



Brantwood
COMMUNITY SERVICES

A Guide To Eating & Drinking **Safely**

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Table of Contents

Acknowledgement and Thanks	Page 4
Introduction.....	Page 5
Swallowing ABC's	Page 15
G.E.R.D. (Reflux).....	Page 25
The Art of the Eating Experience.....	Page 35
Safe Feeding Techniques	Page 43
Consistency Scale.....	Page 59
Texture Scale.....	Page 60
Addendums and Practical Information	Page 61
References.....	Page 76

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Introduction

Why do you Need this Book? Page 8

Impact of Aging on Eating
and Drinking..... Page 10

Where Do I Go For Help? Page 12-13

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Introduction

Eating meals is one of life's greatest pleasures. When we eat we engage our senses of taste, smell, sight, hearing and touch. We enjoy flavours, textures, smells, colours and the presentation of the meal. We share meals with our families, friends and community. It's the way we celebrate achievements, big and small, ours or others. Eating a good meal gives us an energy boost and feelings of satisfaction. We don't even think of the ways our lives would change if we were not able to eat and swallow.

For many people, eating and swallowing are difficult tasks. For them, the problems they encounter can affect their health and their ability to engage socially. Eating can become a stressful and exhausting task and their independence can become compromised. This booklet will explain the nature of a swallowing disorder and a feeding disorder, possible causes and how to help. We hope that this booklet will be a useful tool for you whether you are a health professional, a caregiver, or a person experiencing difficulties.

Disclaimer

This booklet is anecdotal and intended to share the collective experience of Brantwood and Bethesda Community Services pertaining to safely managing eating and drinking in those with identified difficulties and in no way replaces the professional advice of your family physician or other professional support. Please seek medical advice if you or the person you support displays symptoms related to a swallowing difficulty.



Why Do You Need This Book?

With our current population aging, and the emphasis on receiving health care in your home, the needs of the general population living in the community are more complex. One of the areas of concern that will become more prevalent in this situation is swallowing and this tends to be an area that most of us don't have a lot of experience.

Often a swallowing problem goes undiagnosed and can lead to many severe, life-threatening complications. The major risks associated with swallowing problems are poor nutrition, dehydration, weight loss, choking and aspiration pneumonia. These risks can be lowered dramatically when you are aware of the individual's eating and drinking abilities, if you avoid offering foods that can cause harm and learn how to handle a problem once you know about it.

Feeding, swallowing and nutritional problems have a high prevalence among people with developmental disabilities. Individuals with Cerebral Palsy, specifically those with spastic quadriplegia are at highest risk. Cerebral Palsy affects the muscles involved in swallowing

as well as the muscles in the arms, legs and neck. While the research evidence is limited, there is clearly evidence that successful management decreases the risk overall.¹

Finding out the right foods and texture a person should be eating can greatly improve his/her quality of life can be an effective way to enhance their enjoyment of food and improving safety, which can assist with health issues related to swallowing.

Problems resulting from eating and drinking difficulties are not always obvious. Gradual changes may go undetected or be accepted as part of the individual's normal condition.

Often older individuals may mask difficulties they are having with eating, which could be addressed before further complications arise.

Dysphagia (difficulty in swallowing) should always be considered when changes to eating patterns or unexplained eating or breathing difficulties occur.

This booklet will give you a general overview of swallowing difficulties, tell you how to spot a problem, give you information on how to get the help you need as well as some tried and true tips and techniques to help you along the way.

The Impact of Aging on Eating & Drinking

There are a number of physical and cognitive changes that are part of the aging process. Those that may affect eating and drinking include the following:

- Decreased muscle strength
- Slower reaction time
- Bones become more brittle
- Changes in senses - decreased ability to taste, smell and see food; hearing
- Physical and dental health issues can directly impact chewing or swallowing
- Medications can impact hydration, taste, appetite, neurological function or cognitive levels

Proportionately, those with a developmental disability have a higher incidence rate of the following additional issues related to safe eating and drinking:

- Aspiration Pneumonia
- Digestive problems such as “GERD”
- Bowel function problems such as diarrhea or constipation
- Inadequate communication skills to relay choices
- Accelerated aging process in those with developmental disabilities, particularly prevalent with Down Syndrome
- Lack of understanding about nutritional needs
- Dehydration and malnourishment

Where Do I Go for Help?

To access the services needed to help determine if there is a problem and to help identify safe feeding practices you should first see your family physician. A physician can offer a professional opinion on the situation and refer you to the services you need most.

Typically the services are accessed through your local Community Care Access Centre (CCAC) which requires that the referral come from a physician.

People who have developmental disabilities may require more specialized services. These can be accessed through the local Developmental Services Ontario (DSO), toll free at **1-877-376-4674**.



Who Can Help? What Can They Do?

There are a number of resources you may want to access based on your needs.

