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Module 11: Mealtimes and Nutrition
Introduction

I remember working in the institutions where we did a lot of “bird feeding” and we kind of dreamed a lot about why people couldn’t have a nice meal with some ambience to it. You know the kind where people sit around the table and really do break bread. People share things; here, have a little of this. Try some of that. People laugh and it’s a beautiful time together.¹

Bird feeding was a practice used in some institutions in the past, of holding a person’s chin up and pouring food down his or her throat. The goal was to complete this horrendous practice without spilling.


Mealtimes can be an important time of the day.

Through meal planning, preparation, and eating meals together, people get numerous opportunities for important learning and connection with others. And they can put aside the challenges of the day and connect with others around the table through conversation and laughter.

As a Community Disability Services Worker, you

- help people make choices about the meals they will eat,
- show them how to prepare food safely, and
- encourage them to participate in the social experience of eating with others.

Learning Outcomes

After completing this module, you will be able to:

1. Describe the relationship between health and nutrition.
2. Demonstrate safe technique and positioning for helping people to eat.
3. Discuss ways to make mealtimes pleasant experiences for people with disabilities.
4. Make sure the people you support know how to handle food safely.

Unit 1: Mealtimes

Introduction

Mealtimes provide opportunities for building relationships and improving communication skills. Many of us associate eating with spending time and interacting with others.

Think of some good memories from your past. How many of them involve food and eating?

These types of experiences are also important for people with disabilities. As a Community Disability Services Worker, you can help to create a pleasant and friendly atmosphere for individuals who are eating together.

In this unit you will learn ways to enhance the mealtime experience for the individuals you support.

Unit 1 Learning Outcomes

After completing this unit, you will be able to:

1. Describe how you could help to create a positive mealtime experience for the people you support.
2. Describe safe and respectful ways to assist people with eating.

The Dining Experience

Learning Activity

1. On a blank sheet of paper, draw a line down the centre of the page.
2. Title the left side “Feeding” and the right side “Dining.”
3. Now brainstorm all the words, images or phrases that first come to mind when you think of the word “feeding.”
4. Record these in the left hand column.
5. Now brainstorm all the words, images or phrases that first come to mind when you think of the word “dining.”
6. Record these in the right hand column.
7. Compare the two lists. In what ways are they different? Similar?
8. Consider how words can influence one’s perception and behaviour as it related to your work with the people you support.
9. Share your observations tutor and/or with your colleagues.

Karen Melberg Schwier and Erin Schwier Stewart, in their book entitled Breaking Bread, Nourishing Connections: People with and without Disabilities Together at Mealtime, make the important distinction between “feeding” and “dining.”
They note that “feeding” is simply about “introducing nutrition in some manner.”

Some people with disabilities and their families disagree with the use of the word “feeding” as it can imply a kind of impersonal chore that is done to a person rather than with the person. As people with disabilities are at risk of being treated as objects, we need to be extremely careful of the words we use in our work. Words can strongly influence how we see people and, consequently, how we treat them.

As an alternative, Melberg Schwier and Schwier Stewart suggest we use the word “dining” to better reflect a mealtime experience that enhances a person's dignity and self-respect.

Creating Positive Mealtime Experiences

As a Community Disability Services Worker, you can assist people to have positive mealtime experiences.

There may be challenges when helping children and adults with disabilities who need assistance when eating out at a restaurant.

- People may stare, be fearful or critical.
- They may form stereotypes of people with disabilities.

How you respond to situations can influence people’s opinions about people with disabilities in general, as well as about their capacities.

The following suggestions will help you create good mealtime experiences for the individuals you support.

Involve individuals in meal planning, shopping, and food preparation

These experiences provide rich opportunities for social interaction with community members and friends, and for developing independent living skills.

Take time and be present to the person

Assisting a person to eat should be an occasion to give them “undivided attention and support.” People who need physical assistance feel powerless if those who support them approach the experience insensitively.

Actions that communicate lack of respect and care for the dignity of the person include:

- shovelling food into the person’s mouth;
- continually talking to other people throughout the meal; and
- answering cell phones.

Try to imagine how you would feel if you were treated this way and “if you suspect that person may not really care about you as a human being.”

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2 Melberg Schwier and Schwier Stewart, 15.
3 Ibid.
4 Melberg Schwier and Schwier Stewart, 23.
5 Ibid.
6 Ibid.
People with disabilities may have physical conditions that slow down the eating process (e.g., weakened muscles in the tongue and mouth). Therefore, rushing the mealtime experience can contribute to the risk of choking and/or aspiration (i.e., food particles going into the respiratory systems and lungs, rather than the stomach). You need to give them time to chew their food thoroughly and let them direct the pace of eating.

