



AUM

American University Of The Middle East

PES111

A decorative graphic in the top-left corner consisting of a network of white lines and dots on a light gray background, resembling a molecular or digital structure.

**How can someone be
Physically Active?**

TAKE CHARGE

Move More, Sit Less



A regular exercise program provides huge wellness benefits, but it does not cancel out all the negative effects of too much sitting during the day. Advances in technology promote sedentary behavior; we can now work or study at a desk, watch TV or play video games in our leisure time, order takeout and delivery for meals, and shop and bank online. To avoid the negative health effects of too little daily activity, you may need a plan to reduce your sitting time. Try some of the following strategies:

- Stand up and/or walk when you are on work or personal phone calls.
- Take the stairs whenever and wherever you can; walk up and down escalators instead of just riding them.
- At work, walk to a coworker's desk rather than e-mailing or calling; take the long route to the restroom; and take a walk

break whenever you take a coffee or snack break. Drink plenty of water so that you'll have to take frequent restroom breaks.

- Set reminders to get up and move: Use commercial breaks while watching TV; at work or while using a digital device, use the clock function on your computer or phone to make sure you don't sit for longer than an hour at a time.
- Engage in active chores and leisure activities.
- Track your sedentary time to get a baseline, and then continue monitoring to note any improvements. You can also use a fitness tracker such as the Fitbit or step counter to track your general activity level or to set reminders to get up and move after sitting for a particular period of time.

Box icon: ©VisualCommunications/Getty Images RF

A decorative graphic in the top-left corner consisting of a network of white lines and dots on a light gray background, resembling a molecular or digital structure.

**Why do people get involved
in physical activity?**



People get involved in exercise for several reasons:

- to improve their health and physical condition,
- to achieve a sporting ambition,
- to relive the tension and stress of daily life,
- to lose weight, it makes them feel good.

Participating in sport encourages cooperation in team sports, develops the element of competitiveness, provides a physical challenge and the opportunity to meet new people and make new friends.

A decorative graphic in the top-left corner consisting of a network of white lines connecting various nodes, resembling a molecular or digital structure.

What are some **Benefits from being
Physically Active?**

- Decreased body weight and fat mass
- Improved glucose control
- Enhanced feelings of well-being
- longer than sedentary individuals
- Exercise can be fun ... and social!

-
- Increased endurance, strength, and flexibility
 - Healthier muscles, bones, and joints
 - Increased energy (calorie) expenditure
 - Improved body composition
 - More energy
 - Improved ability to cope with stress
 - Improved mood, higher self-esteem, and a greater sense of well-being
 - Improved ability to fall asleep and sleep well
 - Reduced risk of dying prematurely from all causes
 - Reduced risk of developing and/or dying from heart disease, diabetes, high blood pressure, and colon cancer
 - Reduced risk of becoming obese
 - Reduced anxiety, tension, and depression
 - Reduced risk of falls and fractures
 - Reduced spending for health care

FIGURE 1.5 Benefits of regular physical activity.

A decorative graphic in the top-left corner consisting of a network of white lines and dots on a light gray background, resembling a molecular or data network structure.

**Does being physically active make a
difference in how long you live?**



THE EVIDENCE FOR EXERCISE

Does Being Physically Active Make a Difference in How Long You Live?

How can we be sure that physical activity and exercise are good for our health? To answer this question, the U.S. Department of Health and Human Services asked a committee to review scientific literature. The committee's mission was to determine if enough evidence exists to warrant the government making physical activity recommendations to the public. The committee's report, the *Physical Activity Guidelines Advisory Committee Report, 2008*, summarizes the scientific evidence for the health benefits of regular physical activity and the risks of sedentary behavior. The report provides the rationale for the federal government's physical activity guidelines, and its findings were confirmed in the *Scientific Report of the 2015 Dietary Guidelines Committee*.

The Physical Activity Guidelines Advisory Committee started by asking whether physical activity actually helps people live longer. The committee investigated the link between physical activity and all-cause mortality—deaths from all causes—by looking at 73 studies dating from 1995 to 2008. The studies included men and women from all age groups (16 to 65+) and from different racial and ethnic groups.

The data from these studies strongly support an *inverse relation* between physical activity and all-cause mortality; that is, physically active people were less likely to die during a study's follow-up period (ranging from 10 months to 28 years). The review found that active people have about a 30% lower risk of dying compared with inactive people.



