

## 22

## Clients' Nutritional Needs

**1. Describe the importance of proper nutrition and list the six basic nutrients**

Proper nutrition is very important. **Nutrition** is how the body uses food to maintain health. Bodies need a well-balanced diet containing essential nutrients and plenty of fluids. This helps the body grow new cells, maintain normal body function, and have energy for activities.

Proper nutrition in childhood and early adulthood helps ensure health later in life. For people who are ill or elderly, a well-balanced diet helps maintain muscle and skin tissues and prevent pressure injuries. A healthy diet promotes the healing of wounds. It also helps a person cope with physical and emotional stress.

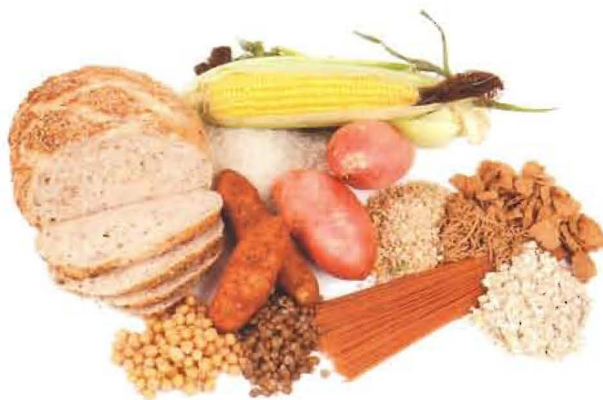
A **nutrient** is a necessary substance that provides energy, promotes growth and health, and helps regulate metabolism. Metabolism is the process by which nutrients are broken down and transformed to be used by the body for energy, growth, and maintenance. The body needs the following six nutrients for healthy growth and development:

1. **Water** is the most essential nutrient for life; it is needed by every cell in the body. Without water, a person can only live for a few days. Water assists in the digestion and absorption of food. It helps with the elimination of waste. Through perspiration, water also helps maintain normal body temperature. Maintaining enough fluid in the body is necessary for health. More

information about fluid balance may be found in Chapter 14 and later in this chapter.

The fluids a person drinks—water, juice, soda, coffee, tea, and milk—provide most of the water the body uses. Some foods are also sources of water, including soup, celery, lettuce, apples, and peaches.

2. **Carbohydrates** (*kar-boh-HIGH-drayts*) supply the body with energy and extra protein and help the body use fat efficiently. Carbohydrates also provide **fiber**, which is necessary for bowel elimination. Carbohydrates can be divided into two basic types: complex and simple. **Complex carbohydrates** are found in bread, cereal, potatoes, rice, pasta, vegetables, and fruits (Fig. 22-1). **Simple carbohydrates** are found in sugars, sweets, syrups, and jellies. Simple carbohydrates do not have the same nutritional value as complex carbohydrates.



**Fig. 22-1.** Some sources of complex carbohydrates.

3. **Proteins** are part of every body cell. They are essential for tissue growth and repair. Proteins also supply energy for the body. Excess proteins are excreted by the kidneys or stored as body fat. Sources of protein include seafood, poultry, meat, eggs, milk, cheese, nuts, nut butters, peas, beans or legumes, and vegetarian meat substitutes from a variety of food sources (Fig. 22-2). Whole grain cereals, pastas, rice, and breads contain some proteins, too.



**Fig. 22-2.** Some sources of protein.

4. **Fats** help the body store energy. Fats also add flavor to food and are important for the absorption of certain vitamins. Excess fat in the diet is stored as fat in the body.

Fat falls into four categories: saturated, trans, monounsaturated, and polyunsaturated. Saturated and trans fats can increase cholesterol levels and the risk of some diseases, like cardiovascular disease. Monounsaturated and polyunsaturated fats can be helpful in the diet, and can decrease the risk of cardiovascular disease and type 2 diabetes.

Some fats come from animal sources, such as butter, beef, pork, fowl, fish, and dairy products. Some fats come from plant sources, such as olives, nuts, and seeds (Fig. 22-3).



**Fig. 22-3.** Some sources of fat.

5. **Vitamins** are substances that are needed by the body to function. The body cannot make most vitamins; they can only be obtained by eating certain foods. Some vitamins are fat-soluble, which means they are carried and stored in body fat. Vitamins A, D, E, and K are examples. Other vitamins are water-soluble, meaning they are broken down by water in the body and cannot be stored. Vitamins B and C are examples of water-soluble vitamins. Excess vitamins B and C are eliminated in urine and feces.

6. **Minerals** maintain body functions. Minerals help build bones, make hormones, and help in blood formation. They provide energy and control body processes. Zinc, iron, calcium, and magnesium are examples of minerals. Minerals are found in many foods. Tables 22-1 and 22-2 on the next page contain more information about vitamins and minerals.

## 2. Describe the USDA's MyPlate

Most foods contain several nutrients, but no one food contains all the nutrients needed for a healthy body. That is why it is important to eat a daily diet that is well balanced. There is not one single dietary plan that is right for everyone. People have different nutritional needs depending upon their age, gender, and activity level.

In 2011, in response to increasing rates of obesity, the United States Department of Agriculture (USDA, [usda.gov](http://usda.gov)) developed MyPlate to help people build a healthy plate at meal times (Fig. 22-4). The MyPlate icon emphasizes vegetables, fruits, grains, protein, and low-fat dairy products.



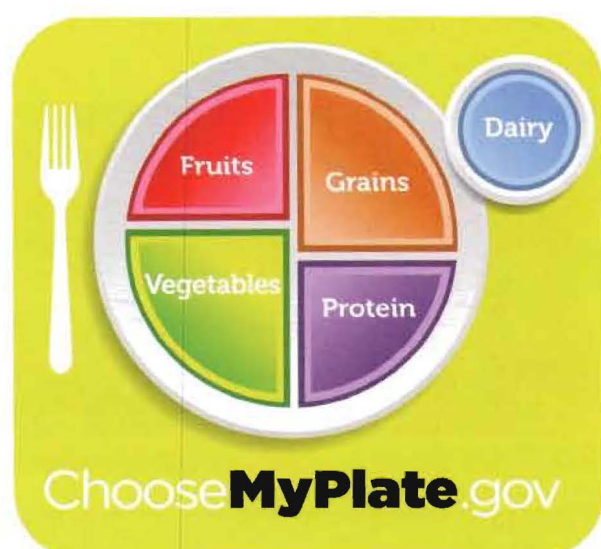
VITAMIN	SOURCE	FUNCTION
Vitamin A	dark green and yellow vegetables, such as broccoli and turnip greens	assists with skin and eye development; keeps the skin healthy; helps the eyes adjust to dim light; helps the linings of the respiratory and digestive tracts resist infection
Vitamin C	fruits such as oranges, strawberries, grapefruit, and cantaloupe; vegetables such as broccoli, cabbage, brussels sprouts, and green peppers	assists with healing wounds and building bones and teeth; holds cells together; strengthens the walls of blood vessels; helps the body absorb iron
Vitamin B2 or riboflavin	milk, milk products, lean meat, green leafy vegetables, eggs, breads, and cereals	helps cells use oxygen, which allows them to release energy from food; important for protein and carbohydrate metabolism; needed for growth, healthy eyes, skin, and mucous membranes
Vitamin B3 or niacin	lean meat, poultry, fish, peanuts and peanut butter, whole grain breads and cereals, peas, beans, and eggs	important for protein, carbohydrate, and fat metabolism; helps maintain appetite; important for the functioning of the skin, tongue, nervous system, and digestive system; helps cells use oxygen for energy
Vitamin D	milk, butter, liver, and fish liver oils; also obtained by exposing the body to direct sunlight, which interacts with the cholesterol in the skin	responsible for the body's absorption of the minerals calcium and phosphorus and contributes to the formation of healthy bones; especially important to growing children and women who are pregnant or breastfeeding
Vitamin E	cereals, nuts, vegetable oils, wheat germ, vegetables, fish, and fruits	antioxidant that protects the body from damage from free radicals; helps boost the immune system; assists in formation of red blood cells
Thiamin	lean pork, dried beans, peas, whole grain and enriched breads and cereals, and certain types of nuts	helps the body obtain energy from foods

Table 22-1. Sources and functions of essential vitamins.

