ***Soft*** Baked Apple ***(No Skin)*** 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***
P.M. Snack		
1 pureed Muffin (No chunks of fruit or nuts), with Margarine* Beverage of choice ***at ordered thickness***		

Bold/Italicized items indicate differences from the Regular Diet menu.
*Low in *trans* fats.
Condiments may include ***finely ground* pepper or other spices, sugar, sugar substitute, salt, coffee creamer, etc. based on nutrition goals. ***Nothing with chunks of solid food such as pickle relish.*** Additional condiments and garnishes (i.e. margarine, gravy, sauces, ketchup, etc.) may round out the menu and make it more appealing and palatable. These add additional calories, micro- and macronutrients (i.e. calories, fat, carbohydrates, sodium, etc.) and may not be appropriate for some individuals.
Note: Liquids thickened to the physician ordered consistency as appropriate (nectar like, honey like or spoon thick).

Dysphagia Mechanically Altered Diet (Level 2)

A Dysphagia Mechanically Altered (Level 2) OR Mechanical Soft Diet is for people with mild to moderate oral and/or pharyngeal dysphagia. Some chewing ability is required. Difficult to chew foods are chopped, ground, shredded, cooked, or altered to make them easier to chew and swallow. Foods should be soft and moist enough to form a bolus, and prepared according to the individual's tolerance to the food. This diet may be used as a transition from the Dysphagia Puree Diet (Level 1) to higher texture levels. These guidelines are intended for use with adults. To achieve optimal intakes, diet should be planned with the individual's preferences and cultural norms in mind. To meet 100% of the US RDA/AI for the majority of individuals as defined by the National Research Council, provide adequate nutrients by following these daily guidelines to plan three balanced meals and up to three snacks daily:

Liquid Consistency (circle 1)

Thin (includes all unthickened beverages and supplements)	**Nectar-like**	**Honey-like**	**Spoon-thick**

Foods Allowed	Foods to Avoid
All foods on Level 1 are allowed if desired.	See below.
Meats, Meat Substitutes, Entrees, Protein Foods (Low-fat as appropriate) (fish, seafood, lean meat, poultry, eggs, dry beans/peas/lentils, soy products, etc.) Moistened ground or cooked meat, poultry, or fish. Moist ground or tender meat may be served with gravy or sauce. Casseroles without rice. Moist macaroni and cheese, well-cooked pasta with meat sauce, tuna noodle casserole, soft, moist lasagna. Moist meatballs, meat loaf or fish loaf. Protein salads such as tuna or egg without large chunks, celery or onion. Cottage cheese, smooth quiche without large chunks. Poached, scrambled, or soft-cooked eggs (egg yolks should not be "runny" but should be moist and mashable with butter, margarine, or other moisture added to them). (Cook eggs to 160°F or use pasteurized eggs for safety.) Soufflés may have small soft chunks. Tofu. Well-cooked, slightly mashed, moist legumes such as baked beans. All meats or protein substitutes should be served with sauces, or moistened to help maintain cohesiveness in the oral cavity. Meat pieces should not exceed ¼ inch cube and should be tender. Encourage 8 oz. of cooked seafood per week.	Dry meats, tough meats (such as bacon, sausage, hot dogs, bratwurst). Dry casseroles or casseroles with rice or large chunks. Cheese slices and cubes. Peanut butter. Hard-cooked or crisp fried eggs. Sandwiches. Pizza. Difficult to chew meat alternates.

Foods Allowed	Foods to Avoid
Fruits (include a variety; with more fruit than juice as appropriate). Cooked, tender, chopped or shredded, juice at ordered thickness. Soft, canned, cooked fruits without seeds or skins. Soft ripe bananas. Juices at allowed thickness (may have a small amount of pulp). If thin liquids are restricted, fruit juices should be thickened to appropriate viscosity; watermelon without seeds.	Raw (fresh) fruits (other than bananas), pineapple, dried fruit, frozen fruit juice bars, fresh or frozen fruits. No seeds or skins.
Vegetables **including potatoes and starches** (Low fat as appropriate) (include more dark green, leafy, red/orange vegetables as tolerated.) Should be soft, well cooked, easily mashed with a fork, tender, chopped or shredded; juice at ordered thickness. Many need pureed. Substitute cooked vegetables or juices for difficulty-to-chew items. Well cooked, moistened, boiled, baked or mashed potatoes, or shredded hashed browns that are not crisp. All potatoes should be moist and in sauces. Well-cooked noodles in sauce. Spaetzel or soft dumplings that have been moistened with butter or gravy.	Raw vegetables, including lettuce. Cooked asparagus, broccoli, Brussels sprouts, cabbage, corn, peas, and other fibrous or rubbery vegetables. Potato skins, fried or French fried potatoes. Any pieces large than ½ inch in size. Potato skins and chips. Rice.
Grains/Breads (Low fat as appropriate) (include as much whole grain/enriched as possible; at least half of grains should be whole) as tolerated. At proper consistency: Breads (such as biscuits, muffins, pastries, rolls, etc.) should be pureed following a recipe, or slurried and gelled. Soft pancakes well moistened with syrup or sauce.	Regular breads, any breads with coconut, seeds, pieces of fruit, etc. that are not pureed. Regular rice. Pizza.
Cereals (may have ¼ cup milk or just enough milk to moisten if thin liquids are restricted. The moisture should be well-blended into food.) Cooked cereals with little texture, including oatmeal, cream of wheat, rice, or moistened bran flakes. Slightly moistened dry cereals with little texture such as puffed rice, toasted O's, fruit rings, cornflakes, Rice Krispies®, Wheaties®, etc. Unprocessed wheat bran stirred into cere4als for bulk. (Note: if thin liquids are restricted, it is important that all of the liquid is absorbed into the cereal.)	Very coarse cooked cereals that may contain flax seed or other seeds or nuts. Whole-grain dry or coarse cereals. Cereals with nuts, seeds, dried fruit and/or coconut.
Fluids/Beverages (especially water) At ordered thickness. Should be at allowed thickness only (physician order for nectar-like, honey-like or spoon thick liquids) or as allowed by physician's order for Frazier Free Water protocol. All beverages with minimal amounts of texture, pulp, etc. Any texture should be suspended in the liquid and should not precipitate out. May need to be thickened, depending on liquid consistency recommended. If thin liquids allowed, may have milk, juices, coffee, tea, sodas, carbonated beverages, alcoholic beverages (if allowed), nutritional supplements, ice chips.	If thin liquids are restricted, avoid milkshakes, frozen yogurt, eggnog, ice cream, sherbet, gelatin, or anything that is liquid at room temperature (including broths in soups and stews). Beverages with pulp that separates out.
Dairy (fortified with vitamins A and D.) Encourage fat free or low fat as appropriate, at ordered thickness.	

Foods Allowed	Foods to Avoid
Soups Soups with easy-to-chew or easy-to-swallow meats or vegetables: particle sizes in soups should be < ½ inch. (Soups may need to be thickened to appropriate consistency, if soup is thinner than prescribed liquid consistency.)	Soups with large chunks of meat and vegetables. Soups with rice, corn, peas.
Desserts Foods include pudding, custard, soft fruit crisps, cobblers or pies (bottom crust only), without large chunks or nuts, soft, very moist cakes or slurried/gelled cakes and cookies. Soft, smooth chocolate. Canned fruit (excluding pineapple). Pregelled cookies or soft, moist cookies that have been "dunked" in milk, coffee or other liquids. If thin liquids allowed, may have ice cream, sherbet, malts, nutritional supplements, frozen yogurt, and other ices. Plain gelatin or gelatin with canned fruit, excluding pineapple.	Dry coarse cakes, cookies, skins, nuts, seeds, coconut, rice or bread pudding. Sticky foods, chewy candies (such as caramel or licorice). Breakfast yogurt with nuts. ***These foods are considered thin liquids and should be avoided if thin liquids are restricted:*** frozen malts, milkshakes, frozen yogurt, eggnog, nutritional supplements, ice cream, sherbet, regular or sugar-free gelatin, or any foods that become thin liquid at either room or body temperature.
Solid Fats and Added Sugars (SoFAS)**, Alcohol and Miscellaneous** Butter, margarine, cream of cereal (depending on liquid consistency recommendations), gravy, cream sauces, mayonnaise, salad dressings, cream cheese, cream cheese spreads with soft additives, sour cream, sour cream dips with soft additives, whipped toppings. Use in limited quantities to round out the menu for a pleasing appearance and satisfying meals. Alcohol in moderation as appropriate. Jams and preserves without seeds, jelly. Soft, smooth chocolate bars that are easily chewed.	All fats with coarse or chunky additives. Avoid added fats, saturated fats, trans fats and sugars. Most fat should come from healthy oils.

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Individualize the diet as needed for best tolerance and safety with swallowing. It is important to make the diet look appealing. The following garnishes can help (as appropriate):

- ◆ Fruits: whipped topping, a light sprinkle of powdered gelatin, or cinnamon sugar.
- ◆ Meats: smooth gravy, sauce, catsup, mustard, mayonnaise, or barbeque sauce.
- ◆ Hot vegetables: smooth Hollandaise sauce or cream sauce.
- ◆ Desserts: smooth chocolate, butterscotch or strawberry syrup, and/or whipped topping.

Level 2: Dysphagia Advanced Altered Menu

Breakfast
Scrambled egg, pureed bread, moistened ground sausage, well-moistened corn flakes.

Lunch
Ground turkey with gravy (add gravy to the meat to keep moist), mashed potatoes with gravy, pureed bread, well-cooked carrots (<1/2 inch), cherry pie (top crust removed).

Dinner
Beef macaroni casserole, soft well-cooked cut green beans, pureed bread, canned peaches cut into cubes.

Recommended Nutritional Composition	
Calories* Approximately 2000	**Fluids** based on individual needs.
Carbohydrates 45-65% of calories	**Sodium**** 2300 mg (higher with processed foods and added salt)
Protein 10-35% of calories	**Calcium** ≥ 1000-1200 mg Vitamin D 600-800 IU
Fat 20-35% of calories <10% from sat. fat <300 mg cholesterol	**Vitamin C** 90 mg
Nutrients may vary day to day, but should average to the above estimates. Additional nutrients will be added if SoFAS, salt and/or alcohol are added to the diet.	

*Based on reference heights and weights, sedentary adult males need 2000-2600 calories and adult females need 1600-2000 calories.

- This diet is based on the Regular Diet and all the same guidelines apply with alterations being made to ease chewing and swallowing.
- Use a wide variety of nutrient-dense foods (fruits, vegetables, whole grains, dairy products, cooked dry beans and peas) rich in vitamins, minerals and dietary fiber.
- Supplement based on individual need: multivitamin or multivitamin with minerals, calcium, vitamin D, and B_{12} in older adults.
- Older adults may need individualized/less restrictive diets especially if intake is poor. Food preferences should be honored.
- Dietary Guidelines for Americans goals may be difficult for some people to achieve and should be balanced with individual preferences and cultural norms.

