

Barriers to Adequate Nutrition

Many individuals have difficulty consuming a nutritional or prescribed diet due to factors that create a barrier. Medical, psychological, and social factors can all create nutritional barriers. Up to 40% of clients in acute care facilities are malnourished either upon admission or throughout a period of their hospital stay.

It is important for nurses to recognize these factors as nutritional education will be ineffective if a client lacks the necessary resources to follow through on recommendations.

NUTRITIONAL BARRIERS AND NURSING INTERVENTIONS

Poor dentition

Poor dentition (dental caries, poorly fitting dentures) is a potential problem for clients across the lifespan.

- Children who do not have access to dental care or tools (toothbrush, toothpaste) can have caries that impair the ability to chew.
- Adults who have lost teeth or have teeth that need removal or repair have an impaired ability to chew.
- After an adult has teeth removed, it can be difficult to adjust to dentures.

NURSING CARE

- School screenings can help identify children who need dental attention, and can facilitate the referral process.
- Provide children with information about healthy snacks that are low in sugar.
- Advise children and adults to limit consumption of processed carbohydrates, which can stick to teeth and increase the risk for dental caries.
- Encourage children and adults to use a fluoridated tooth paste and have fluoride applied to their teeth. **QEBP**
- Adults who are admitted to acute or long-term care facilities should have a dental inspection done by a nurse to identify issues that can affect the ability to properly eat.
- If a barrier is found to exist, consult a dietitian so the proper diet is prescribed and nutritional supplements are added as necessary.

Low socioeconomic status and lack of access

The lack of money to purchase healthy foods or foods required for a specific diet can be a barrier to maintaining a proper diet.

- Nutritious foods (fresh fruit, vegetables) tend to be more expensive than canned and boxed foods.
- Canned, boxed, and processed foods such as lunch meats and frozen meals are usually high in calories and salt, and often contain a higher fat, sodium, and simple carbohydrate content. These are poor choices for clients on calorie- or sodium-restricted diets.
- The lack of money to purchase necessary food can lead to malnutrition or obesity if canned and boxed foods are selected.
- The lack of transportation to grocery stores is a barrier if the client does not have a car or is not licensed to drive.

NURSING CARE

- Refer the client to a dietitian who can discuss food options and substitutions that are appropriate.
- Frozen fruits and vegetables can be an affordable option, and are maintained longer in the freezer.
- Educate clients on how to read food labels to be aware of nutritional, caloric, and sodium values of the food they are consuming.
- Contact social services regarding the availability of food or meal delivery to the client's home. Investigate the availability of a nutrition program that provides a noon meal for older adults within a community. **QRC**

Cognitive disorders

Cognitive disorders (dementia, Alzheimer's disease [AD]) can have a significant impact on nutritional status.

- Clients who have dementia or AD can experience impairments in memory and judgment, making shopping, food selection, and food preparation difficult.
- As dementia and AD progress, clients might refuse to eat or choose a small selection of food that might not provide adequate nutrition.

NURSING CARE

- If the client lives independently, encourage shopping with a friend or family member, and to follow a shopping list.
- Monitor for vitamin and mineral deficits, and evaluate the need for nutritional supplements.
- Contact social services regarding the availability of food or meal delivery to the client's home.
- If the client lives in a care facility, provide a menu with minimal but nutritious options.
- Serve meals at the same time and in the same location surrounded by the same people. Keep environmental distractions to a minimum.
- Provide snacks in between meals if meal time intake is inadequate.
- Cut food into small pieces if the client does have difficulty chewing food. Remind the client to chew and then swallow. Lightly stroking the chin and throat can help promote swallowing. **QS**

Altered sensory perception

Clients who have an alteration in vision, smell, or taste can find it difficult to feed themselves or can find food unpalatable.

- Clients who have decreased vision might need assistance shopping for food on a regular basis, and with food preparation.
- Clients in a health care or long-term care facility might need help with tray setup and location of food on the tray.
- Clients who have an altered sense of smell have an altered sense of taste.
- Clients who smoke might have a diminished sense of smell.
- Clients on chemotherapy and other types of medications can have an unusual metallic taste in their mouth, masking the real taste of food.
- Clients receiving radiation to the head and neck can experience altered or loss of taste (mouth blindness).

NURSING CARE

- Encourage the client who has decreased vision to shop with a friend or family member, or have groceries delivered to the house. **Qccc**
- Contact social services regarding availability of food or meal delivery to the client's home.
- Recommend to the client who has a food aversion to eat foods that are served cool, as they are typically less aromatic and are less likely to precipitate nausea.
- Suggest consuming foods that are spicy or tangy to compensate for the decreased sense of taste.
- Recommend sucking on hard candies, mints, or chewing gum to counteract an unusual taste in the mouth.
- Instruct the client to avoid ingestion of empty calories. If an increase in calories and fluid is desired, milkshakes, juice, and supplements are good options.

Impairment in swallowing

Clients who have neurological disorders (Parkinson's disease, cerebral palsy, stroke) or had a surgical procedure done on their mouth, throat, epiglottis, or larynx can have difficulty managing food and swallowing without choking.