1. Your Physician can help you select a treatment plan that's right for you and can refer you to the appropriate health professionals
2. A Speech-Language Pathologist can assist in determining safe texture for your foods and fluids by using testing such as videofluoroscopy and can provide you with a personalized plan for therapy
3. An Occupational Therapist can help find or develop assistive devices such as special utensils and cups that will support your mealtime needs once a safe consistency has been determined
4. A Dietician can help you optimize your nutritional intake and create meal plans with your particular needs in mind

Notes

Swallowing ABC's

How Swallowing Works	Page 16
Why Do Things Go Wrong	Page 18
Medications That Affect Eating and Drinking.....	Page 20
Signs of a Swallowing Disorder	Page 22
Treatment.....	Page 24

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How Swallowing Works

Although it is often taken for granted, swallowing is, in fact, a complicated process. It uses many muscles and nerves. Some of the swallowing process is under our control, and other parts are under control of the brain (i.e., is a reflex).

First, we must know and do several things. For example, when eating and drinking, we:

- Smell and recognize smells
- Know that it's time to eat and get ready for it
- Pay attention to what we are doing
- Open and close our mouth
- Feed ourselves using a spoon, fork and knife
- Start moving specific parts of our body and to keep moving until done
- Chew
- Use our tongue to gather and clear food from our teeth and other parts of the mouth

- Recognize and correct mistakes, like not chewing food finely enough for us to easily swallow, or putting too much food in our mouth
- Push food back in our mouths using our tongue

There are things that our body does that we don't control. For example:

- The movement of the muscles of our mouth and throat are properly timed so that food and drink are safely passed from the mouth to the throat and is swallowed into the stomach
- Our breathing stops for a very brief moment so food does not go down the wrong way

When all things work correctly, this happens within a second or two.

Why Do Things Go Wrong?

There are many causes of swallowing and/or feeding disorders:

- **Structural:** Weakness of hands and arms, physiological problems with the mouth and throat
- **Dental:** Missing or sensitive teeth, over or underbite, cavities, infections and gum disease causing pain and making it difficult for the individual to eat
- **Functional:** Problems chewing, poor positioning, anxiety, lethargy
- **Medical:** Several syndromes, diseases and disorders such as Cerebral Palsy, Alzheimer's, Cancer and Stroke cause a host of difficulties related to eating and drinking. People who suffer with reflux (when the contents of the stomach flow back up the esophagus causing a burning sensation) can also become reluctant to eat
- **Medications:** and their side effects can also create conditions that affect swallowing and eating



While there are far too many to mention individually, it is wise to be mindful of the impact medications can have on an individual with respect to their nutritional status and swallowing abilities.

The impact of types of medications are outlined as follows.

Medications that Affect Eating & Drinking

- **Psychotropics:** Medications designed to assist with mood and behavioural challenges. Side effects may include: weight gain, sugar cravings, dry mouth, high cholesterol, diabetes, fatigue, nausea, vomiting, diarrhea and constipation
- **Anticonvulsants:** Medications for treatment of Epilepsy. Side effects include: malabsorption of certain minerals or vitamins, constipation, diarrhea, nausea, weight loss or weight gain
- Medication that affect the swallowing function. **Any medication that alters a persons level of alertness** such as some anticonvulsants, bezodiazepines and some psychotropics, medications that alter muscle tone and coordination, medications that decrease or that increase salivation can all impact the swallowing function itself such as antihypertensives or antihistamines

Medications that can cause physical damage to the esophagus such as tetracyclines and potassium salts, or ulcer producing medication like NSAIDs (eg. Advil) and aspirin.

Medication Reviews

It is important to regularly review medications and carefully consider the potential side effects and how they may impact the person's life on a long term basis.²

Also consider:

- The person's ability to swallow tablets
- Consider crushing medication where appropriate
- Be aware of what medication can have altered or undesirable effects if crushed, for example unpleasant taste



Signs of a Swallowing Disorder

Signs of a potential problem can include:

- Coughing during or after meals
- Wet or gurgly sounding voice after meals
- Gagging
- Extra effort or time needed to chew or swallow
- Frequent chest congestion
- Food left in the mouth after swallowing
- Refusal to eat
- Weight loss
- Dehydration
- Food or liquid falling out of the mouth while eating
- Excessive drooling
- Aspiration pneumonia
- Forgetting they have food in their mouth
- Eating too quickly
- Dislike of the taste or texture of food

If the person can speak for themselves, they may complain of:

- Chest pain
- A feeling of having food stuck in their throat

If you notice any of these signs, you can talk to the person's doctor and/or get a referral for a Speech Language Pathologist or Occupational Therapist who has expertise in swallowing disorders.