MINERAL	SOURCE	FUNCTION
Iron	egg yolks, green leafy vegetables, breads, cereals, and organ meats	necessary for red blood cells to carry oxygen; helps in the formation of enzymes
Sodium	almost all foods and table salt	important for maintaining fluid balance (helps the body retain water)
Calcium	milk and milk products such as cheese, yogurt, and ice cream; green leafy vegetables such as collards, kale, mustard, dandelion, and turnip greens; canned fish with soft bones, such as salmon	important for the formation of teeth and bones, the clotting of blood, muscle contraction, and heart and nerve function
Potassium	fruits and vegetables, cereals, coffee, and meats	essential for nerve and heart function and muscle contraction
Phosphorus	milk, milk products, meat, fish, poultry, nuts, and eggs	needed for the formation of bones and teeth and for nerve and heart function; important for the body's utilization of proteins, fats, and carbohydrates

Table 22-2. Sources and functions of essential minerals.





**Fig. 22-4.** To help promote healthy eating practices, the US Department of Agriculture developed the MyPlate icon and website (ChooseMyPlate.gov).

The goal of MyPlate is to guide people in making healthy food choices. The icon is based on scientific information about nutrition and health. It shows the amounts of each food group that should be on a person's plate. MyPlate gives suggestions and tools for making healthy choices; however, it does not provide specific messages about what a person should eat. The MyPlate icon includes the following food groups:

**Vegetables and fruits:** Fruits and vegetables should make up half of a person's plate. Vegetables include all fresh, frozen, canned, and dried vegetables, and vegetable juices. There are five subgroups within the vegetable group, organized by their nutritional content. These are dark green vegetables, red and orange vegetables, beans and peas, starchy vegetables, and other vegetables. A variety of vegetables from these subgroups should be eaten every day. Dark green, red, and orange vegetables have the best nutritional content (Fig. 22-5).

Vegetables are low in fat and calories and have no cholesterol (although sauces and seasonings may add fat, calories, and cholesterol). They are good sources of dietary fiber, potassium, vitamin A, vitamin E, and vitamin C.



**Fig. 22-5.** Eating a variety of vegetables every day, especially dark green, red, and orange vegetables, helps promote health.

Fruits include all fresh, frozen, canned, and dried fruits, and 100% fruit juices. Most choices should be whole, cut-up, or pureed fruit, rather than juice, for the additional dietary fiber provided. Fruit can be added as a main dish, side dish, or dessert.

Fruits, like vegetables, are naturally low in fat, sodium, and calories and have no cholesterol. They are important sources of dietary fiber and many nutrients, including folic acid, potassium, and vitamin C. Foods containing dietary fiber help provide a feeling of fullness with fewer calories. Folic acid helps the body form red blood cells. Vitamin C is important for growth and repair of body tissues.

**Grains:** A person should make half his grain intake whole grains. There are many different grains. Some common ones are wheat, rice, oats, cornmeal, and barley. Foods made from grains include bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. Grains can be divided into two groups: whole grains and refined grains. Whole grains contain bran and germ, as well as the endosperm. Refined grains retain only the endosperm. The endosperm is the tissue within flowering plants. It surrounds and nourishes the plant embryo. Examples of whole grains include brown rice, wild rice, bulgur, oatmeal, whole-grain corn, whole oats, whole wheat, and whole rye. Consuming foods rich in fiber reduces the risk of heart disease and other diseases and may reduce constipation.



**Protein:** MyPlate guidelines emphasize eating a variety of protein foods every week. Meat, poultry, seafood, and eggs are animal sources of proteins. Beans, peas, soy products, vegetarian meat substitutes, nuts, and seeds are plant sources of proteins.

Seafood should be eaten twice a week in place of meat or poultry. Seafood that is higher in oils and low in mercury, such as salmon or trout, is a better choice (Fig. 22-6). Lean meats and poultry, as well as eggs and egg whites, can be eaten on a regular basis. A person should eat plant-based protein foods more often. Beans and peas, soy products (tofu, tempeh, many vegetarian products), vegetarian meat substitutes, nuts, and seeds are low in saturated fat and high in fiber. Some nuts and seeds (flax, walnuts) are excellent sources of essential fatty acids. These fatty acids may reduce the risk of cardiovascular disease. Sunflower seeds and almonds are good sources of vitamin E.



**Fig. 22-6.** Fish, like this salmon, contains healthy oils and is a good source of protein.

**Dairy:** All milk products and foods made from milk that retain their calcium content, such as yogurt and cheese, are part of the dairy category. Most dairy group choices should be fat-free (0%) or low-fat (1%). Fat-free or low-fat milk or yogurt should be chosen more often than cheese. Milk and yogurt contain less sodium than most cheeses.

Milk provides nutrients that are vital for the health and maintenance of the body. These nutrients include calcium, potassium, vitamin D, and protein. Fat-free or low-fat milk provides these nutrients without the extra calories and saturated fat (Fig. 22-7). Soy, almond, rice, and

oat products enriched with calcium are an alternative to dairy foods.



**Fig. 22-7.** Low-fat milk or yogurt is a good source of calcium without the added saturated fat.

The following guidelines provide additional tips for making healthy food choices:

#### Guidelines: Healthy Food Choices

- G** Balance calories. Calorie balance is the relationship between the calories obtained from food and fluids consumed and the calories used during normal body functions and physical activity. Proper calorie intake varies from person to person. To find the proper calorie intake, the USDA suggests visiting ChooseMyPlate.gov.
- G** Enjoy your food, but eat less. Eating too fast or eating without paying attention to your food can lead to overeating. Recognize when you feel hungry and when you are full. Notice what you are eating. Stop eating when you feel satisfied.
- G** Avoid oversized portions. Choose smaller-sized portions when eating. Portion out food before you eat it, and use smaller bowls and plates for meals. When eating out, split food with others or take part of your meal home.
- G** Eat these foods more often: vegetables, fruits, whole grains, and fat-free or 1% milk and low-fat dairy products. These foods have better nutrients for health.
- G** Eat these foods less often: foods high in solid fats, added sugars, and salt. These foods

include fatty meats (like bacon and hot dogs), cheese, fried foods, ice cream, and cookies.

