Acknowledgements

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Special thanks to past Bridgepoint staff who contributed to the original edition of this handbook. The present edition was edited by Danielle Szpiech in 2014.
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Overview

What is the mealtime assistance program?

The Mealtime Assistance Program (MAP) is an educational program aimed at training volunteers, personal caregivers and family members in ways of providing optimal assistance to Bridgepoint patients at mealtime.

Why is this program needed?

For many people, eating is associated with family, friends, conversation, celebrating, caring, religious events and cultural tradition. Families and patients see meals as a time to provide nutrition, love and caring, as well as a time to socialize.

However, a survey on eating patterns conducted by Baycrest found that 87 per cent of patients faced at least one difficulty while eating related to swallowing, seating, eating assistance and amount of food eaten. Our patients experience similar problems, so we designed and implemented a comprehensive training program for our volunteers, personal caregivers and family members interested in assisting us during mealtime. Our program includes elements adapted from the Baycrest Eating Assistance Training Program.

What are the program’s goals?

- To maintain mealtime safety.
- To encourage patient participation in eating.
- To promote family involvement.
- To promote volunteer involvement.
- To encourage the social and pleasurable aspects of meals.
Feeding issues

Understanding the swallowing process

Swallowing is the process of moving food and liquids from the mouth to the stomach. We take it for granted because we do it so often and tend not to think about it. However, swallowing is a complicated process. A swallow consists of three phases: oral, pharyngeal, esophageal. See Diagram 1.

1. The oral phase

First, food is chewed; then the tongue mixes it with saliva into a ball. This food mass is known as the bolus. The lips close to form a barrier so that food can’t spill out from the mouth. The back of the tongue and the soft palate form a barrier preventing food from slipping into the throat before the swallow. The tongue then moves the food to the back of the mouth. During the swallow, the soft palate moves up to shut off the nasal passages, preventing the bolus from ending up in the nose.

2. The pharyngeal phase

The swallow reflex is triggered when the food reaches the back of the throat. Food goes down the throat through the pharynx. The pharynx squeezes to move food down the throat. The Adam’s apple will move up and down. Once a swallow is triggered, the epiglottis moves to cover the entrance to the larynx, diverting the bolus away from the airway and towards the esophagus.

3. The esophageal phase

Food enters the esophagus and goes into the stomach.

Diagram 1
Anatomical structures involved in swallowing
Difficulties of patients at mealtimes

Bridgepoint patients can experience various difficulties with eating, including:

- inability to open food containers
- inability to see the items on the tray
- inability to hold utensils
- inability to cut food or use condiments
- inability to get food to the mouth
- inability to organize the meal or complete eating
- poor or slow chewing
- inability to maintain a good position necessary to eat properly
- loss of appetite with less motivation to feed self
- feeling discomfort while eating
- impaired swallowing ability (dysphagia)
- poor concentration on tasks

These problems arise due to various conditions, including:

- weakness
- paralysis
- tremors
- poor vision
- lack of coordination
- memory problems
- confusion
- fatigue
- loneliness
- depression
- illness

What is dysphagia?

Dysphagia is any condition preventing the successful swallowing of food and liquid. Swallowing disorders typically affect patients with neuromuscular problems caused by strokes and other brain trauma, or by progressive illness such as dementia, amyotrophic lateral sclerosis (ALS), Parkinson’s disease and multiple sclerosis. When these conditions affect muscles controlling the swallowing mechanism, dysphagia will likely develop. Certain medications may interfere with the swallowing process.

Common clinical signs of dysphagia

- The bolus (chewed and mixed food mass) cannot be moved completely and efficiently from the front to the back of the mouth.
- The tongue is unable to shape food into a cohesive bolus, so residual food remains in the mouth after the swallow.
- The bolus slips from the mouth into the throat before the swallow is initiated.
- The swallow reflex takes a long time to trigger.
- The windpipe is not closed off adequately allowing food or fluid to enter the airway.
- The upper and/or lower food pipe sphincters do not open properly; this blocks or slows the bolus from moving through the digestive system.
Major consequences of eating and swallowing problems

**Malnutrition**
This can lead to:
- confusion
- poor resistance to infection
- less responsiveness to rehabilitation therapies
- skin breakdown and/or impaired wound healing
- less vitality, a decreased sense of well-being