Treatment

There is no particular prescription for dysphagia (difficulty swallowing). The main treatment options for this problem may be:

- Education and swallowing therapy done by a Speech Language Pathologist to give you recommendations and exercises to improve your swallowing as well as providing recommendations for altered consistency diets.
- Changes to your diet can be facilitated by a dietician who may suggest dietary changes to create a more calorie dense diet or assist you in creating a meal plan.
- An Occupational Therapist can help you select appropriate utensils and other equipment and they can also help you determine the best position for success.
- Medication can be used if your dysphagia is caused by, or worsened by GERD (reflux) symptoms.

Sometimes tube-feeding can be an alternative that is required when swallowing difficulties puts a person at high risk of aspiration and malnutrition.

Unfortunately, people who are fed by tube can still be at risk of aspiration.

G.E.R.D. (Reflux)

What is GERD?	Page 26
Symptoms of GERD	Page 27
What Can I Do?	Page 29
GERD Diet Guidelines & Foods to Avoid	Page 30
Resources & Other Helpful Hints	Page 32-33
Medication & GERD	Page 34

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What is GERD?

GERD (Gastro-Esophageal Reflux Disorder) commonly known as “Reflux” is a medical problem caused primarily by a weak or relaxed lower esophageal sphincter. This allows food and/or stomach acid to flow back up the esophagus and cause symptoms like heartburn.³

You may feel:

- Pain in the middle of your chest
- Like you have a lump in your throat
- Like your food won't go all the way down

GERD is estimated to affect from 5% to 7% of the global population. However, the prevalence rate is significantly higher in people with developmental disabilities, possibly as high as 40 to 50%, making GERD a significant issue for this population.

Symptoms

Sometimes the symptoms of GERD can be similar to the symptoms of a swallowing disorder. As GERD (or “reflux” for short) is a medical disorder that can only be treated by a physician, it is important to distinguish between the two. Your consulting professional can assist you in making the distinction between a swallowing disorder and reflux and recommend a further evaluation by your physician where required.

Symptoms can vary from person to person, and may include:

- Heartburn - this is a major complaint by most people with GERD - and/or excessive belching
- Regurgitation of food & liquid causing a burning sensation
- Difficulty swallowing
- Dry cough, hoarseness or sore throat
- Lump in throat
- Bleeding in throat
- Refusal to eat
- Chest pain, sometimes mimicking the symptoms of a heart attack

- Erosion of teeth and gums
- Bronchospasms
- Erosion of teeth and gums
- Bronchospasms Chronic throat clearing
- Pharyngitis
- Ear infections
- Difficulty breathing - this is rare

Additional symptoms that can occur in anyone but which require careful observation for people who have developmental disabilities and who are limited in their communication ability, may include:

- Persistent vomiting
- Behaviour problems such as self-injurious behaviours, aggression, fear; and/or episodes of screaming, depression or restlessness; mood changes that cannot be otherwise explained
- Anemia
- Eating or sleeping pattern changes
- Facial expressions, such as grimacing or frowning, that indicate pain or discomfort
- Constipation as a contributing factor
- Vocalizations such as whimpering or crying that indicate pain or discomfort

What Can I do?

GERD is a medical disorder. Your physician can diagnose and treat the symptoms of GERD.

Typically, diet changes and weight loss have been recommended to reduce reflux. Although obesity, diet and lifestyle factors are often cited as causes of the symptoms of GERD, there is no clear correlation between them. It turns out that GERD symptoms are highly individualized, requiring an equally individualized plan of intervention.

People who suffer from GERD may experience difficulty with foods that are different from other people with the same condition. For some people it might be tomatoes, for others it could be any green leafy vegetable, and yet for others it could be coffee or chocolate. Even foods typically cited as “safe” could be a problem for some, while others cited as “problem foods” may not in fact be a problem for you. It may be helpful to keep a journal of the food your person supported eats, where and when they eat them, their reaction, and the physical responses the food triggers, to try and figure out which ones give the individual more problems. Making changes to his/her posture, rate of eating, time of day meals are consumed, or the elimination of foods, may alleviate symptoms.

GERD Diet Guidelines

There are a few general diet guidelines that may provide you with a place to start journaling and to help you design your own GERD diet.

Avoid:

- Coffee and tea
- Citrus fruits and juices
- Spicy foods
- Vegetables such as raw onions, peppers and radishes
- High fat foods
- Carbonated beverages (soda pop)
- Very hot foods and liquids
- Mint and chocolate
- Alcohol
- Your own trigger foods

Include:

- Non-acid fruit such as bananas, apples, pears, peaches
- Baked and steamed vegetables
- Extra-lean meats and skinless white chicken or turkey
- Low fat cheeses and sour cream
- Low fat cereals, breads, crackers, and snacks such as pretzels
- Non-citrus, non-caffeinated drinks such as herbal teas and skimmed milk
- Low fat salad dressings, herbs and mild sauces
- Foods that may promote healing, especially pineapple and papaya. These have enzymes that can assist in the breaking down proteins that can cause pain.

Other Resources

Additional Citations: www.gerd-diet.com

Presentations of physical illness in people with developmental disabilities: the example of gastro-oesophageal reflux. Tracy, Jane M. & Wallace, Robyn. Medical Journal of Australia, Vol. 175, 16 July 2001, pp. 109-111.