Sample Daily Meal Plan for a Well Balanced Diet

Breakfast	Lunch	Dinner
¾ c. Orange Juice ***at ordered thickness*** ½ c. Cooked Oatmeal, ***smooth*** ¼ c. Scrambled Egg ½ c. ***Pureed WW Bread*** 1 tbsp. ***Jelly*** 1 tsp. Margarine* 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***	2 oz. Roast Beef ***chopped or ground with Gravy*** ***½ c. Pureed Buttered*** Rice (may substitute cream of rice cereal) ½ c. ***Well-cooked Carrots*** ***¾ c. Vegetable Juice*** ***1 serving Pureed Bread with 1 tsp. Margarine**** *½ c. Fruit Sorbet ***at ordered thickness with #20 scoop Pureed Strawberries*** 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***	6 oz. Vegetable Soup, ***well cooked at ordered thickness*** 3 oz. ***chopped or ground baked Fish with Smooth Tartar Sauce*** ½ c. Mashed Potato ***½ c. Pureed or soft cooked fork mashable Green Beans (No Almonds)*** ***1 serving pureed Bread with 1 tsp. Margarine***** 1 ***Soft*** Baked Apple ***(No Skin)*** 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***
P.M. Snack		
1 pureed Muffin (No chunks of fruit or nuts), with Margarine* Beverage of choice ***at ordered thickness***		

Bold/Italicized items indicate differences from the Regular Diet menu.
*Low in *trans* fats.
Condiments may include ***finely ground* pepper or other spices, sugar, sugar substitute, salt, coffee creamer, etc. based on nutrition goals. ***Nothing with chunks of solid food such as pickle relish.*** Additional condiments and garnishes (i.e. margarine, gravy, sauces, ketchup, etc.) may round out the menu and make it more appealing and palatable. These add additional calories, micro- and macronutrients (i.e. calories, fat, carbohydrates, sodium, etc.) and may not be appropriate for some individuals.
Note: Liquids thickened to the physician ordered consistency as appropriate (nectar like, honey like or spoon thick).

Dysphagia Advanced Diet (Level 3)

A Dysphagia Advanced (Level 3) OR Mechanical (Dental) Soft Diet is used for Individuals with mild oral and/or pharyngeal phase dysphagia. For some, it may be a transition to the Regular Diet. Foods that are difficult to chew are chopped, ground, shredded, cooked, or altered to make them easier to chew and swallow. Food should be prepared according to individual tolerance to the food. Any foods that are very hard, sticky, chewy, or crunchy should be avoided. These guidelines are intended for use with adults. To achieve optimal intake, diets should be planned with the individual's preferences and cultural norms in mind. To meet 100% of the US RDA/AI for the majority of individuals as defined by the National Research Council, provide adequate nutrients by following these daily guidelines to plan three balanced meals and up to three snacks daily:

Liquid Consistency (circle 1)

Thin (includes all unthickened beverages and supplements)	**Nectar-like**	**Honey-like**	**Spoon-thick**

Foods Allowed	Foods to Avoid
All foods on Level 1 and 2 are allowed if desired.	See below.
Meats, Meat Substitutes must be very tender, small pieces, thin slices, chopped or ground, and well moistened meats and poultry. Well-moistened fish. Eggs prepared any way. Yogurt without nuts or coconut. Casseroles with small chunks of meat, ground meats, or tender meats.. Meats are served moistened with sauce or gravy. Include casseroles with small soft chunks of meat, macaroni and cheese, well-cooked pasta and ground meat sauce or meat balls with sauce, lasagna or quiche without chunks. Soft, mashable baked beans. Poached, scrambled eggs, omelets, egg bakes, and cottage cheese. Tuna or egg salad without large chunks or raw vegetables.	Dry, tough meat, fish or poultry, and other whole pieces of meat, cheese slices or cubes, dry fish or fish with bones, chunky peanut butter, yogurt with nuts or coconut, pizza, difficult-to-chew meat alternatives.
Fruits include soft, canned, cooked fruits, peeled fresh fruits (bananas, soft peeled peaches, nectarines, kiwi, melon without seeds, mangos) or ripe berries without seeds (or with small seeds such as strawberries), chopped if needed. Fruit juices at ordered thickness. May substitute cooked fruits or juices at allowed thickness.	Difficult-to-chew fresh fruits such as apples, pears, or dried fruits (unless cooked in water to a very soft consistency), fruit leather, stringy, high-pulp fruits such as papaya, pineapple, or mango. Fresh fruits with difficult-to-chew peels such as grapes. Uncooked dried fruits such as prunes and apricots. Fruit roll-ups, fruit snacks.
Vegetables should be soft, well cooked and chopped if needed. Avoid any potato skins, corn, raw vegetables (except shredded lettuce). May substitute cooked vegetables or juices for difficult to chew items.	Avoid raw vegetables (except shredded lettuce). Avoid cooked rubbery or non-tender cooked vegetables. Avoid corn, potato skins, tough or crisp-fried potatoes.
Potatoes and Starches Include all potatoes, rice, wild rice, moist bread dressing, and tender fried potatoes.	Avoid crisp-fried potatoes, potato skins, dry bread dressing.

Foods Allowed	Foods to Avoid
Grains/Breads should be well moistened (with syrup, jelly, margarine or butter as appropriate for the diet). Soft, well moistened noodles. Any well-moistened breads, biscuits, muffins, pancakes, waffles, etc. Need to add adequate syrup, jelly, margarine, butter, etc., to moisten well.	Any dry, tough or crusty bread (such as French bread, biscuits, focaccia bread), crackers, toast, baguettes, etc. Grilled sandwiches, pizza, dry bread dressing (stuffing). Avoid dry cereals such as shredded what or bran cereal. Rice.
Cereals should be well moistened with milk or milk substitute (such as bran flakes, corn flakes, puffed rice, toasted O's, fruit rings). Drain any excess milk if thin liquids are not allowed. Hot cereals: cream of wheat, cream of rice, cooked grits.	Coarse cooked cereal, dry whole grain (such as shredded what or bran bud type cereals), raisin bran, cereal with nuts, seeds, and coconut.
Fluids/Beverages should be at allowed thickness only (if your physician has ordered nectar-like, honey-like or spoon thick liquids). If thin liquids allowed, may have milk, juices, coffee, tea, sodas, carbonated beverages, alcoholic beverages, nutritional supplements, ice chips.	If thin liquids are restricted, avoid milkshakes, frozen yogurt, eggnog, ice cream, sherbet, gelatin, or anything that is liquid at room temperature.
Milk and milk products include any milk or milk alternate at the ordered thickness, regular yogurt without nuts, coconut, or chunks of fruit.	Yogurt with nuts, coconut, or chunks of fruit.
Soups All soups except those on the Avoid list. Strained corn or clam chowder. (May need to be thickened o appropriate consistency if soup is thinner than prescribed liquid consistency.) If thin liquids allowed, may have broth and bouillon.	Soups with tough meats. Corn or clam chowders. Soups that have large chunks of meat or vegetables > 1 inch.
Desserts All except those on the Avoid list. If thin liquids are allowed, may have malts, milk shakes, frozen yogurts, ice cream, and other frozen desserts. Nutrition supplements, gelatin, and any other desserts of thin liquid consistency when in the mouth.	Dry cakes, cookies that are chewy or very dry. Anything with nuts, seeds, dry fruits, coconut, pineapple.
Discretionary Calories (Sugars, Fats, Alcohol and Miscellaneous) All fats except those on Avoid list. Foods include pudding, custard, soft fruit crisps, cobblers or pies without large chunks or nuts, soft, moist cakes, or slurred cakes and cookies. Non-chewy candies without nuts, seeds or coconut. Seasonings, sweeteners, sauces, jams, jellies, honey. Soup fillings should be easy to chew and swallow with liquid broth thickened to allowed consistency.	All fats with coarse, difficult-to-chew, or chunky additives such as cream cheese spread with nuts or pineapple. Dry or chewy cakes, cookies, coconut, nuts, large edible seeds, popcorn, potato or corn chips, caramel, taffy, or other chewy candies. Soups with large chunks of meats and vegetables (> 1 inch in size), rice, corn or peas. Clam chowder.

Level 3: Dysphagia Advanced Menu

Breakfast
Scrambled egg, pureed bread, sausage cut into bite-sized pieces, corn flakes with milk.

Lunch
Turkey cut into bite-sized pieces, mashed potatoes with gravy, carrot coins, cherry pie, soft dinner roll.

Dinner
Beef macaroni casserole, green beans, soft breadsticks, fresh or canned peaches cut into bite-sized pieces.

Leve

Recommended Nutritional Composition	
Calories* Approximately 2000	**Fluids** based on individual needs.
Carbohydrates 45-65% of calories	**Sodium**** 2300 mg (higher with processed/convenience foods and added salt)
Protein 10-35% of calories	**Calcium** ≥ 1000-1200 mg Vitamin D 600-800 IU
Fat 20-35% of calories <10% from sat. fat <300 mg cholesterol	**Vitamin C** 90 mg
Nutrients may vary day to day, but should average to the above estimates. Additional nutrients will be added if SoFAS, salt and/or alcohol are added to the diet.	

*Based on reference heights and weights, sedentary adult males need 2000-2600 calories and adult females need 1600-2000 calories (22).
**The goal of Americans is 2300 mg sodium per day (1500 mg/day for 51+ years and other high risk populations).
***Foods high in simple sugars are high in carbohydrates and must be counted in the day's total carbohydrates if on a carbohydrate-controlled diet.

- This diet is based on the Regular Diet and all the same guidelines apply with alterations being made to ease chewing and swallowing.
- Use a wide variety of nutrient-dense foods (fruits, vegetables, whole grains, dairy products, cooked dry beans and peas) rich in vitamins, minerals and dietary fiber.
- Supplement based on individual need: multivitamin or multivitamin with minerals, calcium, vitamin D, and B_{12} in older adults.
- Older adults may need individualized/less restrictive diets especially if intake is poor. Food preferences should be honored.
- Dietary guidelines for Americans goals may be difficult for some people to achieve and should be balanced with individual preferences and cultural norms.

Individualize the diet as needed for best tolerance and safety with swallowing. It is important to make the diet look appealing. The following garnishes can help (as appropriate). Also see Garnishes Appropriate for Each Level of Dysphagia earlier in this chapter.

- ◆ Fruits: whipped topping, a light sprinkle of powdered gelatin, or cinnamon sugar.
- ◆ Meats: gravy, sauce, catsup, mustard, mayonnaise, or barbeque sauce.
- ◆ Hot vegetables: cheese sauce or Hollandaise sauce.
- ◆ Desserts: chocolate, butterscotch or strawberry syrup, and/or whipped topping

Sample Daily Meal Plan for a Well Balanced Diet

Breakfast	Lunch	Dinner
¾ c. Orange Juice ***at ordered thickness*** ½ c. Cooked Oatmeal ¼ c. Scrambled Egg 1 sl. ***WW Bread moistened with margarine**** 1 tbsp. Jelly or Fruit Spread 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***	2 oz. Roast Beef ***chopped or ground with Gravy*** ***½ c. Seasoned*** Buttered Rice ½ c. Seasoned Peas with Mushrooms, ***well cooked*** ½ c. ***shredded Lettuce*** with 1 tbsp. Salad Dressing 1 WW Roll ***Moistened with Margarine**** ½ c. Fruit Sorbet ***at ordered thickness*** with ¼ c. Strawberries 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***	6 oz. Vegetable Soup ***(Broth at ordered thickness)*** 3 oz. Baked Fish, ***Soft with Smooth Tartar Sauce*** ½ c. Mashed Potato ***with Margarine**** ½ c. Green Beans, ***Soft Cooked (No Almonds)*** 1 sl. WW Bread ***Moistened with Margarine***** 1 Baked Apple ***(No Skin)*** 1 c. Low Fat Milk ***at ordered thickness*** Condiments as desired** ***and allowed*** Beverage of choice ***at ordered thickness***
P.M. Snack		
1 Muffin (No chunks of fruit or nuts), Moistened with Margarine* Beverage of choice ***at ordered thickness***		

Bold/Italicized items indicate differences from the Regular Diet menu.
*Low in *trans* fats.
**Condiments may include pepper or other spices, sugar, sugar substitute, salt, coffee creamer, etc. based on nutrition goals. Additional condiments and garnishes (i.e. margarine, gravy, sauces, ketchup, etc.) may round out the menu and make it more appealing and palatable. These add additional calories, micro- and macronutrients (i.e. calories, fat, carbohydrates, sodium, etc.) and may not be appropriate for some individuals.

Note: Liquids thickened to the physician ordered consistency as appropriate (nectar like, honey like or spoon thick).