© yellowdog/Getty Images RF

These inverse associations were found not just for healthy adults but also for older adults (age 65 and older); for people with coronary artery disease, diabetes, or impaired mobility; and for people who were overweight or obese. Poor fitness and low physical activity levels were found to be better predictors of premature death than smoking, diabetes, or obesity. Based on the evidence, the committee determined that

about 150 minutes (2.5 hours) of physical activity per week is enough to reduce all-cause mortality (see Chapter 2 for more details). It appears that it is the overall volume of energy expended, no matter which kinds of activities are done, that makes a difference in risk of premature death.

The committee also looked at whether there is a *dose-response* relation between physical activity and all-cause mortality—that is, whether more activity reduces death rates even further. Again, the studies showed an inverse relation between these two variables. So, more activity above and beyond 150 minutes per week produces greater benefits. Surprisingly, for inactive people, benefits are seen at levels below 150 minutes per week. In fact, *any* increase in physical activity resulted in reduced risk of death. The committee refers to this as the “some is good; more is better” message. A target of 150 minutes per week is recommended, but any level of activity below the target is encouraged for inactive people.

Looking more closely at this relationship, the committee found that the greatest risk reduction is seen at the lower end of the physical activity spectrum (30–90 minutes per week). In fact, sedentary people who become more active have the greatest potential for improving health and reducing the risk of premature death. Additional risk reduction occurs as physical activity increases, but at a slower rate. For example, people who engaged in physical activity 90 minutes per week had a 20% reduction in mortality risk compared with inactive people, and those who were active 150 minutes per week, as noted earlier, had a 30% reduction in risk. But to achieve a 40% reduction in mortality risk, study participants had to be physically active 420 minutes per week (7 hours).

A 2017 American Heart Association report projected that cardiovascular disease costs in the United States will exceed \$1 trillion by 2035. Regular exercise reduces the risk of cardiovascular disease and related health problems such as hypertension, high cholesterol, and diabetes. The message from the research is clear: It doesn't matter what activity you choose or even how much time you can devote to it per week, as long as you get moving!

source: American Heart Association. 2017. *Cardiovascular Disease: A Costly Burden for America; Projections through 2035*. Dallas, TX: American Heart Association; 2015 Dietary Guidelines Advisory Committee. 2015. *Scientific Report of the 2015 Dietary Guidelines Advisory Committee*. Washington, DC: U.S. Department of Health and Human Services; Physical Activity Guidelines Advisory Committee, *Physical Activity Guidelines Advisory Committee Report, 2008*. Washington, DC: U.S. Department of Health and Human Services.

Box Icon: © Vstock LLC/Getty Images RF

A decorative graphic in the top-left corner consisting of a network of white lines and dots on a light gray background, resembling a molecular or digital structure.

How much *Physical Activity* do adults need?

According to CDC, at least 150 minutes a week of moderate aerobic activity or 75 minutes a week of vigorous aerobic activity, or a combination of moderate and vigorous activity.

Example 1



Moderate-intensity aerobic activity

(e.g., brisk walking) for 150 minutes every week (for example, 30 minutes a day, 5 days a week)

AND



Muscle-strengthening activities

on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).

Example 2



Vigorous-intensity aerobic activity

(e.g., jogging or running) for 75 minutes (1 hour and 15 minutes) every week

AND



Muscle-strengthening activities

on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).

Example 3



An equivalent mix of moderate- and vigorous-intensity aerobic activity

on 2 or more days a week

AND



Muscle-strengthening activities

on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).



*“It doesn’t matter what activity you choose or even
how much time you can devote to it per week, as
long as you get moving.”*

American Heart Association

A decorative graphic in the top-left corner consisting of a network of white lines and dots on a light blue background, resembling a molecular or data network structure.

How to stay active during the pandemic?

https://www.youtube.com/watch?v=gC_L9qAHVJ8

A decorative graphic in the top-left corner consisting of a network of white lines connecting various nodes, some of which are highlighted with small circles.

The terms **health** and **wellness** mean the same thing?

True or False

A decorative graphic in the top-left corner consisting of a network of white lines connecting various nodes, resembling a molecular or digital structure.

The word **health** typically refers to the overall condition of a person's body or mind and to the presence or absence of illness or injury.