Nonverbal Individuals with Intellectual/Developmental Disabilities Experiencing GERD: From Infants to Older Adults. Medina, Wndie C., DNP RN, APN-CNS, CRRN. Journal of the Developmental Disabilities Nurse Association, Vol. 2., Issue 1, 2009.

Other Helpful Hints

Reflux is a medical disorder. If these measures do not help, or if your symptoms get worse, contact your doctor.

 <p>Eat Slowly</p>	<p>Sit for 20 to 30 minutes after your meal</p> 
<p>Sit upright when eating</p> 	 <p>Wait before exercising after your meal</p>
 <p>Eat 4 - 6 smaller meals</p>	 <p>Do not eat 2 - 3 hours before sleeping</p>
<p>Chew food well</p> 	 <p>Elevate the head of your bed</p>
 <p>Wear loose clothing</p>	<p>Sleep on your side</p> 

Medication

There are a number of medications you can use in the treatment of this disorder or to decrease the discomfort you feel from Reflux. You should seek direction from your family physician to find out the best medication to meet your needs.

Common over-the-counter remedies, such as Antacids are not typically sufficient to provide effective relief from GERD, but can certainly be used if your difficulty is infrequent or minor.

The Art of the Eating Experience

The Importance of Presentation Page 36

Challenging Recipe Samples..... Page 38

For other samples recipes see Page 72.

Creating An Environment Conducive
to Eating..... Page 39

Special Instructions for Caregivers..... Page 41

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The Importance of Presentation

Presentation is crucial to the enjoyment of any meal.

Meals should be pleasing to a variety of senses, part of the joy of eating is seeing, smelling and tasting what is being presented to us. We savour the smells and the tastes of each food we consume. This helps ensure we take in enough calories and nutrition to remain healthy and happy. Think freshly baked cookies... you don't need to taste them to know they are going to be yummy! This is also true of texture altered foods.

Visual appeal is very important! Unfortunately some methods used to modify the texture of food can limit the visual appeal and affect the taste of food. Visual appeal can be improved, although it can take some time and effort.

- Be sure to separate all components of the meal and provide them in a way that allows each item its own space on the plate
- Combine different textures and temperatures

- Make sure the meal is colorful, flavourful and has a pleasing aroma
- Several kinds of molds are available on the market to shape pureed food into something much more appetizing

Some examples include:

- Pureed fruit can be thickened and made into fruit shapes
- Meat can be thickened and shaped as well
- Piping is a technique that can be used with pureed pasta to look like spaghetti
- Make sauce trails with thickened sauce or garnish with pureed veggies
- As much as possible, involve the person in meal preparation and incorporate their preferences for optimum enjoyment

Challenging Sample Recipe

Ground Pizza

- Use “make your own” pizza crust base
- Tear into pieces and blend into coarse crumbs in a blender or food processor
- Finely chop other toppings in blender (keeping them separate)
- Put pizza crumbs on plate
- Cover with pizza sauce
- Layer with toppings
- Top with small amount of grated cheese
- Bake 5-10 minutes
- Eat with a spoon or fork

Creating An Environment Conducive to Eating

Mealtime should be a most enjoyable experience. People should not be hurried and should be able to come to the table fully prepared for the eating experience. They should have had the opportunity to use the washroom, wash their hands, and have all essential equipment for their meal.

Mealtimes should be a protected time period where other tasks and distractions are avoided.

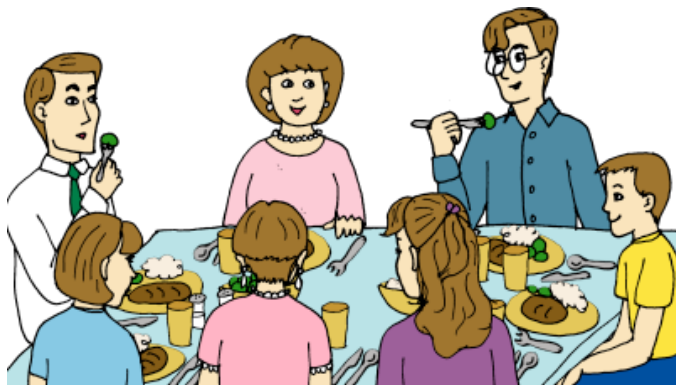
Many people may benefit from cues that a meal is forthcoming. The smell of the food being prepared, the sounds of the kitchen and a visibly prepared table can all help physically and emotionally build an appetite and provide an awareness of mealtime. Remember to engage as many of the senses as possible to create anticipation and heighten enjoyment.

Mealtime, for most, is a social activity. This should be encouraged wherever possible. Meals should be shared with others, caregivers, friends or family members. This

is an important opportunity to model social skills where needed. However, to accomplish this, distractions such as television should be avoided during meals.