Dysphagia Regular Diet (Level 4)

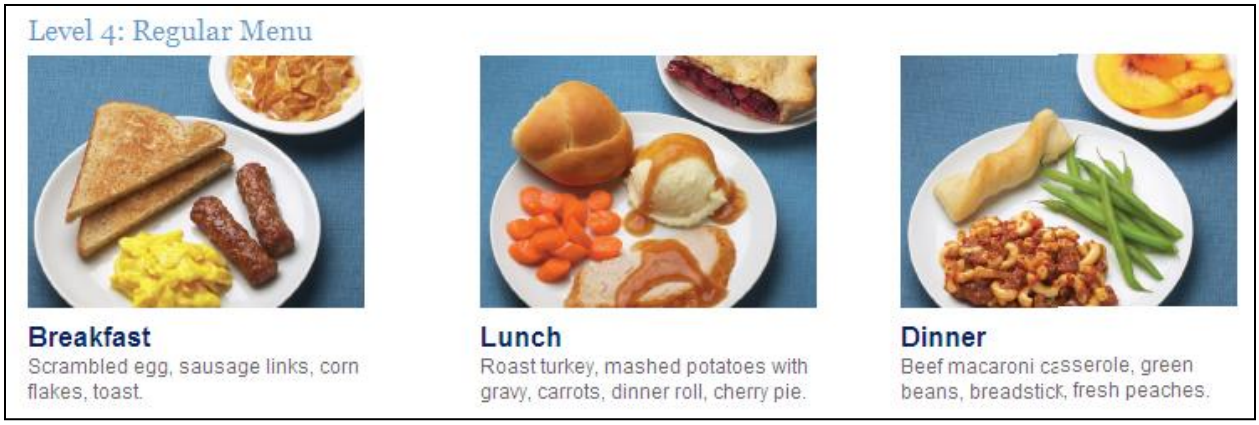
All foods allowed. Food is presented as commonly served. No consistency changes are required. For example, sandwiches are typically served cut in half.

People receiving this diet have no difficulty chewing or swallowing.

People receiving this diet do not need a change in consistency. They are typically able to cut their own food and pace themselves appropriately.

No special instructions required. Prepare and serve food as usual.

Foods Allowed	Foods to Avoid
Meats, Poultry, Fish, Meat alternatives and Casseroles All. *Slice hotdogs and sausages lengthwise before serving.	None
Fruits All	None
Vegetables, including Potatoes and Starches All	None
Grains/Breads All	None
Cereals All	None
Fluids/Beverages All	None
Soups All	None
Desserts All	None
Discretionary Calories (Sugars, Fats (SoFAS), Alcohol and Miscellaneous) – All	None



Doctor Notification of National Dysphagia Diet

Date:

Dear Dr. _____

This letter provides you with information about the National Dysphagia Diet (NDD). This diet was developed by the National Dysphagia Diet Task Force to provide standardization of the nutritional management for people with dysphagia. The task force was comprised of speech pathologists, registered dietitians, and food scientists. The guidelines developed by the task force are for the solid food textures diet. The goal of the National Dysphagia Diet is to standardize terminology and care of patients/residents. Using these standards will assure consistent nutrition management from assessment to the various care settings in which patients may reside.

Our facility will be adopting the National Dysphagia Diet using the following terminology:

1. NDD Level 1: Dysphagia-Pureed (homogenous, very cohesive, pudding-like, requiring very little chewing ability)
2. NDD Level 2: Dysphagia-Mechanical Altered (cohesive, moist, semisolid foods, requiring some chewing)
3. NDD Level 3: Dysphagia-Advanced (soft-solid foods that require more chewing ability)

Your assistance with using the National Dysphagia Diet terminology will help facilitate the nutritional management of your patients with dysphagia.

Sincerely,

Skills Observation Checklist – Dysphagia Diet

Purpose: *This checklist is used to directly observe skills involved with providing a dysphagia diet. This will help ensure the safety of the person receiving the diet and identify areas where re-training may be necessary.*

Directions: *The person completing the observation checklist will observe staff supporting and/or feeding the person for a minimum of 15 minutes. Check marks will be placed when the staff person has demonstrated competency in each particular skill. Any skill level not met will require re-training before the staff person can provide mealtime supports again.*

The following skills were observed by_____ on _____
NAME, TITLE *DATE*

For staff person_____ for individual _____
NAME, POSITION *NAME*

☐ Prior to observation, the staff person was able to verbalize the person's specific diet and/or food modifications and provide the reason for the diet and/or food modifications.

Feeding Plan Skills:

☐ Demonstrate proper solid food preparation technique for_____ texture/consistency food.

☐ Demonstrate proper liquid preparation technique for _____consistency liquids.

☐ Uses proper adaptive equipment as prescribed. List equipment or not applicable (NA):

_____

☐ Follows any specific food to liquid cyclical pattern prescribed. List pattern or NA:

_____

☐ Follows nutritional guidelines/diet order. List prescribed diet:_____

_____

☐ Ensures proper positioning with meal. Describe position: _____

_____

☐ Provides supervision as prescribed. What supervision level is ordered: _____

_____

☐ Follows feeding plan as written and demonstrates proper feeding technique (observe staff supporting and/or feeding the person for minimum of 15 minutes).

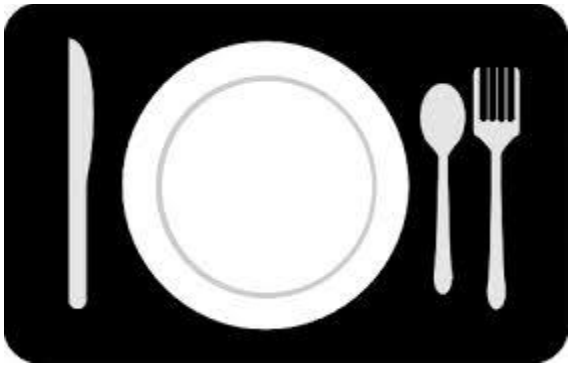
☐ Encourages proper positioning after meal.

☐ Identified and completes any required documentation.

☐ Identifies several signs and symptoms of dysphagia and agency protocol of who to notify if concerns.

Retraining needed? ☐ Yes ☐ No
(Any skill level not met requires retraining)

Skill	Retraining Date	Trainer Signature	Date Observed



Sample Daily Meal Plan for Well Balanced Dysphagia Diets

Dysphagia Advanced (Level 3)	Dysphagia Mechanically Altered (Level 2)	Dysphagia Puree (Level 1)
Breakfast ¾ cup orange juice** ¾ cup cooked oatmeal ¼ cup scrambled egg 1 ***cinnamon muffin (no nuts) well moistened with margarine and jelly*** ***8 oz. low-fat milk***** Sugar, salt, pepper Coffee, tea or beverage**	**Breakfast** ¾ cup orange juice** ¾ cup cooked oatmeal ***(smooth)*** ¼ cup scrambled egg ***#10s pureed cinnamon muffin*** 1 tbsp. jelly 1 tsp. margarine ***8 oz. low-fat milk***** Sugar, salt, pepper Coffee, tea or beverage**	**Breakfast** ¾ cup orange juice** ***¾ cup cooked cream of rice cereal*** ***#8s egg and toast*** ***#10s pureed muffin*** 1 tbsp. jelly 1 tsp. margarine ***8 oz. low-fat milk***** Sugar, salt, pepper Coffee, tea or beverage**
Lunch ***½ cup shredded lettuce*** with 1 tbsp. salad dressing 3 oz. ***chopped or ground*** roast beef with gravy ½ cup ***well moistened noodles*** ½ cup ***well cooked broccoli*** ½ cup ice cream** ***4 oz. low-fat milk***** Coffee, tea or beverage**	**Lunch** ***¾ cup vegetable juice***** 3 oz. ***chopped or ground*** roast beef with gravy ***#8s pureed rice*** ½ cup ***well cooked*** broccoli ½ cup ice cream** ***4 oz. low-fat milk***** Coffee, tea or beverage**	**Lunch** ***¾ cup vegetable juice***** ***#6s pureed roast beef*** ***#8s pureed rice*** ***#8s pureed broccoli*** ½ cup ice cream** ***4 oz. low-fat milk***** Coffee, tea or beverage**
Dinner ¾ cup cream of tomato soup** 2 oz***. chopped or ground*** roast chicken with gravy ½ cup mashed potatoes ½ cup ***finely*** chopped spinach 1 baked apple, ***soft (no chunks, grains, nuts or skin)*** ***4 oz. low-fat milk***** Sugar, salt, pepper Coffee, tea or beverage**	**Dinner** ¾ cup cream of tomato soup** 2 oz***. chopped or ground*** roast chicken with gravy ½ cup mashed potatoes ½ cup ***pureed or finely*** chopped spinach 1 baked apple, ***soft (no chunks, grains, nuts or skin)*** ***4 oz. low-fat milk***** Sugar, salt, pepper Coffee, tea or beverage**	**Dinner** ¾ cup cream of tomato soup** ***#8s purred roast chicken*** with gravy ½ cup mashed potatoes ***#8s pureed spinach*** ***#12s pureed baked apple*** ***4 oz. low-fat milk***** Sugar, salt, pepper Coffee, tea or beverage**
P.M. Nourishment ***½ cup milk**** ***½ cup pudding***	**P.M. Nourishment** ***½ cup milk**** ***½ cup pudding***	**P.M. Nourishment** ***½ cup milk**** ***½ cup pudding***

Bold / italicized items indicate difference from the regular diet.
**Thickened to order consistency.
* *Becky Dorner & Associates, Inc. 2008*

Keep Nutrition in Mind When Modifying Foods

- People with dysphagia are at a higher risk for malnutrition and dehydration.
- It is important to ensure adequate nutritional intake of calories, protein, and nutrients.

- 1 cup of food prior to modification is still the same serving size after modification.
- Food consistency may have to be modified according to diagnosis.

Listed below are the food groups, recommended daily intake, and suggestions for each group for a dysphagia diet:

Fluid Intake: **8 ounce servings (6-8 per day)**	**Recommended Liquids:** Water, 100% juices, decaffeinated tea **Avoid:** Caffeinated beverages, whole or 2% milk, beverages with lumps, pulp, or seeds **Tips:** Dilute juices and sodas with water, offer beverages between meals to promote adequate hydration
Grains: (breads, cereals, pastas) **1 ounce servings (6 per day)**	**Recommended Foods:** Well moistened 100% whole wheat bread, pancakes, French toast, pureed bread mixes, cooked cereal, mashed potatoes (with gravy, butter, sour cream), pasta (well cooked) **Foods to Avoid:** Dry toast/crackers, rice, dry cereals, cooked cereals with lumps or seeds, white or enriched flour, white bread
Vegetables: **½ cup servings (5 per day)**	**Recommended Foods:** Moist, well cooked vegetables, tomato paste or sauce without seeds, tomato juice or vegetable juice (V*) **Foods to Avoid:** Tomato sauce with seeds, cooked corn, raw, hard vegetables, celery, asparagus and other tough, stringy vegetables **Tips:** Add vegetable/tomato juice for desired consistency

Fruits: **1 cup servings** **(2 per day)**	**Recommended Foods:** Fruit juices (100% juice), soft, peeled fresh fruit (peaches, cantaloupe), canned fruit, well mashed fresh bananas, and natural applesauce **Foods to Avoid:** Whole fruits, stringy or high pulp fruits (papaya, pineapple, mango), uncooked dry fruits (prunes, apricots), fruit leather, fruit roll ups, grapes (skin is hard to chew/swallow), oranges **Tips:** Add fruit juice for desired consistency
Dairy/Milk: **1 cup servings** **(3 per day)**	**Recommended:** Milk, yogurt, pudding and cheese (as recommended by your speech language pathologist) **Foods to Avoid:** Yogurt with nuts or fruit chunks or seeds; hard or chunk cheeses **Tips:** Cheese can be used in cooking
Meat/Protein: **3 ounce servings** **(2 per day)**	**Recommended Foods:** Eggs, hummus, softened tofu, meats cooked to desired consistency **Foods to Avoid:** Whole/ground meats, tough dry meats, fish with bones, chunky peanut butter, hot dogs, bacon **Tips:** Add gravy, sauce, or broth to meats, fish, poultry when pureeing
Fats/Oils/Sweets: **Use sparingly**	**Recommended Foods:** Butter, margarine, ketchup, smooth jellies/jams, puddings, mayonnaise, smooth sauces **Foods to Avoid:** Seeds, nuts, sticky foods, chunky/seedy jelly/jam, chewy candy **Tips:** Add condiments for flavor

