

Appendix H. Guide to Physical Activity

An increase in physical activity is an important part of your weight management program. Most weight loss occurs because of decreased caloric intake. Sustained physical activity is most helpful in the prevention of weight regain. In addition, physical activity helps to reduce cardiovascular and diabetes risks beyond what weight reduction alone can do. Start exercising slowly, and gradually increase the intensity. Trying too hard at first can lead to injury.



Your exercise can be done all at one time or intermittently over the course of the day. Initial activities may be walking or swimming at a slow pace. You can start by walking slowly for 30 minutes 3 days a week. Then build to 45 minutes of more intense walking at least 5 days a week. With this regimen, you can burn 100 to 200 calories per day. All adults should set a long-term goal to accumulate at least 30 minutes or more of moderate-intensity physical activity on most, and preferably all, days of the week. This regimen can be adapted to other forms of physical activity, but walking is particularly attractive because of its safety and accessibility. Also, try to change everyday activities; for example, take the stairs instead of the elevator. Reducing sedentary time is a good strategy to increase activity by undertaking frequent, less

Examples of Moderate Amounts of Physical Activity*

Common Chores	Sporting Activities	
Washing and waxing a car for 45–60 minutes	Playing volleyball for 45–60 minutes	Less Vigorous, More Time [†] ↑ ↓ More Vigorous, Less Time
Washing windows or floors for 45–60 minutes	Playing touch football for 45 minutes	
Gardening for 30–45 minutes	Walking 1¾ miles in 35 minutes (20 min/mile)	
Wheeling self in wheelchair for 30–40 minutes	Basketball (shooting baskets) for 30 minutes	
Pushing a stroller 1½ miles in 30 minutes	Bicycling 5 miles in 30 minutes	
Raking leaves for 30 minutes	Dancing fast (social) for 30 minutes	
Walking 2 miles in 30 minutes (15 min/mile)	Water aerobics for 30 minutes	
Shoveling snow for 15 minutes	Swimming laps for 20 minutes	
Stairwalking for 15 minutes	Basketball (playing a game) for 15–20 minutes	
	Jumping rope for 15 minutes	
	Running 1½ miles in 15 minutes (15 min/mile)	

* A moderate amount of physical activity is roughly equivalent to physical activity that uses approximately 150 calories of energy per day, or 1,000 calories per week.

† Some activities can be performed at various intensities; the suggested durations correspond to expected intensity of effort.

strenuous activities.⁷⁶ With time, you may be able to—and you may want to—engage in more strenuous activities. Competitive sports such as tennis and volleyball can provide an enjoyable form of exercise, but you must take care to avoid injury.

Overcoming Obstacles to Regular Activity

Many people who are completely inactive cite various reasons for their inactivity.

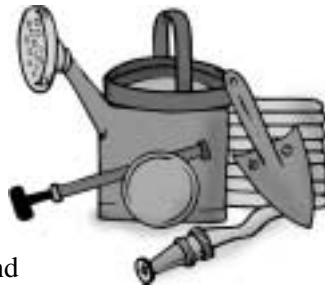
• I don't have the time to exercise.

Physical activity does take time, but only about 1 hour per week of vigorous activity can greatly benefit your heart, lungs, muscles, and weight. Consider the amount of time you spend watching television. Many forms of physical activity, such as riding an exercise bicycle or using hand weights, can be done while watching television.



• I don't like to exercise.

You have bad memories of doing situps or running in high school, sweating, puffing, and panting. Now we know that you can get plenty of gain without pain! Activities you already do, such as gardening and walking, can improve your health, so just do more of the activities you like.



• I don't have the energy to be more active.

Once you become a little more active, you should have more energy. As you progress, daily tasks will seem easier.

• It's hard to remember to exercise.

Leave your sneakers near the door to remind yourself to walk, bring a change of clothes to work and head straight for exercise on the way home, or put a note on your calendar at work to remind yourself to exercise. In addition, simply try to develop the habit of integrating more activity into your daily routine.