- Clients who have a neurological disorder affecting the muscles in the mouth and throat are at risk for aspiration due to delayed swallowing and/or inadequate mastication.
- Clients who have a history of oral cancer might have had part of their lip, tongue, and/or soft palate removed. This significantly affects the ability to masticate and coordinate the development of a bolus of food prior to swallowing.
- Clients who have had their epiglottis completely or partially removed, or part of their larynx removed, have an anatomical structure removed that previously prevented food from entering the trachea. Unless precautions are taken, the client will easily aspirate food and fluids.

NURSING CARE

- Continually monitor clients who are at risk for aspiration during meals, and have suction equipment immediately available. **Qs**
- Consult a dietitian regarding an appropriate diet for the client (thick liquids, pureed, mechanical soft).
- Thicken thin fluids with a commercial thickener to the prescribed consistency of a nectar, honey, or pudding.
- Allow adequate time for assisting the client who has dysphagia to eat.
- Teach clients who aspirate easily due to surgical alteration of their throat or upper tracheal structures to tuck their chins when swallowing. Arching the tongue in the back of the throat can help close off the trachea.

Mechanical fixation of the jaw

Disorders of the jaw requiring surgery include facial trauma and reconstruction.

- After fractured bones are realigned, the client's upper and lower jaw can be wired together.
- The jaw can be immobilized for several weeks.
- The client is generally placed on a liquid diet during this period.

NURSING CARE

- Encourage the intake of fluids.
- Help the client determine where to insert a straw through the space between the jaws.
- Work with the dietitian to develop a liquid meal plan that includes the necessary nutrients. **Qrc**

Lack of knowledge and misinformation about nutrition

Clients who do not have a good understanding about nutritional needs can be subject to overnutrition, undernutrition, and the ingestion of an inadequate intake of essential nutrients.

- Clients might not have basic knowledge about nutrition.
- Information about nutrition can be confusing or misleading.
- Clients can be drawn to fad diets (which are generally unhealthy) because quick results are promised.
- Clients can be misled by false advertising.

NURSING CARE

- Encourage clients to use dietary guidelines available from government and health associations (MyPlate [www.choosemyplate.gov], the American Heart Association). **QEBP**
- Assist clients in locating community resources that provide education on nutrition.
- Assess dietary intake.
- Instruct clients on how to read nutrition fact labels.
- Encourage the client to keep a journal of dietary intake.
- Provide clients with information on foods that are healthy and portion sizes.
- Warn clients that advertisements can be fraudulent.

Medical conditions

- Clients who have medical conditions such as cancer, COPD, burns, severe trauma, or HIV/AIDS are at increased risk for malnutrition due to anorexia, nausea, or stomatitis related to treatments, increased metabolic demands, or the ability to consume a diet.
- Clients who are undergoing diagnostic testing that require NPO status are potentially at risk.
- Clients who have comorbidities resulting in polypharmacy are at risk for malnutrition and medication nutrient interactions.

NURSING CARE

- Monitor diet prescriptions and laboratory results, particularly for clients who are receiving clear or full liquid diets for more than 24 hr. Refer the client to a dietitian for a complete evaluation of nutritional status. 
- Monitor clients who have comorbidities for interactions between medications and nutrition. Refer the client to a pharmacist for a thorough evaluation of medication interactions and the impact upon nutritional intake.

- Offer several small meals or snacks through the day instead of three large meals.
- Provide oral care prior to and following meals.
- Discourage the use of alcohol-based mouthwashes for clients who have stomatitis.
- Provide liquid supplements between meals to increase nutrient intake.

PRACTICE Active Learning Scenario

A nurse is providing dietary teaching for a client who requests assistance for weight loss. The client states, "I've tried several fad diets but they don't work for me." Use the ATI Active Learning Template: Basic Concept to complete this item to include the following sections.

UNDERLYING PRINCIPLES: Identify the client's barrier to nutrition.

NURSING INTERVENTIONS: Identify at least four interventions to address this client's barrier to nutrition and to promote healthy weight loss.

