Lifetime Physical Fitness & Wellness
A Personalized Program

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Behavior Modification

“It is practically impossible to reach a goal without changing behavior.”

Objectives

▶ Learn the effects of environment on human behavior.
▶ Understand obstacles that hinder the ability to change behavior.
▶ Explain the concepts of motivation and locus of control.
▶ Identify the stages of change.
▶ Describe the processes of change.
▶ Explain techniques that will facilitate the process of change.
▶ Describe the role of SMART goal setting in the process of change.
▶ Be able to write specific objectives for behavioral change.

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Prepare for a healthy change in lifestyle. Visit www.cengagebrain.com to access course materials and companion resources for this text including quiz questions designed to check your understanding of the chapter contents. See the preface on page xv for more information.
Why is it so hard to change? Change is incredibly difficult for most people. Our behaviors are based on our core values and actions that are rewarded. Whether we are trying to increase physical activity, quit smoking, change unhealthy eating habits, or reverse heart disease, it is human nature to resist change that isn’t immediately rewarded, even when we know that change will provide substantial benefits in the near future. Furthermore, Dr. Richard Earle, managing director of the Canadian Institute of Stress and the Hans Selye Foundation, explains that people have a tendency toward pessimism. In every spoken language, there is a ratio of three pessimistic adjectives to one positive adjective. Thus, linguistically, psychologically, and emotionally, we focus on what can go wrong and we lose motivation before we even start. “That’s why we have the saying, ‘The only person who truly welcomes a change is a baby with a full diaper.’”

What triggers the desire to change? Motivation comes from within. In most instances, no amount of pressure, reasoning, or fear will inspire people to take action. Change in behavior is most likely to occur when people either receive instant gratification for their actions or when people’s feelings are addressed. People pursue change when it’s either rewarded (for example, lower health care premiums if you quit smoking) or they start contemplating change when there is a change in core values that will make them feel uncomfortable with the present behavior(s) or lack thereof (e.g., a long and healthy life is more important than smoking). Core values change when feelings are addressed. The challenge is to find ways that will help people understand the problems and solutions in a manner that will influence emotions and not just the thought process. Once the problem behavior is understood and “felt,” the person may become uncomfortable with the situation and will be more inclined to address the problem behavior or adoption of a healthy behavior.

Dr. Jan Hill, a Toronto-based life skills specialist, stated that discomfort is a great motivator. People tolerate any situation until it becomes too uncomfortable for them: “Then they have to take steps to make changes in their lives.” It is at this point that the skills presented in this chapter will help you implement a successful plan for change. Keep in mind that as you make lifestyle changes, your relationships and friendships also need to be addressed. You need to distance yourself from those individuals who share your bad habits (e.g., smoking, drinking, sedentary lifestyle) and associate with people who practice healthy habits. Are you prepared to do so?


The benefits of regular physical activity and living a healthy lifestyle to achieve wellness are well documented. Nearly all Americans accept that exercise is beneficial to health and see a need to incorporate it into their lives. Seventy percent of new and returning exercisers, however, are at risk for early dropout.1 As the scientific evidence continues to mount each day, most people still are not adhering to a healthy lifestyle program.

Let’s look at an all-too-common occurrence on college campuses. Most students understand that they should be exercising, and they contemplate enrolling

Real Life Story Sharon’s Experience

Prior to my marriage, I had never really tried jogging. But then I became convinced that aerobic exercise would improve my fitness and help me maintain a healthy weight. My fiancé was really serious about fitness and had been jogging regularly for several years. We wrote out an exercise prescription and started jogging together. Exercise helped me to accomplish my health goals through my first two pregnancies. The feeling of being physically fit was a reward in itself, but jogging two consecutive miles was rarely truly enjoyable. With young children at home, my husband and I were forced to take turns jogging so that one of us would always be home. My jogging program consisted of a 20-minute jog: one mile out and one mile back, five to six times per week.

Five years later, on one particular day, 25 minutes went by and I wasn’t ready to stop jogging. At 30 minutes, I went and knocked on the door: “Honey, I feel great—I’ll be back in 10 minutes.” I did this again at 40 and 50 minutes. I ended up jogging for a full 60 minutes for the first time in my life, and the experience was genuinely joyful! That day, I finally reached “the top of the mountain” (the termination/adoption stage of change) and truly experienced the joy of being physically fit. Jogging became as easy as a “bird in flight.” I have not stopped jogging in more than 32 years! It wasn’t easy at first, but knowledge, commitment, support, action, and perseverance paid off.

Fitness also was the factor that led to improvements in other wellness components in our lives (continuing health education, good nutrition, stress reduction, and chronic disease prevention). Fitness is the daily “bread and butter” that enhances our quality of life. Our children now also follow our active lifestyle. We always say: “A family that exercises together stays together.”
Chapter 2 Behavior Modification

Behavior Modification in a fitness course. The motivating factor might be improved physical appearance, health benefits, or simply fulfillment of a college requirement. They sign up for the course, participate for a few months, finish the course—and stop exercising! They offer a wide array of excuses: too busy, no one to exercise with, already have the grade, inconvenient open-gym hours, job conflicts, and so on. A few months later they realize once again that exercise is vital, and they repeat the cycle (Figure 2.1).

The information in this book will be of little value to you if you are unable to abandon your negative habits and adopt and maintain healthy behaviors. Before looking at any physical fitness and wellness guidelines, you will need to take a critical look at your behaviors and lifestyle—and most likely make some permanent changes to promote your overall health and wellness.

Living in a Toxic Health and Fitness Environment

Most of the behaviors we adopt are a product of our environment—the forces of social influences we encounter and the thought processes we go through (also see self-efficacy on pages 50-51). This environment includes families, friends, peers, homes, schools, workplaces, television, radio, and movies, as well as our communities, country, and culture in general.

Unfortunately, when it comes to fitness and wellness, we live in a “toxic” environment. Becoming aware of how the environment affects us is vital if we wish to achieve and maintain wellness. Yet, we are so habituated to the environment that we miss the subtle ways it influences our behaviors, personal lifestyle, and health each day.

From a young age, we observe, we learn, we emulate, and without realizing it, we incorporate into our own lifestyle the behaviors of people around us. We are transported by parents, relatives, and friends who drive us nearly any place we need to go. We watch them drive short distances to run errands. We see them take escalators and elevators and ride moving sidewalks at malls and airports. They use remote controls and cell phones. We observe them stop at fast-food restaurants and pick up supersized, calorie-dense, high-fat meals. They watch television and surf the net for hours at a time. Some smoke, some drink heavily, and some have

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**Personal Behavior Modification Profile**

Are you able to answer the following questions regarding behavior change? If you are unable to do so, the chapter contents will help you do so.

I. Can you identify behavioral changes that you have consciously made in your life and the process that you went through to do so?

II. Would you categorize yourself as having an internal or external locus of control?

III. Can you identify your current stage of change for physical activity? How about exercise?

IV. A person pre-contemplating a change in behavior is said to be ready to start the process of change.

   ______ True    ______ False

V. SMART goals enhance the odds of success. ______ True    ______ False

VI. Can you list the processes of change that helped Sharon the most adhere to her fitness program?

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**Figure 2.1** Exercise/exercise dropout cycle.

Find excuses for not exercising
Contemplate exercise
Realize need for exercise
Consider fitness course
Enroll in fitness course
Participate in exercise
Course ends
Stop exercising
hard-drug addictions. Others engage in risky behaviors by not wearing seat belts, by drinking and driving, and by having unprotected sex. All of these unhealthy habits can be passed along, unquestioned, to the next generation.

**Environmental Influences on Physical Activity**

Among the leading underlying causes of death in the United States are physical inactivity and poor diet. This is partially because most activities of daily living, which a few decades ago required movement or physical activity, now require almost no effort and negatively affect health, fitness, and body weight. Small movements that have been streamlined out of daily life quickly add up, especially when we consider these over 7 days a week and 52 weeks a year.

We can examine the decrease in the required daily energy (caloric) expenditure as a result of modern-day conveniences that lull us into physical inactivity. For example, short automobile trips that replace walking or riding a bike decrease energy expenditure by 50 to 300 calories per day; automatic car window and door openers represent about 1 calorie at each use; automatic garage door openers, 5 calories; drive-through windows at banks, fast-food restaurants, dry cleaners, and pharmacies add up to about 5 to 10 calories each time; elevators and escalators, 3 to 10 calories per trip; food processors, 5 to 10 calories; riding lawn mowers, about 100 calories; automatic car washes, 100 calories; hours of computer use to e-mail, surf the net, text, and conduct Internet transactions represent another 50 to 300 calories; and excessive television viewing can add up to 200 or more calories. Little wonder that we have such a difficult time maintaining a healthy body weight.

Health experts recommend five to six miles of walking per day. This level of activity equates to about 10,000 to 12,000 daily steps. If you have never clipped on a pedometer, try to do so. When you look at the total number of steps it displays at the end of the day, you may be shocked by how few steps you took.

With the advent of now-ubiquitous cell phones, people are moving even less. Family members call each other on the phone even within the walls of their own home. Some people don’t get out of the car anymore to ring a doorbell. Instead, they wait in front and send a text message to have the person come out.

Even modern-day architecture reinforces unhealthy behaviors. Elevators and escalators are often of the finest workmanship and located conveniently. Many of our newest, showiest shopping centers and convention centers don’t provide accessible stairwells, so people are all but forced to ride escalators. If they want to walk up the escalator, they can’t because the people in front of them obstruct the way. Entrances to buildings provide electric sensors and automatic door openers. Without a second thought, people walk through automatic doors instead of taking the time to push a door open.

At work, most people have jobs that require them to sit most of the day. We don’t even get up and walk a short distance to talk to coworkers. Instead, we use e-mail, IM, and telephones.
For individuals who spend an excessive amount of daily time sitting (riding in a car, sitting at a desk, watching TV and movies, playing computer games, surfing the net), research data published in 2009 indicate that the amount of daily sitting time is associated with an increased risk for all-cause and cardiovascular disease mortality, independent of leisure-time physical activity and excessive body weight. The greater the amount of sitting time per day, the greater the risk of premature mortality. As expected, the highest mortality rates were seen in obese individuals who sit almost all of the time.