Tips to Increase Nutritional Density of Food

- When pureeing foods, rather than using water, use milk or cream for more protein and energy
- Whole milk can be fortified by adding milk powder (4 tbsp. per pint/glass of milk)
- Add fortified milk to potatoes before pureeing
- Add cream, custard, or yogurt to cooked fruits and desserts
- Offer high calorie foods or snacks modified as ordered to increase caloric intake
- Don't forget to add condiments or seasonings to food to provide for good tasting meals

Tips to Decrease Caloric Density of Food

- Avoid fruit juices or dilute them with ½ water, ½ juice ratio
- Use low fat or fat free dairy products and yogurts
- Use broths or natural applesauce as moisteners instead of fats and oils
- Use low fat or skim milk instead of whole milk
- Offer pureed low calorie vegetables as snacks

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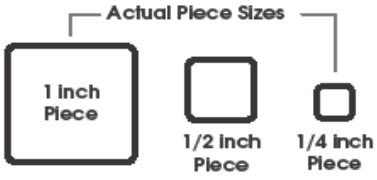
STOP!

Choking Hazards

The food you prepare MUST meet the individual's Dining Plan

Cut to size



Ground

Size of a grain of rice

Pureed

Smooth with no lumps

If the food you prepare does not meet the individual's Dining Plan, it must NOT be served.

Updated 8/16/13

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Andrew M. Cuomo
Governor

OPWDD

Laurie A. Kelley
Acting Commissioner

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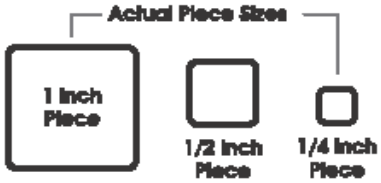
STOP!

Choking Hazards

Cut to size



If the food you prepare does not meet the individual's Dining Plan, it must NOT be served.

Ground

Size of a grain of rice

Pureed

Smooth with no lumps

Andrew M. Cuomo
Governor

Laurie A. Kelley
Acting Commissioner

We help people with developmental disabilities live richer lives

Wash your hands before preparing meals!

Food Consistency Terminology

Term	How to Prepare	Size	Description	Examples
Whole	Prepared according to recipe	As prepared	No changes	Moist, tender cooked chicken breast
1" Pieces Cut to size	Cut by staff	Cut into 1" pieces	Pieces of food approximately the width of a fork	Moist, tender cooked chicken breast cut in 1" pieces
½" Pieces Cut to size	Cut by staff	Cut into ½" pieces	Moist, tender pieces of food approximately the width of a butter knife	Moist, tender cooked chicken breast cut in ½" pieces
¼" Pieces Cut to size	Cut by staff	Cut into ¼" pieces	Moist, tender pieces of food approximately the width of a #2 pencil	Moist, tender cooked chicken breast cut in ¼" pieces
Ground	Prepared using food processor or comparable equipment	Relish-like No larger than a grain of rice	Moist, cohesive, no larger than a grain of rice; relish-like in appearance, must be served with a low fat gravy, sauce or condiment	Moist, tender ground chicken served with low fat gravy
Puree	Prepared using food processor or comparable equipment	No lumps, food is not sticky, pasty or runny	Smooth, pudding like, moist	Moist, tender cooked chicken with low fat gravy processed to smooth product with no lumps

See "High risk Foods" for Hot Dogs and Sausages.
Some individuals on whole diet may require boneless meats.

Preparing Pureed Foods

Using recipe guidelines and techniques can assist in preparing appealing pureed meals. There is more to pureeing entrees and side dishes than effectively changing the consistency of normal foods and maintaining their original flavor. By taking a little extra time, pureed food can be made attractive as well as delicious and nutrition.

The Level 1: Dysphagia Pureed diet requires foods with a “soft mashed potato” or pudding-like consistency. Appropriate pureeing techniques require minimal addition of liquids thus concentrating nutritional value. Use of a food processor will require the addition of less liquid than the use of a blender. The addition of a stabilizing starch or commercial thickener to pureed foods produces a more cohesive bolus when swallowed and may help meet the NDD guidelines. Thickened foods appear more appetizing and will support a sauce as a nutritious eye-appealing garnish. Also, thickened foods are easier for individuals to hold on a spoon and self-feed. Thickeners can be added directly to pureed foods in the processor or added as a slurry made by combining the thickener and liquid and gradually adding to the food while processing.

When processing or blenderizing foods, be sure to scrape down the sides of the blender or processor with a rubber spatula at least once to incorporate all bits of food and thickener. The smallest chunk of food can be very uncomfortable and even life-threatening to a patient/resident with dysphagia.

Season food before cooking. Cook, puree, taste, and re-season as necessary. If it doesn’t taste good to the cook, it won’t taste good to the patient/resident either. The staff must taste pureed food before serving to guarantee quality appeal. Set up a pureed diet “taste panel” to be sure all foods taste good and have the appropriate consistencies before serving. Be sure the consistency of all foods meets the NDD guidelines prescribed for the patient/resident.

Method for Preparing Pureed Foods

The actual food processing is a simple task when the right equipment is used. The following gives a few basic guidelines that should guarantee success:

1. Drain liquid from portions needed for pureed preparation.
2. Weigh or measure the number of drained portions required for the standardized recipe.
3. Process hot or cold items until they are fine and homogenous in texture.
4. Add measured amounts of hot liquid for cooked foods and cold liquid (if required) for cold foods and process until there is a smooth consistency.
5. Measure and add commercial thickener, stabilizer, or shaping/enhancing product as directed in the recipe and process until blended.
6. Scrape down sides and reprocess until very smooth.
7. Reheat cooked thickened food or chill cold thickened food to serving temperature per Hazard Analysis and Critical Control Point (HACCP) guidelines.
8. Serve with appropriate scoop number or divide equally to provide number of portions planned in step #2 above.

Although the above is a fairly standard process, the National Dysphagia Diet Task Force (NDDTF) recommends utilizing standardized recipes for preparing pureed food. It is recommended that Certified Dietary Managers or consultants in facilities receive continuing education on food preparation for modified consistency foods.

Commercially Prepared Pureed Foods

Commercially prepared pureed foods are another option for individuals with dysphagia. These foods are formulated in a laboratory utilizing industrial manufacturing equipment resulting in smooth textures of all foods. Commercial thickening agents are added to the pureed food, processed, and dispensed into the desired molded shape. The molded shaped products are frozen into either individually quick-frozen (IQF) molds or bulk packaging.

Techniques for Improving Acceptance

Feeding individuals with dysphagia requires extra care and consideration. Food is enjoyed with all of the senses. Pureed meals need to look good, smell good, and taste good. Here are some ideas to improve the sensory experience for those with dysphagia. Start simple and build a puree program that will allow you to be creative and serve attractive meals.

Aroma

- Good smelling food and a pleasant atmosphere may increase appetite and improve consumption.

- Serve foods seasoned with aromatic ingredients such as garlic, pepper, onions, and cinnamon.

Seasoning

- Individuals with dysphagia often have a dulled sense of taste.
- Taste all foods and adjust seasoning as needed.
- Serve foods that have stronger flavors such as chili, spaghetti, and apple pie.

Layering/Swirling

- Swirling vegetables together is simple and makes a great plate presentation; peas and carrots are striking together and taste great.
- Use standardized recipes to make attractive layered casseroles such as shepherd's pie, lasagna, or chicken ala king.

Piping

- Place pureed food into a pastry bag and pipe for a lovely plate presentation.
- Simple and fun with pureed pasta.

Molding

- To mold you will need to use a thickener or a shaping/enhancing product.
- For hot foods: prepare per recipe, freeze, heat to temperature before serving.
- For cold foods: prepare per recipe, freeze, set on plate, and serve (will thaw quickly).

Slurries

- Prepare a slurry with thickener and juice or milk.
- Prepare a slurry with a liquid that goes well with the food being prepared.
- Slurry shortcake with juice and serve with pureed strawberries.
- Slurry sugar cookies with milk.
- Slurries work well with biscuits, cakes, graham crackers, muffins, and brownies.

Garnishing

- Often overlooked, but makes a big visual impact.
- Only garnish with foods appropriate for the diet consistency.
- Use sauces, gravies, syrups and try putting in squeeze bottles and decorating plates.
- Pipe garnishes around edges such as piping lettuce around the edge of a pureed sandwich.
- Cut shapes out of cranberry sauce and serve with turkey.

These are a few simple ideas to keep in mind when serving modified consistency foods. Beautiful plate presentations and good tasting foods will help you maintain good consumption and ultimately good nutritional status. Resident and patient dignity is very important. Good looking and good tasting food can help people feel more dignified.

Commercial Thickeners

Thickeners are made from an instant modified cornstarch that can be used to thicken hot or cold beverages and foods. They are designed to thicken liquids for persons with swallowing disorders and to add body and definition to foods. Commercial thickeners can be added to cold pureed foods such as salads, fruits, and desserts and to hot foods to create a mashed potato-like consistency.

Commercial shaping products or puree enhancers can help to form pureed foods into a more defined shape. These enhancers improve the appearance, flavor, and nutrition of hot pureed foods. Foods prepared with these products can be molded, sliced, cut into squares, or scooped. Shaped products have to be cooked to “set” after they are pureed, which limits them to use in hot foods only, such as meats, sandwiches, vegetables, casseroles, or breakfast foods. These foods can be produced in advance an steamed or baked from a frozen state. To heat molded foods prepared with shaping products, use a steamer or oven. It is also possible to use shaping products to create a variety of plate presentations such as swirling foods together or layering combination dishes for visual appeal.

Guidelines for Thickening Liquids

Liquids sometimes need to be thickened as a result of swallowing difficulties. When illnesses, such as strokes, head injuries, Parkinson’s Disease, etc., impact overall motor skills, swallowing skills may also be affected. Thickened liquids are recommended for those individuals who are at risk of aspiration.

The following consistencies are recommended, based on the individual patient’s needs.

THIN LIQUIDS

Any thin liquid is allowed, including water, coffee, tea, etc.

NECTAR THICK LIQUIDS

Slightly thickened liquids, the consistency of fruit nectars or tomato juice, are included at this level. When thickened, a straw should slowly fall to the side.

HONEY THICK LIQUIDS

At this level, liquids should be thickened enough to be the consistency of a milkshake or honey. The liquid should be able to be taken through a straw. The liquid should be adequately thick enough so that a straw will stand upright in the liquid.

PUDDING THICK LIQUIDS

At this level, liquids should be thickened enough to resemble pudding. Liquids at this level cannot go through a straw. A spoon would be needed for these liquids.

There are several ways in which to thicken liquids. There are commercially available products specifically designed to thicken liquids. Other items may be found in your pantry or on the grocery store shelves.

Commercially available products include *Thick & Easy, Thick-it, Thick-it 2, Thicken Right* and *Simply Thick.* Most of these are cornstarch based products which can generally be used to thicken hot or cold items. *Simply Thick* is a gel which can be used with hot or cold items as well as nutritional supplements and dairy products. All of the products are available in large cans; some are available in pre-measured packets designed to thicken 4 ounces of liquid to either a nectar or honey thickness. These products are available through some local pharmacies (including CVS), DME suppliers, as well as by phone or the Internet.