Gaining Health Benefits From Physical Activity

It is much easier to control your weight when you are active, and being active helps to prevent osteoporosis (bone loss) and heart disease and helps in the treatment of diabetes. In addition, physical activity helps to increase your confidence and decrease your stress. It can also decrease sadness and improve depression.

Benefits of Regular Activity

- Your weight is much easier to control when you are active.
- Physical activity can be lots of fun.
- You can be with other people when you are active.
- You'll feel better when you're physically active.
- You'll look better when you're physically active.
- Physical activity is good for your heart.
- Physical activity is a great way to burn off steam and stress.
- Physical activity helps you beat the blues.
- You'll feel more confident when you are active.
- You'll have more energy.

Fitting Activity Into Your Schedule

• What time of day is best for you to exercise?

Try walking before going to work or school, or maybe you prefer evenings. Even a few minutes of walking counts. Try to build up to accumulating 30 minutes per day. You can walk whenever it is convenient for you, or you can take an aerobics class instead. Whatever works for you is fine. The important thing is that you try to be more active. There is no one right time of day to exercise.

Try to think about the little things you can do to add more activity to your daily life. For instance, take the stairs instead of the elevator at work, park farther away from the entrance to the mall, or walk instead of driving to work or to shopping. These little things add up and are easy to fit into your schedule.

Some people want to be alone when they exercise, whereas others prefer the company of a group or class. Again, whatever works for you is fine.

• What activities have you enjoyed in the past? Why did you stop? How can you start them again?

You may enjoy other activities that are better suited to your current lifestyle. The key is to find one or two you really like. Consider varying your activity to prevent boredom.



You can have fun and feel healthier by doing any of the following:

- Walk or ride a bike in your neighborhood.
- Join a walking club at a mall or at work.
- Play golf at a local club.
- Join a dance class.
- Work in your garden.
- Use local athletic facilities.
- Join a hiking or biking club.
- Join a softball team or other sports team with coworkers, friends, or family.
- Chase your kids in the park. If you don't have kids, take your neighbor's. The parents will appreciate the break, the neighbors will enjoy it, and you'll benefit from getting more activity.
- Walk your dog. If you don't have a dog, pretend you do.
- Take a walk during your lunch break.

Planning To Become More Active

• Begin slowly.

If you have not been active for years, do not start with a 3-mile walk! Pushing yourself too hard or too fast will make you sore and discouraged.

• Set realistic goals, and plan to succeed.

For example, set the goal of walking two times this week. Even if you walk for only 5 minutes each time, you will have met your goal. Next week, you might try to walk two times for 10 minutes each time. Being realistic helps you to feel good about yourself, and it helps you to keep up the good work. You may want to keep an activity log to track your progress.

- **Reward yourself for reaching your goals.**

Each time you meet an exercise goal, give yourself a treat to mark the occasion. Some ideas include the following: buy yourself new sports equipment, ask your spouse to take the kids for an hour, visit a friend, spend more time on your favorite hobby, buy yourself flowers or a plant, enjoy a long hot bath, or go to a movie or rent a video.

- **Be active the healthy way.**

Most healthy people can safely start a program of moderate activity. Talk to your doctor first if you have heart trouble or experience pain or pressure in your chest, neck, shoulder, or arm during or after exercise.



Drink plenty of fluids while you are active. If the weather is bad, have a backup plan. Do your activity indoors. Use the proper equipment, such as a bicycle helmet for safety, and wear comfortable shoes or sneakers for walking.



- **How hard should you exercise?**

For the beginner in a sedentary lifestyle, activity level can be very light. This would include increasing standing activities, doing special chores like room painting, pushing a wheelchair, doing yard work, ironing, cooking, and playing a musical instrument.