Of particular interest, the study showed that death rates were still high for people who spent a large portion of their day sitting, even though they met the current minimum moderate-physical activity recommendations (30 minutes, at least five times per week). The researchers concluded that for better health and a longer life people should avoid sedentarism, and most importantly, decrease total daily sitting time.

A subsequent study published in 2010 linked excessive TV watching and earlier death. A total of 8,800 adults with no history of heart disease were followed for more than six years. As compared to individuals who only watched two hours of TV per day, those who watched four or more daily hours were 80 percent more likely to die from heart disease and 46 percent more likely to die from all causes. The authors also indicated that exercise does not make up for long TV sessions. Sitting is the “default position” for TV viewing, and such an action minimizes tasks such as standing, walking, and moving about during the course of the day. Excessive TV viewing may also be more detrimental than other sedentary activities such as reading, studying, or doing homework.

Leisure time is no better. When people arrive home after work, they surf the net, play computer games, or watch television for hours at a time. The first thing people consider when setting up a family room is where to put the television. This little (or big-screen) box has truly lulled us into inactivity. Excessive TV viewing is directly linked to obesity, and the amount of time people choose to spend watching television programs and DVDs is climbing. The average household watches close to 8 hours of programming each day—up one hour from 1982 and two from 1970.

Television viewing is more than just a sedentary activity. Think about people’s habits before they sit down to watch a favorite show. They turn on the television, then stop by the kitchen for a box of crackers and processed cheese. They return to watch the show, start snacking, and are bombarded with commercials about soft drinks, beer, and unhealthy foods. Viewers are enticed to purchase and eat unhealthy, calorie-dense foods in an unnecessary and mindless “snacking setting.” Television viewing even has been shown to reduce the number of fruits and vegetables some people consume, most likely because people are eating the unhealthy foods advertised on television.

Our communities aren’t much help either. Walking, jogging, and bicycle trails are too sparse in most cities, further discouraging physical activity. Places for safe exercise are hard to find in many metropolitan areas, motivating many people to remain indoors during leisure hours for fear of endangering their personal safety and well-being.

In addition to sitting most of the day at work and at home, we also sit in our cars. We are transported or drive everywhere we have to go. Safety concerns also keep people in cars instead of on sidewalks and in parks. And communities are designed around the automobile. City streets make driving convenient and walking or cycling difficult, impossible, or dangerous. Streets typically are rated by traffic engineers according to their “level of service”—that is, based on how well they facilitate motorized traffic. A wide, straight street with few barriers to slow motorized traffic gets a high score. According to these guidelines, pedestrians are “obstructions.” Only recently have a few local governments and communities started to devise standards to determine how useful streets are for pedestrians and bicyclists.

For each car in the United States, there are seven parking spaces. Drivers can almost always find a parking spot, but walkers often run out of sidewalks and crosswalks in modern streets. Sidewalks have not been a priority in city, suburban, or commercial development. Whereas British street design manuals recommend sidewalks on both sides of the street, American
One measure that encourages activity is the use of "traffic-calming" strategies: intentionally slowing traffic to make the pedestrian’s role easier. These strategies were developed and are widely used in Europe. Examples include narrower streets, rougher pavement (cobbledstone), pedestrian islands, and raised crosswalks.

Many European communities place a high priority on walking and cycling, which makes up 40 to 54 percent of all daily trips taken by people in Austria, the Netherlands, Denmark, Italy, and Sweden. By contrast, in the United States, walking and cycling account for 10 percent of daily trips, whereas the automobile accounts for 84 percent.7

Granted, many people drive because the distances to cover are on a vast scale. We live in bedroom communities and commute to work. When people live near frequently visited destinations, they are more likely to walk or bike for transportation. Neighborhoods that mix commercial and residential land use encourage walking over driving because of the short distances among home, shopping, and work.

Children also walk or cycle to school today less frequently than in the past. The reasons? Distance, traffic, weather, perceived crime, and school policy. Distance is a significant barrier because the trend during the past few decades has been to build larger schools on the outskirts of communities instead of small schools within neighborhoods.

Environmental Influence on Diet and Nutrition

The present obesity epidemic in the United States and other developed countries has been getting worse every year. We are becoming a nation of overweight and obese people. You may ask why. Let’s examine the evidence.

According to the U.S. Department of Agriculture’s Center for Nutrition Policy and Promotion, the amount of daily food supply available in the United States is about 3,900 calories per person, before wastage. This figure represents a 700-calorie rise over the early 1980s,8 which means that we have taken the amount of food available to us and tossed in a Cinnabon for every person in the country.

The overabundance of food increases pressure on food suppliers to advertise and try to convince consumers to buy their products. The food industry spends more than $33 billion each year on advertising and promotion, and most of this money goes toward highly processed foods. The few ads and campaigns promoting healthy foods and healthful eating simply cannot compete. Most of us would be hard-pressed to recall a jingle for brown rice or kale. The money spent advertising a single food product across the United States is often 10 to 50 times more than the money the federal government spends promoting MyPlate or encouraging us to eat fruits and vegetables.9

Coupled with our sedentary lifestyle, many activities of daily living in today’s culture are associated with eating. We seem to be eating all the time. We eat during coffee breaks, when we socialize, when we play, when we watch sports, at the movies, during television viewing, and when the clock tells us it’s time for a meal. Our lives seem to be centered on food, a nonstop string of occasions to eat and overeat. And much of the overeating is done without a second thought. For instance, when people rent a video, they usually end up in line with the video and also with popcorn, candy, and soft drinks. Do we really have to eat while watching a movie?

As a nation, we now eat out more often than in the past, portion sizes are larger, and we have an endless variety of foods to choose from. We also snack more than ever before. Unhealthy food is relatively inexpensive and is sold in places where it was not available in the past.

Increasingly, people have decided that they no longer require special occasions to eat out. Mother’s Day, a birthday, or someone’s graduation are no longer reasons to eat at a restaurant. Eating out is part of today’s lifestyle. In the late 1970s, food eaten away from home represented about 18 percent of our energy intake. In the mid-1990s, this figure rose to 32 percent. Almost half of the money Americans spend on food today is on meals away from home.10

Eating out would not be such a problem if portion sizes were reasonable or if restaurant food were similar to food prepared at home. Compared with home-cooked meals, restaurant and fast-food meals are higher in fat and calories and lower in essential nutrients and fiber.

Food portions in restaurants have increased substantially in size. Patrons consume huge amounts of food, almost as if this were the last meal they would ever have. They drink entire pitchers of soda pop or beer instead of the traditional 8-ounce cup size. Some restaurant menus may include selections that are called healthy choices, but these items may not provide nutritional information, including calories. In all likelihood, the menu has many other choices that look delicious but provide larger servings sizes with more fat and calories and fewer fruits and vegetables. Making a healthy selection is difficult, because people tend to choose food for its taste, convenience, and cost instead of nutrition.

Restaurant food is often less healthy than we think. Trained dietitians were asked to estimate nutrition information for five restaurant meals. The results showed that the dietitians underestimated the number of calories and amount of fat by 37 and 49 percent, respectively.11 Findings such as these do not offer much hope for the average consumer who tries to make healthy choices when eating out.
We can also notice that most restaurants are pleasurable places to be: colorful, well-lit, and thoughtfully decorated. These intentional features are designed to enhance comfort, appetite, and length of stay, with the intent to entice more eating. Employees are formally trained in techniques that urge patrons to eat more and spend more. Servers are prepared to approach the table and suggest specific drinks, with at least one from the bar. When the drink is served, they recommend selected appetizers. Drink refills are often free while dining out. Following dinner, the server offers desserts and coffee. A person could literally get a full day’s worth of calories in one meal without ever ordering an entree.

Fast-food restaurants do not lag far behind. Menu items frequently are introduced at one size and, over time, popular items are increased two to five times. Large portion sizes are a major problem because people tend to eat what they are served. A study by the American Institute of Cancer Research found that with bigger portion sizes, 67 percent of Americans ate the larger amount of food they were served. The tendency of most patrons is to “clean the plate.”

Individuals seem to have the same disregard for hunger cues when snacking. Participants in one study were randomly given an afternoon snack of potato chips in different bag sizes. The participants received bags from 1 to 20 ounces for 5 days. The results showed that the larger the bag, the more the person ate. Men ate 37 percent more chips from the largest than the smallest bag. Women ate 18 percent more. Of significant interest, the size of the snack did not change the amount of food the person ate during the next meal. Another study found no major difference in reported hunger or fullness after participants ate different sizes of sandwiches that were served to them, even though they ate more when they were given larger sandwiches.

Other researchers set out to see if the size of the package—not just the amount of food—affects how much people eat. Study participants received two different-sized packages with the same number of spaghetti strands. The larger package was twice the size of the smaller package. When participants were asked to take out enough spaghetti to prepare a meal for two adults, they took out an average of 234 strands from the small package versus 302 strands from the larger package. In our own kitchens, and in restaurants, we seem to have taken away from our internal cues the decision of how much to eat. Instead we have turned that choice over to businesses that profit from our overindulgence.

Also working against our hunger cues is our sense of thrift. Many of us consider cost ahead of nutrition when we choose foods. Restaurants and groceries often appeal to this sense of thrift by using “value marketing,” meaning that they offer us a larger portion for only a small price increase. Customers think they are getting a bargain, and the food providers turn a better profit because the cost of additional food is small compared with the cost of marketing, production, and labor.

The National Alliance for Nutrition has further shown that a little more money buys a lot more calories. Ice cream upsizing from a kid’s scoop to a double scoop, for example, adds an extra 390 calories for only an extra $1.62. A medium-size movie theater popcorn (unbuttered) provides 500 additional calories over a small-size popcorn for just an extra 71 cents. Equally, king-size candy bars provide about 230 additional calories for just another 33 cents over the standard size. We often eat more simply because we get more for our money without taking into consideration the detrimental consequences to our health and waistline.