- G** Check sodium content in foods. Read product labels to determine if they contain salt or sodium. Foods high in sodium include the following:
- Cured meats, including ham, bacon, lunch meat, sausage, salt pork, and hot dogs
  - Salty or smoked fish, including herring, salted cod, sardines, anchovies, caviar, smoked salmon, and lox
  - Processed cheese and some other cheeses
  - Salted foods, including nuts, pretzels, potato chips, dips, and spreads, such as salted butter and margarine
  - Vegetables preserved in brine, such as pickles, sauerkraut, olives, and relishes
  - Sauces with high concentrations of salt, including Worcestershire, chili, steak, and soy sauces; ketchup; mustard; and mayonnaise
  - Commercially prepared foods such as breads, canned soups and vegetables, and certain breakfast cereals

Select canned foods that are labeled *sodium-free*, *very low-sodium*, *low-sodium*, or *reduced sodium*.

- G** Drink water instead of sugary drinks. Drinking water or unsweetened beverages reduces sugar and calorie intake. Sweetened beverages, such as soda, fruit punch, and sports drinks, are a major source of sugar and calories in diets.

### 3. Identify ways to assist clients in maintaining fluid balance

Water is an essential nutrient for life. Proper fluid intake is important. Drinking enough water or other fluids per day can help prevent constipation and urinary incontinence. Without enough fluid, urine becomes concentrated. More

concentrated urine creates a higher risk for infection. Proper fluid intake also helps to dilute wastes and flush out the urinary system. It may even help prevent confusion.

The sense of thirst can diminish as people age. Infection, fever, diarrhea, and some medications will also increase the need for fluid intake. Home health aides should remind clients to drink fluids often. Some clients will drink more fluids if they are offered them in smaller amounts, rather than in one large glassful.

Some clients may have a doctor's order to encourage fluids or restrict fluids because of medical conditions. When a client has an order to restrict fluids, he must limit the daily amount of fluid intake to a level set by the doctor. The HHA should not give the client any extra fluids unless the supervisor approves it.

The abbreviation **NPO** stands for *nothing by mouth*. This means that a client is not allowed to have anything to eat or drink. Some clients have such a severe problem with swallowing that it is unsafe to give them anything by mouth. These clients will receive nutrition through a feeding tube or intravenously. Some clients may not be able to eat or drink for a short time before a medical test or surgery. HHAs need to know this abbreviation. They should never offer any food or drink, even water, to a client with this order.

**Dehydration** (*dee-high-DRAY-shun*) occurs when a person does not have enough fluid in the body. Dehydration is a serious condition and a major problem among the elderly. People can become dehydrated if they do not drink enough or if they have diarrhea or are vomiting. Preventing dehydration is very important.

#### Guidelines: Preventing Dehydration

- G** Report observations and warning signs to your supervisor immediately.
- G** Encourage clients to drink every time you see them (Fig. 22-8).





**Fig. 22-8.** Encouraging your clients to drink every time you see them can help prevent dehydration.

- G** Offer fresh water or other fluids often. Offer drinks that the client enjoys. Some clients may prefer water or sparkling water (seltzer water). Some clients may not like water and prefer other types of beverages, such as juice, soda, tea, or milk. Some clients do not want ice in their drinks. As always, it is important to provide person-centered care and to honor personal preferences.
- G** Ice chips, frozen flavored ice sticks, and gelatin are also forms of liquids. Offer them often. Do not offer ice chips or sticks if a client has a swallowing problem.
- G** If appropriate, offer sips of liquid between bites of food during meals and snacks.
- G** Make sure a pitcher and cup are nearby and are light enough for a client to lift.
- G** Offer assistance if a client cannot drink without help. Use assistive cups as needed.
- G** Record fluid intake and output.

**Observing and Reporting: Dehydration**

Report any of the following to the supervisor:

- O/R** Client drinks fewer than six 8-ounce glasses of liquid per day
- O/R** Client drinks little or no fluids at meals
- O/R** Client needs help drinking from a cup or glass
- O/R** Client has trouble swallowing liquids

- O/R** Client experiences frequent vomiting, diarrhea, or fever
- O/R** Client is easily confused

Report if the client has any of the following:

- O/R** Dry mouth
- O/R** Cracked lips
- O/R** Sunken eyes
- O/R** Dark urine
- O/R** Strong-smelling urine
- O/R** Less frequent urination
- O/R** Weight loss
- O/R** Fatigue
- O/R** Dizziness
- O/R** Abdominal pain
- O/R** Client says she is very thirsty

**Fluid overload** occurs when the body is unable to handle the amount of fluid consumed. This often affects people with heart or kidney disease.

**Observing and Reporting: Fluid Overload**

Report any of the following to the supervisor:

- O/R** Swelling/edema of extremities (ankles, feet, fingers, hands); **edema** is swelling caused by excess fluid in body tissues
- O/R** Weight gain (daily weight gain of one to two pounds)
- O/R** Decreased urine output
- O/R** Shortness of breath
- O/R** Increased heart rate
- O/R** Anxiety
- O/R** Skin that appears tight, smooth, and shiny

**Fluid balance** is maintaining equal input and output, or taking in and eliminating equal amounts of fluid. It can be measured by

monitoring a client's intake and output. Chapter 14 describes how to do this. If dehydration or fluid overload is suspected, the HHA should contact her supervisor immediately.

#### 4. Identify nutritional problems of the elderly or ill

Aging and illness can lead to emotional and physical problems that affect the intake of food. For example, people who are lonely or who suffer from illnesses that affect their ability to chew and swallow may have little interest in food. Weaker hands and arms due to paralysis and tremors make it hard to eat. People with illnesses that affect their ability to chew and swallow may not want to eat. Special care must be taken in meal planning and preparation to ensure proper nutrition.

Clients who have small appetites may eat more if they are fed five or six small meals a day. If an HHA is concerned that a client is not getting enough nutrients, she can talk with her supervisor about preparing high-calorie, high-protein foods and beverages and nutritional supplements.

Unintended weight loss is a serious problem for the elderly. Weight loss can mean the client has a serious medical condition. It can lead to skin breakdown, which leads to pressure injuries. It is very important for home health aides to report any weight loss, no matter how small. If a client has chronic obstructive pulmonary disease, cancer, HIV, or other diseases, he is at a greater risk for malnutrition.

##### Guidelines: Preventing Unintended Weight Loss

- G Report observations and warning signs to your supervisor.
- G Food should look, taste, and smell good, particularly since the client may have a poor sense of taste and smell.

- G Encourage clients to eat. Talk about food being served in a positive tone of voice, using positive words.
- G Honor clients' food likes and dislikes.
- G Offer different kinds of foods and beverages.
- G Help clients who have trouble feeding themselves.
- G Season food to clients' preferences.
- G Allow enough time for clients to finish eating.
- G Notify your supervisor if clients have trouble using utensils.
- G Record the meal/snack intake.
- G Provide oral care before and after meals and as the client requests it.
- G Position clients sitting upright for eating.
- G If a client has had a loss of appetite and/or seems sad, ask about it.