**Dehydration**
This can lead to:
- confusion
- constipation
- bladder infection
- dry mouth
- severe illness

**Aspiration**
Aspiration happens when food or liquid passes into the airway, which may cause:
- chest congestion
- pneumonia

**Airway obstruction**
- Choking occurs when food blocks the windpipe so the person is unable to breathe

**Non-oral feeding**
- Some patients will be fed through a feeding tube; this is an individual decision

**Role of the mealtime assistant**
- Provide nourishment.
- Help the patient be as independent as possible and maintain his/her dignity.
- Be an active participant in the patient’s eating experience.
- Learn the patient’s mealtime style.
- Have a helpful attitude, for example:
  - Take an interest – smile, engage in light conversation, describe the meal.
  - Take time to feed or assist the patient to eat a well-paced meal.
  - Know the patient’s strengths and difficulties, and build on the strengths to compensate for the weaknesses.
  - Teach the patient new skills to enjoy mealtimes.
  - Follow the recommendations of the care team and review the patient’s care plan regularly.
- Watch for any changes in the patient’s eating pattern and report them.
- Ask the care team for advice if experiencing difficulty in following the recommended feeding strategies.
Mealtime Assistance Strategies

Who plays a role in facilitating safe feeding?

Speech-language pathologist (SLP)
Speech language pathologists provide a primary role in a clinical swallowing evaluation to recommend appropriate diet texture and feeding strategies.

Communicative disorders assistant (CDA)
With proper training and supervision from a speech-language pathologist, communicative disorders assistants help feed patients.

Registered dietitian (RD)
Registered dietitians provide individualized nutritional care to the patient. Nutrient intake and appropriate food choices are determined with the recommended food and drink consistencies in mind.

Occupational therapist (OT)
Occupational therapists address seating and positioning needs, and prescribe adaptive eating devices.

Physical therapist (PT)
Physical therapists consult about posture, trunk/upper extremity strength and range of motion related to the patient’s ability to self-feed.

Physician (MD)
Physicians are responsible for overall medical management and educate the care team and families about the effects of certain diseases on swallowing and eating. Physicians regularly review medications and medical treatments to determine if these affect eating and swallowing.

Registered nurse (RN) and registered practical nurse (RPN)
Registered nurses and registered practical nurses identify appropriate patients for the Mealtime Assistance Program and notify the care team and volunteers when there is a change in the patient’s swallowing status. Nurses supervise and support mealtime assistance given by family members, private caregivers, and volunteers, and suggest improvements to eating strategies.

Social worker
Social workers communicate eating concerns to the patient, family, and healthcare team.

Recreation therapist
Recreation therapists oversee recreation programs where food may be served.

Pharmacist
Pharmacists assess the potential impact of medications on swallowing and eating, and also assist the registered nurse and speech-language pathologist to assess medication administration.
Diet texture categories

The texture of foods and drinks can be altered to make chewing and/or swallowing easier and safer for patients. Patients with swallowing difficulty are assessed by a speech-language pathologist to determine the most appropriate diet texture. The diet texture categories at Bridgepoint are as follows:

**Solids**

**Regular textures**
All solid foods, including those that require excessive chewing. For example: sandwiches, roast meats, salads, whole fruits and vegetables.

**Soft textures**
Most solid foods, except those that require excessive chewing. For example: soft-filled sandwiches, soft meats, soft-cooked vegetables and fruits.

**Minced textures**
Soft foods cut into small pieces. For example: ground meats, pasta, cooked and diced vegetables.

**Puree textures**
Mashed foods that require minimal chewing. For example: puréed vegetables and meats, mashed potatoes and puréed dessert.

**Liquids**

**Thin Liquids**
Most regular drinks, including those that move quickly when poured. For example, stock soup, coffee, tea, milk, juice and water.

**Thick liquids**
Drinks that have been thickened to a honey consistency and move slowly when poured. For example, thickened juice, thickened water and cream soup.

**Mixed consistencies**
Pieces of solid foods within a thin liquid. For example: vegetable soup, cereal with milk and fruit cocktail.