Another example of financial but not nutritional sense is free soft-drink refills. When people choose a high-calorie drink over diet soda or water, the person does not compensate by eating less food later that day. Liquid calories seem to be difficult for people to account for. A 20-ounce bottle of regular soda contains the equivalent of one-third cup of sugar. One extra can of soda (160 calories) per day represents an extra 16.5 pounds of fat per year (160 calories x 365 days ÷ 3,500 calories). Even people who regularly drink diet sodas tend to gain weight. In their minds, they may rationalize that a calorie-free drink allows them to consume more food.

A larger variety of food also entices overeating. Think about your own experiences at parties that have a buffet of snacks. Do you eat more when everyone brings something to contribute to the snack table? When unhealthy choices outnumber healthy choices, people are less likely to follow their natural cues to choose healthy food.

The previously mentioned environmental factors influence our thought processes and hinder our ability to determine what constitutes an appropriate meal based on actual needs. The result: On average, American women consume 335 more daily calories than they did 20 years ago and men an additional 170 calories.

Now you can analyze and identify the environmental influences on your behaviors. Activity 2.1 provides you with the opportunity to determine whether you control your environment or the environment controls you.

Living in the 21st century, we have all the modern-day conveniences that lull us into overconsumption and sedentary living. By living in America, we adopt behaviors that put our health at risk. And though we understand that lifestyle choices affect our health and well-being, we still have an extremely difficult time making changes.

Let’s look at weight gain. Most people do not start life with a weight problem. By age 20, a man may weigh 160 pounds. A few years later, the weight starts to climb and may reach 170 pounds. He now adapts and accepts 170 pounds as his weight. He may go on a diet but not make the necessary lifestyle changes. Gradually his weight climbs to 180, 190, 200 pounds. Although he may
Exercising Control over Your Physical Activity and Nutrition Environment

Name: ___________________________ Date: ___________________________

Course: __________________________ Section: __________________________ Gender: ________ Age: ________

Instructions: Select the appropriate answer to each question and obtain a final score according to the guidelines provided at the end of each section.

I. Physical Activity

Note: Based on the definitions of physical activity and exercise (see page 7), as you take this questionnaire, keep in mind that you can be physically active without exercising but you cannot exercise without being physically active.

1. Do you identify daily time slots to be physically active? 4 3 2 1
2. Do you seek additional opportunities to be active each day (walk, cycle, park farther away, do yard work/gardening)? 4 3 2 1
3. Do you avoid labor-saving devices/activities (escalators, elevators, self-propelled lawn mowers, snow blowers, drive-through windows)? 4 3 2 1
4. Does physical activity improve your health and well-being? 4 3 2 1
5. Does physical activity increase your energy level? 4 3 2 1
6. Do you seek professional and/or medical (if necessary) advice prior to starting an exercise program or when increasing the intensity, duration, and frequency of exercise? 4 3 2 1
7. Do you identify time slots to exercise most days of the week? 4 3 2 1
8. Do you schedule exercise during times of the day when you feel most energetic? 4 3 2 1
9. Do you have an alternative plan to be active or exercise during adverse weather conditions (walk at the mall, swim at the health club, climb stairs, skip rope, dance)? 4 3 2 1
10. Do you cross-train (participate in a variety of activities)? 4 3 2 1
11. Do you surround yourself with people who support your physical activity/exercise goals? 4 3 2 1
12. Do you let family and friends know of your physical activity/exercise interests? 4 3 2 1
13. Do you invite family and friends to exercise with you? 4 3 2 1
14. Do you seek new friendships with people who are physically active? 4 3 2 1
15. Do you select friendships with people who are at a similar fitness and skill level as you are? 4 3 2 1
16. Do you plan social activities that involve physical activity? 4 3 2 1
17. Do you plan activity/exercise when you are away from home (during business and vacation trips)? 4 3 2 1
18. When you have a desire to do so, do you take classes to learn new activity/sport skills? 4 3 2 1
19. Do you limit daily television viewing and Internet and computer game time? 4 3 2 1
20. Do you spend leisure hours being physically active? 4 3 2 1

Physical Activity Score: ____________
**Activity 2.1**

Exercising Control over Your Physical Activity and Nutrition Environment (continued)

### II. Nutrition

1. Do you prepare a shopping list prior to going to the store?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

2. Do you select food items primarily from the perimeter of the store (site of most fresh/unprocessed foods)?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

3. Do you limit the unhealthy snacks you bring into the home and the workplace?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

4. Do you plan your meals and is your pantry well stocked so you can easily prepare a meal without a quick trip to the store?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

5. Do you help cook your meals?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

6. Do you pay attention to how hungry you are before and during a meal?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

7. When reaching for food, do you remind yourself that you have a choice about what and how much you eat?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

8. Do you eat your meals at home?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

9. Do you eat your meals at the table only?  
   - Nearly always: 4  
   - Often: 3  
   - Seldom: 2  
   - Never: 1

10. Do you include whole-grain products in your diet each day (whole-grain bread/cereal/crackers/rice/pasta)?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

11. Do you make a deliberate effort to include a variety of fruits and vegetables in your diet each day?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

12. Do you limit your daily saturated fat and trans fat intake (red meat, whole milk, cheese, butter, hard margarines, luncheon meats, baked goods)?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

13. Do you avoid unnecessary/unhealthy snacking (at work, play, during TV viewing, at the movies, socials)?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

14. Do you plan caloric allowances prior to attending social gatherings that include food and eating?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

15. If you drink, do you limit alcohol consumption to two drinks a day if you are a man or one drink a day if you are a woman?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

16. Are you aware of strategies to decrease caloric intake when dining out (resist the server’s offerings for drinks and appetizers, select a low-calorie/nutrient-dense item, drink water, resist cleaning your plate, ask for a doggie bag, share meals, request whole-wheat substitutes, get dressings on the side, avoid cream sauces, skip desserts)?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

17. Do you avoid ordering larger meal sizes because you get more food for your money?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

18. Do you avoid buying food when you hadn’t planned to do so (gas stations, convenience stores, video rental stores)?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

19. Do you fill your time with activities that will keep you away from places where you typically consume food (kitchen, coffee room, dining room)?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

20. Do you know what situations trigger your desire for unnecessary snacking and overeating (vending machines, TV viewing, food ads, cookbooks, fast-food restaurants, buffet restaurants)?  
    - Nearly always: 4  
    - Often: 3  
    - Seldom: 2  
    - Never: 1

**Nutrition Score:**

**Total Environmental Score (add Physical Activity and Nutrition Scores):**

### Environmental Control Ratings

- **≥71** You have good control over your environment
- **51–70** There is room for improvement
- **31–50** Your environmental control is poor
- **≤30** You are controlled by your environment
not like it and would like to weigh less, once again he adapts and accepts 200 pounds as his stable weight.

The time comes, usually around middle age, when values change, that people want to make changes in their lives but find this difficult to accomplish, illustrating the adage that “old habits die hard.” Acquiring positive behaviors that will lead to better health and well-being is a long-term process and requires continual effort. Understanding why so many people are unsuccessful at changing their behaviors and are unable to live a healthy lifestyle may increase your readiness and motivation for change. Next we will examine barriers to change, what motivates people to change, behavior change theories, the transtheoretical or stages-of-change model, the process of change, techniques for change, and actions required to make permanent changes in behavior.

Your Brain and Your Habits

People are creatures of habit. Most of the time habits are developed based on rewards, and most people value instant rewards more than long-term rewards. A change in core values, nonetheless, often overrules instant rewards as people seek long-term gratification.

People tend to repeat actions that are pleasurable and avoid those which are unpleasant. A part of the brain known as the striatum (corpus striatum) plays a key role in habit formation. There is a biological explanation to this process. The striatum is activated by events that are rewarding, exciting, unexpected, and intense, as well as by cues from the environment that are associated with those events. The striatum then memorizes events that are pleasurable and rewarding. For example, most people love cake because its taste is much more pleasurable (immediate reward) than that of a green salad, even though the latter provides better nutrition and is conducive to weight management (long-term gratification).

The neurotransmitter dopamine is abundant in the striatum. Dopamine has many functions in the brain, including cognition, learning, behavior, motivation, and reward and punishment. As such, it plays a key role in habit formation. Any activity that links an action to a reward involves dopamine. Following repeated pairings with a reward, the behavior becomes a conditioned response that is now hard-wired in the brain. Eventually, environmental cues lead the striatum to automatically elicit behaviors. These behaviors, now “ingrained” in the brain, often sabotage the desire for willful change.

There are steps you can take to change unwanted behaviors ingrained in the brain. First, recognize that there are biological processes that lead to behavioral habits. Next, a change in values, whether through education or environmental cues (relationships, surroundings, incentives, rewards) are of utmost importance.

As you are adopting a new behavior, repetition is critical. The more you repeat a new behavior under similar circumstances, the more likely you will develop the required circuitry in the striatum to make it a habit. For example, exercising at the same time of day helps develop the exercise habit. In due time, when you fail to exercise, the striatum will let you know that that specific time of the day is exercise time.

You must also consciously prepare to eliminate bad habits, such as not eating while watching television. Better yet, exercise while viewing television! Finally, realize that excessive stress (distress—see Chapter 12) often triggers old bad habits. For example, an argument with a roommate may lead to excessive TV viewing while eating unhealthy calorie-dense foods. You must prepare for an adequate response in these situations. If you made a mistake and did not adequately respond to that specific situation, chalk it up to experience, use it as a learning tool, and next time come back with the proper response.

Barriers to Change

In spite of the best intentions, people make unhealthy choices daily. The most common reasons are:

1. Lack of core values. Most people recognize the benefits of a healthy lifestyle but are unwilling or unable to trade convenience (sedentary lifestyle, unhealthy eating, substance abuse) for health or other benefits.
Behavior Modification

Chapter 2  Behavior Modification

Tip to initiate change. Educate yourself regarding the benefits of a healthy lifestyle and subscribe to several reputable health, fitness, and wellness newsletters (see Chapter 15). The more you read, understand, and then start living a wellness lifestyle, the more your core values will change. At this time you should also break relationships with individuals who are unwilling to change with you.