**Introduce aids that are age-appropriate and dignified**

If a person requires adapted utensils, make sure they are age-appropriate. Never use utensils and dishes designed for children with cartoon characters or other child-like symbols.

If a person requires clothing protection, there are aprons and clothing protectors available that are discreet and designed for adults. Never refer to clothing protectors as “bibs.”

Only use napkins to wipe a person’s mouth; never a clothing protector. Remove clothing protectors immediately after the person has finished eating.

**Support meal choices that enhance a person’s dignity**

If an individual is embarrassed about needing someone else to cut his or her food, do this in the kitchen before serving.

Some people may manage best with meats, poultry, and fish that have been de-boned. Or they may try to eat independently if finger foods such as raw fruit and vegetables and bread are available.

Tube-feeding and taking food in a pureed form should only occur if prescribed and monitored by a physician.

**Ask permission to assist**

When you are helping people to eat, offer them more control over the meal by asking if they are ready for the next forkful or spoonful.

If a person is not able to independently wipe his or her mouth, ask if you can help and explain what you are going to do. Starting at the side of the person’s mouth, use the napkin to “firmly but gently” remove food particles.

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11. Melberg Schwier and Schwier Stewart, 23.


15. Ibid, 27.
Provide choices wherever possible

Give the people you support a few choices in what they eat, how it is prepared, and how it is seasoned. Too many choices can be overwhelming. Melberg Schwier and Schwier Stewart suggest that there should be a “manageable” number of different foods at each meal.  

Ask people what food they would like next (e.g., meat, potatoes, peas), as people’s preferences vary in this area.  

Some individuals prefer to be assisted by a particular staff member and may become distressed if this person is not available to help them.

If possible, let people sit where they prefer to when they eat.

Never remove or deny food in order to control a person’s behaviour.

Learning Activity

In a blender or food processor, grind up or puree a portion of meat, poultry, and/or cooked vegetables (e.g., carrots, squash).

Working in pairs, take turns assisting each other to eat.

For this exercise, the person who is being assisted to eat cannot use their hands and should be blindfolded. (You can create variations of this by having one person cut up the other’s food, wipe that person’s face, and so on without asking permission and explaining what they are doing).  

Now discuss with your partner what the experience was like for you. Share your observations with your tutor and/or colleagues.

Make sure the meal is enticing and table settings are attractive

Meals are more appetizing when they are attractively presented. Vegetables should be crisp and not over-cooked so that colour and nutritious value are maintained. Serve colourful vegetables with blander-looking meats, pastas, rice, and the like.

People with low vision and/or perceptual difficulties may not be able to see light-coloured food on a light-coloured plate (e.g., potatoes or rice on a white plate). Use contrasting, colourful dishes to display light-coloured food and to make the food more attractive and accessible.

Serving food at the right temperature makes it more appetizing. If a person is taking a long time to eat a hot dinner, warm the food in the microwave during the meal.

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16 Melberg Schwier and Schwier Stewart, 28.
17 Potter and Perry, 1068.
18 Melberg Schwier and Schwier Stewart, 28.
Be sensitive to the mealtime environment

Too much noise and activity can be overwhelming for some people.

Be attentive to what the person is communicating

Listen to the person’s breathing and monitor his or her responses and sounds. For people with more severe disabilities, their only ways of communicating may include:

- slight eye or body movements;
- sounds; or
- subtle behaviours.

If people seem to be eating too much or not enough, this could be a side effect of their medications.

Coughing and gagging on food indicate that the person is having difficulty with swallowing. This can be a signal to

- slow down,
- cut food more finely, or
- consider changing the texture.

Speech language pathologists and occupational therapists can recommend appropriate positions for eating and suggest ways to assist the people you support with eating and swallowing.

Learning Activity

Try to feed yourself using awkward or unusual postures to learn first-hand what mealtimes may be like for the people you support. For example,

- if you are right-handed, eat with a fork held between the third and fourth fingers of your left hand, or
- try to eat without looking at your plate.

For More Information

Find material on swallowing disorders in adults at the following web site: http://www.asha.org/public/speech/swallowing/SwallowingAdults.htm.

