23

Meal Planning, Shopping, Preparation, and Storage

1. Explain how to prepare a basic food plan and list food shopping guidelines

Home health aides should plan meals for a week or at least several days before shopping. When planning, the client's dietary restrictions, food preferences, the number of people present at meals, and the client's budget should be taken into account. On a large sheet of paper, the HHA should write out the days for which she will shop, leaving space under each day for meals and snacks. She may end up serving the meals in a different order. However, by planning for each day, she will plan the right number of meals and buy the right amount of food (Fig. 23-1).

The HHA can fill in breakfasts, lunches, dinners, and snacks for each day. She can ask the client for ideas or look online (epicurious.com, allrecipes.com, and foodnetwork.com are a few options) or in cookbooks. A good plan will include leftovers that can be easily reheated on days the HHA will not be in the home. Nutritious snacks should be part of the plan; clients may need as many as three snacks a day. Beverages should be listed as well.

When the meal plan is complete, the HHA can make a shopping list. On another large sheet of paper, she can list categories, including produce, meats, canned goods, frozen foods, dairy, and other. She should leave space under each

	MONDAY	THESDAY W	EDNESDAY	THURSDAY	FRIDAY
BREAKFAST	Datmen Williams TOAST Juice	Scrambkd eggs Orange Coffee	WAFFLES BANANAS Juice	PORCHED EGG 1/2 GRAPEFRUIT COFFEE	CORN FLAKES STRAWBERRIES OJ
SNACK	Pears Cheese	BRAN MUFFIN	SLICED PEACH TOAST MILK	BRAN MUFFIN	Penrs Cheese
Lunch	TOSSED SALAD W/TURKEY, TOMATO, + CUCUMBER	CHICKEN SOUP SOURDOUGH BREAD ICED TEA	Roast Beet Sandwich Applesauce	Tomato soup Ham sandwich	CHICKEN SALAD SANDWICH TOMATO SLICES
SNACK	BRAN MUFFIN MICK	APPLE SLICES CHEDDAR CHEESE	ENGLISH MAFFIN HOT TEA	Apple Slices Cheddar Cheese	Banana Bread Milk
DINNER	Roast beef Potatoes Carrots Applesauce	Smoked Ham Mashed Potatoes Gravy Green Beaus	BANED POTATO W/ BROCCOLI AND CHEASE SOURDOUGH BREAK		TUNA CASSEROLE SOURDOUGH BREAD PEACHES + YOURT
Snack	HOT LOCOA ENGLISH MUFFIN	GRAHAM CRACKES	es corn nuffin Milk	BANANA BEEAD PLEASON BOOM MILK	CORN MUFFIN

Fig. 23-1. A meal plan helps a home health aide know what kinds and quantities of food to buy for a week.

category to list the foods she needs to buy. Listing items by category saves time in the grocery store. The HHA can go through the plan meal by meal and write down all of the ingredients needed for each meal. Beverages should be included as well. The HHA should check the refrigerator, cabinets, and pantry for ingredients. Many needed ingredients may already be in the home. It is a good idea to keep a shopping list available so family members, clients, and caregivers can write down items they run out of during the week.

Nutritious Snacks

The client's dietary needs should be taken into account when planning snacks. For all instances of milk listed below, a nondairy alternative such as almond, soy, rice, or oat milk could be substituted.

- · Low-salt pretzels and low-sodium tomato juice
- · Celery with peanut butter and milk
- Graham crackers and milk
- · Rice cakes with peanut butter and milk
- · Cereal and milk
- Yogurt
- · Baked tortilla chips with salsa
- · Carrot, celery sticks, or crackers with hummus
- · Gelatin with fruit
- · Bran muffin and milk
- Raisins, dates, figs, prunes, or dried apricots
- . Trail mix
- Smoothies made with fruit or vegetables and yogurt or milk blended together
- · Fresh fruit
- · Apple with peanut butter
- · Apple with cheese

Meals that Make Good Leftovers

- · Beef or vegetable stew
- · Chili (meat or vegetable)
- · Spaghetti with sauce
- Casseroles
- · Red beans and rice

- · Split pea soup
- · Lentil soup
- · Chicken soup
- · Macaroni and cheese
- Lasagna (meat or vegetable)
- · Meat loaf
- · Pot roast

Guidelines: Shopping for Clients

- Use coupons. Check online for coupons or scan a newspaper if your client receives one. Print or clip coupons for items you have already planned to buy.
- Check store circulars for advertised specials. Compare foods by reading the unit price tags that are on the shelves in front of the product (Fig. 23-2). Store brands are usually cheaper than advertised brands.