2. Procrastination. People seem to think that tomorrow, next week, or after the holiday is the best time to start change.

   Tip to initiate change. Ask yourself: Why wait until tomorrow when you can start changing today? Lack of motivation is a key factor in procrastination (motivation is discussed later in this chapter).

3. Preconditioned cultural beliefs. If we accept the idea that we are a product of our environment, our cultural beliefs and our physical surroundings pose significant barriers to change. In Salzburg, Austria, people of both genders and all ages use bicycles as a primary mode of transportation. In the United States, few people other than children ride bicycles.

   Tip to initiate change. Find a like-minded partner. In the pre-Columbian era, people thought the world was flat. Few dared to sail long distances for fear that they would fall off the edge. If your health and fitness are at stake, preconditioned cultural beliefs shouldn’t keep you from making changes. Finding people who are willing to “sail” with you will help overcome this barrier.

4. Gratification. People prefer instant gratification to long-term benefits. Therefore, they will overeat (instant pleasure) instead of using self-restraint to eat moderately to prevent weight gain (long-term satisfaction). We like tanning (instant gratification) and avoid paying much attention to skin cancer (long-term consequence).

   Tip to initiate change. Think ahead and ask yourself: How did I feel the last time I engaged in this behavior? How did it affect me? Did I really feel good about myself or about the results? In retrospect, was it worth it?

5. Risk complacency. Consequences of unhealthy behaviors often don’t manifest themselves until years later. People tell themselves, “If I get heart disease, I’ll deal with it then. For now, let me eat, drink, and be merry.”

   Tip to initiate change. Ask yourself: How long do I want to live? How do I want to live the rest of my life and what type of health do I want to have? What do I want to be able to do when I am 60, 70, or 80 years old?

6. Complexity. People think the world is too complicated, with too much to think about. If you are living the typical lifestyle, you may feel overwhelmed by everything that seems to be required to lead a healthy lifestyle, such as:
   - controlling use of substances
   - managing stress
   - wearing seat belts
   - practicing safe sex
   - getting annual physicals, including blood tests, Pap smears, and so on
   - fostering spiritual, social, and emotional wellness

   Tip to initiate change. Take it one step at a time. Work on only one or two behaviors at a time so the task won’t seem insurmountable.

7. Indifference and helplessness. A defeatist thought process often takes over, and we may believe that the way we live won’t really affect our health, that we have no control over our health, or that our destiny is all in our genes (also see discussion of locus of control, pages 51–52).

   Tip to initiate change. As much as 84 percent of the leading causes of death in the United States are preventable. Realize that only you can take control of your personal health and lifestyle habits and affect the quality of your life. Implementing many of the behavioral modification strategies and programs outlined in this book will get you started on a wellness way of life.

8. Rationalization. Even though people are not practicing healthy behaviors, they often tell themselves that they do get sufficient exercise, that their diet is fine, that they have good, solid relationships, or that they don’t smoke/drink/get high enough to affect their health.

   Tip to initiate change. Learn to recognize when you’re glossing over or minimizing a problem. You’ll need to face the fact that you have a problem before you can commit to change. Your health and your life are at stake. Monitoring lifestyle habits through daily logs and then analyzing the results can help you change self-defeating behaviors.

9. Illusions of invincibility. At times people believe that unhealthy behaviors will not harm them. Young adults often have the attitude that “I can smoke now, and in a few years I’ll quit before it causes any damage.” Unfortunately, nicotine is one of the most addictive drugs known to us, so quitting smoking is not an easy task. Health problems may arise before you quit, and the risk of lung cancer lingers for years after you quit. Another example is drinking and driving. The feeling of “I’m in control” or “I can handle it” while under the influence of alcohol is a deadly combination. Others perceive low risk when engaging in negative behaviors with people they like (for example, sex with someone you’ve recently met and feel attracted to) but perceive themselves at risk just by being in the same classroom with an HIV-infected person.

   Tip to initiate change. No one is immune to sickness, disease, and tragedy. The younger you are when you implement a healthy lifestyle, the better are your odds to attain a long and healthy life. Thus, initiating change right now will help you enjoy the best possible quality of life for as long as you live.
As you have already learned in this chapter, the environment has a tremendous effect on our behaviors. We can therefore increase self-efficacy by the type of environment we choose. Experts agree that four different sources affect self-efficacy (discussed next). If you understand these sources and learn from them, you can use them to improve your degree of efficacy. Subsequently, you can apply the concepts for change provided in this chapter to increase confidence in your abilities to master challenging tasks and succeed at implementing change.

**Sources of Self-Efficacy**

The best contributors to self-efficacy are mastery experiences, or personal experiences that one has had with successes and failures. Successful past performances greatly enhance self-efficacy: “Nothing breeds success like success.” Failures, on the other hand, undermine confidence, in particular if they occur before a sense of efficacy is established.

You should structure your activities in such ways that they will bring success. Don’t set your goals too high or make them too difficult to achieve. Your success at a particular activity increases your confidence in being able to repeat that activity. Once strong self-efficacy is developed through successful mastery experiences, an occasional setback does not have a significant effect on one’s beliefs.

Vicarious experiences provided by role models or those one admires also influence personal efficacy. This involves the thought process of your belief that you can also do it. When you observe a peer of similar capabilities master a task, you are more likely to develop a belief that you too can perform that task—“If he can do it, so can I.” Here you imitate the model’s skill or you follow the same approach demonstrated by your model to complete the task. You may also visualize success. Visual imagery of successful personal performance, that is, watching yourself perform the skill in your mind, also increases personal efficacy.

Although not as effective as past performances and vicarious experiences, verbal persuasion of one’s capabilities to perform a task also contributes to self-efficacy. When you are verbally persuaded that you possess the capabilities, you will be more likely to try the task and believe that you can get it done. The opposite is also true. Negative verbal persuasion has a far greater effect in lowering efficacy than positive messages do to enhance it. If you are verbally persuaded that you lack the skills to master a task, you will tend to avoid the activity and will be more likely to give up without giving yourself a fair chance to succeed.

The least significant source of self-efficacy beliefs are physiological cues that people experience when facing a challenge. These cues in turn affect performance. For example, feeling calm, relaxed, and self-confident enhances self-efficacy. Anxiety, nervousness, perspiration, dryness of the mouth, and a rapid heart rate are cues that

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**Critical Thinking**

What barriers to exercise do you encounter most frequently?

- How about barriers that keep you from managing your daily caloric intake?

When health and appearance begin to deteriorate—usually around middle age—people seek out health care professionals in search of a “magic pill” to reverse and cure the many ills they have accumulated during years of abuse and overindulgence. The sooner we implement a healthy lifestyle program, the greater will be the health benefits and quality of life that lie ahead.

**Self-Efficacy**

At the heart of behavior modification is the concept of self-efficacy, or the belief in one’s own ability to perform a given task. Self-efficacy exerts a powerful influence on people’s behaviors and touches virtually every aspect of their lives. It determines how you feel, think, behave, motivate yourself, make choices, set goals, and pursue courses of action, as well as the effort you put into all of your tasks or activities. It also influences your vulnerability to stress and depression. Furthermore, your confidence in your coping skills determines how resilient you are in the face of adversity. Possessing high self-efficacy enhances wellness in countless ways, including your desire to learn, be productive, be fit, and be healthy.

The knowledge and skills you possess and further develop determine your goals and what you do and choose not to do. Mahatma Gandhi once stated: “If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning.” Likewise, Teilhard de Chardin, a French paleontologist and philosopher, stated: “It is our duty as human beings to proceed as though the limits of our capabilities do not exist.” With this type of attitude, how can you not strive to be the best that you can possibly be?
may adversely affect performance. You may question your competence to successfully complete the task.

**Motivation and Locus of Control**

The explanation given for why some people succeed and others do not is often motivation. Motivation is the drive that dictates human behavior. Although motivation comes from within, external factors trigger the inner desire to accomplish a given task. These external factors, then, control behavior.

When studying motivation, understanding locus of control is helpful. People who believe they have control over events in their lives are said to have an internal locus of control. People with an external locus of control believe that what happens to them is a result of chance or the environment and is unrelated to their behavior. People with an internal locus of control generally are healthier and have an easier time initiating and adhering to a wellness program than those who perceive that they have no control and think of themselves as powerless and vulnerable. The latter people also are at greater risk for illness. When illness does strike a person, establishing a sense of control is vital to recovery.

Few people have either a completely external or a completely internal locus of control. They fall somewhere along a continuum. The more external one’s locus of control is, the greater is the challenge to change and adhere to exercise and other healthy lifestyle behaviors. Fortunately, people can develop a more internal locus of control. Understanding that most events in life are not determined genetically or environmentally helps people pursue goals and gain control over their lives. Three impediments, however, can keep people from taking action: lack of competence, of confidence, and of motivation.

1. **Problems of competence.** Lacking the skills to get a given task done leads to reduced competence. If your friends play basketball regularly but you don’t know how to play, you might be inclined not to participate. The solution to this problem of competence is to master the skills you required to participate. Most people are not born with all-inclusive natural abilities, including playing sports.

   Another alternative is to select an activity in which you are skilled. It may not be basketball, but it well could be aerobics. Don’t be afraid to try new activities. Similarly, if your body weight is a problem, you could learn to cook healthy, low-calorie meals. Try different recipes until you find foods that you like.

2. **Problems of confidence.** Problems with confidence arise when you have the skill but don’t believe you can get it done. Fear and feelings of inadequacy often interfere with the ability to perform the task. You shouldn’t talk yourself out of something until you have given it a fair try. If you have the skills, the sky is the limit. Initially, try to visualize yourself doing the task and getting it done. Repeat this several times, then actually try it. You will surprise yourself.