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20 Melberg Schwier and Schwier Stewart, 26.
21 Potter and Perry, 1067.
22 Eicher, 487.
23 Ibid.
24 Potter and Perry, 1068.
Tips for Assisting with Eating

The following suggestions should help you to make mealtimes safer and more enjoyable experiences for the people you support:

1. Thorough hand washing is important before preparing and eating food.\footnote{Potter and Perry, 1063.}
2. When presenting food, sit so that you are at the same level as, or slightly below, the person, so that he or she is not forced to look up and stretch his or her neck.\footnote{Melberg Schwier and Schwier Stewart, 27.} Position yourself on the side of the person that is most comfortable for him or her.
3. Watch the person’s breathing and present the food just \textbf{before} the person inhales or exhales.\footnote{Melberg Schwier and Schwier Stewart, 26.}
4. Offer beverages regularly throughout the meal.
5. To prevent choking, make sure the person is in an upright position at a 75-90 degree angle while eating. Foam wedges or pillows can be used for support, if necessary.\footnote{Potter and Perry, 1068.}
6. You can tell people who are blind or have visual impairments what is on their plate and where it is located by using the top, bottom, and sides of the plate as reference points, or by referring to a clock face (e.g., “The meat is on the right side of your plate,” or “The potato is at 3 o’clock.”).\footnote{Potter and Perry, 1068.} Tell the person where the drink is in relation to the plate.\footnote{Potter and Perry, 1068.}
7. If a person receives his or her meal through a gastrostomy tube (G-tube), ask where he or she would like to eat. He or she may choose to come to the table to share in the social experience.

\textbf{Learning Activity}

Do at least two of the following exercises, then describe your experiences to your co-workers or tutor.

1. Eat while wearing a blindfold.
2. Eat slouched in your chair with your feet dangling.
3. Drink or eat while holding your nose.
4. Drink or eat with your head back.
5. Drink or eat with your chin on your chest.
6. Drink or eat while lying on your back.
7. Swallow while pressing on your throat.
8. Imagine that the people all around you are talking only to each other and ignoring all your gestures and attempts to communicate with them.

\footnotesize{\texttt{Potter and Perry, 1063.}}\footnotesize{\texttt{Melberg Schwier and Schwier Stewart, 27.}}\footnotesize{\texttt{Melberg Schwier and Schwier Stewart, 26.}}\footnotesize{\texttt{Potter and Perry, 1068.}}\footnotesize{\texttt{Potter and Perry, 1068.}}\footnotesize{\texttt{Potter and Perry, 1068.}}
Unit 2: Wellness and Nutrition

Introduction

Eating a balanced diet provides the nutrients that are necessary for good health. Healthy eating can prevent or reduce the risk for many diseases and help people recover from illness. It also helps people maintain a healthy weight.

A concerning trend is the increase in the number of Canadians, both children and adults, who are overweight or obese. According to Statistics Canada, 58.8% of Canadian adults were considered to be overweight or obese in 2004, and children are being diagnosed with type 2 diabetes as young as age five. Type 2 diabetes is a disease that, in most cases, is preventable through healthy eating and weight maintenance.

Maintaining a balanced, healthy diet takes thought and planning, but the people you support will certainly benefit.

Unit 2 Learning Outcomes

After completing this unit, you will be able to:

1. Discuss the potential health risks of being overweight.
2. Identify the information you need to plan menus.
3. Describe important considerations in planning healthy meals.
4. List the guidelines for healthy eating that are outlined in Canada’s Food Guide.
5. Describe several types of special diets.

Nutrition

Nutrition is the process of providing our body’s cells with the nutrients necessary for them to function.

The body requires nutrients (i.e., carbohydrates, proteins, fats, minerals, vitamins, water) to provide energy for the numerous chemical reactions necessary for good health. This includes:

- cell growth and repair;
- organ (e.g., heart, kidneys, skin) functioning; and
- movement.

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32 Potter and Perry, 1044.

33 Ibid.

34 Ibid.

35 The Ultimate Canadian Medical Encyclopedia, 11.

36 Ibid.

37 Potter and Perry, 1044.
Generally, a person’s weight doesn’t change if his or her energy requirements are met by the calories being consumed. Weight gain occurs when we consume more calories than our bodies need for the energy demands placed upon them.\(^{37}\)

**Some Common Effects of Being Overweight**

- Increased risk of
  - high blood pressure,
  - heart disease,
  - type 2 diabetes, and
  - cancer of the colon.\(^{38}\)
- Increased risk of damage to hip joints and knee joints, causing pain (arthrosis).\(^{39}\)
- Sleep difficulties (e.g., sleep apnea, which is a condition where people stop breathing for brief periods at night, interrupting their sleep and causing them to be overtired during the day).\(^{40}\)
- Problems breathing when the extra weight inside the chest wall squeezes the lungs.\(^{41}\)

**Some Nutritional Issues Common to People with Disabilities**

The people you support experience the same problems as the general population in regards to nutrition, but some may have additional challenges because of their disabilities and associated medical complications.\(^{42}\)

People with special dietary considerations should be monitored regularly by a qualified dietitian and/or physician.