Patients may receive any combination of the solids and liquids listed above. A dysphagia diet texture consists of puree solids and thick liquids. Mealtime assistants should always:

- Make sure the diet type and texture on a meal tray goes to the correct patient; and
- Check with the patient’s nurse before providing any food or drink that is not on the meal tray.
Description of feeding strategies

How and where a patient takes a meal can impact the amount of food and drink they consume. Proper and consistent use of appropriate feeding strategies make swallowing as safe as possible and minimize the risk of choking/aspirating.

1. Location

Setting up a good environment lays the foundation for a safe and meaningful mealtime experience.

- **Feed in the patient’s room.**
  Most patients have their meals in their own room. Some patients prefer to eat in the dining room.

- **Reduce distractions in the environment.**
  For some patients, hospital rooms are noisy, confusing places. Decreasing conversations between staff or visitors, and turning the radio and television off can help to create a calm environment.

2. Sensory needs

These strategies should be used to help patients fully enjoy and appreciate meal times.

- **Ensure glasses/dentures/hearing aids are worn.**
  Patients need all of their senses to fully enjoy the taste, smell and look of a meal.

- **Get the patient up just before the meal.**
  This strategy helps patients who tire easily, can only sit comfortably for a short period of time, or become agitated while sitting.

- **Provide stimulation before the meal.**
  Make sure the patient is awake and alert before starting the meal. This can be done by stating the patient’s name, informing the patient about the time of day and identifying the foods on the meal tray.
3. Positioning

Proper positioning of the patient is essential during meals. These are the general guidelines for proper positioning in a chair or wheelchair. See diagram 2.

- Upright and centered.
- Not leaning excessively to one side.
- Pelvis or buttocks should touch the back of the chair to prevent slipping forward.
- Patient’s back should touch the chair’s back to prevent slipping forward.
- Patient’s back should be straight or slightly forward.
- Seatbelt should be secured.
- Feet should be resting on the wheelchair’s footrests.
- Inactive arms should be supported on the wheelchair tray or on a pillow.
- Head should be positioned so that it is upright or flexed very slightly forward.
- Patients who are lying back, or who have an arched or hyper-extended neck should not be fed, as this creates an open airway, making it easier to choke.
The following general guidelines assure proper positioning in bed while eating. See diagram 3.

- Roll the head of the bed up to a 90 degree angle.
- Ensure the patient’s body is aligned with and supported by the surface of the bed.
- If the patient cannot tolerate sitting at this angle, try to position the head at a 75 to 90 degree angle using a small pillow, foam wedges or rolled blankets behind the shoulders, and/or head.
- The head should be positioned so that it is upright or flexed very slightly forward.

Why is positioning important?

- Positioning the patient’s hips in a 75 to 90 degree angle and the chin tucked downward slightly allows gravity to keep the food bolus toward the front of the oral cavity. It is important to prevent the bolus from sliding directly to the back of the oral cavity where it can descend prematurely and increase the risk of choking/aspirating.

- Patients should never be physically moved by those who have not been trained to do so properly. If the patient is not in the proper position to begin his/her meal (e.g. turned on one side, moved downwards in the bed), a nurse should always be called to help with repositioning.

- Once properly positioned, seat yourself beside and slightly in front of the patient, so that good eye contact is established. This enables the patient to maintain the slight chin-tuck position necessary for safe eating. It also promotes social interaction and comfort. Please make sure that the patient does not tilt the head backward, as this opens the airway and places the patient at higher risk of choking/aspirating.
How should patients be positioned once the meal is complete?

- After a meal, position the patient to remain comfortably upright for at least one hour.
- If the patient is in bed, the head of the bed may be lowered slightly to no lower than a 60 degree angle.
- This helps gravity to promote the downward progress of the meal, and prevent reflux of food content that can cause aspiration pneumonia. See Diagram 4.

Diagram 4
Proper positioning for one hour after eating
4. Set up

There are many considerations when setting up the meal tray for a patient. Each of the strategies listed below may help patients experience more success when eating.

- **Place tray in visual field.**
  Patients may be unable to see all of the items on the tray if it is not placed where they can see it. At times it is necessary to place the tray either to the right or to the left side of a patient to ensure all parts are visible.

- **Place tray within reach.**
  To encourage independence and participation during the meal, place the tray within the patient’s reach. Always place the food and utensils on the patient’s stronger side.