   Sometimes, lack of confidence arises when the task seems insurmountable. In these situations, dividing a goal into smaller, more realistic objectives helps to accomplish the task. You might know how to swim but may need to train for several weeks to swim a continuous mile. Set up your training program so you swim a little farther each day until you are able to swim the entire mile. If you don’t meet your objective on a given day, try it again, reevaluate, cut back a little, and, most important, don’t give up.

3. **Problems of motivation.** With problems of motivation, both the competence and the confidence are there but individuals are unwilling to change because the reasons to change are not important to them. For example, people begin contemplating a smoking-cessation pro-

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**Key Terms**

**Motivation** The desire and will to do something.

**Locus of control** A concept examining the extent to which a person believes he or she can influence the external environment.
Changing Behavior

The first step in addressing behavioral change is to recognize that you indeed have a problem. The five general categories of behaviors addressed in the process of willful change are:

1. Stopping a negative behavior
2. Preventing relapse to a negative behavior
3. Developing a positive behavior
4. Strengthening a positive behavior
5. Maintaining a positive behavior

Most people do not change all at once. Thus, psychotherapy has been used successfully to help people change their behavior. But most people do not seek professional help. They usually attempt to change by themselves with limited or no knowledge of how to achieve change. In essence, the process of change moves along a continuum from being not willing to change to recognizing the need for change to taking action and implementing change.

The simplest model of change is the two-stage model of unhealthy behavior and healthy behavior. This model states that either you do it or you don’t. Most people who use this model attempt self-change but end up asking themselves why they’re unsuccessful. They just can’t do it (exercise, perhaps, or quit smoking). Their intent to change may be good, but to accomplish it, they need knowledge about how to achieve change.

Behavior Change Theories

For most people, changing chronic/unhealthy behaviors to stable/healthy behaviors is challenging. The “do it or don’t do it” approach seldom works when attempting to implement lifestyle changes. Thus, several theories or models have been developed over the years. Among the most accepted are learning theories, the problem-solving model, social cognitive theory, the relapse prevention model, humanistic theory of change, and the transtheoretical model.

Learning Theories

Learning theories maintain that most behaviors are learned and maintained under complex schedules of reinforcement and anticipated outcomes. The process involved in learning a new behavior requires modifying many small behaviors that shape the new pattern behavior. For example, a previously inactive individual who wishes to accumulate 10,000 steps per day may have to gradually increase the number of steps daily, park farther away from the office and stores, decrease television and Internet use, take stairs instead of elevators and escalators, and avoid the car and telephone when running errands that are only short distances away. The outcomes are better health and body weight management and feelings of well-being.

Problem-Solving Model

The problem-solving model proposes that many behaviors are the result of making decisions as we seek to change the problem behavior. The process of change requires conscious attention, the setting of goals, and a design for a specific plan of action. For instance, to quit smoking cigarettes, one has to understand the reasons for smoking, know under what conditions each cigarette is smoked, decide that one will quit, select a date to do so, and then draw up a plan of action to reach the goal (a complete smoking-cessation program is outlined in Chapter 13).

Social Cognitive Theory

In social cognitive theory, behavior change is influenced by the environment, self-efficacy, and characteristics of the behavior itself. You can increase self-efficacy by educating yourself about the behavior, developing the skills to master the behavior, performing smaller mastery experiences successfully, and receiving verbal reinforce-
ment and vicarious experiences. If you desire to lose weight, for example, you need to learn the principles of proper weight management, associate with people who are also losing weight or who have lost weight, eat less, shop and cook wisely, be more active, set small weight-loss goals of 1 to 2 pounds per week, praise yourself for your accomplishments, and visualize losing the weight as others you admire have done.

Relapse Prevention Model
In the relapse prevention model, people are taught to anticipate high-risk situations and develop action plans to prevent lapses and relapses. Examples of factors that disrupt behavior change include negative physiological or psychological states (stress, illness), social pressure, lack of support, limited coping skills, change in work conditions, and lack of motivation. For example, if the weather turns bad for your evening walk, you can choose to walk around an indoor track (or at the mall), do water aerobics, swim, or play racquetball.

Humanistic Theory of Change
Humanists believe in the basic goodness of humanity and respect for mankind. At the core of the theory is the belief that people are unique in the development of personal goals—with the ultimate goal being self-actualization. Self-actualized people are independent, are creative, set their own goals, and accept themselves. Humanists also propose that people are motivated by a hierarchy of needs that include approval, recognition, achievement, and the fulfillment of each person’s potential. In this hierarchy, each need requires fulfillment before the next need becomes relevant. The present is the most important time for any person rather than the past or the future. For instance, a person will not exercise unless he or she has had something to eat within a reasonable amount of time. Similarly, a person who uses cigarette smoking to maintain weight will not give up smoking unless proper weight management is accomplished by other means (healthy eating habits and increased physical activity). The challenge, then, is to identify basic needs at the core of the hierarchy (acceptance, independence, recognition) before other healthy behaviors (exercise, stress management, altruism) are considered.

Transtheoretical Model
The transtheoretical model, developed by psychologists James Prochaska, John Norcross, and Carlo DiClemente, is based on the theory that change is a gradual process that involves several stages. The model is used most frequently to change health-related behaviors such as physical inactivity, smoking, poor nutrition, weight problems, stress, and alcohol abuse.

An individual goes through five stages in the process of willful change. The stages describe underlying processes that people go through to change problem behaviors and replace them with healthy behaviors. A sixth stage (termination/adoption) was subsequently added to this model. The six stages of change are precontemplation, contemplation, preparation, action, maintenance, and termination/adoption (see Figure 2.2).

After years of study, researchers indicate that applying specific behavioral-change processes during each stage of the model increases the success rate for change (the specific processes for each stage are shown in Table 2.1). Understanding each stage of this model will help you determine where you are in relation to your personal healthy lifestyle behaviors. It also will help you identify processes to make successful changes. The discussion in the remainder of the chapter focuses on the transtheoretical model, with the other models integrated as applicable with each stage of change.

1. **Precontemplation.** Individuals in the precontemplation stage are not considering change or do not want to change a given behavior. They typically deny having a problem and have no intention of changing in the immediate future. These people are usually unaware or underaware of the problem. Other people around them, including family, friends, health care practitioners, and coworkers, however, identify the problem clearly. Precontemplators do not care about the problem behavior and may even avoid information and materials that address the issue. They tend to avoid free screenings and workshops that might help identify and change the problem, even if they receive financial compensation for attending. Often they actively resist change and

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**Key Terms**

**Learning theories** Behavioral modification perspective stating that most behaviors are learned and maintained under complex schedules of reinforcement and anticipated outcomes.

**Problem-solving model** Behavioral modification model proposing that many behaviors are the result of making decisions as the individual seeks to solve the problem behavior.

**Social cognitive theory** Behavioral modification model holding that behavior change is influenced by the environment, self-efficacy, and characteristics of the behavior itself.

**Relapse prevention model** Behavioral modification model based on the principle that high-risk situations can be anticipated through the development of strategies to prevent lapses and relapses.

**Transtheoretical model** Behavioral modification model proposing that change is accomplished through a series of progressive stages in keeping with a person’s readiness to change.

**Self-efficacy** One’s belief in the ability to perform a given task.

**Lapse** (v) To slip or fall back temporarily into unhealthy behavior(s); (n.) short-term failure to maintain healthy behaviors.

**Relapse** (v) To slip or fall back into unhealthy behavior(s) over a longer time; (n.) longer-term failure to maintain healthy behaviors.

**Precontemplation stage** Stage of change in the transtheoretical model in which an individual is unwilling to change behavior.
Figure 2.2 Stages of change model.

Precontemplation
Do not wish to change

Contemplation
Contemplating change over next 6 months

Preparation
Looking to change in the next month

Termination/Adoption
Change has been maintained for more than 5 years

Maintenance
Maintaining change for 5 years

Action
Implementing change for 6 months

Table 2.1 Applicable Processes of Change During Each Stage of Change

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<tr>
<th>Precontemplation</th>
<th>Contemplation</th>
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<th>Action</th>
<th>Maintenance</th>
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seem resigned to accepting the unhealthy behavior as their “fate.”

Precontemplators are the most difficult people to inspire toward behavioral change. Many think that change isn’t even a possibility. At this stage, knowledge is power. Educating them about the problem behavior is critical to help them start contemplating the process of change. The challenge is to find ways to help them realize that they are ultimately responsible for the consequences of their behavior. Typically, they initiate change only when their values change or people they respect or job requirements pressure them to do so.

2. Contemplation. In the contemplation stage, individuals acknowledge that they have a problem and begin to think seriously about overcoming it. Although they are not quite ready for change, they are weighing the cons of changing. Core values are starting to change. Even though they may remain in this stage for years, in their minds they are planning to take some action within the next six months. Education and peer support remain valuable during this stage. In Activity 2.2, you will be able to list under the processes of change self-defeating and constructive habits (pros and cons) that work against and for you when attempting to accomplish that specific behavior.

3. Preparation. In the preparation stage, individuals are seriously considering change and planning to change a behavior within the next month. They are taking initial steps for change and may even try the new behavior for a short while, such as stopping smoking for a day or exercising a few times during the month. During this stage, people define a general goal for behavioral change (for example, to quit smoking by the last day of the month) and write specific objectives (or strategies) to accomplish this goal. The discussion on goal setting later in this chapter will help you write SMART goals and specific objectives to reach your goal. Continued peer and environmental support is helpful during the preparation stage.

A key concept to keep in mind during the preparation stage is that in addition to being prepared to address the behavioral change or goal you are attempting to reach, you must prepare to address the specific objectives (supportive behaviors) required to reach that goal (Figure 2.3). For example, you may be willing to give weight loss a try, but are you prepared to start eating less, eating out less often, eating less calorie-dense foods, shopping and cooking wisely, exercising more, watching television less, and becoming much more active? Achieving goals generally requires changing these supportive behaviors, and you must be prepared to do so.

