



## Learn By Doing: Section 16.1 Activity

1. Complete Worksheet 1.
2. Complete Worksheet/Activity 2.
3. Complete Worksheets 3 through 5 after your teacher discusses this chapter in class.
4. Complete Worksheets/Activities 6 and 7.
5. Complete Worksheet 8.
6. When you are confident that you can meet each objective for this section, ask your teacher for the section evaluation.

### SECTION

## 16.2

# Therapeutic Diets

### Background

Some patients/clients have illnesses that require special diets. Therapeutic diets are diets that modify a patient's normal diet in order to treat an illness. Understanding why the diet has been changed helps you to encourage clients to eat the food prepared for them. When you are knowledgeable about their diet, you are able to explain how important it is to their recovery.

### Objectives

When you have completed this section, you will be able to do the following:

- Match key terms with their correct meaning.
- List three factors that influence food habits.
- Select a correct therapeutic diet for physical disorders.
- Discuss characteristics and treatment of common eating disorders
- List four commonly abused substances and their negative impacts on the human body.



### Introduction to Therapeutic Diets

It is especially important to remember the factors that influence food habits for patients who are on a therapeutic diet. Always respect the patient's personal attitudes and preferences, nationality, race, and religious needs.

**metabolic**

(met uh BOL ik)

Pertaining to the total of all the physical and chemical changes that take place in living organisms and cells.

**deficient**

(di FISH uhnt)

Lacking something (e.g., a deficient diet causes the body to function poorly because it is missing an important element).

**gastrointestinal**

(gas troh in TES tuh nuhl)

Pertaining to the stomach and intestine.

**colitis**

(kuh lahy tis)

Inflammation of the colon.

**ileitis**

(il ee AHY tis)

Inflammation of the ileum (the lower three-fifths of the small intestine).

**diabetes mellitus**

(dahy uh BEE teez)

(mel uh thus)

Condition that develops when the body cannot change sugar into energy; there is an insufficient amount of insulin, leading to an increased amount of sugar in the blood.

**soluble**

(SOL yuh buhl)

Able to break down or dissolve in liquid.

**atherosclerosis**

(ath uh roh skluh ROH sis)

Condition of hardening of the arteries due to fat deposits that narrow the space blood flows through.

A therapeutic diet is often very different from the foods the patient normally eats. Your understanding of the reason for the diet and your patients' special needs helps ease their concerns. The dietitian will talk with the patient and try to adapt a therapeutic diet to meet a patient's nutritional and personal needs. An example of a special or personal need is religious restrictions.

Many religions of the world follow specific dietary laws. These guidelines are very important to clients. The stress caused by breaking the law when clients are on a therapeutic diet may cause added worry. Always be respectful of the dietary requests that your clients make, and report their requests to your supervisor. Ask your clients what diet they normally follow. If there is a problem with the diet, report it to your supervisor, who will talk with the dietitian. **Table 16.2** lists a few of the restrictions that you may observe.

**Purposes of Therapeutic Diets**

Therapeutic diets are given to:

- Regulate the amount of food in **metabolic** disorders.
- Prevent or restrict edema by restricting sodium intake.
- Assist body organs to regain and/or maintain normal function.
- Aid in digestion by avoiding foods that irritate the digestive tract.
- Increase or decrease body weight by adding or eliminating calories.

**Table 16.2 Religious Dietary Restrictions**

Religion	Restriction
Christian Science	Avoid alcohol, coffee, tea.
Church of Latter-Day Saints (Mormons)	Avoid alcohol, coffee, tea.
Conservative Protestants	Avoid alcohol, coffee, tea.
Greek Orthodox	No meat or dairy products on fast days.
Muslim (Moslem)	No alcohol, pork, or pork products.
Orthodox Jewish	No shellfish, pork, or non-kosher meats. No serving milk and milk products with meat. No eating leavened bread during Passover. Abstain from eating on specific fast days.
Roman Catholic	No food one hour before communion and no meat on Ash Wednesday, Good Friday, and all the Fridays during Lent.
Buddhist	Generally vegetarian.
Hindu	Generally vegetarian.