- **Cut food.**
  A patient may be unable to use a fork and knife and need you to cut food into bite-sized pieces.

- **Open lids and containers.**
  Making a meal accessible increases the likelihood of all items being eaten. Opened juice and milk containers will increase the patient’s chance of receiving appropriate fluid intake.

- **Put soup in a cup.**
  This strategy increases independence for patients who can pick up a cup but are unable to use a spoon to carry a thin liquid.

- **Provide straws.**
  Straws increase independence for patients who cannot hold a cup but can easily reach a straw. Please check with the nurse first, as some patients with swallowing problems may not be allowed to use a straw for drinking.

- **Remove unnecessary items from tray.**
  This strategy helps patients focus on the important items that need to be eaten. For example, remove lids and wrappers, and leave only the utensils and food.

- **Give only one item at a time.**
  Position one dish at a time in front of the patient to reduce confusion or impulsivity.

- **Provide adapted utensils.**
  When appropriate, ensure special utensils are available at every meal and are washed and sanitized after every meal.
5. Nutrition and hydration

Nutrition and hydration strategies can be used during meals where food intake is less than usual due to illness, fatigue or other factors.

- **Give high calorie items first.**
  Items on the tray are fed in high to low calorie order to ensure the most valuable intake occurs. Feed entrée first; when the patient has had enough, provide nutrient dense fluids (e.g. supplements, fortified pudding and milk). Follow with soup, tea, coffee or any combination of these items.

- **Arrange for small, frequent snacks.**
  Snacks may be required for patients who eat slowly or become tired easily.

- **Provide water for patients with swallowing difficulties.**
  Patients may complain of thirst after receiving thickened fluids or tube feedings. Even with hydration requirements met, they may continue to experience the sensation of thirst and/or dry mouth. Before serving water to patients on thick liquids, please check with the nurse or the patient’s speech-language pathologist to make sure it is safe to do so.

6. Verbal encouragements and directions

There are many ways to help a patient eat. The patient may simply need help to understand what is on the meal tray, what to eat next and how to eat it. Verbal prompts are important and can help guide a patient through all the steps of a meal. At times, patients may only require encouragement or praise for trying.

- **Identify foods on the tray by name or taste.**
  This helps patients who have difficulty seeing the tray and its contents.

- **Tell the patient where the food is or which utensil to use.**
  Help the patient get started by telling them where the food is or which utensils to use.

- **Tell the patient what to do next.**
  Patients who have trouble knowing the next step to eating will need you to tell them what to do.

- **State the patient’s name as often as necessary.**
  Patients who are easily distracted or tend to drift off during the meal may benefit from having their names called to alert and redirect them to the task of eating.

- **Praise and encourage the patient.**
  Everyone likes to know they are doing well. Encourage the patient to continue what they are doing right.
7. Physical guidance

Some patients may only be able to participate in feeding at certain times, or only able to complete certain aspects of feeding. Independence during mealtimes should be encouraged whenever possible.

- **Place the food on the spoon and then hand it to the patient.**
  Some patients are able to move their hand to their mouth for eating but cannot get the food onto the utensils properly. By placing the food on the spoon and then handing it over, you are encouraging the patient to play an active role in eating.

- **Hand the cup to the patient.**
  Patients who cannot get started may need you to hand them a cup in order to drink. They may not be able to reach for the cup on their own, but are able to hold it and drink from it.

- **Hand finger foods to the patient.**
  To encourage participation, hand finger foods to the patient. For some patients, it is not always obvious that finger foods, such as a sandwich, can be picked up.

- **Initiate and then allow the patient to take over.**
  Help the patient get started, as they may only need help to begin eating rather than be fed the whole meal.

- **Take turns.**
  Take turns with the patient in getting the food to the mouth. Alternating gives the patient the opportunity to participate, learn from your actions, and receive additional support. Mealtime assistants should establish and maintain a controlled rate of intake during the meal.

- **Provide hand-over-hand assistance.**
  Hand-over-hand assistance helps guide the patient. Gently, put your hand over or around the patient’s hand to hold the utensil, or move the hand to the mouth.

- **Alert the patient by gently touching forearm**
  Touching a patient’s forearm during meals can help to maintain attention and level of alertness.
8. Spoon feeding

Patients who require complete spoon feeding need to be observed carefully during feeding. When providing spoon feeding it’s important to take the patient’s perspective to ensure the proper bolus size and rate of feeding.