The recommended procedure for thickening liquids is to add small amounts of the thickener while stirring briskly using a straw, wire whisk or fork. Stir until the liquid appears relatively smooth. A blender may also be used for 15-20 seconds to produce a smooth texture. Continue to add thickener and stir briskly until the liquid reaches the appropriate thickness. Keep in mind that the liquid will continue to thicken as the product sits.

Bread crumbs may also be used to thicken foods such as soups, pureed vegetables and casseroles. Fresh slices of bread, any kind without seeds or shells, can be finely ground in a food processor or chopper. Fresh bread will be more absorbent than dried bread or cracker crumbs. Bread crumbs will be lower in sodium content than cracker crumbs.

Instant mashed potatoes and baby cereal (e.g., rice cereal) can be used to thicken soups. Fruit puree (applesauce, blenderized fruits or jarred baby fruits) can be added to juices. Pureed vegetables can be used to thicken soups but will not thicken as much as the bread crumbs.

When thickened liquids are recommended, it is important to remember that all liquids need to be thickened. Items that are often overlooked are soups and cold cereals. Soup broths can be thickened as identified above. Hot cereals might be a good alternative to cold cereals until liquids are swallowed easier.

For those individuals having difficulty swallowing liquids, Jello and ice cream present some additional challenges. Milk shakes can be made by adding a little instant pudding to the shake; this will help to keep the liquid thickened as it warms. Because both Jello and ice cream melt with our body temperature, use of these products should be reviewed with the speech pathologist.

Foods That Melt at Room Temperature

Foods that melt at room temperature should be considered liquids and should not be given to people who are supposed to have their liquids thickened to a honey or pudding consistency.

Examples of such foods include but are not limited to:

- Ice Cream
- Frozen Ice Milks
- Frozen Yogurt
- Sherbet
- Jello
- Milk Shakes

Acceptable alternatives include:

- Chilled or frozen shelf stable snack pack pudding
- Chilled mousse
- Ice cream/ice milk/frozen yogurt/sherbet which has been thawed, thickened and refrozen
- Chilled slurries of dessert items
- Calorie Control brand gelatin
- Magic Cup frozen dessert.

Treatment

Exercise to Improve Swallowing
If the swallow disorder is a result of weakness of the muscles of the lips or tongue, there are a variety of exercises to help strengthen these muscles as determined by a speech therapist.

Food Consistency
After the evaluation is completed, the food modification/consistency easiest and safest for the individual will be recommended. It is imperative that these modifications are made for ALL ORAL INTAKE including medications.

Liquids
Consistency of liquids may need to be modified. Again it is imperative that the consistency of liquids be made as ordered to prevent aspiration.

Positioning
For most people the best position is sitting as upright as possible with hips at a right angle to the trunk.

Time Between Swallows
People with weakened tongues and oral muscle need more time to move food and liquid into position for swallowing. Additional food should NEVER be placed into the mouth until after the first mouthful has been swallowed.

Thermal Stimulation
Cold tends to enhance the sensitivity of the swallowing reflex. Using a utensil that is cold or introducing a cold food at the start of the meal may stimulate the swallow reflex.

Sensory Cues
Cues can be verbal, such as the reminder, *"Swallow."* Gestures can include a caretaker pointing to the lips or tilt the chin down, or move head to demonstrate the head position. Cold tends to stimulate swallowing and hot liquids are a cue to go slowly and sip the drink.

Environment
A person with a swallowing problem must pay close attention to what must be done in order to facilitate swallowing and to avoid aspiration. It is important that a person with swallowing difficulties eat in a quiet environment free of distractions. Talking and socializing during mealtime can cause the individual to forget to follow the swallowing guidelines.

Overview of Dining Problems

Problem	Common Contributing Causes	Therapeutic Interventions
1. Unsafe Dining Habits a. Eating too fast b. Stuffing too much	➢ Poor chewing ability ➢ Poor tongue control ➢ Poor jaw control ➢ Poor lip control ➢ Hypo/hyper sensitivity of oral area ➢ Hypotonia/spasticity ➢ Diet texture ➢ Poor early training; fear of food being stolen ➢ Degree of hunger ➢ Limited opportunities for multiple satisfying sensory experiences ➢ Impaired ability to control/inhibit movement and/or emotion ➢ Diminished gag/swallow reflex ➢ Respiratory control ➢ Positioning ➢ Dining set-up	➢ Smaller portions, even as little as three (3) tablespoons at a time or second, third helpings ➢ Food on plate should be shallow, not piled on ➢ Divided plates ➢ Smaller spoons ➢ Physical and/or verbal prompting ~ Put spoon/cup down between bites/sips ~ Wait until mouth is clear ➢ Cut pieces small enough ➢ Several dishes instead of just one ➢ Feed person part of meal; have them eat rest ➢ Consider schedule ➢ Proper positioning ➢ Staff hold food item ➢ Demonstration/modeling ➢ Changes in food/beverage consistency ➢ Relaxation techniques
2. Drinking too fast	➢ Hypotonia/spasticity ➢ Respiratory control ➢ Poor tongue control ➢ Poor jaw control ➢ Poor lip control ➢ Diminished gag/swallow reflex ➢ Poor early training; fear of drink being stolen ➢ Degree of thirst ➢ Limited opportunity for multiple satisfying sensory experiences ➢ Impaired ability to control/inhibit movement and/or emotion ➢ Positioning	➢ Smaller portions/amount in cup at a time ➢ Physical and/or verbal prompting ~ Put cup down between sips ~ Wait until swallow ➢ Adaptive equipment ➢ Feed person part of drink; have them drink rest ➢ Proper positioning ➢ Change of beverage consistency; i.e., thicker ➢ Relaxation techniques
3. Taking too large a bite from whole food item	➢ Poor early training; fear of food being stolen ➢ Poor cognitive/perceptual concepts of whole vs. pieces ➢ Poor jaw and lip control ➢ Degree of hunger ➢ Hypotonia/spasticity ➢ Diminished gag reflex ➢ impaired early training	➢ Have staff hold food item ➢ Physical and/or verbal prompting ~ Wait until mouth is clear ~ Put food down between bites ➢ Cut food up ➢ Cut up part of meal

Problem	Common Contributing Causes	Therapeutic Interventions
4. Inability to cut or break up food	➢ Poor fine motor ability ➢ Poor cognitive/perceptual concepts of whole vs. pieces ➢ Poor motor planning ability ➢ Poor hypotonia/spasticity ➢ Positioning ➢ Dining set-up ➢ Lack of training/opportunity	➢ Physical and/or verbal prompting ➢ Adaptive equipment ➢ Demonstration/modeling ➢ Prerequisite fine motor skills training
5. Deviation from prescribed diet	➢ Person's lack of knowledge of diet limitations ➢ Obtaining foods of inappropriate consistency from other people ➢ Difficulty in obtaining foods of prescribed consistency outside of usual dining room (i.e., picnics, restaurants)	➢ Follow prescribed diet both on and off grounds ➢ May require extra effort on part of staff ~ Menu selection ~ Choice of places to go ~ Prepare certain food ahead of time to take along ➢ Make arrangements with restaurant to specially prepare food
6. Using beverage to swallow food in place of chewing	➢ Poor chewing ability ➢ Poor lip, tongue and jaw control ➢ Hypo/hyper sensitivity in oral area ➢ Impaired ability to control/inhibit movement and/or emotion ➢ Improper early training	➢ Physical and/or verbal prompting ~ Wait until mouth is clear ➢ Allow sufficient time for chewing ➢ Oral motor therapy techniques
7. Inappropriate Dining a. Sloppiness	➢ Poor chewing ability ➢ Poor lip, tongue and jaw control ➢ Hypo/hyper sensitivity of oral care ➢ Hypotonia/spasticity ➢ Diet texture ➢ Poor early training ➢ Degree of hunger ➢ Limited opportunities for multiple satisfying sensory experiences ➢ Impaired ability to control/inhibit movement and/or emotion ➢ Respiratory control ➢ Diminished gag/swallow reflex ➢ Positioning ➢ Dining set-up ➢ Poor fine motor control ➢ Poor eye/hand coordination	➢ Smaller portions ➢ Divided plates ➢ Smaller spoons ➢ Physical and/or verbal prompting ~ Put spoon down between bites ~ Wait until mouth is clear ➢ Adaptive equipment ➢ Feed person part of meal ➢ Proper positioning ➢ Changes in food/beverage consistency ➢ Prerequisite motor skills training
8. Utensil use a. improper use of utensils b. Improper use of fingers when appropriate	➢ Lack of proper training ➢ Positioning ➢ Dining set-up ➢ Poor fine motor and eye/hand coordination skills ➢ Lack of opportunity and experience	➢ Physical and/or verbal prompting ➢ Demonstration/modeling ➢ Adaptive equipment

Ways to Help the Person with Eating Problems

1. To increase RELAXATION:
   - During meals, work at a relaxed pace fitting into the person's natural rhythms.
   - Use a relatively relaxed, quiet environment for meals.
   - Slow massage to shoulders.
   - Slow massage to cheeks and neck area: Use fingertips to slowly massage along the jawline, neck, and under the chin. Use firm pressure, not light touch.
   - Gently rock the person.
   - Check the amount of time the person is in their chair before eating. Observe the person for what is their optimum time for being positioned before eating.

2. To increase ALERTNESS:
   - Re-position person in chair just prior to feeding them.
   - Establish social interaction.
   - Encourage person to participate in a favorite activity for a few minutes before eating.

3. To improve POSITIONING:
   - Person should be as upright as possible.
   - Hips flexed at 90° and at the back of the chair, knees bent, feet flat on the floor and supported.
   - Head stabilized in midline. Firm but gentle downward pressure with your hand on the top of their head may be used.
   - Your position, sitting at their eye level across from the person or next to them as close to midline as possible determines the person's head position to some extent.
   - PERSON MUST FEEL COMFORTABLE AND SECURE.

4. To decrease HYPERSENSITIVITY to TOUCH:
   - Use relaxation techniques (above) prior to meals.
   - Avoid any light touch with your hands, hair, or clothing.
   - Apply fir pressure with palms of hands to cheeks.
   - Give firm pressure around mouth with the side of your index finger.
   - Use neutral temperature foods if temperature changes produce adverse reaction.
   - Finish feeding one type of food before changing to the next if changes in flavor or consistency produce adverse effect.
   - Feed in a quiet, relaxed atmosphere.

5. To reduce EXCESSIVE MUCUS:
    - Begin meal with a tart beverage such as lemonade.
    - Milk and sweets may increase secretions. Consult with a Dietitian if you notice this is a problem.

6. To increase the person's ability to USE MOUTH EFFECTIVELY:
    - Tell person when you are giving them a bite of food and what that food is.
    - Allow person to smell food before giving it to them.
    - Control the amount of food given.
    - Allow person to clear their mouth between bites.
    - Alternate bits of food with sips of beverage.
    - Refrain from scraping food from spoon on teeth.
    - Place food to sides of mouth.
    - Encourage mid-range jaw opening to receive bite of food rather than wide mouth opening.
    - Use pressure with bowl of spoon on center of tongue when leaving food in mouth.
    - Allow person to take food from spoon with lips if they are able to do so.

7. To improve DRINKING:
    - Offer small sips.
    - Make sure mouth is clear before giving more.
    - Thickened beverages are easier to manage in the mouth.
    - Keep head forward or straight, not tipped back.
    - Offer beverages before, intermittently throughout, and after meals.

8. At the end of the meal:
    - Give several sips of beverage.
    - Make sure mouth is clear of food and beverage.
    - Person should be upright at least one half hour after eating.

9. Remember each person is an individual and will respond to food and feeding techniques in their own unique way.

Feeding Adaptations*

What can be adapted?