## Types of Therapeutic Diets

Table 16.3 describes the various types of therapeutic diets and their purposes.

The physician may order other diets. Always check the diet that has been ordered for the patient/client. If you have any question about it, ask the person in charge. Correct diets are essential in maintaining good health, and only those foods allowed should be served.

**Table 16.3 Some Therapeutic Diets and Their Purposes**

Type of Diet	Purpose of Diet	Description
<i>Clear liquid</i> Nutritionally inadequate	Replaces fluids lost from vomiting, diarrhea, surgery	Plain gelatin, ginger ale, tea, coffee (no cream), fruit or apple juice (no pulp), fat-free broth
<i>Full liquid</i> May be <b>deficient</b> in iron	Trouble chewing or swallowing, <b>gastrointestinal</b> disturbances	All clear liquids, fruit or vegetable juices, strained soup, custard, ice cream, sherbet, milk, cream, eggs, buttermilk, carbonated beverages, eggs, cocoa, eggnog
<i>Soft</i> Nutritionally inadequate	For patients who have trouble chewing, postsurgically	Foods that are soft in consistency, such as fish, ground beef, broth, pureed vegetables, strained cream soup, tender cooked vegetables, fruit juices, cooked fruit, refined cereals, pasta, sherbet, ices, ice cream, custard, plain cookies, angel food cake, tea, coffee, cocoa, carbonated beverages, cheese, cottage cheese
<i>Bland</i> Nutritionally adequate	Soothes gastrointestinal tract, avoids irritation in ulcers, <b>colitis</b>	Foods low in fiber and connective tissue that are mild flavored and easy to digest, such as bananas, prune juice, applesauce, custard, pudding, ice cream, plain cookies, sponge cake, decaffeinated coffee, milk, cheese, yogurt
<i>Restricted residue</i> Nutritionally adequate	Reduces normal work of the intestine, in cases of rectal diseases, colitis, <b>ileitis</b>	Foods low in fiber and low in bulk, such as milk, buttermilk, cottage cheese, butter, margarine, eggs (not fried), tender poultry, fish, lamb, ground beef (broiled, boiled, baked), broth, refined bread, cereals, pasta, gelatin, angel food or sponge cake, mild-flavored cooked vegetables, lettuce, vegetable and fruit juice, applesauce, canned fruit, citrus fruit without membranes
<i>Low carbohydrate</i> (diabetic) Nutritionally adequate	Matches food intake with insulin uptake and nutritional requirements, used for patients with hyperinsulism and <b>diabetes mellitus</b>	Foods that supply enough protein, fat, and carbohydrate to maintain health and activities; requires a balance of carbohydrates, protein, and fat to meet the individual need of the patient; restricts sugar, cookies, pies, candies, etc.
<i>Low fat</i> Deficient in fat <b>soluble</b> vitamins	For patients with gallbladder and liver disease, obesity, and heart conditions	Foods high in carbohydrates and proteins; all fats are limited; skim milk, buttermilk, cottage cheese, lean fish, poultry, meats, fat-free soup broths, cooked vegetables, lettuce, fruit juice, bananas, citrus fruits, gelatin, angel food cake, coffee, tea, carbonated beverages, jelly, honey as desired

(continued)