##### Observing and Reporting: Unintended Weight Loss

Report any of the following to the supervisor:

- O/R Client needs help eating or drinking
- O/R Client eats less than 75% of meals served
- O/R Client has mouth pain
- O/R Client has dentures that do not fit properly
- O/R Client has difficulty chewing or swallowing
- O/R Client coughs or chokes while eating
- O/R Client is sad, has crying spells, or withdraws from others
- O/R Client is confused, wanders, or paces

Certain medications and limited activity cause constipation. Constipation often interferes with appetite. Fiber, fluids, and exercise can improve this common problem. Many illnesses require restrictions of fluids, proteins, certain minerals, or calories.



In addition, clients who are ill are often fatigued, nauseated, or in pain. These clients should get plenty of rest and take prescribed medications (Fig. 22-9). Some medications must be taken with food, while others must be taken before meals. These instructions are important both for helping clients remember to take medications and for limiting nausea and upset stomach caused by medications. People who are nauseated may tolerate cold foods better than warm foods, because cold foods have less aroma. Eating small amounts of food throughout the day and eating slowly may also help.



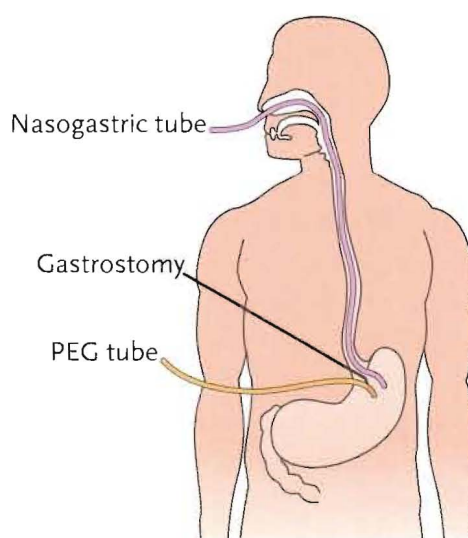
**Fig. 22-9.** Many clients take a variety of medications, which can affect the way food smells and tastes.

Clients who have had strokes may have difficulty swallowing liquids because of facial weakness or paralysis. Liquids that have been thickened may be easier to swallow. Thickening improves the ability to control fluid in the mouth and throat. Thickened liquids include milkshakes, sherbet, gelatin, thin hot cereal, cream soups, and fruit juices that have been frozen to a slushy consistency. More information about swallowing problems and thickened liquids may be found later in this chapter.

When the digestive system does not function properly, **parenteral** (*pa-REN-ter-uhl*) **nutrition (PN)** (sometimes referred to as *total parenteral nutrition [TPN]*) may be necessary. With parenteral nutrition, a solution of nutrients is administered directly into the bloodstream. It bypasses the digestive system. The nutrients are in their most basic forms of carbohydrates, proteins, and fats and are absorbed directly by the cells.

Home health aides are not responsible for parenteral nutrition. They may be assigned to take the client's temperature or assemble supplies. In addition, they should observe, report, and document changes in the client or problems with the feeding.

When a person is unable to swallow, he or she may be fed through a tube. A **nasogastric tube** is inserted into the nose and goes to the stomach. A tube can also be placed into the stomach through the abdominal wall. This is called a **percutaneous endoscopic gastrostomy (PEG) tube**. The surgically created opening into the stomach that allows the insertion of a tube is called a **gastrostomy** (Fig. 22-10). Tube feedings are used when clients cannot swallow but can digest food. Conditions that may prevent clients from swallowing include coma, cancer, stroke, refusal to eat, or extreme weakness. It is important to remember that clients have the right to refuse treatment, which includes the insertion of tubes.



**Fig. 22-10.** Nasogastric tubes are inserted through the nose, and PEG tubes are inserted through the abdominal wall into the stomach.

Home health aides never insert or remove tubes, do the feeding, or irrigate (clean) the tubes. They may assemble equipment and supplies and hand them to the nurse. HHAs may position clients in a sitting position for feeding. They may also

discard or clean used equipment and supplies. In addition, HHAs may observe, report, and document any changes in the client or problems with the feeding.

**Guidelines: Tube Feedings**

- G** Wash your hands before assisting with any aspect of tube feedings.
- G** Make sure the tubing is not coiled or kinked or resting underneath the client.
- G** Be aware if client has an order for nothing by mouth, or NPO.
- G** The tube is only inserted and removed by a doctor or nurse. If it comes out, report it immediately.
- G** A doctor will prescribe the type and amount of feeding. The feedings should be at room temperature and in liquid form.
- G** A client with a feeding tube should always have the head of the bed elevated 30 degrees. However, during the feeding, the client should remain in a sitting position with the head of the bed elevated at least 45 degrees. This helps prevent serious problems, such as aspiration. The elderly can develop pneumonia or even die from improper positioning during tube feedings. After the feeding, keep the client upright for as long as ordered, at least 30 minutes.
- G** If your client must remain in bed for long periods during feedings, give careful skin care. This helps to prevent pressure injuries on the hips and sacral area.

**Observing and Reporting: Tube Feedings**

Report any of the following immediately:

- O/R** Redness or drainage around the opening
- O/R** Skin sores or bruises
- O/R** Cyanotic skin

- O/R** Client mentions pain or nausea
- O/R** Choking or coughing
- O/R** Vomiting
- O/R** Diarrhea
- O/R** Swollen abdomen
- O/R** Fever
- O/R** Tube falls out
- O/R** Problems with the equipment
- O/R** Feeding pump alarm sounds
- O/R** Change of client's inclined position

**5. Demonstrate awareness of regional, cultural, and religious food preferences**

Culture, ethnicity, income, education, religion, and geography all affect ideas about nutrition. Food preferences may be formed by what a person ate as a child, by what tastes good, or by personal beliefs about what should be eaten (Fig. 22-11). For instance, some people choose not to eat any animals or animal products, such as steak, chicken, butter, or eggs. These people are called vegetarians or vegans, depending on what they eat.



**Fig. 22-11.** Food likes and dislikes are influenced by what a person ate as a child.

The region or culture in which a person grows up often affects his food preference. For example, people from the southwestern United States may like spicy foods. Southern cooking may



include fried foods, like fried chicken or fried okra. Ethnic groups often share common foods. These may be eaten at certain times of the year or all of the time. Religious beliefs influence diet, too. For example, some Muslims and Jewish people do not eat any pork. Members of the Church of Jesus Christ of Latter-day Saints may not drink alcohol, coffee, or tea.

When planning meals and cooking for clients, home health aides should know clients' food preferences. Some of these may be listed in the care plan. HHAs will also need to find out more before planning meals. A good way for the HHA to do this is to ask the client or a family member to discuss his food preferences, or suggest some sample menus and ask for reactions. Food preferences may change while working with clients. Just as anyone may decide that she likes foods for a time and then change her mind, so may clients. Providing person-centered care means respecting each client's preferences.

Paying attention to what is eaten when meals are served is also important. If a client never finishes her chicken, it may mean that she prefers other kinds of meats. Cost may also be a factor in choosing foods. Protein-rich foods are generally the most expensive, but are also the most important for the healing process. There is more information about these aspects of meal planning in Chapter 23.