- Plates/Bowls
- Cups
- Utensils
- Miscellaneous

Plate Guards

- Can be used to keep food from being pushed off the edge of the plate.
- Also helps guide food onto utensils more easily.
- Beneficial for people who have limited use in one of their upper extremities.

Scooper Plate/Dish

- Used to help scoop food onto utensils without the food spilling out of the dish.
- Assists those with limited muscle control or those with use of only one hand.

Suction/Non-Skid Surfaces

- Keeps plates from sliding around on tables.
- Helps prevent spilling.
- Gives plate/dish more stability when person is scooping food out of it.

T Handles

- Handle accommodates for a variety of grasping patterns vs. a standard curved handle.

Nosey Cup

- Allows for drinking without needing to bend one's neck or stilting their head.
- Drinking made easier due to proper head and neck position being maintained during swallowing.
- Beneficial for people with arthritis or limited range of motion of the head, neck or upper extremities.

*Same with many aspects of health, a case by case approach needs to be considered when selecting feeding adaptations. If you feel you or someone else would benefit from a feeding adaptation, it is important to consult with a licensed Occupational Therapist before buying/using them in order to see which adaptations will best benefit each person's situation.

By Robert Walsh, OTS; supervised by E. Adel Herge, OTD, OTR/L

Straws

- Provide hands free drinking.
- Ideal for those with weak grasp or decreased strength/function in upper extremities.

Weighted Cups

(can also be weighted dishes)

- Helps reduce tremors of the hands.
- Reduces chances of spilling drink.
- Beneficial for those with Parkinson's Disease and other illnesses/injuries resulting in tremors.

Curved Handles

- Angling the utensil helps reduce wrist strain while eating.
- Beneficial for people with upper extremity weakness or reduced range of motion at the wrist.

Built Up Handles

- Larger, easier to hold handles.
- A variety of materials can be used to build up handles.
- Beneficial for persons who have had a stroke, and for those with arthritis and/or weak grasps.

Coated Spoons

- Used to protect teeth and lips for persons with biting reflexes*.
- Beneficial for those with biting reflexes, limited coordination, spasticity, or limited hand control.

Not recommended for those with **heavy biting reflexes.*

Rocker Knife

- Has curved blade and allows food to be cut with a rocking motion with just one hand.
- Requires minimal arm strength.
- Beneficial for those unable to use a knife and fork simultaneously due to Parkinson's Disease, muscle weakness, or arthritis.

Weighted Utensils

- Helps reduce tremors of the hands.
- Reduces dropping of food from fork/spoon and allows for smoother transfer of food onto utensils.
- Beneficial for those with Parkinson's Disease, spasticity, and other illnesses/injuries resulting in tremors.

Red Dishware

- Studies show Alzheimer patients increase food intake by 24% and liquid by 84% due to red color*.
- Red dishware offers a high contrast to the food and drink.

**http://www.caregiverproducts.com/site/270651/product/CMF74538*

Sit for Safety!

Choking can happen to anyone! *(even to people without the diagnosis of dysphagia)*

Choking is an extremely frightening breathing emergency. It only take a moment for a choking episode to occur. While some choking episodes are uneventful, others can result in serious injury or death. **Sit for Safety!**

Don't let people eat or take medication alone.

If we remain with people when they are eating or taking medication, we can reduce the chance of choking episodes.

If you are feeding someone or administering medication, taking a seat to do so may reduce the chance of choking.

- Many times people with intellectual/developmental disabilities eat alone.
- Being able to intervene early when someone is choking is essential.
- If you are not hungry at the time someone is eating, just sit and have a drink while the person eats.
- It is important to stay with the person while they are taking their medication.

Guidelines for Writing a Dysphagia Policy

I. Write a policy statement that explains the need for a dysphagia policy and that the policy aims to ensure best-practice healthcare support when screening individuals for dysphagia or when dysphagia is diagnosed.

II. Include key points in your policy and how they will be addressed throughout your agency:

a. Staff and providers must receive general training on dysphagia prior to working with individuals who have dysphagia. State when your agency will provide training; identify who will provide the general training..

b. State how frequently your agency requires the *"Eating, Drinking and Swallowing Checklist"* to be completed. Identify who will complete the checklist and what will be down with it.

c. Staff and providers working with an individual who is diagnosed with dysphagia must receive person specific training on each person's dietary modifications. Identify who will provide the training.

d. Describe how competency will be measured after person specific training. State how competency will be demonstrated by trained staff and providers before they work with individuals with dysphagia. Identify who will assess competency and how frequently it will be measured.

e. Explain how the agency will assure that only staff and providers who can demonstrate competence will be able to prepare meals for individuals who have dysphagia. This will include the proper documentation to support the attainment of competency by staff and providers. State who will be responsible for assuring staff assignments and related documentation.

f. Describe what documentation must be in place to safely support an individual with dysphagia, i.e. Speech Language Pathologist written recommendations around the type of dietary modification. Clearly define the level of supervision individuals need at meal times. State who will be responsible for assuring that the written recommendations are in place and understood by staff.

g. Describe what support and services will be provided in regards to assessment, care planning and support for the individual when not eating at home. Identify who will be responsible for assuring supports and services are provided.

h. Describe how information around diagnosis, dietary modifications and mealtime supervision will be communicated to day programs, workshops and family members. Identify the staff person responsible for disseminating information.

Choking Prevention

- Take small bites / limit amount per bite
- Cut meat into small pieces
- Chew food thoroughly
- Follow all recommendations made by the physician and/or speech therapist on food modifications
- Prompt to swallow before taking next bite
- Alternate liquids and solids throughout the meal
- Limit talking during meals
- Avoid talking and laughing with food in your mouth
- Do not walk with food in mouth
- Watch individuals to keep them from putting foreign objects into their mouth
- Stay with person who has a swallowing disorder or Alzheimer's disease whenever eating
- Anyone can be trained to perform the abdominal thrust
- Incorrect application of the abdominal thrust can damage the chest, ribs, and internal organs of the person on whom it is performed
- People may also vomit after being treated with the abdominal thrust

Choking Precautions

Many individuals diagnosed with Dysphagia and other swallowing difficulties have "choking/aspiration precautions" as part of their care/support plan. Precautions may include types of foods to avoid, type of diet (chopped, mechanical soft, pureed, etc.), and proper positioning during meal times. All precautions are designed specifically to meet the needs of the individual who has swallowing problems.

Whatever the precautions are, they should be followed and communicated by all staff, especially when moving to another home or residential agency. Historical incidents have highlighted the importance of communicating this life-threatening information. When a person has such choking/aspiration precautions, make sure they are part of his/her support/care plan and distributed to all staff members in the new home. Your may even want to post or keep choking/aspiration precautions in the kitchen area for all staff to see and follow. **It is everyone's responsibility to ensure safety around mealtime.**

General Mealtime Strategies

To ensure the health and safety of a person with dysphagia when eating, some basic guidelines should be followed. Below you will find some general strategies, but remember: *Mealtime strategies should always be individualized and check with the individual's doctor first for any contraindications.*

- Observation at all times when individuals are eating, drinking, or if you are assisting an individual.
- Follow prescribed diet.
- Eliminate distractions.
- Allow enough time for meals – avoid rushed or forced feeding.
- Do not eat while lying down or leaning back.
- Position at 90 degree angle or as upright as possible while eating or taking oral medications.
- Tilt head/chin slightly forward (45 degrees).
- Avoid tilting head back.
- If you are feeding an individual do so slowly and sit within the individuals' visual field.
- Offer small amounts (1/2 to 1 teaspoon) at a time.
- Let the individual catch a breath between spoonfuls and sips (at least 10 seconds).
- Alternate solids and liquids.
- Let the individual remain upright at least 30-60 minutes following meal.
- Caregiver needs to immediately report to a supervisor all changes to a person's baseline, especially:
    - Change in respiratory status or difficult breathing.
    - Increased coughing.
    - Increased secretions or changes to secretions (color/texture).
    - Fever.

Remember: Dysphagia doesn't disappear when the person is not home! It is important to share all information regarding someone's prescribed diet with anyone supporting the person for any situation.

Note: All feeding guidelines should be individualized. It is important to be evaluated for specialized feeding strategies.

Choking and High Risk Foods

Risk Factors:

The National Safety Council reports that annually nearly 3,000 people in the United States die from choking. A large percentage of those persons are over 65 years of age.

Choking and aspiration are common problems in persons with developmental disabilities. A number of factors increase an individual's risk of choking including:

- Neurological and muscular disorders such as cerebral palsy and seizure disorders
- Few or no teeth
- Chewing inadequately
- Eating too rapidly
- Putting too large a portion in one's mouth
- Talking or being distracted while eating
- Side effects from medications
- Poor posture while eating
- Pica
- Gastro-esophageal reflux disease (GERD)
- Difficulty swallowing

Some Signs of Choking:

- Change of facial color
- Unable to talk or breathe
- Gasping for breath

If Choking Occurs During Feeding:

1. **Stop** feeding immediately.
2. **Utilize the Abdominal Thrust if needed.**
3. Sit the individual forward (if unable to sit, turn head to the side).
4. Call for assistance immediately.
5. Do not give water or fluids until symptoms subside.
6. Trained personnel may need to use suctioning techniques.
7. Follow your workplace policy – the individual may need to be evaluated by medical professional.

High Risk Foods – Foods that May Cause Choking:

The foods listed below are difficult for some people to chew and swallow. These foods could cause a person to choke, cough or inhale food and/or liquid into the lungs (aspirate). If serving these items, watch the person closely when they are eating. Remember to follow consistency modification guidelines. (This list includes, but is not limited to, common high risk foods that may cause choking or aspiration):

- Apple chunks and slices
- Bacon
- Bread
- Cheese (cubed, string or melted)
- Chewing gum
- Coconut
- Corn
- Crackers (especially Wheat Thins™, Triscuits™, Saltines™)
- Croutons
- Donuts
- Dried fruits

- Dried peas or beans
- Dry cereal
- Dry meat
- Dry muffins or pound cake
- Fresh oranges and grapefruit sections
- Granola
- Grapes
- Gummy candies
- Hard candies
- Hotdogs
- Jello Jigglers™
- Lima beans
- Marshmallows (including all marshmallow candy such as Peeps™)
- M&Ms™
- Meatballs
- Peanut butter
- Peanuts and other nuts and seeds
- Peas
- Plain rice
- Popcorn
- Raisins
- Raw vegetables
- Refried beans
- Reese's Pieces™
- Sausages
- Snack chips
- Whole hard-boiled eggs

Aspiration

Aspiration is defined as the inhalation of food, fluid, saliva, medication or other foreign material into the trachea and lungs. Any material can be aspirated on the way to the stomach or as stomach contents are refluxed back into the throat. The following information will help identify risk factors and interventions that may be unique to persons with developmental disabilities.

FACTORS THAT PLACE INDIVIDUALS AT RISK FOR ASPIRATION:

- Being fed by others
- Inadequately trained caregivers assisting with eating/drinking
- Weak or absent coughing/gagging reflexes, commonly seen in persons who have cerebral palsy or muscular dystrophy
- Poor chewing or swallowing skills
- Gastro-esophageal reflux disease (GERD, GER) which can cause aspiration of stomach contents
- Food stuffing, rapid eating/drinking and pooling of food in the mouth
- Inappropriate fluid consistency and/or food textures
- Medication side effects that cause drowsiness and/or relax muscles causing delayed swallowing and suppression of gag and cough reflexes
- Impaired mobility that may leave individuals unable to sit upright while eating
- Epileptic seizures that may occur during oral intake or failure to position a person on their side after a seizure, allowing oral secretions to enter the airway

REVIEW THE HEALTH HISTORY FOR ASPIRATION RISKS

- A diagnosis of risk for aspiration or past episodes of aspiration
- A diagnosis, such as cerebral palsy, muscular dystrophy, epilepsy, GERD, dysphagia or hiatal hernia
- History of aspiration pneumonia
- Needing to be fed by others
- History of choking, coughing, gagging while eating
- Needs modified food texture and fluid consistency
- Eating/swallowing evaluations and laboratory tests (barium swallow, pH study, etc.) that indicates dysphagia
- Takes medications that may decrease voluntary muscle coordination or cause drowsiness
- Has unsafe eating and drinking practices, such as eating/drinking rapidly and food stuffing
- Has chronic chest congestion, frequent pneumonia, moist respirations, persistent cough or chronically uses cough/asthma medications

MEALTIME BEHAVIORS THAT MAY INDICATE ASPIRATION

- Eating slowly
- Fear or reluctance to eat
- Coughing or choking during meals
- Refusing foods and/or fluids
- Food and fluid falling out of the person's mouth
- Eating in odd or unusual positions, such as throwing head back when swallowing or swallowing large amounts of food rapidly
- Refusing to eat except from a "favorite caregiver."