Health is influenced by factors beyond your control: age, genes and family history.

Wellness expands this idea of health to include our ability to achieve optimal health.

Wellness is largely determined by the decisions you make about how you live.



The good news is that people have some control over whether they develop chronic diseases. Every day people can make choices that increase or decrease their risks.

These lifestyle choices include the decisions regarding smoking, diet, exercise, and sleep.

A decorative graphic in the top-left corner consisting of a network of white lines and dots on a light blue background, resembling a molecular or digital structure.

The Dimensions of wellness

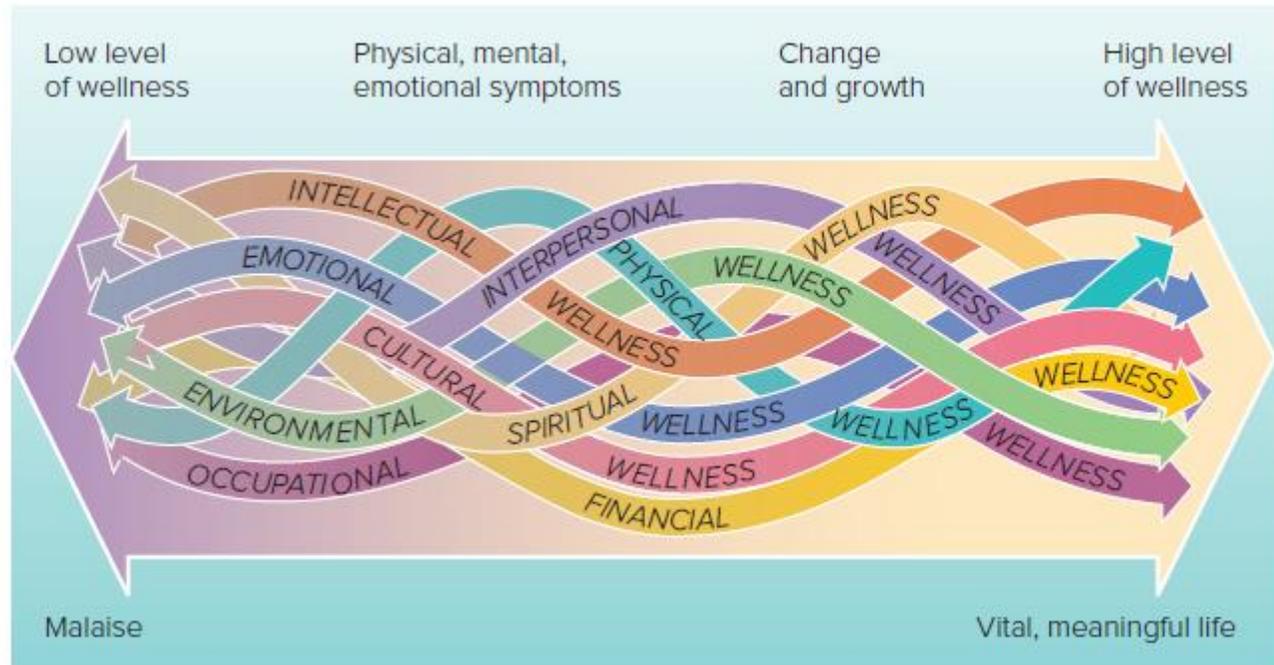
A decorative graphic in the top-left corner consisting of a network of white lines connecting various nodes, some of which are highlighted with small white circles.

Physical
Emotional
Intellectual
Interpersonal
Cultural
Spiritual
Environmental
Financial
Occupational

Each dimension affects the others. Furthermore, the process of achieving wellness is constant and dynamic (Figure 1.1), involving change and growth. Ignoring any dimension of wellness can have harmful effects on your life.

FIGURE 1.1 The wellness continuum.

The concept of wellness includes vitality in nine interrelated dimensions, all of which contribute to overall wellness.