4. Action. The action stage requires the greatest commitment of time and energy. Here, the individual is actively doing things to change or modify the problem behavior or to adopt a new, healthy behavior. The action stage requires that the person follow the specific guidelines set forth for that behavior. For example, a person has actually stopped smoking completely, is exercising aerobically three times a week according to exercise prescription guidelines, or is maintaining a healthy diet.

Relapse is common during this stage, and the individual may regress to a previous stage. If unsuccessful, a person should reevaluate his or her readiness to change supportive behaviors as required to reach the overall goal. Problem solving that includes identifying barriers to change and specific strategies (objectives) to overcome supportive behaviors is useful during relapse. Once people are able to maintain the action stage for six consecutive months, they move into the maintenance stage.

**Figure 2.3** Goal setting and supportive behaviors.

**Key Terms**

- **Contemplation stage** Stage of change in the transtheoretical model in which the individual is considering changing behavior within the next six months.
- **Preparation stage** Stage of change in the transtheoretical model in which the individual is getting ready to make a change within the next month.
- **Action stage** Stage of change in the transtheoretical model in which the individual is actively changing a negative behavior or adopting a new, healthy behavior.
5. **Maintenance.** During the **maintenance stage**, the person continues the new behavior for up to five years. This stage requires the person to continue to adhere to the specific guidelines that govern the behavior (such as complete smoking cessation, exercising aerobically three times a week, or practicing proper stress management techniques). At this time, the person works to reinforce the gains made through the various stages of change and strives to prevent lapses and relapses.

6. **Termination/Adoption.** Once a person has maintained a behavior more than five years, he or she is said to be in the **termination or adoption stage** and exits from the cycle of change without fear of relapse. In the case of negative behaviors that are terminated, the stage of change is referred to as termination. If a positive behavior has been adopted successfully for more than five years, this stage is designated as adoption.

Many experts believe that once an individual enters the termination/adoption stage, former addictions, problems, or lack of compliance with healthy behaviors no longer presents an obstacle in the quest for wellness. The change has become part of one’s lifestyle. This phase is the ultimate goal for all people searching for a healthier lifestyle.

For addictive behaviors such as alcoholism and hard drug use, however, some health care practitioners believe that the individual never enters the termination stage. Chemical dependency is so strong that most former alcoholics and hard-drug users must make a lifetime effort to prevent relapse. Similarly, some behavioral scientists suggest that the adoption stage might not be applicable to health behaviors such as exercise and weight control because the likelihood of relapse is always high.

Use the guidelines provided in Activity 2.2 to determine where you stand in respect to behaviors you want to change or new ones you wish to adopt. As you follow the guidelines, you will realize that you might be at different stages for different behaviors. For instance, you might be in the preparation stage for aerobic exercise and smoking cessation, in the action stage for strength training, but only in the contemplation stage for a healthy diet. Realizing where you are with respect to different behaviors will help you design a better action plan for a healthy lifestyle.

**Relapse**

After the precontemplation stage, relapse may occur at any level of the model. Even individuals in the maintenance and termination/adoption stages may regress to any of the first three stages of the model (Figure 2.4). Relapse, however, does not mean failure. Failure comes only to those who give up and don’t use prior experiences as a building block for future success. The chances of moving back up to a higher stage of the model are far better for someone who has previously made it into one of those stages.

---

**The Process of Change**

Using the same plan for everyone who wishes to change a behavior will not work. With exercise, for instance, we provide different prescriptions to people of varying fitness levels (Chapter 6). The same prescription would not provide optimal results for a person who has been inactive for 20 years, compared with one who already walks regularly three times each week. This principle also holds true for individuals who are attempting to change their behaviors.

Timing is also important in the process of willful change. People respond more effectively to selected processes of change in keeping with the stage of change they have reached at any given time. Thus, applying appropriate processes at each stage of change enhances the likelihood of changing behavior permanently. The following description of 14 of the most common processes of change will help you develop a personal plan for change. The respective stages of change in which each process works best are summarized in Table 2.1.

**Consciousness-Raising**

The first step in a behavior modification program is consciousness-raising. This step involves obtaining information about the problem so you can make a better decision about the problem behavior. For example, the problem could be physical inactivity. Learning about the benefits of exercise or the difference in benefits between physical activity and exercise (Chapter 1) can help you decide the type of fitness program (health or high fitness) that you want to pursue. Possibly, you don’t even know that a certain behavior is a problem, such as being unaware of saturated and total fat content in many fast-food items. Consciousness-raising may continue from the precontemplation stage through the preparation stage.
Social Liberation

Social liberation stresses external alternatives that make you aware of problem behaviors and make you begin to contemplate change. Examples of social liberation include pedestrian-only traffic areas, nonsmoking areas, health-oriented cafeterias and restaurants, advocacy groups, civic organizations, policy interventions, and self-help groups. Social liberation often provides opportunities to get involved, stir up emotions, and enhance self-esteem—helping you gain confidence in your ability to change.

Self-Analysis

The next process in modifying behavior is developing a decisive desire to do so, called self-analysis. If you have no interest in changing a behavior, you won’t do it. You will remain a precontemplator or a contemplator. A person who has no intention of quitting smoking will not quit, regardless of what anyone may say or how strong the evidence in favor of quitting may be. In your self-analysis, you may want to prepare a list of reasons for continuing or discontinuing the behavior. When the reasons for changing outweigh the reasons for not changing, you are ready for the next stage—either the contemplation stage or the preparation stage.

Emotional Arousal

In emotional arousal, a person experiences and expresses feelings about the problem and its solutions. Also referred to as “dramatic release,” this process often involves deep emotional experiences. Watching a loved one die from lung cancer caused by cigarette smoking may be all that is needed to make a person quit smoking. As in other examples, emotional arousal might be prompted by a dramatization of the consequences of drug use and abuse, a film about a person undergoing open-heart surgery, or a book illustrating damage to body systems as a result of unhealthy behaviors.

Positive Outlook

Having a positive outlook means taking an optimistic approach from the beginning and believing in yourself. Following the guidelines in this chapter will help you design a plan so you can work toward change and remain enthused about your progress. Also, you may become motivated by looking at the outcome—how much healthier you will be, how much better you will look, or how far you will be able to jog.

Commitment

Upon making a decision to change, you accept the responsibility to change and believe in your ability to do so. During the commitment process, you engage in preparation and may draw up a specific plan of action.

Goals

Goals motivate change in behavior. The stronger the goal or desire, the more motivated you’ll be either to change unwanted behaviors or to implement new, healthy behaviors. The discussion on goal setting (beginning on page 61) will help you write goals and prepare an action plan to achieve them. This will aid with behavior modification.

Self-Reevaluation

During the process of self-reevaluation, individuals analyze their feelings about a problem behavior. The pros and cons or advantages and disadvantages of a certain behavior can be reevaluated at this time. For example, you may decide that strength training will help you get stronger and tone up, but implementing this change will require you to stop watching an hour of TV three times per week. If you presently have a weight problem and are unable to lift certain objects around the house, you may feel good about weight loss and enhanced physical capacity as a result of a strength-training program. You also might visualize what it would be like if you were successful at changing.

Key Terms

- **Maintenance stage** Stage of change in the transtheoretical model in which the individual maintains behavioral change for up to five years.
- **Termination/adoption stage** Stage of change in the transtheoretical model in which the individual has eliminated an undesirable behavior or maintained a positive behavior for more than five years.
- **Processes of change** Actions that help you achieve change in behavior.
- **Behavior modification** The process of permanently changing negative behaviors to positive behaviors that will lead to better health and well-being.
Behavior Modification

Steps for Successful Behavior Modification

1. Acknowledge that you have a problem.
2. Describe the behavior to change (increase physical activity, stop overeating, quit smoking).
3. List advantages and disadvantages of changing the specified behavior.
4. Decide positively that you will change.
5. Identify your stage of change.
6. Set a realistic goal (SMART goal), completion date, and sign a behavioral contract.
7. Define your behavioral change plan: List processes of change, techniques of change, and objectives that will help you reach your goal.
8. Implement the behavior change plan.
9. Monitor your progress toward the desired goal.
10. Periodically evaluate and reassess your goal.
11. Reward yourself when you achieve your goal.
12. Maintain the successful change for good.

Try It

In your Online Journal or class notebook, record your answers to the following questions:

Have you consciously attempted to incorporate a healthy behavior into or eliminate a negative behavior from your lifestyle? If so, what steps did you follow, and what helped you achieve your goal?

Countering

The process whereby you substitute healthy behaviors for a problem behavior, known as countering, is critical in changing behaviors as part of the action and maintenance stages. You need to replace unhealthy behaviors with new, healthy ones. You can use exercise to combat sedentary living, smoking, stress, or overeating. Or you may use exercise, diet, yard work, volunteer work, or reading to prevent overeating and achieve recommended body weight.

Monitoring

During the action and maintenance stages, continuous behavior monitoring increases awareness of the desired outcome. Sometimes this process of monitoring is sufficient in itself to cause change. For example, keeping track of daily food intake reveals sources of excessive fat in the diet. This can help you gradually cut down or completely eliminate high-fat foods. If the goal is to increase daily intake of fruit and vegetables, keeping track of the number of servings consumed each day raises awareness and may help increase intake.

Environment Control

In environment control, the person restructures the physical surroundings to avoid problem behaviors and decrease temptations. If you don’t buy alcohol, you can’t drink any. If you shop on a full stomach, you can reduce impulse buying of junk food.

Similarly, you can create an environment in which exceptions become the norm, and then the norm can flourish. Instead of bringing home cookies for snacks, bring fruit. Place notes to yourself on the refrigerator and pantry to avoid unnecessary snacking. Put baby carrots or sugarless gum where you used to put cigarettes. Post notes around the house to remind you of your exercise time. Leave exercise shoes and clothing by the door so they are visible as you walk into your home. Put an electric timer on the TV so it will shut off automatically at 7:00 p.m. All of these tactics will be helpful throughout the action, maintenance, and termination/adoption stages.