## 6. List and define common health claims on food labels

Food packages often make claims about the health benefits of the food they contain. Food labels are a form of advertising designed to convince shoppers to buy a product. Although some regulations exist about what labels can claim, an HHA should read health claims carefully before making a decision to buy. Key claims in food label advertising include the following:

**Low-fat, nonfat, fat-free, reduced fat, or light:** If a product is labeled *low-fat* or *nonfat*, it usually

does not contain much fat. However, it is still important to read the label to determine the fat content of the food.

Products labeled *reduced fat* or *light* contain less fat than other versions of the same product. For example, salad dressing labeled *reduced fat* should contain 25 percent less fat than regular salad dressing, but it may still be high in fat. Salad dressing labeled *light* should contain 50 percent less fat than regular. Reading the label is the only way to determine fat content. Some foods that claim to have less fat may contain fat substitutes. In general, the best food and dollar value is found in products that do not contain these substitutes.

Cookies, cakes, and other treats labeled *fat-free* or *reduced fat* usually contain a lot of sugar and calories. All sweets should be eaten sparingly, as they provide little or no nutritional value. Extra calories, especially sugars, are quickly converted to fat by the body.

**Low-sodium, very low-sodium, sodium-free, or no added salt (or no salt added):** For clients who must reduce their sodium or salt intake, foods labeled *low-sodium*, *very low-sodium*, or *sodium-free* are important. *No added salt* or *no salt added* means that no salt was added during processing, but these products may not be sodium free. Most foods naturally contain some sodium. Foods that list salt or sodium as added ingredients should be avoided. In general, canned foods and prepared foods like soups and frozen dinners have a lot of added salt and should not be eaten regularly.

**Cholesterol-free:** Cholesterol-free foods may be useful for those clients who must restrict their cholesterol intake. However, the best way to limit cholesterol is to avoid foods containing animal fats, such as butter, cheese, whole milk, red meats, and organ meats.

**Sugar-free or no added sugar:** Clients who must lose weight or who have diabetes must be very careful about consuming sugar in any form.

Sugar-free products can be helpful, but they may contain artificial sweeteners, such as saccharin or aspartame. These have no food value and should be used sparingly. Foods sweetened with fruit juice may still contain a lot of calories. People who have diabetes may need to avoid fruit-juice-sweetened products as well as sugar-sweetened ones.

**Organic:** Organic food differs from conventionally produced food in the way it is grown, handled, and processed (Fig. 22-12). Organic food is produced without using most conventional pesticides, fertilizers made with synthetic ingredients or sewage sludge, bioengineering, or ionizing radiation. Organic meat, poultry, eggs, and dairy products come from animals that are given no antibiotics or growth hormones. Before a product can be labeled *organic* by the USDA, a government-approved certifier inspects the farm where the food is grown to make sure all rules are being followed to meet USDA organic standards. Companies that handle or process organic food before it gets to the supermarket or restaurant must be certified, too.



**Fig. 22-12.** Foods labeled organic differ in the way they are grown, handled, and processed.

**Free range or free roaming:** When poultry is labeled *free range* or *free roaming*, it means that the chickens producing the eggs have access to the outside each day. However, the length of time of that access is not specified.

**Gluten-free:** For a product to be labeled *gluten-free*, gluten must be limited to less than 20 parts per million (ppm) and should not contain any wheat, rye, barley, or crossbreeds of these grains.

Foods that are naturally gluten-free like bottled water or raw fruits and vegetables can also be labeled gluten-free as long as any gluten that came in contact with the food is less than 20 ppm.

**Natural, healthy, or good for you:** These claims may have little or no meaning. In fact, due to consumers wanting clarification, in 2016, the US Food & Drug Administration (FDA, [fda.gov](http://fda.gov)) asked for information and public comment on questions related to the term *natural*. Buying whole, unprocessed grains, fresh fruits and vegetables, and lean meats, poultry, and fish is the best way to buy healthy, nutritious food. HHAs should not be swayed by the advertising on labels; they should check the facts.

There are many other food labels that are not regulated by the US government. These labels may be regulated by other organizations or not governed by any particular agency (*non-GMO*, *kosher*, *raw*, and *vegan* are examples). The HHA should follow the clients' preferences when choosing food based on labeling.

## 7. Explain the information on the FDA-required Nutrition Facts label

The FDA requires that all packaged foods contain a standardized nutrition label, called *Nutrition Facts*. This label contains information about the nutritional content of food (Fig. 22-13). Because the label is in the same format on all foods, it is easy to compare different products.

In 2016 major changes to the nutrition label became final. The changes make information easier to understand so that consumers can make informed decisions about what they eat. The Nutrition Facts label gives the following information:

**Serving size and number of servings per container:** Serving sizes aim to reflect the amount that people are actually eating, not what they should be eating. HHAs should check the size of the serving.



**Calories per serving:** The number of calories per serving tells how much food energy a serving contains. It does not explain how much nutritional value the food has. A candy bar is high in calories, providing quick energy, but has very few nutrients and lots of fat and sugar.

**Total fat, cholesterol, sodium, total carbohydrate, and protein:** The label provides information on total fat, including saturated fat and trans fat; cholesterol; sodium; total carbohydrates, including dietary fiber and total sugars; and protein. Total sugars has a subcategory of added sugars to help consumers understand how much sugar has been added to a product. Studies have shown that excessive sugar may be linked to a variety of serious conditions and diseases.

Nutrition Facts	
12 servings per container	
Serving size	1 cup (28g)
Amount per serving	
Calories	103
% Daily Value*	
Total Fat 2g	3%
Saturated Fat 0g	1%
Trans Fat 0g	
Cholesterol 0g	0%
Sodium 186mg	8%
Total Carbohydrate 21g	7%
Dietary Fiber 3g	11%
Total Sugars 21g	
Includes 11g Added Sugars	25%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Fig. 22-13. The FDA-required Nutrition Facts label contains standard nutritional information that makes it easy to compare different products.

**Vitamins and minerals:** The label lists the percentages of the recommended daily total for

vitamin D, calcium, iron, and potassium. Manufacturers can voluntarily list amounts of other vitamins and minerals.

**Percent daily values:** The label tells a person what percent of the recommended daily total a serving contains. These recommended daily totals are based on a 2,000-calorie diet, so someone who eats fewer than 2,000 calories per day should have less each day. Someone who eats more than 2,000 calories per day can have more.

8. Explain special diets

A doctor sometimes places clients who have certain illnesses on special diets. These diets are known as **therapeutic, modified, or special diets**. Certain nutrients or fluids may be restricted or eliminated. Some medications may also interact with certain foods, which then must be restricted. Clients who do not eat enough may be placed on special supplementary diets. Diets are also prescribed for weight control and food allergies.

Home health aides will play an important role in helping clients follow their modified diets. Several types of modified diets are available for different illnesses. Some clients may be on a combination of special diets. The care plan should specify any diet the client is on (Fig. 22-14). It should also explain any eating problems that a client may have and how the client's eating habits can be improved. Therapeutic diets can only be prescribed by doctors and planned by dietitians, along with the clients. An HHA should not modify the diet. Following the client's diet plan without making judgments is important. An HHA should report observations to his supervisor.