Fig. 23-2. Compare foods by reading the unit price tag.

- Buy fresh foods that are in season, when they are at peak flavor and inexpensive. You may also want to buy seasonal foods for canning, freezing, or preserving. Follow your client's preferences when buying in-season foods.
- G Buy in quantity. Large amounts or larger sizes are usually more economical, but do not buy more than you can store.
- G Shop from your list. Do not be tempted by items that are not on your list.
- Avoid overly processed, already-mixed, or ready-made foods. They are usually more expensive and less nutritious. When time allows, buy staples, or basic items.

- Loaves of bread are generally a better buy than rolls or crackers. Day-old bread is usually sold at reduced prices. Buy whole-grain breads if the client agrees. Get different varieties from time to time.
- Milk can be bought in many forms. Choose the type that the client prefers. Skim or 1% milk has lower fat content and is usually cheaper than whole milk. Evaporated milk is useful in cooking. Nondairy milks are an alternative to dairy milk.
- G Buy a cheaper brand when appearance is not important. For example, store-brand mushroom pieces are fine to use in a casserole and cheaper than name-brand mushroom pieces.
- G Read labels to be sure you are getting the kind of product and the quantity you want. Read labels for ingredients that may be harmful to your client, such as excessive sodium or sugar.
- Estimate the cost per serving before buying. Divide the total cost by the number of servings to determine the cost per serving.
- G Consider the amount of waste in bones and fat when buying cheaper cuts of meat. Some cuts of less expensive meats yield only half of what leaner cuts yield per pound. For clients on low-fat diets, pick lean meats and take the skin off chicken and turkey parts. The skin holds much of the fat.

Inexpensive Meals

- · Pasta dishes
- Baked stuffed potatoes
- · Rice and beans
- Tuna casserole
- Chicken thighs or legs
- · Hamburger casserole
- Pot roast
- Stews
- Lentil soup
- · Split pea soup

When deciding what to buy, an HHA should keep these four factors in mind:

- 1. **Nutritional value**: Does this food contain essential nutrients, vitamins, and minerals? Is it unprocessed, without added salt or sugar?
- Quality: Is this food fresh and in good condition? Fruits, vegetables, and meats should look fresh. Canned goods should not be dented, rusted, or bulging (bulging may be a sign of bacterial growth). Milk and dairy products should not have passed their expiration dates.
- 3. **Price**: Is this the most economical choice? If it costs more, is it worth it?
- 4. **Preference**: Will the client like this food? Can it be made into an appealing meal?

Environmentally Friendly Care

Organic, Local, and Sustainably Produced Foods

Planning healthy meals for clients is important. Proper nutrition is essential in improving health. More people are trying to include as much organic, local, and sustainably produced food as possible in their diets, and this may be important to some clients.

Organic food was introduced in Chapter 22. Organic food is produced without using most conventional pesticides, synthetic ingredients, bioengineering, or ionizing radiation. Organic meat, poultry, eggs, and dairy products come from animals that are given no antibiotics or growth hormones. For foods to be labeled organic they must meet certain legal standards.

The word *local* can have different meanings. Simply put, local foods are grown and produced as close to home as possible. Local foods are not necessarily organic, although they may be. One environmental benefit of buying food locally is that it is transported shorter distances, which may reduce the pollution associated with getting food to customers. Local foods may not require as much packaging or processing as foods that are shipped long distances, and that results in environmental benefits as well.

Although sustainable can also mean many different things, the main idea is that sustainably produced foods cause minimal or no harm to the environment or to those involved in the work of producing the food. The farming community is supported. Its workers are treated well, and the animals are treated humanely.

The HHA should buy and prepare the foods that each client wants. Organic, local, and sustainably produced foods will almost always be more expensive than other options and may not always be available. Choices should reflect the client's wishes. If unsure about exactly what the client wants, the HHA should talk to her supervisor.