Helping Relationships

Surrounding yourself with people who will work toward a common goal with you or those who care about you and will encourage you along the way—helping
relationships—will be supportive during the action, maintenance, and termination/adoption stages.

Attempting to quit smoking, for instance, is easier when a person is around others who are trying to quit as well. The person also could get help from friends who have quit smoking already. Losing weight is difficult if meal planning and cooking are shared with roommates who enjoy foods that are high in fat and sugar. This situation can be even worse if a roommate also has a weight problem but does not wish to lose weight.

Peer support is a strong incentive for behavioral change. Thus, the individual should avoid people who will not be supportive and associate with those who will. Friends who have no desire to quit smoking or to lose weight, or whatever behavior a person is trying to change, may tempt one to smoke or overeat and encourage relapse into unwanted behaviors.

In some cases, people who have achieved the same goal already may not be supportive either. For instance, someone may say, “I can do six consecutive miles.” Your response should be, “I’m proud that I can jog three consecutive miles.”

Rewards

People tend to repeat behaviors that are rewarded and to disregard those that are not rewarded or are punished. Rewarding oneself or being rewarded by others is a powerful tool during the process of change in all stages. If you have successfully cut down your caloric intake during the week, reward yourself by going to a movie or buying a new pair of shoes. Do not reinforce yourself with destructive behaviors such as eating a high-fat/calorie-dense dinner. If you fail to change a desired behavior (or to implement a new one), you may want to put off buying those new shoes you had planned for that week. When a positive behavior becomes habitual, give yourself an even better reward. Treat yourself to a weekend away from home or buy a new bicycle.

Critical Thinking

Your friend John is a 20-year-old student who is not physically active. Exercise has never been a part of his life, and it has not been a priority in his family. He has decided to start a jogging and strength-training course in two weeks. Can you identify his current stage of change and list processes and techniques of change that will help him maintain a regular exercise behavior?

Techniques of Change

Not to be confused with the processes of change, you can apply any number of techniques of change within each process to help you through it (Table 2.2). For example, following dinner, people with a weight problem often can’t resist continuous snacking during the rest of the evening until it is time to retire for the night. In the process of countering, for example, you can use various techniques to avoid unnecessary snacking. Examples include going for a walk, flossing and brushing your teeth immediately after dinner, going for a drive, playing the piano, going to a show, or going to bed earlier.

As you develop a behavior modification plan, you need to identify specific techniques that may work for you within each process of change. A list of techniques for each process is provided in Table 2.2. This is only a sample list; dozens of other techniques could be used as well. For example, a discussion of behavior modification and adhering to a weight management program starts on page 172; getting started and adhering to a lifetime exercise program is presented on page 216; stress management techniques are provided in Chapter 12; and tips to help stop smoking on pages 456–457. Some of these techniques also can be used with more than one process.

Key Terms

Techniques of change Methods or procedures used during each process of change.
Visualization, for example, is helpful in emotional arousal and self-reevaluation.

Now that you are familiar with the stages of change in the process of behavior modification, use Figure 2.5 and Activity 2.2 to identify two problem behaviors in your life. In this activity, you will be asked to determine your stage of change for two behaviors according to six standard statements. Based on your selection, determine the stage of change classification according to the ratings provided in Table 2.3. Next, develop a behavior modification plan according to the processes and techniques for change that you have learned in this chapter. (Similar

<table>
<thead>
<tr>
<th>Process</th>
<th>Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness-Raising</td>
<td>Become aware that there is a problem, read educational materials about the problem behavior or about people who have overcome this same problem, find out about the benefits of changing the behavior, watch an instructional program on television, visit a therapist, talk and listen to others, ask questions, take a class.</td>
</tr>
<tr>
<td>Social Liberation</td>
<td>Seek out advocacy groups (Overeaters Anonymous, Alcoholics Anonymous), join a health club, buy a bike, join a neighborhood walking group, work in nonsmoking areas.</td>
</tr>
<tr>
<td>Self-Analysis</td>
<td>Question yourself on the problem behavior, express your feelings about it, become aware that there is a problem, analyze your values, list advantages and disadvantages of continuing (smoking) or not implementing a behavior (exercise), take a fitness test, do a nutrient analysis.</td>
</tr>
<tr>
<td>Emotional Arousal</td>
<td>Practice mental imagery of yourself going through the process of change, visualize yourself overcoming the problem behavior, do some role-playing in overcoming the behavior or practicing a new one, watch dramatizations (a movie) of the consequences or benefits of your actions, visit an auto salvage yard or a drug rehabilitation center.</td>
</tr>
<tr>
<td>Positive Outlook</td>
<td>Believe in yourself, know that you are capable, know that you are special, draw from previous personal successes.</td>
</tr>
<tr>
<td>Commitment</td>
<td>Just do it, set New Year’s resolutions, sign a behavioral contract, set start and completion dates, tell others about your goals, work on your action plan.</td>
</tr>
<tr>
<td>Behavior Analysis</td>
<td>Prepare logs of circumstances that trigger or prevent a given behavior and look for patterns that prompt the behavior or cause you to relapse.</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>Write goals and objectives; design a specific action plan.</td>
</tr>
<tr>
<td>Self-Reevaluation</td>
<td>Determine accomplishments and evaluate progress, rewrite goals and objectives, list pros and cons, weigh sacrifices (can’t eat out with others) versus benefits (weight loss), visualize continued change, think before you act, learn from mistakes, and prepare new action plans accordingly.</td>
</tr>
<tr>
<td>Countering</td>
<td>Seek out alternatives: Stay busy, walk (don’t drive), read a book (instead of snacking), attend alcohol-free socials, carry your own groceries, mow your yard, dance (don’t eat), go to a movie (instead of smoking), practice stress management.</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Use exercise logs (days exercised, sets and resistance used in strength training), keep journals, conduct nutrient analyses, count grams of fat, count number of consecutive days without smoking, list days and type of relaxation technique(s) used.</td>
</tr>
<tr>
<td>Environment Control</td>
<td>Rearrange your home (no TVs, ashtrays, large-sized cups), get rid of unhealthy items (cigarettes, junk food, alcohol), then avoid unhealthy places (bars, happy hour), avoid relationships that encourage problem behaviors, use reminders to control problem behaviors or encourage positive ones (post notes indicating “don’t snack after dinner” or “lift weights at 8:00 p.m.”). Frequent healthy environments (a clean park, a health club, restaurants with low-fat/low-calorie/nutrient-dense menus, friends with goals similar to yours).</td>
</tr>
<tr>
<td>Helping Relationships</td>
<td>Associate with people who have and want to overcome the same problem, form or join self-help groups, join community programs specifically designed to deal with your problem.</td>
</tr>
<tr>
<td>Rewards</td>
<td>Go to a movie, buy a new outfit or shoes, buy a new bike, go on a weekend getaway, reassess your fitness level, use positive self-talk (“good job,” “that felt good,” “I did it,” “I knew I’d make it,” “I’m good at this”).</td>
</tr>
</tbody>
</table>

Table 2.3 Stage of Change Classification

<table>
<thead>
<tr>
<th>Selected Statements (see Figure 2.5 and Activity 2.2)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Precontemplation</td>
</tr>
<tr>
<td>2</td>
<td>Contemplation</td>
</tr>
<tr>
<td>3</td>
<td>Preparation</td>
</tr>
<tr>
<td>4</td>
<td>Action</td>
</tr>
<tr>
<td>5</td>
<td>Maintenance</td>
</tr>
<tr>
<td>6</td>
<td>Termination/Adoption</td>
</tr>
</tbody>
</table>
Goal Setting and Evaluation

To initiate change, goals are essential, as goals motivate behavioral change. Whatever you decide to accomplish, setting goals will provide the road map to help make your dreams a reality. Setting goals, however, is not as simple as it looks. Setting goals is more than just deciding what you want to do. A vague statement such as “I will lose weight” is not sufficient to help you achieve this goal.

SMART Goals

Only a well-conceived action plan will help you attain goals. Determining what you want to accomplish is the starting point, but to reach your goal you need to write SMART goals. These goals are Specific, Measurable, Acceptable, Realistic, and Time specific. In Activity 2.3, you have an opportunity to set SMART goals for two behaviors that you wish to change or adopt.

1. Specific. When writing goals, state exactly and in a positive manner what you would like to accomplish. For example, if you are overweight at 150 pounds and at 27 percent body fat, to simply state, “I will lose weight” is not a specific goal. Instead, rewrite your goal to state, “I will reduce my body fat to 20 percent (137 pounds) in 12 weeks.”

Write down your goals. An unwritten goal is simply a wish. A written goal, in essence, becomes a contract with yourself. Show this goal to a friend or an instructor, and have him or her witness the contract you have made with yourself by signing alongside your signature.

Once you have identified and written down a specific goal, write the specific objectives that will help you reach that goal. These objectives are necessary steps. For example, a goal might be to achieve recommended body weight. Several specific objectives could be to:

a. lose an average of 1 pound (or 1 fat percentage point) per week
b. monitor body weight before breakfast every morning
c. assess body composition at three-week intervals
d. limit fat intake to less than 25 percent of total daily caloric intake
e. eliminate all pastries from the diet during this time
f. walk/jog in the proper target zone for 60 minutes, six times a week
Behavior Modification Plan

Name: ___________________________ Date: ___________________________

Course: ___________________________ Section: ___________________________ Gender: ______ Age: ______

I. Stages of Change Instructions

Please indicate which response most accurately describes your current and behaviors (in the blank spaces, identify the behaviors: smoking, physical activity, stress, nutrition, weight control). Next, select one of the six statements below (select only one) that best represents your current behavior pattern for each. To select the most appropriate statement, fill in the blank for one of the first three statements if your current behavior is a problem behavior. For example, you may say:

“I currently ______ smoke_______ and I do not intend to change in the foreseeable future” OR
“I currently ______ do not exercise_______ but I am contemplating changing in the next 6 months.”

If you have already started to make changes, fill in the blank in one of the last three statements. In this case, you may say:

“I currently ______ eat a low-fat diet_______ but I have done so only within the past 6 months.” OR
“I currently ______ practice adequate stress management techniques_______, and I have done so for more than 6 months.”