ACTION	Diet Order:	Low fat	
	✓ Meal Preparation		
	Assist with Feeding		
	✓ Limit, Encourage Fluids		
	Assess Swallowing		

Fig. 22-14. The care plan specifies the special diet ordered, as well as any additional dietary restrictions.

**Low-Sodium Diet:** People are most familiar with sodium as one of the two components of salt. Salt is restricted first in a low-sodium diet because it is high in sodium. Excess sodium causes the body to retain more water in tissues and in the circulatory system than is necessary. This causes the heart to pump harder. This is harmful for clients who have high blood pressure, coronary artery disease, or kidney disease. A modified fluid intake may also be required for people with these conditions, because too much fluid can lead to congestive heart failure.

Recommendations vary, but the American Heart Association recommends sodium intake should be limited to less than 2,300 milligrams per day, moving toward an ideal amount of no more than 1,500 mg per day for most adults. Most people consume much more sodium than the recommended amount. Excess sodium is excreted in the urine and over the years can erode the kidneys, leading to hypertension and kidney disease.

The HHA should read product labels to determine if they contain salt or sodium in any form. A common form of sodium is **monosodium glutamate** (*GLOO-ta-mayt*), sometimes added to meat tenderizers, seasonings, and prepared foods to enhance flavor. Another common form is **sodium nitrate**, a salt used to preserve lunch meats and other cured meats. A partial list of foods high in sodium is located in Learning Objective 2 in the discussion of MyPlate.

Low-sodium meals can be made more flavorful by adding lemon, herbs, dry mustard, pepper, paprika, orange rind, onion, and garlic to recipes. The flavor of meats can also be enhanced by the addition of fruits and jellies. Salt substitutes should only be used with the approval of the client's doctor. These seasonings might be high in potassium, which can be harmful to people with certain illnesses, such as kidney disease.

Common abbreviations for this diet are *Low Na*, which means low sodium, or *NAS*, which stands for *No Added Salt*.

**Fluid-Restricted Diet:** The amount of fluid consumed through food and fluids must equal the amount of fluid that leaves the body through perspiration, stool, urine, and expiration. This is fluid balance. When fluid intake is greater than fluid output, body tissues become swollen with excess fluid. In addition, people with severe heart disease and kidney disease may have difficulty processing large volumes of fluid. To prevent further damage, doctors may restrict a client's fluid intake. For clients on fluid restriction, the HHA will measure and document exact amounts of fluid intake and report excesses to the supervisor. Additional fluids or foods that count as fluids, such as ice cream, puddings, gelatin, etc., should not be offered. If the client complains of thirst or requests fluids, the HHA should inform her supervisor. A common abbreviation for this diet is *RF*, which stands for *Restrict Fluids*.

**High-Potassium Diet:** Some clients take blood pressure medications or **diuretics** (*dye-you-RET-iks*), which are medications that reduce fluid volume. These clients may be excreting so much fluid that their bodies could be depleted of potassium. Other clients may be placed on a high-potassium diet for different reasons.

Foods high in potassium include bananas, grapefruit, oranges, orange juice, prune juice, prunes, dried apricots, figs, raisins, dates, cantaloupes, tomatoes, potatoes with skins, sweet potatoes and yams, winter squash, legumes, avocados, and unsalted nuts. *K+* is the common abbreviation for this diet.

**Low-Protein Diet:** People who have kidney disease may also be on a low-protein (also called *renal*) diet. Protein is restricted because it breaks down into compounds that may lead to further kidney damage. The extent of the restrictions depends on the stage of the disease and whether the client is on dialysis. Vegetables and starches, such as breads and pasta, are encouraged.



**Low-Fat Diet:** Eating a diet high in saturated fat may put a person at risk for heart disease. Choosing to eat unsaturated fat can reduce the risk of heart disease and improve HDL (good) cholesterol levels. People who have heart disease or who have had heart attacks are often prescribed a diet that is low in saturated fat. People with gallbladder disease, diseases that interfere with fat digestion, and liver disease are also placed on a low-fat diet. This diet limits the intake of saturated fat (trans fat should be avoided). Foods high in saturated fat include fatty meats, high-fat dairy products (especially cheese), hydrogenated oils, and desserts and baked goods. Foods that contain healthier fats include olive oil, nuts, avocado, and fatty fish like salmon (Fig. 22-15). People who have gallbladder disease or other digestive problems may be placed on a diet that restricts all fats. *Low-Fat* may be the abbreviation used for this diet, although sometimes *Cardiac Diet* is used. This means a diet that is low in sodium, fat, and cholesterol, as well as in excess sugar.



**Fig. 22-15.** Healthier fats come from olive oil, nuts, avocados, and fatty fish.

**Modified Calorie Diet:** Some clients may need to reduce calories to lose weight or prevent additional weight gain. Other clients may need to gain weight and increase calories because of malnutrition, surgery, illness, or fever. Common abbreviations for this diet are *Low-Cal* or *High-Cal*.

**Bland Diet:** Gastric and duodenal (*doo-a-DEE-nal*) ulcers can be irritated by foods that produce

or increase levels of acid in the stomach, so these foods are eliminated. The bland diet is also used for people who have intestinal disorders, such as Crohn's disease or irritable bowel syndrome (IBS). The following foods and drinks should be avoided: alcohol; beverages containing caffeine, such as coffee, tea, and soft drinks; citrus juices; spicy foods; and spicy seasonings such as black pepper, cayenne, and chili pepper. Three meals or more a day are usually advised. If alcohol is allowed, it should be drunk with meals.

**Diabetic Diet:** People with diabetes must be very careful about what they eat. Calories and carbohydrates are carefully controlled, and protein and fats are also regulated. The types of foods and the amounts are determined by nutritional and energy needs. A dietitian and the client will make up a meal plan, taking into account the person's health status, activity levels, and lifestyle. The meal plan will include all the right types and amounts of food for each day.

The meal plan may use a counting carbohydrates approach (often called *carb counting*). After the proper amount of carbohydrates is determined by the dietitian, they need to be counted in each meal or snack. Nutrition labels need to be read, paying attention to serving size and carbohydrate content. Food portions may need to be measured.

To keep their blood glucose levels near normal, clients who have diabetes must eat the right amount of the right type of food at the right time. They must eat all that is served. This is necessary to maintain blood sugar. Home health aides should encourage them to eat all of their meals and snacks. HHAs should not offer other foods without the supervisor's approval. Any variation in eating patterns and routine must be reported to the doctor or nurse. If a client will not eat what is directed, does not finish meals or snacks, or is not following the diet, the HHA should notify her supervisor.

People who have diabetes should avoid foods that are high in sugar because sugary foods can cause problems with insulin balance. Foods and drinks high in sugar include candy, ice cream, cakes, cookies, jellies, jams, fruits canned in heavy syrup, soft drinks, sports drinks, and alcoholic beverages. Many foods are high in sugar that do not appear to be so, such as canned vegetables, many breakfast cereals, and ketchup. The HHA can read labels to determine if they contain sugar, looking for these words: sucrose, glucose, maltose, dextrose, lactose, fructose, and syrup. The American Diabetes Association's (ADA) website, [diabetes.org](http://diabetes.org), has more information. Additional information on diabetes may be found in Chapter 9.