Maintaining past roles and patterns whenever possible will build routine and security. For example, sitting in the same spot at the table at each meal.

It is important for both the caregiver and the person to be engaged in the meal. Avoid all distractions and commit to focusing solely on the meal to make it a safe and enjoyable experience.



Special Instructions for Caregivers

You have a very important job in caring for people who rely on your expertise and support to help fulfill all of their needs.

Although it can often be necessary, assistance with eating can lead to a decrease in self-esteem and a sense of vulnerability for the person in need of your support.

Ensure that, wherever possible, independence is promoted even if they can only manage finger foods on their own and always take consideration of the person's likes and dislikes and incorporate favourite foods whenever possible.

Integration of finger foods into the meal plan can help support independence and also give a self-esteem boost and allows the person the ability to set the pace for the meal.

Notes

Safe Feeding Tehniques

The Importance of Safety.....	Page 44
Practices with Significant Safety Consequences	Page 47
Positioning for Safe Eating.....	Page 48
Other Important Precautions.....	Page 49
Simple Adjustments for Feeding Disorders	Page 50
Adjustments for Sensory Impairments.....	Page 51
Communication Adjustments.....	Page 53
Adjustments for Dementia or Cognitive Disorders	Page 54
Consistency.....	Page 55
Consistency Samples	Page 56-59
Texture Scale.....	Page 60

The Importance of Safety

If a swallowing disorder does not receive proper attention it may result in aspiration pneumonia, chronic lung disease, poor nutrition, dehydration and/or weight loss.

Complications & Symptoms

Aspiration Pneumonia

Aspiration Pneumonia is an infection of the lungs caused by penetration of food or liquids into the lungs. It can be signaled by coughing or distress. It can also cause serious illness requiring hospitalization and may even be life-threatening.

Symptoms of Aspiration Pneumonia:

- Shortness of breath
- Wheezing
- Bluish colour to skin
- Fatigue

Malnutrition

People who are chronically malnourished lack the nutrients needed for proper health and development. Some disorders on their own (such as Celiac Disease and Cystic Fibrosis) can keep people from absorbing the nutrients they need. Malnutrition, if severe, can cause illness and possibly death.

Symptoms of Malnutrition:

- Dizziness
- Difficulty concentrating
- Irritability
- Poor immune function
- Fatigue and weakness
- Weight loss
- Dry, scaly skin
- Tooth decay and gum disease
- Poor growth and development

Dehydration

If someone is dehydrated it means their body doesn't have as much water as it should. Although there are many possible causes, not drinking enough, loss of appetite, nausea, vomiting and diarrhea are the main causes. If left untreated, dehydration can cause death.

Symptoms of Dehydration:

- Difficulty eating and talking
- Decreased participation in activities
- Poor wound healing
- Dry skin
- Sunken eyes
- Seizures

Practices with Significant Safety Consequences

The practices mentioned below can pose a severe health risk to the person you are caring for. These **must** be avoided!

- Feeding someone who is not alert
- Syringe feeding
- Feeding in a reclined position
- Feeding too quickly
- Feeding a seated person when you are standing (always sit at eye level)
- Feeding with a tablespoon (use nothing larger than a teaspoon)



Positioning for Safe Eating

Whether someone is able to feed themselves or they require assistance, two key points apply to position for safety:

Stability & Position

Stability allows our upper body to relax and gives more control of the head and neck.

To achieve stability:

- Sit upright with feet flat on the floor (or footrest)
- Back supported

Proper positioning of the head:

- Head should be positioned in midline, with the chin slightly down in a “tucked” position (chin-tuck protects the airway so food is less likely to be aspirated)
- Note: If head control is lacking, a headrest should be used

Under no circumstances should anyone eat with their neck extended!

Other Important Precautions

- Reduce distractions
- Maximum 30 minutes for eating, less if tired
- Sit up for 20-30 minutes after the meal
- Verbal cues to “chew” and “swallow” can be helpful
- Caregivers sit at eye level across from the person if they need assistance
- If someone must be fed in bed, elevate the head of the bed to no less than a 45 degree angle (consider using a wedge behind their neck and shoulders to position their airway properly)
- **NEVER USE A SYRINGE** to feed the person
- Allowing adequate time to swallow and clear the mouth between spoonfuls is extremely important, keeping in mind it may take more than one swallow to do so



Simple Adjustment for Feeding Disorders

People who have cognitive impairments frequently cannot participate in therapy programs that focus on how they chew and swallow. They often need others to make adjustments to keep them as safe as possible when they eat and drink.

While professional help is advisable there may be some things that caregivers and family members can do to try to improve the person's ability to eat before accessing a clinician.

Environment Adjustments

People can put themselves at risk of choking if they eat too quickly, particularly if they combine eating with talking.