Application Exercises

1. A nurse is caring for several clients in an extended care facility. Which of the following clients is the highest priority to observe during meals?
 - A. A client who has decreased vision
 - B. A client who has Parkinson's disease
 - C. A client who has poor dentition
 - D. A client who has anorexia
2. A nurse is planning care for an older adult client who is receiving treatment for malnutrition. The client is scheduled for discharge to his home where he lives alone. Which of the following actions should the nurse include in the plan of care? (Select all that apply.)
 - A. Consult social services to arrange home meal delivery.
 - B. Encourage the client to purchase nonperishable boxed meals.
 - C. Advise the client to purchase frozen fruits and vegetables.
 - D. Recommend drinking a supplement between meals.
 - E. Educate the client on how to read nutrition labels.
3. A nurse is providing teaching for a client who has a new diagnosis of hypertension and a prescription for a low-sodium diet. Which of the following client statements indicate an understanding of the teaching? (Select all that apply.)
 - A. "I should select organic canned vegetables."
 - B. "I need to read food labels when grocery shopping."
 - C. "I will stop eating frozen dinners for lunch at work."
 - D. "I know that deli meats are usually high in sodium."
 - E. "I can refer to the American Heart Association's website for dietary guidelines."
4. A nurse is caring for a client who is transitioning to an oral diet following a partial laryngectomy. Which of the following actions should the nurse take to reduce the client's risk for aspiration?
 - A. Request to have the client's oral medications provided in liquid form.
 - B. Instruct the client to follow each bite of food with a drink of water.
 - C. Encourage the client to tuck the chin when swallowing.
 - D. Consult the dietitian about providing the client with a thin liquid diet.
5. A nurse is planning care for a client who has mechanical fixation of the jaw following a motorcycle crash. Which of the following actions should the nurse include in the plan of care? (Select all that apply.)
 - A. Thicken liquids to honey consistency.
 - B. Educate the client about the use of a nasogastric tube.
 - C. Assist the client to use a straw to drink liquids.
 - D. Ensure that the client receives ground meats.
 - E. Encourage intake of fluids between meals.

Application Exercises Key

1. A. Observation of a client who has decreased vision is necessary to evaluate the client's need for assistance. However, this client is not the highest priority to observe during meals.
B. **CORRECT:** A client who has Parkinson's disease is at risk for aspiration. Due to this safety risk, this client is the highest priority to observe during meals.
C. Observation of a client who has poor dentition is necessary to evaluate the client's need for assistance or a modified diet. However, this client is not the highest priority to observe during meals.
D. Observation of a client who has anorexia is necessary to evaluate the client's intake. However, this client is not the highest priority to observe during meals.
NCLEX® Connection: Safety and Infection Control, Accident/Error/Injury Prevention
2. A. **CORRECT:** The nurse should consult social services to arrange home meal delivery to promote adequate nutrition.
B. Boxed foods are usually high in calories and salt and are therefore not recommended to promote adequate nutrition.
C. **CORRECT:** The nurse should advise the client to purchase frozen fruits and vegetables to promote adequate nutrition.
D. **CORRECT:** The nurse should recommend a supplement between meals to promote adequate nutrition.
E. **CORRECT:** The nurse should educate the client on how to read food labels to promote adequate nutrition.
NCLEX® Connection: Physiological Adaptation, Illness Management
3. A. Canned foods, even if organic, are usually high in sodium and are therefore a poor choice for a client on a sodium-restricted diet.
B. **CORRECT:** Reading food labels provides the client with information about the food's sodium content.
C. Frozen dinners are usually high in sodium and are therefore a poor choice for a client on a sodium-restricted diet.
D. **CORRECT:** Deli meats are usually high in sodium and are therefore a poor choice for a client on a sodium-restricted diet.
E. **CORRECT:** The American Heart Association is a recommended health association for continued client education on dietary guidelines related to cardiac disorders such as hypertension.
NCLEX® Connection: Physiological Adaptation, Illness Management
4. A. Providing medications in liquid form does not decrease the risk for aspiration.
B. Drinking thin liquids, such as water, increases the risk for aspiration.
C. **CORRECT:** Tucking the chin when swallowing helps to close off the trachea and reduces the risk for aspiration.
D. Thick, rather than thin, liquids help reduce the risk for aspiration.
NCLEX® Connection: Reduction of Risk Potential, Potential for Complications of Diagnostic Tests/Treatments/Procedures
5. A. Mechanical fixation of the jaw does not cause dysphagia. It is not necessary to thicken the client's liquids.
B. Mechanical fixation of the jaw does not indicate the need for a nasogastric tube.
C. **CORRECT:** The nurse should recommend the use of a straw to drink liquids. The nurse should help the client determine where to insert the straw through the space between the jaws.
D. Mechanical fixation of the jaw indicates the need for a liquid diet rather than ground meats.
E. **CORRECT:** The client who has a mechanical fixation of the jaw will have the jaws wired shut and is only able to consume liquids. The nurse should encourage supplemental and nutrient-rich liquids to maintain adequate hydration and nutrition.
NCLEX® Connection: Basic Care and Comfort, Nutrition and Oral Hydration

PRACTICE Answer

Using the ATI Active Learning Template: Basic Concept

UNDERLYING PRINCIPLES: The client's barrier to nutrition is lack of knowledge and misinformation about nutrition. This barrier must be acknowledged to promote adequate nutrition.

NURSING INTERVENTIONS

- Encourage the client to use dietary guidelines such as MyPlate.
- Assist the client in locating community resources that provide education and nutrition to support healthy nutrition and weight loss.
- Advise the clients that fad diets are generally unhealthy and often include false advertising.
- Perform an assessment of dietary intake.
- Encourage the client to keep a journal of dietary intake.
- Provide the client with information on healthy foods and portion sizes.

NCLEX® Connection: Health Promotion and Maintenance, Health Promotion/Disease Prevention