Qualities and behaviors associated with the dimensions of wellness

Physical Wellness

- Eating well
- Exercising
- Avoiding harmful habits
- Recognizing symptoms of disease
- Getting regular checkups
- Avoiding injuries

Emotional Wellness

- Optimism
- Trust
- Self-esteem
- Self-acceptance
- Self-confidence
- Ability to understand and accept one's feelings
- Ability to share feelings with others

Intellectual Wellness

- Openness to new ideas
- Capacity to question
- Ability to think critically
- Motivation to master new skills
- Sense of humor
- Creativity
- Curiosity
- Lifelong learning

Interpersonal Wellness

- Communication skills
- Capacity for intimacy
- Ability to establish and maintain satisfying relationships
- Ability to cultivate a support system of friends and family

Cultural Wellness

- Creating relationships with those who are different from you
- Maintaining and valuing your own cultural identity
- Avoiding stereotyping based on ethnicity, gender, religion.

Spiritual Wellness

- Capacity for love
- Compassion
- Forgiveness
- Joy and fulfillment
- Caring for others
- Sense of meaning and purpose
- Sense of belonging to something greater than oneself

Environmental Wellness

- Having abundant, clean natural resources
- Maintaining sustainable development
- Recycling whenever possible
- Reducing pollution and waste

Financial Wellness

- Having a basic understanding of how money works
- Living within one's means
- Avoiding debt, especially for unnecessary items
- Saving for the future and for emergencies

Occupational Wellness

- Enjoying what you do
- Feeling valued by your manager
- Building satisfying relationships with coworkers
- Taking advantage of opportunities to learn and be challenged

Behaviors that contribute to Wellness

- Be physically active
- Choose a healthy diet
- Maintain a healthy body weight
- Manage stress effectively
- Avoid tobacco use
- Protect yourself from disease and injury

Take other steps toward wellness:

- Developing meaningful relationships
- Planning for successful aging
- Learning about the health care system
- Acting responsibly toward the environment



College students and wellness

Each year, thousands of students lose productive academic time to activities causing stress and other physical and emotional health problems – some of which can continue for a lifetime.

According to the fall 2016 American College Health Association National College Health Assessment II, the following were commonly reported factors affecting academic performance:

- Stress (32.2% students affected)
- Anxiety (24.9%)
- Sleep difficulties (20.6%)
- Depression (15.4%)
- Work (14.2%)
- Cold/Flu/Sore throat (13%)
- Concern for a troubled friend/family member (10.1%)
- Internet use/computer games (9%)



College students and wellness

Each of these factors is related to one or more dimensions of wellness, and most can be influenced by choices student make daily.

Example:

Increase healthy choices:

- time-management techniques.
- 150 minutes of physical activity per week is enough to reduce all-cause mortality. “Some is good, more is better”.



Reaching wellness through lifestyle management

Getting serious about your health

- Examine your current health
- Choose a target behavior: start small by choosing a simple behavior and working on it until you succeed
- Learn about your target behavior: risks & benefits
- Find help



Reaching wellness through lifestyle management

Building motivation to change

To succeed at behavior change, you need to be motivated and to know that even though an active lifestyle may be inconvenient, it may be required.

- Examine the Pros and Cons of change
- Boost self-efficacy: your belief in your ability to successfully take action and perform a specific task.
 - Visualization and self-talk
 - Role models and other supportive individuals
- Identify and overcome barriers to change

Evaluating Sources of Health Information



Surveys indicate that college students are smart about evaluating health information. They trust the health information they receive from health professionals and educators and are skeptical about popular information sources, such as magazine articles and websites.

How smart are you about evaluating health information? Here are some tips.

General Strategies

Whenever you encounter health-related information, take the following steps to make sure it is credible:

- **Go to the original source.** Media reports and social media posts often simplify the results of medical research. Find out for yourself what a study really reported, and determine whether it was based on good science. What type of study was it? Was it published in a recognized medical journal? Was it an animal study, or did it involve people? Did the study include a large number of people? What did the study's authors actually report?
- **Watch for misleading language.** Reports that tout "breakthroughs" or "dramatic proof" are probably hype. A study may state that a behavior "contributes to" or is "associated with" an outcome, but this does not prove a cause-and-effect relationship.
- **Distinguish between research reports and public health advice.** Do not change your behavior based on the results of a single report or study. If an agency such as the National Cancer Institute urges a behavior change, however, you should follow its advice. Large, publicly funded organizations issue such advice based on many studies, not a single report.
- **Remember that anecdotes are not facts.** A friend may tell you he lost weight on some new diet, but individual success stories do not mean the plan is truly safe or effective. Do any scientific studies back up the claims of the article?
- **Be skeptical.** If a report seems too good to be true, it probably is. Be wary of information contained in advertisements. An ad's goal is to sell a product, even if there is no need for it, and sometimes even if the product has not been proven to be safe or effective.