**Table 16.3 Some Therapeutic Diets and Their Purposes (continued)**

Type of Diet	Purpose of Diet	Description
<i>Low cholesterol</i> Nutritionally adequate	Regulates amount of cholesterol in the blood for patients with coronary disease and <b>atherosclerosis</b>	Foods low in fat, such as lean muscle meat, fish, poultry without skin or fat, skim milk, vegetables, fruits
<i>Low calorie</i> Nutritionally adequate (800–2,000 cal)	Reduces number of calories for overweight patients and for clients with arthritis or cardiac conditions	Foods low in fats and calories: skim milk, buttermilk, lean meats, clear soup, vegetables, fresh fruit, coffee, tea, herbs, onions, garlic
<i>High calorie</i> (2,000+ cal) Nutritionally adequate	For persons 10 percent or more below desired weight; for patients with <b>anorexia nervosa</b> and hyperthyroidism	All foods with nutritionally balanced proteins, carbohydrates, fats, vitamins, minerals
<i>Low sodium</i> Nutritionally adequate	Reduces salt intake for patients with kidney disease, cardiovascular disorders, edema, and <b>hypertension</b>	Natural foods prepared without salt, such as fresh fruits, fresh vegetables, foods without salt added
<i>High protein</i> Nutritionally adequate	For children and adolescents needing additional protein for growth; during pregnancy, <b>lactation</b> ; postsurgically; during illnesses resulting from protein loss	Foods high in protein, such as milk, cheese, eggs, lean meats, fish, and poultry; fruit, cereals, vegetables

**anorexia nervosa**

(an uh REK see uh nur VOH suh)  
Loss of appetite with serious weight loss. It is considered a mental disorder.

**hypertension**

(hahy per TEN shuhn)  
High blood pressure.

**lactation**

(lak TEY shuhn)  
Body's process of producing milk to feed newborns.

**Career Connection**

Participate in a job shadow of a Dietician in either an acute care or long-term care facility and learn about the therapeutic diets required for specific conditions such as diabetes, high blood pressure, or hypoglycemia.

**Eating Disorders**

Eating disorders are not due to a failure of will. They are real and treatable medical illnesses. The three main types of eating disorders are anorexia nervosa, bulimia, and binge-eating. All three can affect a person's health including causing serious heart conditions, kidney failure, and electrolyte imbalance. The cause of eating disorders is not entirely clear. They seem to have a basis in biology but they are also affected by emotions, genes, and culture.

Eating is controlled by many factors including a person's appetite, the availability of food, family, peer, and cultural practices, and attempts at voluntary control. An eating disorder involves a serious disturbance in eating behavior, such as extreme reduction of food intake, severe overeating, or intentional vomiting. Eating disorders frequently develop during adolescence or early adulthood and can often be found with other problems such as depression, substance abuse, and anxiety disorders.

Women are much more likely than men to develop an eating disorder. Women's magazines, fashion trends, and some activities and professions promote dieting to achieve the "perfect" lean body. This can lead to pressure on women to be thin. Eating disorders are sometimes triggered by the stress of being unable to reach an unattainable goal. Males make up only about 10 percent of people with anorexia or bulimia.



### Dietary Careers

Proper nutrition is vital for both health care workers—so that they maintain the stamina and health required for the job—and patients—so that they grow stronger or stay healthy. Eating a balanced diet is important for both the brain and the body. As many Americans do not follow a healthy diet, the role of the dietary worker is becoming more and more important to the populations' health. There are different types of dietary careers, including Registered Dietitians, Dietetic Technicians, and Food Service Workers.

Working with a partner, research various dietary careers. Using the Internet or a library, research

the educational and skills needs to go into this area of study. If you are able to speak with professionals in these fields, interview them about how they become interested in this subject, what the requirements were, and what their job responsibilities are.

After you've completed your research, create a document with several paragraphs on each dietary career that you learned about. Be sure to proofread your work to see if you can improve it by making it clearer, more concise, or more interesting to read. Check the spelling and grammar and correct any errors.

### Anorexia Nervosa

People with *anorexia nervosa* see themselves as overweight and have an immense fear of becoming fat even though they are dangerously thin. In addition, many athletes have eating disorders. For them, eating becomes an obsession. They develop unusual eating habits such as avoiding meals, eating only a few foods in small quantities, or carefully weighing food. People with anorexia may repeatedly check their body weight or exercise compulsively.

People with anorexia are often perfectionists. They are driven to succeed but cannot achieve the unattainable standards they set for themselves. When they fail to meet these standards, they often look for a part of their lives they can control such as food or weight.