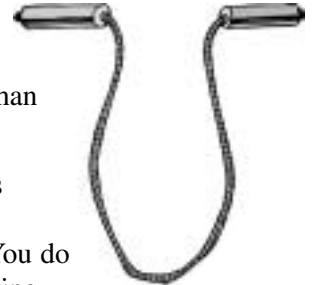
The next level would be light activity such as slow walking (24 minutes per mile), garage work, carpentry, house cleaning, child care, golf, sailing, and recreational table tennis.

The next level would be moderate activity such as walking at 15 minutes per mile, weeding and hoeing a garden, carrying a load, cycling, skiing, tennis, and dancing.



Two Sample Activity Programs

There are many ways to begin an activity program. Below are two examples—a walking program and a jogging program. These activities are easy ways for most people to get regular exercise because they do not require special facilities or equipment other than good, comfortable shoes.



If you find a particular week's pattern tiring, repeat it before going on to the next pattern. You do not have to complete the walking program in 12 weeks or the jogging program in 15 weeks.

A sample jogging program

If you are older than 40 and have not been active, you should not begin with a program as strenuous as jogging. Begin with the walking program instead. After completing the walking program, you can start with week 3 of the jogging program below.

If walking or jogging does not meet your needs, look for other exercise programs in pamphlets and books on aerobic exercise and sports medicine. Check out the programs and facilities of your local park and recreation department or community recreation centers. Many programs have adapted facilities for the disabled and for seniors.



A sample walking program

	Warmup	Exercising	Cool down	Total time
Week 1				
Session A	Walk 5 min.	Then walk briskly 5 min.	Then walk more slowly 5 min.	15 min.
Session B	Repeat above pattern			
Session C	Repeat above pattern			

Continue with at least three exercise sessions during each week of the program.

Week 2	Walk 5 min.	Walk briskly 7 min.	Walk 5 min.	17 min.
Week 3	Walk 5 min.	Walk briskly 9 min.	Walk 5 min.	19 min.
Week 4	Walk 5 min.	Walk briskly 11 min.	Walk 5 min.	21 min.
Week 5	Walk 5 min.	Walk briskly 13 min.	Walk 5 min.	23 min.
Week 6	Walk 5 min.	Walk briskly 15 min.	Walk 5 min.	25 min.
Week 7	Walk 5 min.	Walk briskly 18 min.	Walk 5 min.	28 min.
Week 8	Walk 5 min.	Walk briskly 20 min.	Walk 5 min.	30 min.
Week 9	Walk 5 min.	Walk briskly 23 min.	Walk 5 min.	33 min.
Week 10	Walk 5 min.	Walk briskly 26 min.	Walk 5 min.	36 min.
Week 11	Walk 5 min.	Walk briskly 28 min.	Walk 5 min.	38 min.
Week 12	Walk 5 min.	Walk briskly 30 min.	Walk 5 min.	40 min.

Week 13 on:

Gradually increase your brisk walking time to 30 to 60 minutes, three or four times a week. Remember that your goal is to get the benefits you are seeking and enjoy your activity.

Walking Tips

- Hold your head up, and keep your back straight.
- Bend your elbows as you swing your arms.
- Take long, easy strides.

For additional information about physical activity, request the NHLBI booklet *Exercise and Your Heart: A Guide to Physical Activity*.

A sample jogging program

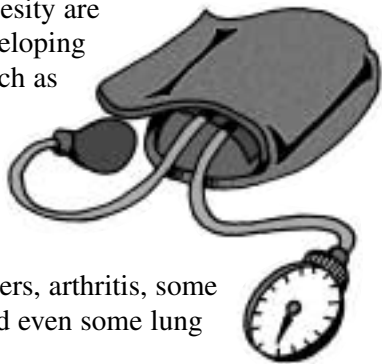
If you are older than 40 and have not been active, you should not begin with a program as strenuous as jogging. Begin with the walking program instead. After completing the walking program, you can start with week 3 of the jogging program below.