**Obesity**

People who may have more challenges maintaining a healthy weight are those with disabilities such as:
- Down syndrome;
- Praeder-Willi syndrome;
- spina bifida; and
- cerebral palsy.

Other aspects that can play a part include:
- Medications;
- restricted mobility;
- genetic factors (particularly with Praeder-Willi syndrome); and
- lack of opportunity for physical activity\(^{42}\).

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\(^{37}\) Potter and Perry, 1044.

\(^{38}\) The Ultimate Canadian Medical Encyclopedia, 20.

\(^{39}\) Ibid.


\(^{41}\) “Obesity.”

Eating Disorders

Some of the people you support

• may have problems keeping a healthy weight,
• may choke and cough frequently during meals, and
• may require a long time to eat their food.

This can be caused by a number of factors that make eating more difficult.43

• Poor swallowing reflex.
• Tonic bite reflex (i.e., when the jaw clamps shut when chewing).44
• Gagging, choking, or coughing frequently.
• Tongue thrust (i.e., when the tongue thrusts out, similar to a spasm).45
• Cleft lip or palate (i.e., when the upper lip and/or bony roof of the mouth has not formed properly).
• Being highly sensitivity to temperatures, touch, and food textures.
• Poor gums and/or teeth.
• Frequent illness (e.g., bronchitis, pneumonia) that cause congestion.

Poor Appetite and Food Absorption due to Medications

The chemicals used in medications can reduce appetite and affect the way nutrients are absorbed and processed in the body.46 For example, antibiotics can cause stomach problems, and anti-convulsants for seizure control can cause Vitamin D and folate deficiencies.

Menu Planning

For many years, Health Canada has produced a document called Canada’s Food Guide, which provides a standard for the types and amounts of food we should eat in order to maintain good health. By following the guidelines set out in Canada’s Food Guide when planning meals, you help the people you support to get the nutrients they need.

Canada's Food Guide online:

Printable version:

Menu planning saves time, money, and energy, because food for several meals can be bought during one trip to the store.47

43 Amundson, 263.
45 Ibid.
46 Amundson, 264.
When a meal has been carefully planned and all the ingredients for the meal are at hand, meal preparation can be a positive learning and social experience.

Adults over 19 years of age should get 45-65% of their calories from carbohydrates, 10-35% from protein, and 20-35% from fat.\(^{48}\) You can find out the nutritional contents of many foods by reading the labels on food packages.

*Canada’s Food Guide* lists the serving sizes for the foods listed below.

**Select foods from the following four food groups:**

1. **Vegetables and Fruits** (for teens and adults)
   - females: 7-8 servings per day
   - males: 8-10 servings per day
   - includes lettuce, peas, tomatoes, apples, oranges

2. **Grain Products** (for teens and adults)
   - females: 6-7 servings per day
   - males: 8 servings per day
   - includes bread, cereal, rice, pasta, couscous, bulgar, quinoa

3. **Meat and Alternatives** (for teens and adults)
   - females: 2 servings per day
   - males: 3 servings per day
   - includes poultry, fish, eggs, tofu, beans

4. **Milk and Alternatives**
   - adults: 2 servings per day
   - teens and seniors: 3-4 servings per day
   - includes soy, yogurt, kefir, cheese, cottage cheese

**The following topics should be considered in planning meals:**

- Dietary concerns and special dietary considerations and restrictions for people with diabetes, high cholesterol, problems with weight control, and so on.
- Food allergies.
- Religious restrictions.
- Individual preferences and variety.
- Cost of food and individual budgets.
- Amount of food required based on number of people and meals.


Canada’s Food Guide’s recommendations for planning meals:

- Eat vegetables and fruit that have little or no added fat, salt, or sugar.
- Choose whole fruit and vegetables more often than fruit and vegetable juices.
- At least 50% of the grain products that you eat each day should be whole grain.
- Grain products that are lower in fat, sugar, or salt are the better choice.
- Drink skim, 1%, or 2% milk, or fortified soy beverage every day.
- Select milk products (e.g., cheese, cream cheese, sour cream) that are lower in fat.
- Eat foods such as beans, lentils, and tofu as healthy alternatives to meat.
- Eat at least two servings of fish each week.
- Choose lean meat and low-fat and low-sodium meat byproducts (e.g., hot dogs, sausages).
- Include a small amount of unsaturated fat in your diet every day (i.e., 2-3 tablespoons).  
- If you are thirsty, drink water.
- Limit the amount of foods and beverages that are high in calories, fat, sugar, or salt.

Learning Activity

The person you support has been advised by a doctor to decrease fats and increase fibre in his diet.

1. In each of the categories below, underline what you think is the best choice for a lunch menu. If you have any processed items available (e.g., cans of soup or jars of sandwich moisteners), read the labels before making your choices.