2. List guidelines for safe food preparation

Foodborne illnesses affect up to 100 million people each year. Elderly people are at increased risk partly because they may not see, smell, or taste that food is spoiled. They also may not have the energy to prepare and store food safely. For people who have weakened immune systems because of AIDS or cancer, a foodborne illness can be deadly.

Guidelines: Safe Food Preparation

- Wash your hands frequently. Wash your hands thoroughly before beginning any food preparation. Wash your hands after touching non-food items and after handling raw meat, poultry, or fish.
- Keep your hair tied back or covered.
- Wear clean clothes or a clean apron.
- Wear gloves when you have a cut on your hands. Depending upon a client's illness, you may always have to wear gloves when preparing food. You may also have to wear a mask. Follow instructions in the care plan.
- Avoid coughing or sneezing around food. If you cough or sneeze, wash your hands immediately.
- Keep everything clean. Clean and disinfect countertops and other surfaces before, during (as necessary), and after food preparation.
- G Handle raw meat, poultry, fish, and eggs carefully. Use an antibacterial kitchen cleaner or a dilute bleach solution to clean any countertops on which meat juices or raw eggs

- were spilled. Wrap paper or packaging containing meat juices in plastic and discard immediately.
- Once you have used a knife or cutting board to cut fresh meat, do not use it for anything else until it has been washed in hot, soapy water, rinsed in clear water, and allowed to air dry. Cutting boards made of plastic, glass, and nonporous acrylic can also be washed in the dishwasher. Use one cutting board for fresh produce and bread, and a separate cutting board for raw meat, poultry, and seafood (Fig. 23-3). This helps prevent contamination of food.



Fig. 23-3. Use a separate cutting board for raw meat, poultry, and seafood. After use, wash the cutting board in hot, soapy water, rinse in clear water, and allow it to air dry.

- Use hot, soapy water to wash utensils.
- G Use clean dishcloths, sponges, and towels. Change them frequently. Wash sponges regularly in the dishwasher to disinfect them.
- Defrost frozen foods in the refrigerator, not on the countertop. Do not remove meats or dairy products from the refrigerator until just before use.
- Wash fruits and vegetables thoroughly in running water to remove pesticides and bacteria.
- Cook meats, poultry, and fish thoroughly to kill any harmful microorganisms they may contain. Heat leftovers thoroughly. Never leave food out for over two hours. Put warm foods in the refrigerator before they are cool, so that bacteria does not have a chance to

grow. Keep cold foods cold and hot foods hot. Use cooked meat, poultry, fish, and baked dishes within three to four days.

- G Do not use cracked eggs. Do not consume or serve raw eggs.
- Never taste and stir with the same utensil.

3. Identify methods of food preparation

The following are basic methods of food preparation for making a variety of healthy meals:

Boiling: Food is cooked in boiling water until tender or done. This is the best method for cooking pasta, noodles, rice, and hard- or soft-boiled eggs (Fig. 23-4).



Fig. 23-4. Boiling works well for pasta and other grains.

Steaming: Steaming is a healthy way to prepare vegetables. A small amount of water is boiled in the bottom of a saucepan or pot, and food is set over it in a steamer basket or colander (Fig. 23-5). The pan is tightly covered to keep the steam in.



Fig. 23-5. Steaming allows vegetables to retain their vitamins and flavor and may be done in a steamer basket or colander.

Poaching: Fish or eggs may be cooked by poaching in barely boiling water or other liquids. Eggs are cracked and shells discarded before poaching. Fish may be poached in milk or broth, on top of the stove, or in the oven in a baking dish (Fig. 23-6).



Fig. 23-6. Fish and eggs can both be poached.

Roasting: Used for meats, poultry, and some vegetables, roasting is a simple way to cook. Dry heat roasting means food is roasted in an open pan in the oven. Food may be tossed with oil and spices before roasting. Meats and poultry are **basted**, or coated with juices or other liquids, during roasting (Fig. 23-7).



Fig. 23-7. Vegetables, as well as meats and poultry, can be roasted. Meats roast well at high temperatures (450°F) but may need to be basted.