### Bulimia Nervosa and Binge-Eating Disorder

*Bingeing* means eating an excessive amount of food within a short period of time. Bulimia sufferers have recurring episodes of binge eating. They usually feel unable to control their appetite during a bingeing episode.

Afterwards, they try desperately to compensate in order to avoid gaining weight. A person with bulimia might engage in inappropriate behavior known as "*purging*," brought on by self-induced vomiting, or misuse of laxatives, diuretics, or other medications.

Because purging follows the binge-eating episodes, people with bulimia usually have a "normal" weight for their age and height. However, like people with anorexia, people with bulimia often feel extremely dissatisfied with their bodies. They might also feel disgusted and ashamed when they binge and perform both bingeing and purging behavior in secret.

### Apply It

Working in pairs, choose a therapeutic diet and pretend you have been put on it. Go to several different grocery stores and collect the sale papers for the week.

Create a menu for one week, based on this diet. Make sure you keep track of grocery cost and compare your menu to the food guide pyramid recommendations to see if it is nutritious.

Binge-eating disorder is similar to bulimia but without the purging. Therefore, many people with the disorder are overweight for their age and height. The out-of-control eating may be associated with eating rapidly, eating until feeling uncomfortably full, or eating large amounts when not feeling hungry. Binge-eaters often feel embarrassed, depressed, or guilty after overeating. This can lead to overeating again, creating a cycle of binge eating.

### **Treatment**

People with eating disorders often do not recognize or admit that they are ill. They may strongly resist getting and staying in treatment. Family members or friends can be helpful in making sure that a person with an eating disorder receives the necessary care. Eating disorders can be treated and a healthy weight restored. The sooner a doctor diagnoses and treats these disorders, the better the outcomes are likely to be.

Eating disorders often have multiple causes and require a complex treatment plan. This may include medical care, psychological treatment, nutritional counseling, and medication. Ongoing research by scientists continues to advance the understanding and treatment of eating disorders.



## *Personal Wellness*

### **Substance Abuse**

Substance abuse refers to the use of legal or illegal substances that cause harm to a person's health or life. Abused substances usually produce some form of intoxication that alters judgment, perception, or physical control.

Substance abuse in the United States is widespread. In 2007, there were an estimated 16.4 million Americans using illicit drugs and about 15 million heavy alcohol users. About one out of five Americans smokes cigarettes.

People use alcohol and other drugs because they like the way these substances make them feel. However, substance abuse may lead to addiction. Addiction is a compulsion to continue using a substance even though it has negative consequences. People can become addicted to illegal drugs, drugs that doctors prescribe, or to things they may not think of as drugs, such as alcohol and the nicotine in cigarettes.

Many abused substances can produce a phenomenon known as *tolerance*. This means a person would have to use a larger amount of the drug to produce the same level of intoxication. Once a person is addicted to a drug, it becomes almost impossible to stop using it. Sometimes, when people stop using a drug, they experience withdrawal. Withdrawal can range from mild anxiety to seizures and hallucinations.

### **Alcohol**

Despite the focus on illegal drugs, alcohol remains the main drug problem in the United States. Alcohol lessens a person's inhibitions, slurs speech, and decreases coordination. Many people use alcohol without any negative consequences. However, there are approximately 15 million people in the country addicted to alcohol; more than 4.5 million of them are women.

Alcohol is the most common cause of liver failure in the U.S. The drug can also cause heart enlargement and cancer of the pancreas, esophagus, and stomach. Alcohol abuse is associated with nearly half of all fatal motor vehicle accidents. Every year in the United States, alcohol abuse also causes 500,000 injuries, 600,000 assaults, and 70,000 sexual assaults.



## *Personal Wellness (continued)*

### **Tobacco**

Cigarettes kill more Americans than alcohol, car accidents, suicide, AIDS, homicide, and illegal drugs combined. Yet, amazingly, people continue to smoke. Cigarettes and other forms of tobacco contain nicotine, one of the most addictive of all drugs. Despite the rising cost of cigarettes, more than 40 million U.S. adults were smokers in 2004. This is 21 percent of all American adults.