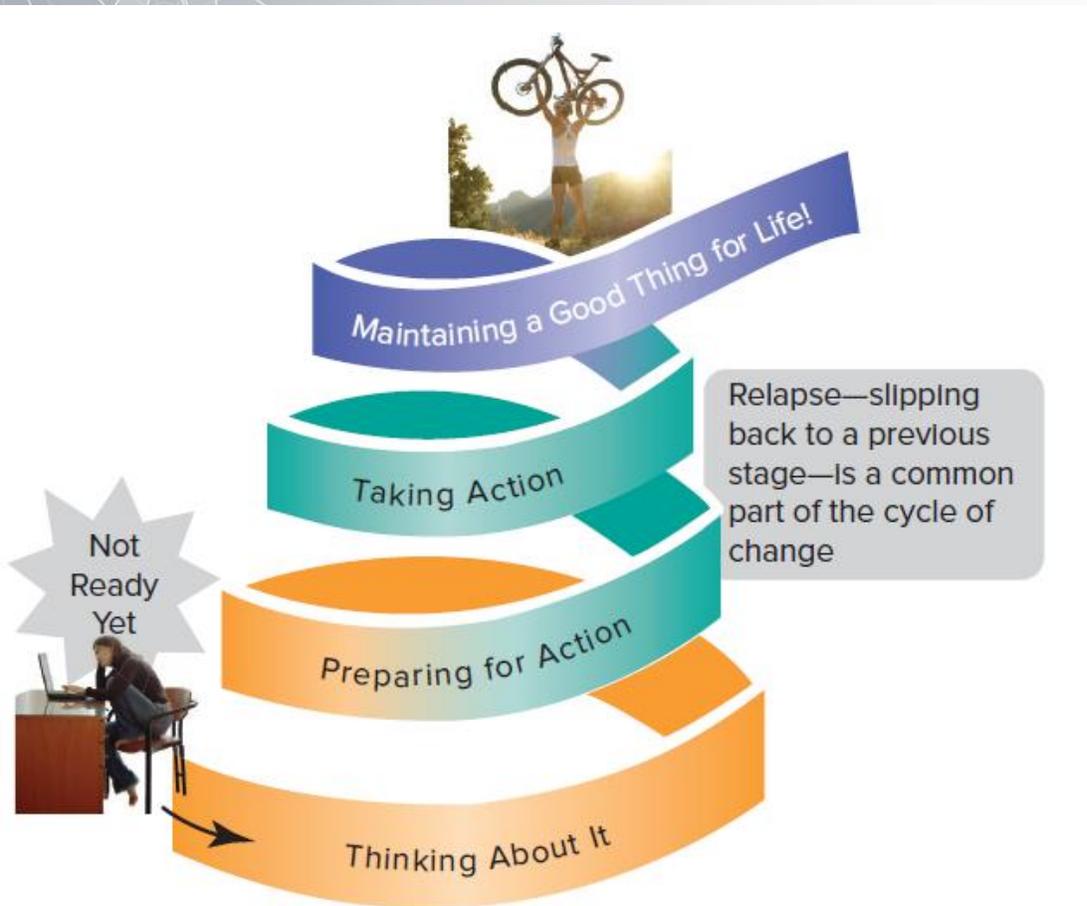
- **Make choices that are right for you.** Friends and family members can be a great source of ideas and inspiration, but you need to make health-related choices that work best for you.

Internet Resources

Online information sources pose special challenges. When reviewing a health-related website, ask these questions:

- **What is the source of the information?** Websites maintained by government agencies, professional associations, or established academic or medical institutions are likely to present trustworthy information. Many other groups and individuals post accurate information, but it is important to look at the qualifications of the people who are behind the site. (Check the home page or click the "About Us" link.) Verify information you get from social media by visiting the originating organization's website and evaluating the source.
- **How often is the site updated?** Look for sites that are updated frequently. Check the "last modified" date of any web page. Newer studies may contradict the results of earlier ones.
- **Is the site promotional?** Be wary of information from sites that sell specific products, use testimonials as evidence, appear to have a social or political agenda, or ask for money.
- **What do other sources say about a topic?** Be wary of claims and information that appear at only one site or come from a chat room, bulletin board, or blog. Do other authors cite the same studies as the ones in this article?
- **Does the site conform to any set of guidelines or criteria for quality and accuracy?** Look for sites that identify themselves as conforming to some code or set of principles, such as those set forth by the Health on the Net Foundation or the American Medical Association. Medical and health journals that have been peer reviewed (edited by experts in the field), and websites maintained by government agencies, professional associations, or established academic or medical institutions are most likely to present trustworthy information.