- **Provide teaspoon-sized bites and sips.**
  A metal teaspoon is usually the best utensil for spoon feeding because it provides the appropriate amount of food. However, some patients can only manage half a teaspoon. Patients should be provided with one teaspoon-sized bite at a time and fully swallow the bite before having another.

- **Slow the rate of feeding.**
  Slowing the rate of feeding gives the patient more time to prepare the food in the mouth and to swallow. If food is introduced too quickly, the muscle sequence for swallowing can be disrupted, leading to aspiration. Patients who require spoon feeding often have difficulty swallowing and require additional time to fully clear the bolus from the mouth and throat.

- **Allow time for two swallows between mouthfuls.**
  Most people swallow more than once per mouthful. Watching or feeling for the up and down movement of the Adam’s apple can help identify when a patient has swallowed. An empty mouth does not always mean that food has been swallowed; the food may simply be out of sight at the back of the tongue or pocketed in the cheeks. Providing extra time allows for extra swallows to occur, as each may take a few seconds or longer.

- **Recognize requests for more and indications that the patient has had enough.**
  The patient sets the pace of the meal by indicating readiness for more food and drink. Completed swallows, a nod, a verbal request, or an open mouth are all indications of the patient’s wish to continue eating. Whenever possible, offer the patient a choice of what to eat next. If the patient appears to be getting tired, is nodding off, or is swallowing slower, break from or stop feeding until the patient is alert enough and ready to continue.

- **Gently rub spoon on lower lip.**
  Rubbing the spoon gently on the lower lip may encourage mouth opening. Try to allow the patient to remove the food from the spoon with their lips; this encourages participation.

- **Feed to unaffected side of mouth.**
  Patients’ muscles may be weakened on one side of the mouth (e.g. due to a stroke). These patients should be fed to their preferred side to take advantage of stronger, more coordinated mouth muscles that help with chewing.

- **Alternate taste, texture and temperature of food.**
  Varying these characteristics may assist in increasing awareness of food in the mouth, particularly for patients who have trouble remembering that food has been placed in the mouth.
Consistent mouth care after meals

Nursing staff perform oral care for patients. At the end of each meal, please ensure that the patient’s mouth is empty and no food is being pocketed (e.g. in the cheeks or under the tongue).

Monitoring for signs of eating problems

It is important to always watch for signs of eating problems. Any of the following observations may indicate swallowing problems and should be reported to the nurse:

- coughing/choking during meals
- frequent throat clearing during eating or drinking
- wet or gurgly voice during meals
- excessive drooling
- vomiting
- nasal regurgitation: food or drink coming from the nose
- complaints of pain when swallowing
- chest congestion around meals
- holding lips tight
- food spilling excessively out of the mouth
- holding food in the mouth
- refusing to eat

Refusal to eat should not be interpreted as uncooperative behaviour. Mealtime assistants are not to force feed patients. Please report the refusal to eat to nursing staff so that the appropriate assessments and referrals can be completed.

Choking – Emergency procedures

- Stop feeding immediately and seek nursing attention if the patient experiences these conditions:
  - excessive coughing
  - gagging/gasping for air/struggling to breathe
  - grabbing at the throat
  - turning blue in the lips and face
  - indicates that something is stuck in his/her throat

- In all cases of choking, stay with the patient at all times and follow this procedure:
  - STOP feeding
  - push the green button at the head of the patient’s bed labeled “staff assist” to inform staff that urgent assistance is required
  - shout for help
  - keep the patient in an upright position
  - do not pat the patient on the back as this action could push the food further down into the airway.
Mealtime volunteer attendance

Attendance is an important part of our Mealtime Assistance Program. Our staff and patients rely greatly on our volunteers to provide assistance when scheduled. If you are unable to attend a shift, you must provide at least 24 hours notice to the Mealtime Assistance Program coordinator and the patient’s unit. This allows nursing to promptly provide the patient with appropriate mealtime assistance.

You can contact the Mealtime Assistance Program coordinator either by email or by phone. You can contact the team stations on each unit by calling the main hospital line at 416-461-8252 and then dialing the unit’s extension:

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References