SIGNS AND SYMPTOMS THAT MAY INDICATE ASPIRATION RISK

- Gagging/choking during meals
- Persistent coughing during or after meals
- Irregular breathing, turning blue, moist respirations, wheezing or rapid respirations
- Food or fluid falling out of the person's mouth or drooling
- Intermittent fevers
- Chronic dehydration
- Unexplained weight loss
- Vomiting, regurgitation, rumination and/or odor of vomit or formula after meals

ASPIRATION INTERVENTIONS

- Call 911 if the person stops breathing and start CPR
- Stop feeding/eating immediately (may restart meal if feeding/dining instructions, supervisor or health care professional gives permission)
- Keep person in an upright position and encourage coughing
- If in doubt on what to do, call the health care professional or 911

GUIDELINES ON HOW TO PREVENT OR MINIMIZE THE RISK OF ASPIRATION

- Obtain a consultation by a swallowing specialist if symptoms occur
- Change diet consistency, texture or temperature (need a physician's order)
- Slow the pace of eating and decrease the size of the bites
- Position to enhance swallowing during meal times
- Keep in an upright position after meals for 45 minutes or as ordered
- Elevate the head of the bed 30 to 45 degrees
- Avoid food/fluids 2-3 hours before bedtime
- Consider the use of medications to promote stomach emptying, reduce reflux and acidity
- Write an aspiration protocol and written instructions on how the person is to eat or be fed and provide caregiver training. Cover the following:
    - The assistance level needed
    - Correct positioning for all oral intake and tooth brushing
    - Eating/feeding equipment needed
    - Physical and verbal cueing needed
    - Location of meals – some individuals may need to eat alone as they come distracted when eating with their peers
    - Recognition of aspiration symptoms, what to do about it if noted and who to notify.

ASPIRATION RISKS AND FEEDING TUBES

Many individuals with developmental disabilities have permanent gastrostomy feeding tubes or jejunostomy tubes. Having a feeding tube does not eliminate the risk of aspiration. Stomach contents can still enter the airway via regurgitation or oral secretions can be aspirated if the person has dysphagia. Occasionally anti-reflux surgery will be performed to tighten the lower esophageal sphincter. Having this surgery will not conclusively eliminate the risk of aspiration, but should lessen the risk. Some standard aspiration precautions are:

- Administering tube feedings in an upright sitting position and keep upright for at least 45 minutes after
- If the person must be fed in bed, keep the head of the bed at a 45° angle while feeding and for 45 minutes to an hour after
- Don't overfill the stomach
- Formula given at room temperature is better tolerated
- Don't feed too rapidly; feedings should be administered over at least 30 minutes or as ordered

After receiving a feeding tube, some individuals continue to eat small portions of their favorite foods orally. For these individuals, complete elimination of oral intake would take away a very valued activity – eating. To allow someone to eat after a feeding tube is placed is a difficult decision as even small infrequent amounts of food taken orally could be aspirated. The pros and cons of this decision should be discussed thoroughly by the team with good documentation on why the team reached its decision. If the team feels that the person should have some oral intake, guidelines should be written about what foods, how and when the person can be fed.

Complications as a Result of Dysphagia

- Malnutrition
- Dehydration
- Weight Loss
- Choking
- Depression
- Aspiration
- Pneumonia

Guide to Levels of Risk of Negative Health Consequences from Dysphagia

National Patient Safety Agency

This guide identifies the factors that increase the risk of negative health consequences arising from a person's dysphagia. The negative health consequences are **asphyxiation and/or choking episode, aspiration incidents, dehydration and poor nutrition status.**

These factors are not related to the severity of the dysphagia itself, but to other intrinsic and extrinsic factors which may exacerbate dysphagia risks. These factors affect the predictability of the person's presentation and interact with the dysphagia. High risk and low risk are easier to manage the fluctuating risk i.e. the person's risk varies for any intrinsic or extrinsic factor from meal to meal or day to day. Each factor can increase the risk of all the negative health consequences outlined above.

Intrinsic Factors	Indicators Associated with Low Risk	Indicators Associated with Increasing Risk	Indicators Associated with High Risk
Level of learning inability/cognitive function	• Able to understand risks associated with their dysphagia. • Able to understand and implement their management strategies.	• Reliant on others to implement dysphagia management strategies. • Cognitively dependent on others to eat and drink.	• Unable to understand risks associated with their dysphagia. • Unable to recognize health and safety aspects of eating and drinking (e.g. volume, temperature, rate of intake and presence of inedibles).

Intrinsic Factors	Indicators Associated with Low Risk	Indicators Associated with Increasing Risk	Indicators Associated with High Risk
Alertness and cooperation	• Maintains alertness during eating and drinking. • Alert throughout the day. • Shows anticipation of food and drink presented. • Opens and closes mouth appropriately. • Does not experience things which may affect level of alertness or cooperation.	• Has reduced ability to focus. • Less alert at different times of the day (e.g. early morning and after bathing). • Has reduced response to helper or food and drink. • Does not consistenly open and close mouth in response to food and drink. • Experiencing things that affect levels of alertness or cooperation (e.g. medication and ill health).	• Is sleepy or drowsy and less alert. • Is unable to maintain sustained periods of alertness. • Has no anticipatory response to helper or food and drink. • Does not anticipate arrival of bolus. • Is experiencnig many things which affect levels of alertness or cooperation (e.g. medication cocktail and serious ill health).
Distractibility	• Focuses on helper and/or food and drink.	• Is occasionally distracted during mealtimes.	• Is highly distracted by environmental sounds or activity.
Fatigue	• Does not get fatigued during meals and drinks. • Has a regular sleep pattern and is refreshed after sleeping. • Sleeps unaided by medication and/or is not on medications that affects sleep. • Safe posture is not compromised as they become fatigued.	• May become fatigued during meals and drinks (e.g. because they tire after physical activity, have sleep apnea or requires postural adjustments during the night which disturbs sleep). • Sleeps during the day. • Requires medication to attain regular sleep pattern. • Safe posture is compromised as they fatigue.	• Visibly and/or rapidly fatigues during course of meal or dink showing signs of incoordiation which affects eating and drinking. • Falls asleep during oral intake. • Takes medications which increase fatigability and reduces energy levels. • Safe posture cannot be maintained when they fatigue.
Rapid decline in function (decompensation) due to ill health	• Has good general health. • Appears physically unaffected by everyday infections. • Appears cognitively unaffected by everyday infections.	• Has a suppressed immune system. • Has underlying medical problems that may interact with new infections. • Decompensates when experiencing any kind of infection (e.g. UTI). • Has reduced ability to make decisions because of decompensation (e.g. volume or rate intake).	• Has seriously compromised immune system. • Decompensates rapidly when experiencing any kind of infection (e.g. UTI). • Has extremely reduced or no ability to make decisions (e.g. volume, temperature, rate of intake or presence of inedibles).
Seizure activity	• Does not have seizures. • Seizures are well controlled by medication or very infrequent and easy to recognize.	• Seizure activity is less controlled or predictable. • Experiences some changes in skills pre- or post-seizure. • Seizure activity is affected by other things (e.g. increased temperature or fatigue).	• Seizure activity leads to increased arousal pre- or post-seizure. • Seizure activity leads to loss of alertness and incoordination. • Seizure activity is difficult to recognize or is atypical.

Intrinsic Factors	Indicators Associated with Low Risk	Indicators Associated with Increasing Risk	Indicators Associated with High Risk
Oral health problems	• Has no oral health problems. • Has minor oral health problems which do not impact on eating and drinking. • Has minor oral health problems which are managed well.	• Has occasional and/or low level oral health problems which impact eating and drinking (e.g. occasional mouth ulcers or mild case of oral thrush). • Has mild or occasional tooth decay, gum disease or toothache which may impact eating and drinking.	• Has severe oral health problems which impact eating and drinking (e.g. many mouth ulcers or severe case of oral thrush). • Has serious and/or frequent tooth decay, gum disease or toothache which impacts eating and drinking.
Underlying respiratory problem	• Has no underlying respiratory problems. • Respiratory function is effectively monitored and managed and does not affect eating, drinking or swallowing. • Underlying respiratory problems are well controlled by medication. • Respiratory function is being improved via, for example, exercises and postural management. • Has active and effective cough reflex.	• Prone to infections that affect respiratory function. • Finds it difficult to adapt eating and drinking style to compensate for respiratory problems. • Finds it difficult to implement medication regime (e.g. inhaler). • Is unable to participate in activities to improve respiratory function. • Has delayed cough reflex and/or less effective cough.	• Has severely impaired respiratory function (e.g. COPD, rapid respiratory rate, reduced functional reserve or reflux with ascending aspiration). • Unable to adapt eating and drinking style to compensate for respiratory problems (e.g. inspires post swallow due to rapid respiratory rate, swallows during inhalation or incoordination between respiration and deglutition). • Respiratory problems are not improved by medication. • Has respiratory problems which will not or are unlikely to respond to intervention. • Has severely delayed, weak or absent cough reflex.
Postural control	• Has no postural difficulties. • Can be assisted to achieve and maintain a stable position during and after oral intake. • Can achieve and maintain a stable position during and after oral intake.	• Postural stability deteriorates during and after eating and drinking (e.g. head tilting forward or backwards or changes to hand to mouth coordination as a result of loss of postural stability). • Needs to reposition self and this is judged to be safe or is repositioned and this is judged to be safe. • Requies equipment to achieve and maintain postural stability.	• Unable to achieve and maintain a stable posture aided or unaided during and after eating and drinking. • Requires frequent repositioning, aided or unaided, and this affects functioning (e.g. disrupts concentration, increases fatigue or makes respiratory demands).
Behavioral difficulties	• Has no behavioral problems. • Is able to eat and drink safely with appropriate support.	• Behavior affects efficiency and safety of their eating and drinking (e.g. increasing level of agitation or wanting to move when eating and drinking). • Management strategies impact on the safety of eating and drinking.	• Behavior is incompatible with safe eating and drinking. • Management strategies are incompatible with safe eating and drinking.