Reaching wellness through lifestyle management



Enhancing your readiness to change “stages of change”

First you must determine what stage you are in now so that you can choose appropriate strategies for progressing through the cycle of change

FIGURE 1.6 The stages of change: A spiral model.

SOURCE: Centers for Disease Control and Prevention. (n.d.) *PEP guide: Personal empowerment plan for improving eating and increasing physical activity*. Dallas, TX: The Cooper Institute.

(bike): © Adam Brown/Getty Images RF; (desk): © Ray Kachatorian/Getty Images

Reaching wellness through lifestyle management

What stage are you in?

- **Precontemplation:** people at this stage do not think that they have a problem and do not intend to change their behavior. They believe that there are more reasons or more important reasons not to change than there are reasons to change.
- **Contemplation:** people at this stage know they have a problem and intend to take action within six months. They acknowledge the benefits of behavior change but worry about the costs of changing.
- **Preparation:** people at this stage plan to take action within a month or may already have begun to make small changes in their behavior. They may be engaging in their new, healthier behavior but not yet regularly or consistently. They may have created a plan for change but may be worried about failing.

Reaching wellness through lifestyle management

What stage are you in?

- **Action:** during the action stage, people outwardly modify their behavior and their environment. The action stage requires the greatest commitment of time and energy, and people in this stage are at risk for reverting to old, unhealthy patterns of behavior.
- **Maintenance:** people at this stage have maintained their new, healthier lifestyle for at least six months. Lapses may have occurred, but people in maintenance have been successful in quickly reestablishing the desired behavior. The maintenance stage can last for months or years.
- **Termination:** people at this stage have exited the cycle of change and are no longer tempted to lapse back into their old behavior. They have a new self-image and total self-efficacy with regard to their target behavior.



Reaching wellness through lifestyle management

Dealing with relapse.

- Forgive yourself
- Give yourself credit for the progress you have already made
- Move on



Reaching wellness through lifestyle management

Developing skills for change: creating a personalized plan

1. Monitor your behavior and gather data: keep a record of your target behavior and the circumstances surrounding it for at least a week or two:
 - What the activity was
 - When and where it happened
 - What you were doing
 - How you felt at that time
2. Analyze the data and identify patterns
3. Be “SMART” about setting your goals:
 - Specific
 - Measurable
 - Attainable
 - Realistic
 - Time frame-specific



Reaching wellness through lifestyle management

Developing skills for change: creating a personalized plan

4. Devise a plan of action:

- Get what you need (resources, buying equipment, joining a club)
- Modify your environment
- Control related habits
- Reward yourself
- Involve the people around you
- Plan for challenges

Behavior Change Contract

1. I, Tammy Lau, agree to increase my consumption of fruit from 1 cup per week to 2 cups per day.

2. I will begin on 10/5 and plan to reach my goal of 2 cups of fruit per day by 12/7

3. To reach my final goal, I have devised the following schedule of mini-goals.

For each step in my program, I will give myself the reward listed.

I will begin to have ½ cup of fruit with breakfast 10/5 see movie

I will begin to have ½ cup of fruit with lunch 10/26 new video game

I will begin to substitute fruit juice for soda 1 time per day 11/16 concert

My overall reward for reaching my goal will be trip to beach

4. I have gathered and analyzed data on my target behavior and have identified the following strategies for changing my behavior: Keep the fridge stocked with easy-to-carry fruit. Pack fruit in my backpack every day. Buy lunch at place that serves fruit.

5. I will use the following tools to monitor my progress toward my final goal:
Chart on fridge door
Diet log app

I sign this contract as an indication of my personal commitment to reach my goal: Tammy Lau 9/28

I have recruited a helper who will witness my contract and also increase his consumption of fruit; eat lunch with me twice a week.
Eric March 9/28

Developing skills for change: creating a personalized plan

5. Make a personal contract

Should include a statement of your goal and your commitment to reaching it.