Braising: Braising is a slow-cooking method that uses moist heat. Liquid such as broth, wine, or sauce is poured over and around meat or vegetables, and the pot is covered. The meat or vegetables are then slowly cooked at a temperature just below boiling. Braising is a good way to tenderize tough meats and vegetables, since the long cooking breaks down their fibers. Braising may be done in the oven or on the stove top.

Baking: Baking is used for many foods, including breads, poultry, fish, vegetables, and casseroles. Baking is done at moderate heat, 350°F to 400°F. Vegetables such as potatoes and winter squash bake very well (Fig. 23-8).



Fig. 23-8. Potatoes are one type of vegetable that bakes very well.

Broiling: Used primarily for meats, broiling involves cooking food close to the source of heat at a high temperature for a short time (Fig. 23-9). Meat must be tender to be broiled successfully; inexpensive and lean cuts are often better cooked using moist heat. The broil setting on the oven can also be used to melt cheese or brown the top of a casserole. An HHA should leave the oven door ajar when broiling and never leave the kitchen; things can burn very fast.



Fig. 23-9. Broiling involves cooking at a very high temperature.

Sautéing or stir-frying: These are quick cooking methods for vegetables and meats. A small amount of oil is used in a frying pan or wok over high heat (Fig. 23-10).



Fig. 23-10. Stir-frying is quick and uses very little fat. Food must be stirred constantly to prevent it from sticking.

Microwaving: Microwave ovens are used for defrosting, reheating, and cooking. However, cold spots can occur in microwaved foods because of the irregular way the microwaves enter the oven and are absorbed by the food. If food does not cook evenly, bacteria may survive and cause foodborne illness. To minimize cold spots, foods should be stirred and rotated once or twice during cooking. Arranging foods uniformly in a covered dish and turning large foods upside down during cooking also help.

When defrosting food in the microwave, the store wrap should be removed first. Foam trays and plastic wraps may melt and cause chemicals to migrate into the food. The food should be placed in a microwave-safe dish instead. Foods being reheated in the microwave should be steaming and hot to the touch. Covering foods and stirring them from the outside in will encourage safe, even heating.

To ensure that meat is properly cooked, an HHA should use a meat thermometer to verify that the food has reached a safe temperature. She should check in several places to be sure ground beef, pork, veal, and lamb are cooked to 160°F. Fresh beef, pork, veal, and lamb should be 145°F

with a three-minute rest time. Ground or whole chicken and turkey should be 165°F. Visual signs of doneness include juices that run clear and meat that is no longer pink. Metal thermometers and other metal objects should not be placed in the microwave oven. Some clients cannot be near a microwave when it is in use.

Frying: Frying uses a lot of fat and is the least healthy way to cook. HHAs should avoid frying foods for clients (Fig. 23-11).



Fig. 23-11. Frying foods is one of the least healthy ways to cook and should be avoided.

Fresh, uncooked foods: Many fruits and vegetables have the most nutrients when eaten fresh, as in salads (Fig. 23-12). However, fresh fruits and vegetables may be difficult for some clients to chew or digest. Fruits and vegetables should be washed well to remove any chemicals or pesticides.

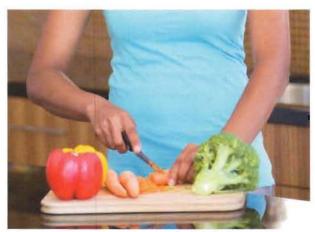


Fig. 23-12. Many fruits and vegetables have the most nutrients when eaten uncooked and fresh.

Preparing Mechanically Altered Diets

Information about special diets was introduced in Chapter 22. If a client has chewing or swallowing difficulties, weakness, paralysis, dental problems, or is recovering from surgery, the doctor may order a liquid, soft, mechanical soft, or pureed diet for a short time.

For soft, mechanical soft, or pureed diets, foods are prepared with blenders, food processors, meat grinders, or cutting utensils. Chopped foods are foods that have been cut up into very small pieces. When chopping food, a sharp knife and a clean cutting board (separate boards for raw meat and for vegetables and other foods) should be used. Grinding breaks the foods up into even smaller pieces. Pureed foods are cooked and then ground very fine or strained. A little liquid is added to give them the consistency of baby food. Grinding and pureeing can be done in a blender, food processor, or meat grinder. However, fruits and vegetables can also be pureed by pushing them through a colander with the back of a spoon.