You may use this form to identify your stage of change for any type of health-related behavior. After identifying two problem behaviors, look up your stage of change for each one of these behaviors using the ratings provided in Table 2.3, page 54.

Behavior #1

☐ 1. I currently ______ , and I do not intend to change in the foreseeable future.
☐ 2. I currently ______ , but I am contemplating changing in the next 6 months.
☐ 3. I currently ______ regularly, but I intend to change in the next month.
☐ 4. I currently ______ , but I have done so only within the past 6 months.
☐ 5. I currently ______ , and I have done so for more than 6 months.
☐ 6. I currently ______ , and I have done so for more than 5 years.

Stage of change: ___________________________ (see stages listed in Table 2.3, page 60).

Behavior #2

☐ 1. I currently ______ , and I do not intend to change in the foreseeable future.
☐ 2. I currently ______ , but I am contemplating changing in the next 6 months.
☐ 3. I currently ______ regularly, but I intend to change in the next month.
☐ 4. I currently ______ , but I have done so only within the past 6 months.
☐ 5. I currently ______ , and I have done so for more than 6 months.
☐ 6. I currently ______ , and I have done so for more than 5 years.

Stage of change: ___________________________ (see stages listed in Table 2.3, page 60).
Behavior Modification Plan (continued)

II. Processes of Change
According to your stage of change for the two behaviors identified previously, list the processes of change that apply to each behavior (see Table 2.1, page 54).

Behavior #1:
____________________________________________________________________
____________________________________________________________________

Behavior #2:
____________________________________________________________________
____________________________________________________________________

III. Techniques for Change
List a minimum of three techniques that you will use with each process of change (see Table 2.2, page 60).

Behavior #1:
____________________________________________________________________
____________________________________________________________________

List: Self-destructive Behaviors Constructive Behaviors
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Behavior #2:
____________________________________________________________________
____________________________________________________________________

List: Self-destructive Behaviors Constructive Behaviors
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Today’s date: Completion date:

Signature:
Setting SMART Goals

In Activity 2.2 you identified two behaviors that you wish to change. Using SMART goal guidelines (see pages 61–66), write goals and objectives that will provide a road map for behavioral change. In the spaces provided in this lab, indicate how your stated goals meet each one of the SMART goal guidelines.

I. SMART Goals

Goal 1:

Indicate what makes your goal specific.

How is your goal measurable?

Why is this an acceptable goal?

State why you consider this goal realistic.

How is this goal time-specific?
Setting SMART Goals (continued)

Goal 2:

Indicate what makes your goal specific.

How is your goal measurable?

Why is this an acceptable goal?

State why you consider this goal realistic.

How is this goal time-specific?

II. Specific objectives

Write a minimum of five specific objectives that will help you reach your two SMART goals.

Goal 1:

Objectives:

1. 

2. 

3. 

4. 

5. 

Goal 2:

Objectives:

1. 

2. 

3. 

4. 

5.
2. Measurable. Whenever possible, goals and objectives should be measurable. For example, “I will lose weight” is not measurable, but “to reduce body fat to 20 percent” is measurable. Also note that all of the sample-specific objectives (a) through (f) for “Specific” above are measurable. For instance, you can figure out easily whether you are losing a pound or a percentage point per week; you can conduct a nutrient analysis to assess your average fat intake; or you can monitor your weekly exercise sessions to make sure you are meeting this specific objective.

3. Acceptable. Goals that you set for yourself are more motivational than goals that someone else sets for you. These goals will motivate and challenge you and should be consistent with your other goals. As you set an acceptable goal, ask yourself: Do I have the time, commitment, and necessary skills to accomplish this goal? If not, you need to restate your goal so it is acceptable to you.

When successful completion of a goal involves others, such as an athletic team or an organization, an acceptable goal must be compatible with those of the other people involved. If a team’s practice schedule is set Monday through Friday from 4:00 to 6:00 p.m., it is unacceptable for you to train only three times per week or at a different time of the day.

Acceptable goals also embrace positive thoughts. Visualize and believe in your success. As difficult as some tasks may seem, where there’s a will, there’s a way. A plan of action, prepared according to the guidelines in this chapter, will help you achieve your goals.

4. Realistic. Goals should be within reach. On the one hand, if you currently weigh 190 pounds and your target weight is 140 pounds, setting a goal to lose 50 pounds in a month would be unsound, if not impossible. Such a goal does not allow you to implement adequate behavior modification techniques or ensure weight maintenance at the target weight. Unattainable goals only set you up for failure, discouragement, and loss of interest. On the other hand, do not write goals that are too easy to achieve and do not challenge you. If a goal is too easy, you may lose interest and stop working toward it.

You can write both short-term and long-term goals. If the long-term goal is to attain recommended body weight and you are 53 pounds overweight, you might set a short-term goal of losing 10 pounds and write specific objectives to accomplish this goal. Then the immediate task will not seem as overwhelming and will be easier.

At times, problems arise even with realistic goals. Try to anticipate potential difficulties as much as possible, and plan for ways to deal with them. If your goal is to jog for 30 minutes on six consecutive days, what are the alternatives if the weather turns bad? Possible solutions are to jog in the rain, find an indoor track, jog at a different time of day when the weather is better, or participate in a different aerobic activity such as stationary cycling, swimming, zumba, or step aerobics.

Monitoring your progress as you move toward a goal also reinforces behavior. Keeping an exercise log or doing a body composition assessment periodically enables you to determine your progress at any given time.

5. Time specific. A goal should always have a specific date set for completion. The above example to reach 20 percent body fat in 12 weeks is time specific. The chosen date should be realistic but not too distant in the future. Allow yourself enough time to achieve the goal, but not too much time, as this could affect your performance. With a deadline, a task is much easier to work toward.

Goal Evaluation

In addition to the SMART guidelines provided, you should conduct periodic evaluations of your goals. Reevaluations are vital to success. You may find that after you have fully committed and put all your effort into a goal, that goal may be unreachable. If so, reassess the goal.

Recognize that you will face obstacles and you will not always meet your goals. Use your setbacks and learn from them. Rewrite your goal and create a plan that will help you get around self-defeating behaviors in the future. Once you achieve a goal, set a new one to improve upon or maintain what you have achieved. Goals keep you motivated.
Log on to www.cengagebrain.com to access CengageNOW and the Behavior Change Planner where you can assess the behaviors that might benefit you most from healthy change.

1. What are your feelings about the science of behavior modification and how its principles may help you on your journey to health and wellness?

2. Can you accept the fact that for various healthy lifestyle factors (for example, regular exercise, healthy eating, not smoking, stress management, prevention of sexually transmitted infections), you are either in the precontemplation or contemplation stage of change? As such, are you willing to learn what is required to change and actually eliminate unhealthy behaviors and adopt healthy lifestyle behaviors?

3. Are you now in the action phase (or above) for exercise and healthy eating? If not, what barriers keep you from doing so?

Assess Your Behavior

Evaluate how well you understand the concepts presented in this chapter using the chapter-specific quizzing available in the online materials at www.cengagebrain.com.

1. Most of the behaviors that people adopt in life are
   a. a product of their environment.
   b. learned early in childhood.
   c. learned from parents.
   d. genetically determined.
   e. the result of peer pressure.

2. Instant gratification is
   a. a barrier to change.
   b. a factor that motivates change.
   c. one of the six stages of change.
   d. the end result of successful change.
   e. a technique in the process of change.

3. The desire and will to do something is referred to as
   a. invincibility.
   b. confidence.
   c. competence.
   d. external locus of control.
   e. motivation.

4. People who believe they have control over events in their lives
   a. tend to rationalize their negative actions.
   b. exhibit problems of competence.
   c. often feel helpless over illness and disease.
   d. have an internal locus of control.
   e. often engage in risky lifestyle behaviors.

5. A person who is unwilling to change a negative behavior because the reasons for change are not important enough is said to have problems of
   a. competence.
   b. conduct.
   c. motivation.
   d. confidence.
   e. risk complacency.

6. Which of the following is a stage of change in the transtheoretical model?
   a. recognition
   b. motivation
   c. relapse
   d. preparation
   e. goal setting

7. A precontemplator is a person who
   a. has no desire to change a behavior.
   b. is looking to make a change in the next 6 months.
   c. is preparing for change in the next 30 days.
   d. willingly adopts healthy behaviors.
   e. is talking to a therapist to overcome a problem behavior.

8. An individual who is trying to stop smoking and has not smoked for 3 months is in the
   a. maintenance stage.
   b. action stage.
   c. termination stage.
   d. adoption stage.
   e. evaluation stage.

9. The process of change in which an individual obtains information to make a better decision about a problem behavior is known as
   a. behavior analysis.
   b. self-reevaluation.
   c. commitment.
   d. positive outlook.
   e. consciousness-raising.

10. A goal is effective when it is
    a. specific.
    b. measurable.
    c. realistic.
    d. time specific.
    e. all of the above.

Correct answers can be found at the back of the book.
Chapter 2

Notes


Suggested Readings


Answer Key

This page contains answers for this chapter only

Chapter 2
1. a  2. a  3. e  4. d  5. c  6. d  7. a  8. b  9. e  10. e
CHAPTER 2 CHECK YOURSELF
Steps for Successful Behavior Modification

- 1. Acknowledge that you have a problem.
- 2. Describe the behavior to change (increase physical activity, stop overeating, quit smoking).
- 3. List advantages and disadvantages of changing the specified behavior.
- 4. Decide positively that you will change.
- 5. Identify your stage of change.
- 6. Set a realistic goal (SMART goal), completion date, and sign a behavioral contract.
- 7. Define your behavioral change plan: List processes of change, techniques of change, and objectives that will help you reach your goal.
- 8. Implement the behavior change plan.
- 9. Monitor your progress toward the desired goal.
- 10. Periodically evaluate and reassess your goal.
- 11. Reward yourself when you achieve your goal.
- 12. Maintain the successful change for good.