- The date you will start
- The steps you will take to measure your progress
- The strategies you plan to use to promote change
- The date you expect to reach your final goal

FIGURE 1.8 A sample behavior change contract.



Reaching wellness through lifestyle management

Putting plan into action

- It requires commitment, the resolve to stick with the plan no matter what temptations you encounter.
- Remember all the reasons you have to make the change and remember that YOU are the boss.

TAKE CHARGE

Tips for Moving Forward in the Cycle of Behavior Change



Precontemplation

- **Raise your awareness.** Research your target behavior and its effects.
- **Be self-aware.** Look at the mechanisms you use to resist change, such as denial or rationalization. Find ways to counteract these mechanisms.
- **Seek social support.** Friends and family members can help you identify target behaviors and understand their impact on the people around you.
- **Identify helpful resources.** These might include exercise classes or stress-management workshops offered by your school.

Contemplation

- **Keep a journal.** A record of your target behavior and the circumstances that elicit the behavior can help you plan a change program.
- **Do a cost-benefit analysis.** Identify the costs and benefits (both current and future) of maintaining your behavior and of changing it. Costs can be monetary, social, emotional, and so on.
- **Identify barriers to change.** Knowing these obstacles can help you overcome them.
- **Engage your emotions.** Watch movies or read books about people with your target behavior. Imagine what your life will be like if you don't change.
- **Create a new self-image.** Imagine what you'll be like after changing your target behavior. Try to think of yourself in new terms right now.
- **Think before you act.** Learn why you engage in the target behavior. Determine what "sets you off" and train yourself not to act reflexively.

Preparation

- **Create a plan.** Include a start date, goals, rewards, and specific steps you will take to change your behavior.

- **Make change a priority.** Create and sign a contract with yourself.
- **Practice visualization and self-talk.** These techniques can help prepare you mentally for challenging situations.
- **Take short steps.** Successfully practicing your new behavior for a short time—even a single day—can boost your confidence and motivation.

Action

- **Monitor your progress.** Keep up with your journal entries.
- **Change your environment.** Make changes that will discourage the target behavior—for example, getting rid of snack foods or not stocking the refrigerator with beer.
- **Find alternatives to your target behavior.** Make a list of things you can do to replace the behavior.
- **Reward yourself.** Rewards should be identified in your change plan. Give yourself lots of praise, and focus on your success.
- **Involve your friends.** Tell them you want to change, and ask for their help.
- **Don't get discouraged.** Real change is difficult.

Maintenance

- **Keep going.** Continue using the positive strategies that worked in earlier stages.
- **Be prepared for lapses.** Don't let slip-ups set you back.
- **Be a role model.** After you have successfully changed your behavior, you may be able to help someone else do the same thing.

If relapses keep occurring or if you can't seem to control them, you may need to return to a previous stage of the behavior change process. If this is necessary, reevaluate your goals and your strategy. A different or less stressful approach may help you avoid setbacks when you try again.



Reaching wellness through lifestyle management

Staying with it

Don't be surprised when you run up against obstacles; they're inevitable.

- Social influences
- Levels of motivation and commitment
- Choice of techniques and level of effort (make changes when necessary)
- Stress barrier (find the sources of stress)

Reaching wellness through lifestyle management

Staying with it

- Procrastinating, rationalizing, and blaming
 - Procrastinating: If you tell yourself, “It’s Friday already; I might as well wait until Monday to start,” you’re procrastinating. Break your plan into smaller steps that you can accomplish one day at a time.
 - Rationalizing: If you tell yourself, “I wanted to go swimming today but wouldn’t have had time to wash my hair afterward,” you’re making excuses.
 - Blaming: If you tell yourself, “I couldn’t exercise because Dave was hogging the elliptical trainer,” you’re blaming others for your own failure to follow through. Blaming is a way of taking focus off the real problem and denying responsibility for your own actions.



Reaching wellness through lifestyle management

Being fit and Well for life

Your first attempts at making behavior changes may never go beyond the contemplation or preparation stage. But as you experience some success, you'll start to have more positive feelings about yourself.

You may discover new physical activities and sports you enjoy, and you may encounter new situations and meet new people.

Once you've started, don't stop.