All equipment used must be kept very clean to help prevent infection and illness. The blender or food processor must be taken apart after every use and each piece should be washed in hot, soapy water and rinsed thoroughly. The cutting board should be washed with soap or in the dishwasher after each use. This is especially important after chopping raw meat, poultry, and fish. Cutting boards should be allowed to air dry.

Changing the texture of food may make it lose its appeal. The HHA should season it according to the client's preferences and should talk about the food being served using positive words. Pureeing also causes nutrients to be lost, so vitamin supplements may be ordered. Constipation and dehydration are complications of a pureed diet. It is very important to follow directions exactly.

Preparing Nutritional Supplements

Illness and injury may call for nutritional supplements to be added into the client's diet. Certain medications also change the need for nutrients. For example, some medication prescribed for high blood pressure increases the need for potassium.

Nutritional supplements may come in a powdered form or liquid form. Powdered supplements need to be mixed with a liquid before being taken; the care plan will include instructions for how much liquid to add.

When preparing supplements, the supplement should be mixed thoroughly. The client should take it at the ordered time. Clients who are ill, tired, or in pain may not have much of an appetite. It may take a long time for a client to drink a large glass of a thick liquid. The HHA should be patient and encouraging. If the client does not want to drink the supplement, the HHA should not insist that he do so. However, it should be reported to the supervisor.

4. Identify four methods of low-fat food preparation

- 1. Cook lean. Boiling, steaming, broiling, roasting, and braising are all methods of cooking that require little or no added fat. Broiling also allows fats in meat to drip out before food is consumed. This lowers the fat content even more.
- 2. **Drain fat.** When using ground meat, an HHA should brown it first. It should then be removed with a slotted spoon and drained on paper towels or put in a colander to remove excess fat.
- 3. Plan lean. Choosing foods with lower saturated fat content to begin with will make low-fat cooking easier. Planning meals around vegetables or grains will help cut the fat content. Low-fat meals based on vegetables and grains include pasta dishes, roasted vegetables, quinoa, salads with lean plant or animal proteins, rice and beans, baked or stuffed potatoes, and soups.
- 4. Substitute or cut down. Sometimes high fat ingredients can be left out or replaced in a recipe. An HHA can leave out cheese or reduce the amount of cheese used on sandwiches or to top casseroles. Plain nonfat yogurt can be substituted for mayonnaise or sour cream. Nonfat cottage cheese can also be used on a baked potato instead of sour cream. For those who are vegan or who only need to lower their saturated fat intake, nutbased foods can be substituted for cheese and cream (cashew queso and cashew cream

are two examples). Olive oil can be substituted for butter.

5. List four guidelines for safe food storage

- 1. **Buy cold food last; get it home fast.** After shopping, refrigerated foods should be put away first.
- 2. **Keep it safe; refrigerate**. The proper refrigerator temperature is between 36°F and 40°F. Freezer temperature should be 0°F. Refrigerated items that spoil easily should be kept in the rear of the refrigerator, not the door. Jars and packages will state if food requires refrigeration (Fig. 23-13). Items should not be frozen again after they have been thawed.



Fig. 23-13. Refrigeration guidelines can be found on food labels.

3. Use small containers that seal tightly. Foods cool more quickly when stored in smaller containers. They should be stored with enough room around them for air circulation. Foods should not be left out for more than two hours. They should be tightly covered. To prevent dry foods, such as cornmeal and flour, from becoming infested with insects, they should be stored in tightly-sealed or airtight containers. If an HHA finds items that are already infested, she should discard them and use a clean container to store a fresh supply. HHAs should check dry storage areas periodically for signs of insects and rodents.

4. When in doubt, throw it out. If an HHA is not sure whether food is spoiled, she must not take any chances. She should discard it. An HHA should check the expiration dates on foods, especially perishables, and check the refrigerator often for spoiled foods. Any expired foods should be discarded. Foods that have become moldy should be thrown away. Mold cannot be just scraped off.