Safety can be encouraged by:

- Serving the meal in portions
- Ensuring the rest of the meal is out of reach until the person asks for more
- Using smaller utensils like a dessert spoon or fork

- Encouraging the person to put their utensils down between bites
- Avoiding hard or chewy foods
- Cutting food into smaller pieces (or mince it)
- Close supervision
- Using verbal or physical cues to slow them down

If the person is dependant on others to feed them:

- The caregiver should reduce the rate accordingly
- Ensure that all food is gone from the mouth before giving the person more
- Be alert to signs that the person is full

Adjustments for Sensory Impairments

Vision Impairments

- Use colour contrast on the dining table to ensure the person can see the food (eg. Mashed potatoes on a brightly coloured plate)
- Ensure good lighting in the dining area
- Use adaptive dishes with lips around the rim to help the person scoop food

Hearing Impairments

Reduce noise in the environment as much as possible:

- Turn off the TV, dishwasher, music and any other sources of sound. These noises can compete with verbal instructions and conversation
- Get the person's attention before you begin speaking to avoid starting him/her. This is also so they can watch your face for other cues that might help in understanding what is said
- Ensure good lighting so they can see you speak and can watch your body language
- Speak to them within three to six feet

Dry Mouth

If the person is on medication that causes dry mouth:

- Moisten dry foods with broth, juices, gravies or dunk in liquids
- Avoid dry foods that crumble such as rice, crusty rolls, muffins, hamburger, etc.
- Try over-the-counter rinses or sprays that can moisten the mouth

As with anyone, consider referring the person to a professional for evaluation when symptoms of a swallowing disorder are evident.

Communication Adjustments

Verbal Cues

- Call the person by name to get their attention
- Use short, simple instructions. Repeat if necessary
- Rephrase instruction if needed
- Use other visual cues such as pointing and gesturing
- Be patient and speak calmly
- Give praise generously

Functional Changes

Changes in the ability to hold/grip utensils, tremors and range of arm movement can affect an individuals ability to eat successfully. Conditions associated with aging such as arthritis and stroke can also impact a persons ability to eat independently.

A variety of adaptive utensils are available which can compensate and enable people supported to feed themselves.

Adjustments for Dementia or Cognitive Disorders

If a person has, or appears to have, dementia and no symptoms of a swallowing disorder are evident, confusion may still affect their ability to eat. They may forget to eat, may not recognize the dining room or may think it's time to eat even though they already ate. It's important they get a clear signal that it's time to eat and when eating is over.

The following may improve the situation:

- Use the dining room only for meals, not other activities
- Because he/she may forget to chew, it may be necessary to mince or puree their food
- They may need help placing the utensil in their hand and even to begin the movement to their mouth
- They may not realize they have food in their mouth

To help increase sensory input to the tongue you can try:

- Ensuring the food stays warm
- Adding spices to the food to enhance flavour
- Use colour contrasts to make the food more noticeable
- Talk the person through each step
- Use visual cues to alert the person to the next meal or snack time as well as picture cues for directions

Consistency

Fluids

Thickening fluids may dramatically reduce the risk of aspiration. The purpose of thickening is to slow the time it takes to move the liquid from the mouth to the esophagus, allowing the person better control of the swallow.⁴

For the purposes of this booklet we have defined liquids into the following four levels of consistency:

Thin

Nectar

Honey

Pudding

Solids

Consistency Chart

Thin

Example(s): Water, Apple Juice, Tea, Coffee, Broth, Water

- You must be conscious of foods that turn into liquids in the mouth, these are also considered thin fluids (eg. ice) cream, popsicles, jello



Nectar

Example(s): Tomato Juice, Egg Nog

- Thickened fluids that can be sipped from a cup or through a straw and will pour slowly from a spoon



Honey

Example(s): Tomato Sauce,
Honey

- Thickened fluids that can be sipped from a cup or eaten with a spoon but are too thick to be drawn through a straw



Pudding

Example(s): Thick Applesauce,
Pudding

- Very thick, pudding-like fluids that must be eaten with a spoon and are too thick to be sipped from a cup



Solids

The texture of food can be extremely helpful in supporting a variety of eating concerns such as fatigue, ability to chew, dental issues, as well as dysphagia.

With respect to foodstuffs the following terms are most commonly used:

- **Regular** - you can eat food of any type
- **Mechanical Soft** - these are foods that are easy to chew
- **Cut** - these are foods that are bite-sized, usually 1" or 2.5cm in size
- **Chopped** - these are smaller, usually 1/2" or 1cm in size
- **Minced** - these are foods that are cut down to a consistency similar to rice



- **Puree (coarse)** - like oatmeal



- **Puree (regular)** - like applesauce or mashed potatoes



- **Puree (smooth)** - like pudding



Texture Scale

Smooth Puree



Regular Puree



Course Puree|Fork Chopped



Finely Chopped



Chopped



Bite Size



Addendum

Tricky Foods and Tricks to Help.....	Page 62
Using Thickening Agents.....	Page 64
How to Puree	Page 66
What About Feeding Tubes?	Page 67
Sensory Stimulation.....	Page 70
Recipes Ideas.....	Page 72
Where Can I Get Specialized Products?	Page 73
Samples Diets	Page 74