   **Soup:** chicken noodle, vegetable, mushroom, tomato
   **Sandwich bread:** white enriched, whole wheat, flax, rye
   **Sandwich filling:** egg salad, tuna salad, bacon and tomato, peanut butter
   **Sandwich moistener:** mayonnaise, salsa, plain yogurt, cheese spread
   **Dessert:** banana, Jell-O, apple, angel food cake

2. In a role-play situation, prepare and present a discussion between two people who have different eating habits and food preferences. The dialogue should cover the ethical issue of personal choice versus healthy lifestyle choices.

3. Obtain a copy of Canada’s Food Guide from your tutor or from the Health Canada website. Using this guide, prepare a menu for an entire week, including breakfast, lunch, and dinner.

4. Discuss your menu with your tutor.

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Special Diets

Some of the people you support may have physical conditions or illnesses that affect their
- digestion,
- ability to absorb nutrients,
- chewing, and
- swallowing.

A doctor or dietitian may prescribe a special diet for them to meet their specific nutritional
needs. Some of the more common special diets are described below.

Liquid Diets

Liquid diets are made up foods that are liquid at body temperature. Physicians often
recommend them for a short time because of a medical condition or following testing or
surgery.

<table>
<thead>
<tr>
<th>Clear liquid diet</th>
<th>Full liquid diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clear juices</td>
<td>• Clear liquids (as listed in the left column)</td>
</tr>
<tr>
<td>• Broth</td>
<td>• Cream soups</td>
</tr>
<tr>
<td>• Tea (clear)</td>
<td>• Milk</td>
</tr>
<tr>
<td>• Coffee (black)</td>
<td>• Ice cream</td>
</tr>
<tr>
<td>• Popsicles</td>
<td></td>
</tr>
<tr>
<td>• Jell-O</td>
<td></td>
</tr>
</tbody>
</table>

Thickened Diet

A thickened diet is for people who have swallowing problems. Fruit juices can be
thickened with rice flakes or special thickening agents, which can be purchased at
pharmacies. There are different levels of thickened fluids, each one to meet a variety of
dietary needs.

Soft Diet

A soft diet is for people who have problems with chewing and/or swallowing due to dental
or other medical problems. The diet has more texture than clear or full fluid diets because it
consists of foods that are soft or chopped (e.g., mashed potatoes, puddings, soft eggs).

Pureed Diet

Puree means to grind, press or strain food such as meat, vegetables, or fruit, or mashed
potatoes and gravy. A pureed diet assists people who have difficulty chewing and
swallowing. Pureed food must remain thick enough to hold its shape in a person’s mouth.

51 Fuzy and Leahy, 205.
52 Potter and Perry, 1070.
53 Fuzy and Leahy, 205.
54 Potter and Perry, 1070.
High Fibre Diet

A high fibre diet may help to relieve constipation. High fibre food includes:

- bran;
- oatmeal;
- dried and uncooked fruits; and
- steamed vegetables.\textsuperscript{56}

Low Sodium Diet

This diet is for people who must limit salt intake. The maximum amount of sodium allowed is usually in the range of 500 mg to 4 g per day.\textsuperscript{57}

Diabetic Diet

This diet provides a balance of proteins, fats, and carbohydrates that is adjusted to the person’s diabetes medication. Calories and carbohydrates are carefully counted and controlled\textsuperscript{58} to keep the body’s blood sugars in balance.

People with diabetes should follow guidelines for nutrition that are laid out in Canada’s Food Guide,\textsuperscript{59} unless otherwise recommended by a physician or dietitian.

Allergy Diet

Allergy diets take into consideration a person’s allergies to certain types of food. Foods that commonly cause allergic reactions in adults include:

- shellfish (e.g., shrimp, crayfish, lobster, crab);
- nuts from trees (e.g., walnuts, almonds);
- fish;
- eggs; and
- peanuts.\textsuperscript{60}

Vegetarian Diet

In a total vegetarian diet, all foods of fish or animal origin are avoided. This type of diet has variations.

- A lacto-vegetarian diet includes dairy products.
- A lacto-ovo vegetarian diet includes dairy products and eggs.\textsuperscript{61}
- A vegan diet consists of only vegetables and plant foods.\textsuperscript{62}

\textsuperscript{55} Fuzy and Leahy, 205.
\textsuperscript{56} Potter and Perry, 1070.
\textsuperscript{57} Potter and Perry, 1070.
\textsuperscript{58} Fuzy and Leahy, 205.
\textsuperscript{59} Potter and Perry, 1070.
\textsuperscript{60} Melissa Conrad Stöppler, “Food Allergy – What are food allergy symptoms and signs?” MedicineNet.com, \url{http://www.medicinenet.com/food_allergy/page3.htm}.
\textsuperscript{61} Potter and Perry, 1056.
\textsuperscript{62} Potter and Perry, 1056.
• A Zen macrobiotic diet includes brown rice, grains, and herbal teas.
• A fruitarian diet is fruit, nuts, honey, and olive oil.\textsuperscript{63}

Consult with a dietitian when menu planning for vegetarians to ensure that the diet provides all the necessary protein and other nutrients for good health.