About half of all Americans who continue to smoke will die because of the habit. Each year about 440,000 people die in the United States from illnesses related to cigarette smoking such as heart disease, lung cancer, emphysema, and stroke.

Although 70 percent of smokers want to quit and 35 percent attempt to quit each year, fewer than 5 percent succeed. This is because smokers not only become physically addicted to nicotine but they also become psychologically addicted. Nicotine withdrawal symptoms of smoking include anxiety, hunger, sleep disturbances, and depression. All these factors make it very difficult for a person to stop smoking once he or she starts.

### **Illegal Drugs**

Marijuana comes from the plant *Cannabis sativa* and is the most commonly used illegal drug in the United States. Marijuana is a popular drug because it produces a feeling of pleasure and relaxation without a high risk of addiction. More than 83 million Americans have tried marijuana. However, there are dangers associated with it. Like anything that is smoked, it can irritate a person's lungs.

Smoking marijuana also impairs coordination and memory. Perhaps most importantly, possession of even small amounts of marijuana in the United States remains a crime. In 2005, 42 percent (787,000) of all drug arrests were for marijuana.

Americans in large numbers use many other types of illegal drugs. Cocaine, derived from the coca plant of South America, is the most abused major stimulant in America. More than 2 million Americans use heroin despite the very real danger of death through overdose.

Methamphetamines are a powerful stimulant that increases alertness and decreases appetite. An assortment of so-called "club drugs" have also become popular in the last two decades, including Ecstasy, PCP, GHB, Rohypnol, Ketamine, and LSD.

Most of these drugs deliver a feeling of happiness, excitement, and energy. However, most of them are physically and/or psychologically addictive. Withdrawal symptoms can be particularly harrowing for some drugs such as heroin. In addition, prolonged use of any of them can lead to serious health problems including coronary problems, dangerously high blood pressure, and stroke.

### **Steroids**

Anabolic steroids are artificial versions of the hormone testosterone. Testosterone brings out male sexual traits. Steroids are often used to treat delayed puberty and the wasting of the body caused by diseases. However, anabolic steroids also help the growth of skeletal muscle. For this reason, these compounds have been abused by bodybuilders, weightlifters, and athletes in many other sports.

By the 2000s, the use of steroids was becoming epidemic among college and high school athletes. In 2006, 1.6 percent of eighth graders and 2.7 percent of twelfth graders reported using steroids without a prescription at least once in their lifetimes.

Anabolic steroids can be injected, taken by mouth, or rubbed on the skin when in the form of gels or creams. Anabolic steroid abuse has been associated with a wide range of adverse side effects such as irritability, aggression, acne, breast development in men, liver cancer, and heart attacks. Most of the effects are reversible if the abuser stops taking the drug, but some can be permanent.

## Summary

There are many factors that influence food habits. Some of these factors are personal attitudes, nationality, race, and religious restrictions. A health care worker must be aware of these factors in order to help the patient/client adapt to therapeutic diets.

The therapeutic diet is prescribed for various ailments. It is important to understand why the diet was prescribed and how it helps in regaining a healthier state. The health care worker should be aware of the foods allowed and not allowed in therapeutic diets and serve only proper foods to his or her patients.

### SECTION

### 16.2

### Review Questions

1. What is a therapeutic diet?
2. What is a common dietary restriction for Muslims?
3. What is the purpose of a clear liquid diet?
4. If a patient has ulcer problems, what kind of therapeutic diet would be most helpful?
5. What foods are high in protein?
6. What types of care might be included in a treatment program for eating disorders?



### *Learn By Doing: Section 16.2 Activity*

1. Complete Worksheets 1 and 2 as assigned.
2. Complete Worksheet/Activity 3.
3. Complete Worksheets 4 and 5.
4. Prepare responses to each item listed in Chapter Review.
5. When you are confident that you can meet each objective for this section, ask your teacher for the section evaluation.

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