Ability

Tricky Foods & Tricks to Help

Foods Which Should Be Avoided

- **Ice cream:** starts out as a solid but turns to a thin liquid during the swallowing process
- **Popcorn:** is a food that is very difficult to manipulate in the mouth and the throat
- **Rice and Hamburger:** are also hard to manipulate because of their tendency to break apart while chewing

It is also wise to avoid:

- Any food that requires a lot of chewing (eg. steak)
- Stringy food like bacon or celery
- Coarse/hard food like nuts or seeds
- Tough or dry food
- Food that gets sticky in your mouth (eg. Bread, white in particular)

Helpful Hint

Sometimes breads can be moistened with sauce or butter to form a safe texture. Adding liberal amounts of butter can prevent bread from sticking in the throat and removing crusts can help with swallowing. Adding soft fillings such as egg salad to a well buttered, crustless sandwich can make an appropriate meal for someone with dysphagia.

Beware of Mixed-Textured Foods

Mixed Textured Foods are foods that have liquid mixed with solids as found in soups etc. These can be very difficult to separate in the mouth in preparation of swallowing and put people at an increased risk of aspiration. Often these types of foods can be pureed to even out the texture while still maintaining good flavour.

Using Thickening Agents

There are many thickening agents on the market that you can use to get the perfect consistency you desire. There are also some items available at home for you to use, including baby cereal flakes, pudding powder, gelatine, mashed potatoes and potato flakes.

Here is a sample chart for use of one commonly used thickener, Thick and Easy®

Amount	Thin	Nectar	Honey	Pudding
100 mls	none	1tbsp (4.5g)	1 1/2 tbsp (7g)	2 tbsp (9g)

Slowly add the necessary amount of thickener and mix thoroughly. Allow to stand 1 minute to fully thicken. Add more as necessary.

Using thickeners can be a complicated task. Not all thickeners perform the same way. Some thickeners have a gum base, other thickeners have a starch base; each interact differently with fluids.

Starch based thickened fluids can become thicker when prepared several minutes to a half-hour before serving whereas **gum-based** thickened fluids may break down over time, forming a mixed consistency of thickened fluids and thin. Additionally, thickeners may interact differently with different types of fluids. For example, orange juice with pulp may become thicker than apple juice.

These factors can affect the consistency of the fluids fed to someone, which may or may not be appropriate for that person's requirements. Thickened fluids can become unappealing for the individual, which can cause the person to drink less and lead to dehydration and a host of health problems. Careful training and skill on the part of caregivers are therefore required.

How to Puree

If recommended, a diet of pureed food can minimize the aspiration of food into your airway, helping prevent complications such as choking or aspiration pneumonia.⁵

Pureeing food most often requires the addition of a liquid. Water is the least desirable option as it increases the amount of food, offers the least amount of nutritional value, and affects the taste. This may potentially result in the consumption of less food and consequently nourishment.

Some tips to work around this are:

- Puree with gravy, broth, vegetable juice, or milk
- Increase the nutritional value by adding skim milk powder to some recipes to increase protein
- Use pasta and other grains to maintain adequate intake from that food group
- Potato flakes can also be used in a variety of ways

Ideally you should have a sturdy blender. Keep in mind that you want everything to taste good so don't just throw it all in together. Separate the different parts of the meal so the eating experience is as pleasurable as possible.

What About Feeding Tubes?

Feeding Tube ABC's

Tube feeding can prove necessary in rare cases where the swallowing problem causes significant risk to the health and safety of the individual.

A “G-Tube” is typically inserted into a small incision in the abdomen into the stomach and is used for long-term nutritional support.

There are very few complications with a G-Tube. However, one complication can be irritation of the surrounding skin is caused by leakage of stomach acid or feed to the skin around the incision site. It is recommended to keep the area clean and apply barrier cream to protect the skin surrounding the incision⁶, or treatment as prescribed by your physician.

Rate

The rate is the speed at which the tube feed is delivered to the stomach. In some cases people will be fed through the night, some will use what is called “bolus feeding”

which is essentially portioning meals out throughout the day to a standard meal schedule.

This can be done manually or with a pump. The rate is typically based on tolerance. Part of the planning for a person with a feeding tube will be obtaining an assessment by a dietician. A dietician should determine the correct product and the rate at which the feed is administered. They will take into consideration your nutritional needs and your tolerance for the process in designing a meal plan best suited to you.

You may wish to provide a larger amount of feed at intervals throughout the day to simulate meals.

This allows for full integration of the person into meal time activities and enhances their enjoyment of meals by being able to participate in the social aspect of the eating experience.