**Low-Residue (Low-Fiber) Diet:** This diet decreases the amount of fiber, whole grains, raw fruits and vegetables, seeds, and other foods, such as dairy and coffee, in a person's diet. The low-residue diet is used for people with bowel disorders such as diverticulitis.

**High-Residue (High-Fiber) Diet:** High-residue diets increase the intake of fiber and whole grains, such as whole grain cereals, breads, and raw fruits and vegetables. This diet helps with problems such as constipation and bowel disorders.

**Gluten-Free Diet:** This diet is free of gluten, which is a protein found in wheat, rye, and barley. It is used for people with celiac disease, which is an autoimmune disease that can damage the intestines if gluten is consumed. Foods containing wheat flour, such as tortillas, crackers, breads, cakes, pasta, and cereals, are eliminated from the diet. Some sauces and dressings also have wheat in them. Other items that may contain gluten include beer, hot dogs, candy, broths, vitamins, and medications.

Unlike celiac disease, gluten intolerance is a condition that does not cause damage to the intestines. It does, however, cause unpleasant

symptoms such as abdominal pain, gas, and diarrhea when products containing gluten are consumed. If a person has a gluten intolerance, eliminating gluten from the diet is usually enough to manage symptoms.

**Vegetarian Diet:** Health issues, such as diabetes or obesity, may cause a person to require a vegetarian diet. A person may also choose to eat a vegetarian diet for religious reasons or due to a dislike of meat, a compassion for animals, a belief in nonviolence, or financial issues. There are different types of vegetarian diets, including the following:

- A lacto-ovo vegetarian diet excludes all meats, fish, and poultry, but allows eggs and dairy products.
- A lacto-vegetarian diet eliminates poultry, meats, fish, and eggs, but allows dairy products.
- An ovo-vegetarian diet omits all meats, fish, poultry, and dairy products, but allows eggs.

**Vegan Diet:** A vegan diet consists of only plant-based foods and eliminates all poultry, meats, fish, eggs, and dairy products, along with foods that are derived from animals, such as gelatin and honey. Vegan diets may be ordered for people who have heart disease, diabetes, or other health issues, or a person may choose to eat a vegan diet for ethical or other reasons. Both vegetarians and vegans may need to take supplements such as iron supplements or B complex vitamins.

**Limited Animal-Based Diets:** A person might choose to limit his intake of animal-based foods by being a pescatarian. A pescatarian diet eliminates all meats and poultry, but allows fish and other seafood. Eggs and dairy products may be consumed.

A flexitarian diet is a diet in which plant-based foods are eaten primarily, but meats and other animal products are eaten occasionally.



Diets may also be modified in consistency:

**Liquid Diet:** A liquid diet is usually ordered for a short time due to a medical condition or before or after a test or surgery. It is ordered when a client needs to keep the intestinal tract free of food. A liquid diet consists of foods that are in a liquid state at body temperature. Liquid diets are usually ordered as *clear* or *full*. A clear liquid diet includes clear juices, broth, gelatin, and popsicles. A full liquid diet includes all the liquids served on a clear liquid diet with the addition of cream soups, milk, and ice cream.

**Soft Diet and Mechanical Soft Diet:** The soft diet is soft in texture and consists of soft or chopped foods that are easy to chew and swallow. Foods that are hard to chew and swallow, such as raw fruits and vegetables and some meats, will be restricted. High-fiber foods, fried foods, and spicy foods may also be limited to help with digestion. Doctors order this diet for clients who have trouble chewing and swallowing due to dental problems or other medical conditions. It is also ordered for people who are making the transition from a liquid diet to a regular diet.

The mechanical soft diet consists of chopped or blended foods that are easier to chew and swallow. Foods are prepared with blenders, food processors, meat grinders, or cutting utensils. Unlike the soft diet, the mechanical soft diet does not limit spices, fat, and fiber. Only the texture of foods is changed. For example, meats and poultry can be ground and moistened with sauces or water to ease swallowing. This diet is used for people recovering from surgery or who have difficulty chewing and swallowing.

**Pureed Diet:** To **puree** a food means to blend or grind it into a thick paste of baby food consistency. The food should be thick enough to hold its form in the mouth. This diet does not require a person to chew his food. A pureed diet is often used for people who have trouble chewing and/or swallowing more textured foods.

## 9. Describe guidelines for assisting with eating

Mealtime is often an important part of a client's day. This is especially true because weight loss and malnutrition issues are common among the elderly. Not only is mealtime the time for getting proper nourishment, but it is also a time for socializing. Socializing has a positive effect on eating. It can help prevent weight loss, dehydration, and malnutrition. It can also prevent loneliness and boredom. When it is practical, home health aides should plan meals so that they can sit and talk with clients while they eat. This promotes healthy eating.

Clients who must be fed are often embarrassed and depressed about their dependence on another person. Home health aides should be sensitive to this and only give assistance as specified, when necessary, or when the client requests it. They should encourage clients to do whatever they can for themselves. For example, if a client can hold and use a napkin, he should. Assistive devices are available to help clients eat and drink more independently (Fig. 22-16). More assistive devices are shown in Chapter 16.



**Fig. 22-16.** This special utensil and plate are examples of assistive devices that can help with eating. (PHOTO COURTESY OF NORTH COAST MEDICAL, INC., [WWW.NCMEDICAL.COM](http://WWW.NCMEDICAL.COM), 800-821-9319)

### Food Appearance, Texture, and Portion Size

The HHA should keep the color and texture of foods in mind when planning meals. For example, two types of green vegetables should not be served at the same meal. Rather than green beans and spinach, green beans and carrots may be a better option.

Serving food that is similar in texture may make the meal less interesting. For example, mashed potatoes and mashed rutabagas are similar. A boiled or baked potato could be used instead. To promote appetites, food should be attractively arranged on the plate and it should look appealing. Large portions should be avoided, unless the client normally eats larger amounts of food. Planning on smaller portions, but having enough food available in case the client requests seconds, is best. Small, frequent meals may be ordered for some clients. More information about meal planning is located in Chapter 23.

### Guidelines: Assisting a Client with Eating

- G** Before you begin serving or helping the client, wash your hands.
- G** Never treat the client like a child. This is embarrassing and disrespectful. It is difficult for many people to accept help with feeding. Be supportive and encouraging.
- G** Sit at the client's eye level. The client should be sitting upright, at a 90-degree angle. Make eye contact with the client.
- G** Test the temperature of the food by putting your hand over the dish to sense the heat. Do not touch food to test its temperature. If you think the food is too hot, do not blow on it to cool it. Offer other food to give it time to cool.
- G** Cut foods and pour liquids as needed. Season foods to the client's preference.
- G** Identify the foods and fluids that are in front of the client. Call pureed foods by the correct name. For example, ask, "Would you like some green beans?" rather than referring to it as "some green stuff."
- G** Ask the client which food she prefers to eat first. Allow her to make the choice, even if she wants to eat dessert first.
- G** Do not mix foods unless the client requests it.