Intrinsic Factors	Indicators Associated with Low Risk	Indicators Associated with Increasing Risk	Indicators Associated with High Risk
Unmanaged pain	• Does not have any unmanaged pain. • Unmanaged pain does not impact eating and drinking. • Is able to communicate about any pain and can be managed (e.g. using medication).	• Is likely to or does experience unmanaged pain which may distract them during eating and drinking. • Has limited ability to communicate about pain experience.	• Is likely to or does experience unmanaged pain which distracts them during eating and drinking. • Cannot communicate pain experienced.
Mental health problems	• Has no mental health problems that impact upon safe eating, drinking and swallowing. • Mental health problems are well controlled by medication and/or therapy.	• Has mental health problems that are less controlled or predictable which may impact safe eating, drinking and swallowing. • Has mental health problems that are exacerbated by other things (e.g. changes to daily routine increasing anxiety, exposure to stressful situations or noise).	• Has severe and enduring mental health problems which impact safe eating, drinking and swallowing. • Has fluctuating mental health problems which impact safe eating, drinking and swallowing (e.g. response to offered support, behavior around eating and drinking and capacity to make decisions are all likely to be more variable).
Medications	• Is not on medication. • Is on medications that have no or minimal impact upon their physical, sensory or cognitive functions. • Is on medications with no or minimal side effects that impact on their physical, sensory or cognitive functions. • Dysphagia medication sensitivities are considered when selecting the form and administering medications.	• Is on medications that may impact on physical, sensory and cognitive functioning (e.g. some anticonvulsants and neuroleptics can cause dyskinesia and some antipsychotics can cause loss of concentration). • Is on medication with side effects which may effect physical, sensory and cognitive functioning (e.g. some antipsychotics, antispasmodics and diuretics can cause xerostomia (dry mouth)). • Is taking a number of medications, some of which may be the same type (e.g. polypharmacy).	• Is on medication which the primary action and/or side effects cause dysphagia (e.g. dantrolene sodium (muscle relaxant effect)). • Is on medication which the primary action and/or side effects can suppress the cough or gag (e.g. haloperidol). • Has a history of sensitivity to medications. • Is prescribed medication in an unsafe form (e.g. gelatine capsule).
Physical environment	• Needs no environmental adaptations for safe eating and drinking. • Environment is appropriate and adapted to their management needs.	• Environment is temporary (e.g. respite or hospital) and not adapted to their specific management needs.	• Environment is not temporary and is inapprpriately or insufficiently adapted to their specific management needs.
Social environment	• Needs no environmental adaptations for safe eating and drinking. • Safe eating and drinking is not adversely affected by others in the environment. • Support needs do not conflict with others in the environment.	• Safe eating and drinking may be adversely affected by others in the environment. • Support needs and those of others in the environment compete for caregiver time.	• Safety during eating and drinking is seriously compromised by others in the environment. • Has incompatible support needs with others in the environment during meals and drinks.

Intrinsic Factors	Indicators Associated with Low Risk	Indicators Associated with Increasing Risk	Indicators Associated with High Risk
Access to eating and drinking equipment	• Needs no specialized equipment. • Has a ready supply of appropriate working equipment for safe eating and drinking. • Can access and recognize his/her own equipment needs. • Can adapt eating and drinking to non-personal adapted equipment (e.g. different sized spoon).	• Access to equipment is dependent upon carers. • Equipment function is dependent upon caregiver's checking before use (e.g. correct lid on cup for the person). • Has limited ability to adapt beyond own specialized equipment.	• Can only be safely eating and drinking with specified specialized equipment (e.g. slow-flow equipment where valve needs to be in place). • Access to functional specialized equipment is likely to be compromised. • Has no ability to adapt beyond own specialized equipment.
Staffing level	• Does not require staff support to eat and drink safely. • Adequate staff are available to support them to eat and drink safely at all times. • Has a staff team of less than seven members which is stable and consistent. • Additional staff responsibilities do not interfere with safe management.	• Is partially physically dependent on staff to eat and drink safely. • Staffing level is insufficient to meet support needs of all people in a specific setting. • Has a staff team of more than seven members that is stable or a small but unstable team of less than seven. • Staff vacancies leading to cover from a variety of carers. • Additional staff responsibilities may interfere with safe management.	• Is totally physically dependent on staff to eat and drink safely. • Staffing levels are not sufficient to provide adequate support and monitoring during mealtimes. • Has large and unstable staff team of more than seven members. • Use of unmonitored, untrained, unfamiliar agency staff. • Additional staff responsibilities interfere with safe management.
Staff adherence to plan	• Staff understand and believe dysphagia management guideliens are appropriate for the person. • Staff are fully trained in dysphagia management by experienced staff. • Staff have read and understand management guideliens and have a thorough knowledge and understanding of implementing the guidelines. • Staff follow dysphagia management guidelines. • Staff have a thorough knowledge of the risks associated with dysphagia and non-adherence to management. • Staff inform relevant people when the person experiences changes which may impact on the safety of their eating and drinking.	• Staff partially believe in and understand dysphagia management and associated guidelines. • Staff are trained by more experienced staff only and do not read management guidelines. • Staff do not update their knowledge about dysphagia management. • Staff forget important aspects of management whilst maintaining other interventions. • Staff do not update their knowledge about dysphagia risks. • Staff spend little time empathizing with the people with dysphagia that they support. • Staff intermittently inform relevant people about changes which may impact safe eating and drinking.	• Staff do not acknowledge or believe the person has dysphagia and do not agree with guidelines. • Staff are untrained and have no knoweldge of dysphagia management. • Staff fail to implement guidelines or implement them inconsistently. • Staff are unaware of health risks associated with non-adherence. • Staff have a negative attitude and do not empathize with people with dysphagia. • Staff fail to inform relevant people about changes which may impact upon safe eating and drinking.

Intrinsic Factors	Indicators Associated with Low Risk	Indicators Associated with Increasing Risk	Indicators Associated with High Risk
Family adherence to plan	• Family believe in, understand, follow and agree with dysphagia management guideliens for the person. • Family informs relevant people when the person experiences changes which may impact the safety of their eating and drinking. • Time pressures and organizational issues in the family do not impact safe eating and drinking (e.g. management is prioritized). • Person is supported at mealtimes by only a small number of experienced family carers.	• Family past experiences, attitudes and beliefs make it difficult for them to accept and implement changes necessary for safe eating and drinking. • Family intermittently informs relevant people about changes which may impact safe eating and drinking. • Time pressure and organizational issues in the family lead to reduced and variable safe support. • Person is supported by many different family carers at mealtimes.	• Family member(s) refuse to engage with dysphagia management. • Family does not inform relevant people when the person experiences changes which may impact safe eating and drinking. • Time pressure and organizational issues in the family lead to unsafe practices. • Person is supported by many inexperienced family carers at mealtimes.
Additional risks			
Compromised quality of life and loss of personal dignity	These risks increase when too little attention is paid to: • Communication about food and drink. • Hygiene and personal care needs around eating and drinking. • Protection of clothing and suitable clothing protection. • Cultural needs and age in relation to eating and drinking. • Food and drink preferences, and choices around eating and drinking. • Personality and history in relation to food and drink. • The way the person is assisted. • Eating and drinking in an appropriate place. • Experiences and feelings about dysphagia		
	Situations associated with low risk	**Situations associated with increasing risk**	**Situations associated with high risk**
	Carers take into account the above factors associated with quality of life and dignity when supporting the person during meals and drinks.	Carers find is difficult to consider these factors when supporting the person during meals and drinks (e.g. due to competing time demands and insufficient personal information available).	Carers do not consider the above factors when supporting the person during meals and drinks.
Injury and discomfort	Risk of injury may increase due to: • Actions of the person's carer (e.g. wiped excess saliva rather than dabbing – causing sore chin). • Utensils they have to use (large metal spoon). • Food and drink (hot food, hard food, food with sharp edges, bones). Risk of discomfort may increase due to: • The position the person is in. • Food, drink or drool around the mouth, chin or neck. • The speed at which food or drink is given. • Oral health problems. • Debris in the mouth. • Food or drink temperature. • Engaging in physical activity too soon after eating or drinking.		

	Situations associated with low risk	Situations associated with increasing risk	Situations associated with high risk
	Carers take into account the above factors when supporting the person during meals and drinks.	Carers find is difficult to consider these factors when supporting the person during meals and drinks.	Carers do not consider the above factors when supporting the person during meals and drinks.

Proforma for indicating degree of negative health risks for individual clients

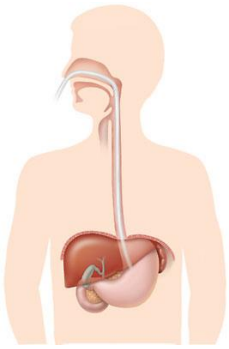
Negative health consequence:							
Intrinsic factors	**Low risk (0)**	**Increas-ing risk (1)**	**High risk (2)**	**Extrinsic factors**	**Low risk (0)**	**Increas-ing risk (1)**	**High risk (2)**
Level of learning disability/cognitive function				Physical environment			
Alertness/cooperation				Social environment			
Distractibility				Access to specialized equipment			
Fatigue				Staffing level			
Rapid delcine in function due to ill health (decompensation)				Staff adherence			
Seizure activity				Family adherence			
Oral health problems				**Additional risks**			
Underlying respiratory problem				Quality of life/loss of dignity			
Posture control				Injury/discomfort			
Behavioral difficulties							
Unmanaged pain							
Intrinsic factors	**Low risk (0)**	**Increas-ing risk (1)**	**High risk (2)**	**Extrinsic factors**	**Low risk (0)**	**Increas-ing risk (1)**	**High risk (2)**
Mental health problems							
Medication							
Totals							

High risk levels should always be monitored by a specialist dysphagia practitioner.

Notes: these documents are for reference and clinical use. The guide has not been piloted in clinical practice, and the reliability and validity of the guide has not been checked. Scoring of risk factors using the guide is optional. Scoring needs trialing in practice to identify scores which equate to high, medium and low overall heatlh consequence risk. Scoring risk can allow practitioners to prioritize and sequence dysphagia management. Room is provided for additional factors to be incorporated onto the proforma and further intrinsic and extrinsic factor may be developed in the future. Feedback on this document can be provided thorough the ALD-Dysphagia UK Group (alddysphagiaauk@gmail.com)

Alternative Means of Feeding

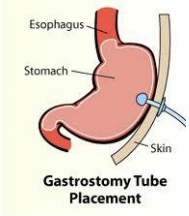
If a person's swallow is so severely impaired it may be necessary to use an alternate form of feeding. There are 3 main types:



1. **Nasogastric Tube**

   This tube is passed through the nose and throat down the esophagus and into the stomach for the person to receive liquid nutrition. This is a temporary method; if long term use is needed a gastrostomy tube may be placed.

2. **Gastrostomy Tube**



Gastrostomy Tube Placement

   This is a more permanent method. A surgical procedure is used to place the tube directly through the abdominal wall into the stomach.

3. **IVs and Hyperalimentation**
   Nutrients are infused directly into the blood by placing a needle into a vein in the arm or main vein in the neck.

Oral Hygiene for People with Swallowing Difficulty/Dysphagia

For people diagnosed with a swallowing disorder, oral hygiene will need special attention. A specific plan must be developed with the dentist or primary care physician that includes steps to complete oral hygiene as well as safeguards because of the individual's specific swallowing difficulty.

Even if a person takes nothing by mouth (receives all nutrition/liquids from a feeding tube), or has no teeth (edentulous), oral hygiene is still an important part of ensuring good health.

Some general guidelines include:

- *Use the least amount of water as possible.*
  - Whatever you are using to clean the mouth (washcloth, toothette sponge, or toothbrush) squeeze until it is almost dry.

- *Watch how you position the person for care.*
  - Leaning someone back could allow even a small amount of fluid to get into the lungs.
  - Improper position may cause gagging and choking.
  - Care should be given at face level (you are face to face with the person).

- *Having oral hygiene completed by a caregiver may be difficult for the person receiving care.*
  - Please be patient with the person.

- *Develop an oral hygiene plan with the dentist or primary care physician.*
  - Make sure that the plan includes what products to use, positioning, and frequency of care.
  - This plan should be discussed with the dentist/primary care physician if it is not working and changes made; it should be updated annually.

Dysphagia Resources

For more information on dysphagia and resources:

- Visit the American Speech-Language Hearing Association website at www.asha.org.
- Contact the central PA HCQU for a copy of the dysphagia booklet.
- Download the *Dysphagia Resource Directory* from the Philadelphia Coordinated Health Care (PCHC) website: www.pchc.org.
- Contact a Speech-Language Pathologist for technical assistance.

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Notes


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