Mealtimes are a source of connection with family and friends where we enjoy a shared activity. Always ensure people using a feeding tube for their nutritional support remain an active part of this wonderful aspect of daily living. The sights, sounds and smells of mealtimes are a pleasant experience that can be enjoyed by everyone.

Problem Busting

A blocked tube can be very frustrating. It often occurs when residue from feed or medications is left in the tube. Prevention is key. Always use a sufficient flush to clear the tube before and after each use. The feeding tube should be flushed with a minimum amount of 30 cc of water before and after each feed and administration of medications.

Cola products in small amounts can be used to dissolve a stubborn blockage. If you cannot get the tube cleared, access medical support to change the tubing or trouble shoot in other ways.

Sensory Stimulation

This technique can be used by caregivers to stimulate and maintain the swallowing function. It can help to prepare the person both physically and emotionally for eating by encouraging salivation and appetite. It can also be useful for individuals who are tube-fed to enhance the meal time experience and to allow them to safely enjoy flavours.

You can use an endless range of flavours from pickle juice to strawberry. Be creative!

External Stimulation Technique

Use this technique only if the person can tolerate it. Some people may be hypersensitive near the mouth and face.

1. Using warm hands, massage face with firm but gentle pressure
2. Use small circular movements on the face
3. Use stroking movements for 1-3 minutes depending on tolerance from;
 - a. Ear to mouth
 - b. Nose to upper lip
 - c. Chin to lower lip

“Taste” Stimulation Technique

After each application of flavour, pause to allow the person an opportunity to register the taste. Be aware of individual cues for tolerance and refusal.

1. Soak a non-flavoured toothette in diluted flavour
2. Squeeze out excess
3. Stroke around outer lip, then pause
4. Stroke around inner lip
5. Stroke gently across gums
6. Stroke tongue from back to front (careful not to stimulate gag reflex)

*Note: If a person is known to have a bite reflex or may bite the toothette, perform taste stimulation outside the mouth only.

Recipe Ideas

Spaghetti and Meatballs

- Puree pasta and meatballs separately
- Place pureed pasta on a dish
- Mound the pureed meat on top and in the middle of the pasta
- Pour sauce on top

Ground Sandwich

- Use a clear square sandwich shaped food storage container to give the visual appearance of a layered sandwich
- Use blender or food processor to chop the bread into coarse crumbs
- Place layer of crumbs in the sandwich box
- Add a layer of soft sandwich filling (eg. tuna, egg salad)
- Layer more bread crumbs on top
- You can even decorate it with a minced pickle
- Eat with a spoon or fork

Where Can I Get Specialized Products?

Simply Thick® - www.simplythick.com

Phone: (800) 205-7115

Thick & Easy® - www.homecarenutrition.com

Phone: (888) 617-3482

These types of products can also be found at your local Home Health Supply typically found in your pharmacy.

- Utensils
- Toothettes
- Assistive devices

Molds

Molds are available on the professional market, such as www.dysphagia-diet.com. This website offers large molds on which several servings of an item can be made and frozen for later use.

Fun shapes for molds can easily be found, such as heart shapes, stars, etc. Additionally, food-safe silicone molding putty is now available, which can be formed into any shape and are oven safe up to 450 degrees.

Sample Diets

Breakfast

525 ml Homo milk

1/4 bran buds

150 - 250 ml hot or cold cereal with sugar

1-2 slices of toast with butter and peanut butter

Lunch

350 ml Homo milk

250 ml soup with crackers

Sandwich (thick with layers ie. mayo, butter, cheese)

Salad or vegetable

Dinner

350 ml Homo milk

Meat, potatoes, and vegetable meal

Butter and gravy

1 serving dessert

1 can Two-Cal HN

*** Snack in the AM and PM ***

Breakfast

1 English muffin
1 boiled egg
250ml fruit juice (+ water)
250ml skim milk (+ syrup)
1 tsp margarine

2 grains
1 meat/alternative
2 fruit
1 milk
1 fat

Lunch

2 slices whole grain bread
1 slice lean ham
250ml fruit juice (+ water)
1 slice low fat cheese
mustard
fat-free mayo

2 grains
1 meat/alternative
2 fruit
1 milk

Dinner

1/2 cup rice
1/2 cup peas, 1/2 cup carrots
90 grams (3 oz) fish
1/2 cup mixed fruit
125ml fruit juice (+ water)
400ml skim milk

1 grain
2 vegetable
1 meat/alternative
2 fruit
2 milk
1 fat

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Notes

Notes

About Brantwood

Brantwood Community Services is a not for profit agency in Brantford, ON that empowers people with developmental challenges in their pursuit of a full life. The agency operates a full range of residential supports including 12 group homes, independent living apartments, a Community Day Program, a Recreation Therapy Centre, a variety of Respite Services and a Seating Clinic that produces customized seating and positioning products.

To download an electronic version of this resource, please visit: **www.brantwood.ca**

For more information on Brantwood Community Services visit us at:

www.brantwood.ca

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Ability