\textit{Meal replacements}

Meal replacements are nutritional supplements that provide essential nutrients for people who

• are ill,
• have a poor appetite, or
• may not be getting enough nutrition on a daily basis.

Ensure\textsuperscript{™} and Boost\textsuperscript{™} are common meal replacements that can be purchased at a local grocery store or pharmacy.

\textsuperscript{63} Potter and Perry, 1056.
Unit 3: Non-Nutritive Mealtime Program

Introduction

As was discussed in an earlier module, some people you support will have to be fed through a gastrostomy tube (G-tube) to make sure they receive the proper nutrition for their bodies’ needs.

This module provides more information about tube feeding and emphasizes the importance of including individuals who use G-tubes in the mealtime experience.

Unit 3 Learning Outcomes

After completing this unit, you will be able to:

1. Describe the function of a G-tube.
2. Explain why the Non-Nutritive Mealtime Program was developed.
3. Explain why inclusion in mealtimes is important for individuals who use G-tubes.

The Non-Nutritive Mealtime Program

Some people, such as those who are unable to chew or swallow, require tubes for eating to ensure that they are getting the proper nutrition.64

A G-tube is inserted into the person’s stomach or intestines (gastrointestinal system) through the stomach wall.65 G-tubes should only be inserted by qualified professionals (i.e., physicians, trained nurses on a doctor’s orders).66 Giving nutrients via the gastrointestinal system is called enteral tube feeding.67

At pre-scheduled times, a nutritionally-balanced liquid drips into the enteral tube and goes directly into the gastrointestinal system to be absorbed and digested by the body.68 When the meal is completed, the feeding bag is disconnected.

It is very important that anyone who assists a person with enteral tube feeding be thoroughly trained to watch for signs of complications that might put the individual at risk. Complications can include:

- coughing;
- vomiting;
- nausea;
- diarrhea.69

64 Potter and Perry, 1076.
65 Ibid.
66 Ibid.
67 Ibid.
68 Ibid.
69 Ibid, 1084.
The Non-Nutritive Mealtime Program was developed in the early 1990s by the Capital Health Region – Queen Alexandra Centre for Children’s Health (CHR–QACCH) in Victoria, BC.

When several long-term care residents at the facility required G-tubes instead of oral nutrition, the following concerns were raised.

- Tube feeding was impersonal.
- Individuals were losing oral motor skills because the muscles of their mouths and throats were not being exercised.
- Drooling became a problem because they were not swallowing often enough to manage their own saliva.

The program developers wanted to design a program that would

- solve the problems of isolation and loss of oral skills, and
- provide options for people who might have a combined (i.e., oral and gastrostomy) nutritional intake in the future.

By inviting people who use G-tubes to the dining table at regularly-scheduled mealtimes, even if they have already eaten, you can help them

- to experience all of the benefits of sitting around a table and sharing a meal together and
- to overcome loneliness and isolation.

The Non-Nutritive Mealtime Program can have few or many parts, depending on each individual. It can include:

- oral motor exercises;
- small tastes of food and flavours; and
- general oral hygiene (e.g., tooth brushing).

One element of the program is a chew bag made of gauze. The smell and taste of food in the bag stimulates the person to practice chewing and swallowing without the risk of choking.

More information on this program can be obtained from CHR-QACCH, 2400 Arbutus Road, Victoria, BC, V8N 1V7; telephone 250-477-1826; fax 250-721-6837.
Unit 4: Safe Food Handling

Introduction

Proper food handling and safe kitchen practices are necessary to prevent illnesses. In this unit you will learn about food poisoning and how to prevent it.

Unit 4 Learning Outcomes

After completing this unit, you will be able to:

1. Identify the causes and symptoms of food poisoning.
2. Describe safe food handling practices.

Food Poisoning

Food poisoning is an illness caused by eating food that contains infectious microorganisms or toxins (poisons).  

Symptoms of food poisoning include:

- diarrhea;
- cramps;
- nausea;
- headaches;
- vomiting;
- fever.

The majority of cases are mild; however, death does occur on occasion. The Ontario Ministry of Health estimates that one out of six people in Canada get food poisoning each year.