- G** Do not rush the meal. Allow time for the client to chew and swallow each bite. Be relaxed.
- G** Be social and friendly. Make simple conversation if the client wishes to do so. Try not to ask questions that require long answers. Use appropriate topics, such as the weather, the client's life, things the client enjoys, and food preferences. Say positive things about the food being served, such as, "This smells really good," and, "This looks really fresh."
- G** Give the client your full attention while she is eating.
- G** Alternate offering food and drink. Alternating cold and hot foods or bland foods and sweets can help increase appetite.

### Assisting a client with eating



*Equipment: meal and beverage; eating utensils; clothing protector (if appropriate); washcloths, wipes, or towel*

1. Wash your hands.
2. Explain the procedure to the client, speaking clearly, slowly, and directly. Maintain face-to-face contact whenever possible.
3. Provide privacy for the client if desired.
4. Raise the head of the bed or use pillows to make sure that the client is in an upright sitting position (at a 90-degree angle).
5. If bed is adjustable, adjust the bed height to where you will be able to sit at the client's eye level. Lock the bed wheels.
6. Place the food and drink where they can be easily seen by the client.
7. Help the client to clean her hands with a wet washcloth, wipe, or towel if she cannot do it herself.
8. Help the client put on the clothing protector if desired.



9. Sit facing the client at the client's eye level (Fig. 22-17). Sit on the stronger side if the client has one-sided weakness. Do not sit on the client's bed.



**Fig. 22-17.** The client should be sitting upright and the HHA should be sitting at her eye level.

10. Tell the client what foods and drink are there. Offer a drink of the beverage and ask what the client would like to eat first.
11. Check the temperature of the food. Using utensils, offer the food in bite-sized pieces. Tell the client the content of each bite of food offered (Fig. 22-18). Alternate types of food offered, allowing for the client's preferences. Do not feed all of one type before offering another type. Make sure the client's mouth is empty before the next bite or sip is offered.



**Fig. 22-18.** Offer the food in bite-sized pieces, and direct food to the client's stronger, or unaffected, side. Tell the client the content of each bite of food.

12. Ask the client if she is ready for the next sip of beverage. Offer sips of the beverage

throughout the meal and at the end of the meal. If you are holding the cup, touch it to the client's lips before you tip it. Give small, frequent sips.

13. Talk with the client throughout the meal. It makes mealtime more enjoyable (Fig. 22-19). Do not rush the client.



**Fig. 22-19.** Socializing makes mealtime more enjoyable and may increase how much the client eats and drinks.

14. Using a washcloth, wipe, or towel, wipe food from the client's mouth and hands as needed during the meal (Fig. 22-20). Wipe again at the end of the meal.



**Fig. 22-20.** Wiping food from the mouth during the meal helps to maintain the client's dignity.

15. When the client is done eating, remove the clothing protector if used. Remove the tray or dishes.
16. Assist the client to a comfortable position. Keep the client in the upright position for at least 30 minutes. Make sure the bed is free of crumbs.

17. If you raised an adjustable bed, return it to its lowest position.
18. Wash your hands.
19. Document the client's intake, if required, and any observations. How did the client tolerate being upright for the meal? Did the client eat well? What foods did the client eat or not eat? Report any swallowing difficulties to your supervisor.

## 10. Describe eating and swallowing problems a client may have

Clients may have conditions that make eating or swallowing difficult. **Dysphagia** (*dis-FAY-jah*) means difficulty in swallowing. A stroke, or CVA, can cause weakness on one side of the body and paralysis. Nerve and muscle damage from head and neck cancer, multiple sclerosis, Parkinson's disease, or Alzheimer's disease can also contribute to dysphagia. If a client has trouble swallowing, soft foods and thickened liquids will be served. A special cup will help make swallowing easier.

Home health aides need to be able to recognize and report signs that a client has a swallowing problem. Signs and symptoms of swallowing problems include the following:

- Coughing during or after meals
- Choking during meals
- Dribbling saliva, food, or fluid from the mouth
- Having food residue inside the mouth or cheeks during and after meals
- Gurgling during or after meals or losing voice
- Eating slowly
- Avoiding eating
- Spitting out pieces of food

- Swallowing several times per mouthful
- Clearing the throat frequently during and after meals
- Watering eyes when eating or drinking
- Food or fluid coming up into the nose
- Making a visible effort to swallow
- Breathing rapidly or with shorter breaths while eating or drinking
- Difficulty chewing food
- Difficulty swallowing medications

Swallowing problems put clients at high risk for choking on food or drink. Inhaling food, fluid, or foreign material into the lungs is called **aspiration**. Aspiration can cause pneumonia or death. The supervisor must be notified immediately if an HHA notices any signs of swallowing problems.

### Guidelines: Preventing Aspiration

- G** Position clients properly for eating and drinking. They must sit upright at a 90-degree angle. Do not feed clients in a reclining position.
- G** Offer small pieces of food or small spoonfuls of pureed food.
- G** Feed clients slowly. Do not rush them.
- G** Place food in the unaffected, or stronger, side of the mouth.
- G** Make sure the mouth is empty before offering the next bite of food or sip of drink.
- G** If possible, keep clients in the upright position for about 30 minutes after eating and drinking.

Clients with dysphagia or swallowing problems may be restricted to consuming only thickened liquids. Thickened liquids have a thickening powder or agent added to them, which improves the ability to control fluid in the mouth and



throat. A doctor orders the necessary thickness after the client has been evaluated by a speech-language pathologist.

If thickening is ordered, it must be used with all liquids. This means that a home health aide should not offer regular liquids, such as water or other beverages, to clients who require thickened liquids. There are three basic thickened consistencies:

1. **Nectar Thick:** This consistency is thicker than water. It is the thickness of a thick juice, such as pear nectar or tomato juice. A client can drink this from a cup.
2. **Honey Thick:** This consistency has the thickness of honey. It will pour very slowly. A client will usually use a spoon to consume it.
3. **Pudding Thick:** With this consistency, the liquids have become semisolid, much like pudding. A spoon should stand up straight in the glass when put into the middle of the drink. A client must consume these liquids with a spoon.

### Chapter Review

1. List the six basic nutrients and identify which nutrient is the most essential for life.
2. According to MyPlate's suggestions, what should make up half of a person's plate?
3. List some examples of plant sources of protein foods.
4. According to MyPlate, what should most dairy group choices be?
5. Describe six ways that an HHA can help prevent dehydration.
6. What does the abbreviation *NPO* stand for?
7. Why is it important for an HHA to report any weight loss, no matter how small?
8. Name three reasons an elderly or ill client may have nutritional problems.
9. What is the proper position in which to place a client for eating?
10. What are two ways a client may be fed if he has a digestive system that does not function properly or if he cannot swallow?
11. List two factors that influence food choices.
12. What does it mean if a food is labeled *organic*?
13. What does the serving size reflect on a food label?
14. What is the first item to be restricted in a low-sodium diet?
15. Why might a client be placed on a low-fat diet?
16. What is the difference between a clear liquid diet and a full liquid diet?
17. How is the mechanical soft diet different from the soft diet?
18. Choose one of the diets listed in Learning Objective 8. Describe a meal that would be appropriate for a client on that diet.
19. How should an HHA test the temperature of food?
20. Give two examples of appropriate topics of conversation for an HHA to use with a client during mealtime.
21. List five guidelines for preventing aspiration.
22. List and briefly describe three basic thickened consistencies.