Environmentally Friendly Care

Composting

Clients may use scraps left over from food preparation, food that was not eaten, or expired food to make compost. Compost is a mixture of decaying food and garden waste that is used to improve and fertilize soil. Another benefit of composting is that it reduces the amount of waste sent to landfills. Only certain items can be composted. Fruits and vegetables (including rinds and cores), egg shells, coffee grounds and filters, tea bags, old bread and crackers (and other items made from flour), grains, many types of expired boxed foods, and spices can be composted. Meats, fish, dairy products, grease, and oils cannot be composted. If a client has a compost bin, the HHA should follow instructions about what to compost, asking the client or supervisor for help when needed.

Chapter Review

- 1. When planning a meal for a client, what factors should the HHA take into account?
- 2. List 10 examples of nutritious snacks.
- 3. What are two reasons that an HHA should buy fresh foods that are in season?
- 4. Why is more expensive meat sometimes a better deal?
- 5. Why are overly processed or ready-made foods not as desirable as food made from scratch?
- 6. What is the longest period of time that cooked food can safely be left unrefrigerated?

- 7. What needs to happen after an HHA has used a cutting board to cut fresh meat?
- 8. How can pesticides be removed from fresh fruits and vegetables?
- 9. How can a sponge be disinfected?
- 10. Briefly describe each of the following food preparation methods: boiling, steaming, poaching, roasting, braising, baking, broiling, sautéing, microwaving, and frying.
- 11. What equipment is used to prepare soft, mechanical soft, or pureed diets?
- 12. An HHA has browned ground beef to make tacos for her client. What should be done before adding the seasoning to make it lower in fat?
- 13. Give an example of one low-fat substitution in addition to those listed in the text.
- 14. When is it acceptable to refreeze an item?
- 15. What does the phrase, "When in doubt, throw it out" mean?
- 16. If an HHA finds insects in the flour, what should he do?

Conversion Tables

Liquid Measures				
1 gal=	4 qt=	8 pt=	16 cups=	128 fl oz
1/2 gal=	2 qt=	4 pt=	8 cups=	64 fl oz
1/4 gal=	1 qt=	2 pt=	4 cups=	32 fl oz
	1/2 qt=	1 pt=	2 cups=	16 fl oz
	1/4 qt=	1/2 pt=	1 cup=	8 fl oz

Dry Measures			
1 cup=	8 fl oz=	16 tbsp=	48 tsp
3/4 cup=	6 fl oz=	12 tbsp=	36 tsp
2/3 cup=	5 1/3 fl oz=	10 2/3 tbsp=	32 tsp
1/2 cup=	4 fl oz=	8 tbsp=	24 tsp
1/3 cup=	2 2/3 fl oz=	5 1/3 tbsp=	16 tsp
1/4 cup=	2 fl oz=	4 tbsp=	12 tsp
1/8 cup=	1 fl oz=	2 tbsp=	6 tsp
		1 tbsp=	3 tsp

Emergency Substitutions

Emergency substitutions can sometimes be made, although it is best to use the ingredients called for in recipes.

Vegetables		
Ingredient	Substitute	
1 1/3 cups cut-up fresh tomatoes, simmered 10 minutes	1 cup canned tomatoes	
1/2 lb fresh mushrooms	4-oz can mushrooms	
Legumes	With the exception of lentils, dried beans can be used interchangeably to suit personal preference.	

Herbs, Spices, Seasonings		
Ingredient	Substitute	
1 tbsp snipped fresh herbs	1 tsp same herb, dried, or 1/4 tsp powdered or ground	
1 tsp dry mustard	2 tsp prepared mustard	
1 tsp pumpkin pie spice	1/2 tsp cinnamon, 1/2 tsp ginger, 1/8 tsp ground allspice, 1/8 tsp nutmeg	

Baking	
Ingredient	Substitute
1 tsp baking powder	1/4 tsp baking soda plus 1/2 tsp cream of tartar
1 pkg active dry yeast	2 1/4 tsp dry yeast
1 cup oil	1/2 lb butter or margarine
1 cup brown sugar	1 cup granulated sugar

Thickeners		
Ingredient	Substitute	
1 tbsp cornstarch	2 tbsp flour, or 1 1/3 tbsp quick-cooking tapioca	
1 tbsp flour	1/2 tbsp cornstarch, or 2 tsp quick-cooking tapi- oca, or two egg yolks	
1 tbsp tapioca	1 1/2 tbsp flour	