Sources of Food Poisoning

Harmful bacteria or germs that are in a person’s body can be transferred to food when:

- a person sneezes or coughs;
- hands are not washed properly after using the toilet;
- insects and/or rodents are in contact with foods;
- dust particles attach to foods; and/or
- kitchen equipment, surfaces, utensils, etc. and are not cleaned properly.

Simply stated, anything that touches food can be a source of germs and contamination.

71 Ibid.
72 Ibid.
73 Ibid.
74 Ibid.
In warm, moist foods where internal temperatures are between 35°C and 45°C, these germs or pathogens can double in number every fifteen minutes. Refraining foods at a temperature below 4°C or heating them above 60°C significantly reduces the speed at which these bacteria grow.

You cannot necessarily tell by looking at and/or smelling food whether or not it is going to make a person sick. In most cases of food poisoning, the look, smell, and taste of the food doesn’t change, even when it is contaminated.

**Foods that are Potentially Unsafe**

Dairy products, meat, and poultry are particularly susceptible to contamination. However, any of the following foods can cause food poisoning if not properly handled, cooked, refrigerated, and/or frozen:

- meat, poultry, and fish;
- cooked vegetables, peas, and beans;
- custards, puddings, and whipped cream;
- milk and milk products (except hard cheeses);
- processed meats (e.g., bologna, hotdogs, ham);
- shellfish;
- dressings;
- soft cheeses;
- eggs and egg products.

**Common Causes of Food Poisoning:**

- Meat that is not cooked thoroughly.
- Foods that are not refrigerated at a temperature below 4°C.
- Poor hygiene of food handlers (e.g., not properly washing hands).
- Utensils, dishes, and work surfaces that are contaminated. Food purchased from unsafe sources.

Approximately 75% of all cases of food poisoning are caused by improper cooking and refrigeration of food.

**Learning Activity**

Watch a video entitled “How to be Food Safe Canada,” at [http://www.youtube.com/watch?v=sf7ic4Lhnv8](http://www.youtube.com/watch?v=sf7ic4Lhnv8).

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75 “Food Safety Tips.”
76 Ibid.
77 Ibid.
78 Ibid.
79 Ibid.
80 Ibid.
Safe Food Handling Tips\textsuperscript{81}

- Regularly and thoroughly clean equipment, utensils, and workspaces.\textsuperscript{82}
  - Use hot, soapy water to clean all utensils, equipment, dishcloths, towels, and work surfaces (e.g., countertops).
  - Sanitize cutting boards and knives after they have been used to prepare raw meats and poultry.
    - Soak items in 50 mL of chlorine bleach added to a sink full of hot water to kill bacteria that can cause food poisoning.
  - Never use cutting boards that are worn or cracked.
    - Bacteria can hide in the crevices and broken areas where it is difficult to properly clean.
- Food handlers should always practice good personal hygiene.\textsuperscript{83}
  - Wash your hands thoroughly
    - before and after handling food and
    - after touching any surface that could be contaminated (e.g., after using the toilet).
  - Do not handle or prepare food if you are ill.
    - You can pass your sickness onto others this way.
  - Clean utensils when tasting food.
    - Do not put the spoon or fork back in the food after it has been in your mouth or on your lips.
  - When handling and/or preparing food
    - wear clean clothing,
    - keep your hair clean,
    - wear a hair net or tie back long hair, and
    - avoid coughing, sneezing, scratching, or touching your face, mouth, or nose.
    - If you can’t avoid coughing or sneezing,
      - turn your head away from the food and
      - wash your hands immediately after.
  - Cover all sores or cuts on your hands with waterproof bandages.
- Always thaw foods safely.\textsuperscript{84}
  - Thaw foods in the refrigerator or in cold water, not on the counter.
    - Food thaws from the outside in. By the time the centre has thawed, potentially harmful bacteria on the outside have begun to grow.
    - There is less moisture and nutrient loss when foods are thawed in the refrigerator.
  - After thawing food in cold water, either refrigerate or cook foods promptly.

\textsuperscript{81} “Food Safety Tips.”
\textsuperscript{82} Ibid.
\textsuperscript{83} Ibid.
\textsuperscript{84} Ibid.
• Thoroughly cook all foods.\textsuperscript{85}
  o Cooking foods fully and keeping them hot will prevent the growth of bacteria.
    • Cook and keep food at a temperature above 60°C.
    • Stir foods such as gravy, sauces, and stews to ensure even heat distribution.
  o refrigerator or freeze food immediately after serving.
  o do not refreeze food that has been defrosted.\textsuperscript{87}
  o When you have a large quantity of food to cool, divide it into smaller containers so it can cool faster.
  o Pack picnic lunches in ice or freezer packs.
    • Throw out all leftovers.
• Keep cold foods at a temperature below 4°C.\textsuperscript{86}
  o Bacteria grows rapidly at temperatures between 4°C and 60°C.
  o Refrigerate or freeze food immediately after serving.
  o Pack picnic lunches in ice or freezer packs.
  o Throw out all leftovers.
• Store all foods properly.
  o Use wrap or food storage containers to store food in the refrigerator.
  o Thoroughly wrap meats and poultry.
  o Store meats and poultry on the bottom shelves to prevent juices from coming in contact with other foods.\textsuperscript{88}

Further information about safe food handling can be found on the Health Canada web site under the section entitled, Safe Food Handling Tips. Go to \url{http://www.hc-sc.gc.ca/fn-an/securit/kitchen-cuisine/index-eng.php}. Information can be printed or shared.

\textsuperscript{85} “Food Safety Tips.”
\textsuperscript{86} Ibid.
\textsuperscript{87} The Ultimate Canadian Medical Encyclopedia, 31.
\textsuperscript{88} “Food Safety Tips.”
References for Module 11: Mealtimes and Nutrition


Self-Assessment

This activity will help you to determine whether you have accomplished the learning outcomes of *Mealtimes and Nutrition*. Please answer the following questions and then compare your responses to the answer key that follows the self-assessment.

1. Name at least three possible consequences of being overweight.

2. Give four suggestions for creating positive mealtime experiences with the people you support.

3. List at least four of Health Canada’s guidelines for healthy eating.

4. List three nutritional issues common to people with disabilities.

5. List at least three physical conditions that result in eating difficulties and disorders in people with disabilities.
6. Suggest at least five tips for assisting people with eating.

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7. List at least three common causes of food poisoning.

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8. List at least five safe food handling tips.

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Answer Key for Self-Assessment

If your answers do not include most of the following points, you may want to review this material before taking the test on Mealtimes and Nutrition.

1. Any three of the following possible consequences of being overweight are correct answers. You may have thought of additional consequences.
   - Increased risk of high blood pressure, heart disease, type 2 diabetes and cancer of the colon.
   - Increased risk of damage to hip joints and knee joints, causing pain (arthrosis).
   - Sleep difficulties (e.g., sleep apnea is a condition where people stop breathing for brief periods at night, which interrupts their sleep and causes them to be overtired during the day).
   - Problems breathing occur when the extra weight inside the chest wall squeezes the lungs.

2. Any four of the suggestions for creating positive mealtime experiences provided on pages 3-6 of this module are correct.

3. Any four of the suggestions for guidelines to healthy eating provided on pages 10-12 of this module would be correct.

4. Three nutritional issues common to people with disabilities include:
   - obesity;
   - eating disorders; and/or
   - poor appetite and food absorption due to medications.

5. Physical conditions that result in eating difficulties and disorders in people with disabilities include:
   - poor swallowing reflex;
   - tonic bite reflex (when the jaw clamps shut when chewing);
   - gagging, choking or coughing frequently;
   - tongue thrust (when the tongue thrusts out, similar to a spasm);
   - cleft lip or palate (when the upper lip and/or bony roof of the mouth has not formed properly);
   - being highly sensitivity to temperatures, touch and food textures;
   - poor gums and/or teeth; and/or
   - frequent illness (e.g., bronchitis, pneumonia) that causes congestion.

6. Any five of the following tips for assisting people with eating are correct.
   - Thorough hand washing is important before preparing and eating food.
   - When presenting food, sit so that you are at the same level as the person or slightly below them so that they are not forced to look up and stretch their neck.
     - Position yourself on the side of the person that is most comfortable for them.
   - Watch the person’s breathing and present the food just before the person inhales or exhales.
   - Offer beverages regularly throughout the meal.
• To prevent choking, make sure the person is in an upright position at a 75-90 degree angle while eating.
  o Foam wedges or pillows can be used to support them, if necessary.
• You can tell people who are blind or have visual impairments
  o where their drink is in relation to the plate,
  o what is on their plate, and
  o where it is located by using the top, bottom, and sides of the plate as reference points, or referring to a clock face. For example:
    ▪ “The meat is on the right side of your plate” or
    ▪ “The potato is at 3 o’clock.”
• For people who receive their meals through a G-tube, ask them where they would like to eat.
  o They may choose to come to the table to share in the social experience.

7. Common causes of food poisoning include:
• meat that is not cooked thoroughly;
• foods that are not refrigerated at a temperature below 40°C;
• poor hygiene of food handlers (i.e., not washing hands properly);
• utensils, dishes and work surfaces that are contaminated; and/or
• purchasing food from unsafe sources.

8. Any five of the safe food handling tips provided on pages 20 and 21 of this module are correct.