	Warmup	Exercising	Cool down	Total time
Week 1				
Session A	Walk 5 min., then stretch and limber up	Then walk 10 min. Try not to stop.	Then walk more slowly 3 min. and stretch 2 min.	20 min.
Session B	Repeat above pattern			
Session C	Repeat above pattern			
<i>Continue with at least three exercise sessions during each week of the program.</i>				
Week 2	Walk 5 min., then stretch and limber up	Walk 5 min., jog 1 min., walk 5 min., jog 1 min.	Walk 3 min., stretch 2 min.	22 min.
Week 3	Walk 5 min., then stretch and limber up	Walk 5 min., jog 3 min., walk 5 min., jog 3 min.	Walk 3 min., stretch 2 min.	26 min.
Week 4	Walk 5 min., then stretch and limber up	Walk 4 min., jog 5 min., walk 4 min., jog 5 min.	Walk 3 min., stretch 2 min.	28 min.
Week 5	Walk 5 min., then stretch and limber up	Walk 4 min., jog 5 min., walk 4 min., jog 5 min.	Walk 3 min., stretch 2 min.	28 min.
Week 6	Walk 5 min., then stretch and limber up	Walk 4 min., jog 6 min., walk 4 min., jog 6 min.	Walk 3 min., stretch 2 min.	30 min.
Week 7	Walk 5 min., then stretch and limber up	Walk 4 min., jog 7 min., walk 4 min., jog 7 min.	Walk 3 min., stretch 2 min.	32 min.
Week 8	Walk 5 min., then stretch and limber up	Walk 4 min., jog 8 min., walk 4 min., jog 8 min.	Walk 3 min., stretch 2 min.	34 min.
Week 9	Walk 5 min., then stretch and limber up	Walk 4 min., jog 9 min., walk 4 min., jog 9 min.	Walk 3 min., stretch 2 min.	36 min.
Week 10	Walk 5 min., then stretch and limber up	Walk 4 min., jog 13 min.	Walk 3 min., stretch 2 min.	27 min.
Week 11	Walk 5 min., then stretch and limber up	Walk 4 min., jog 15 min.	Walk 3 min., stretch 2 min.	29 min.
Week 12	Walk 5 min., then stretch and limber up	Walk 4 min., jog 17 min.	Walk 3 min., stretch 2 min.	31 min.
Week 13	Walk 5 min., then stretch and limber up	Walk 2 min., jog slowly 2 min., jog 17 min.	Walk 3 min., stretch 2 min.	31 min.
Week 14	Walk 5 min., then stretch and limber up	Walk 1 min., jog slowly 3 min., jog 17 min.	Walk 3 min., stretch 2 min.	31 min.
Week 15	Walk 5 min., then stretch and limber up	Jog slowly 3 min., jog 17 min.	Walk 3 min., stretch 2 min.	30 min.
Week 16 on: Gradually increase your jogging time from 20 to 30 minutes (or more, up to 60 minutes), three or four times a week. Remember that your goal is to get the benefits you are seeking and enjoy your activity.				

Why Weight Is Important

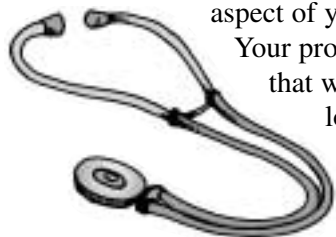
Being overweight or obese can have a negative effect on your overall health.

Overweight and obesity are risk factors for developing health problems such as high blood cholesterol, high blood pressure, diabetes, gall-bladder disease, gynecologic disorders, arthritis, some types of cancer, and even some lung problems.



People try to lose weight for a number of reasons. You may already have a health problem that you know about, such as high blood pressure, and want to lose weight to improve your health. Others may be losing weight in order to help prevent health problems. Still others simply want to lose weight to look thinner. For whatever reason, your health care provider may have given you information to help you lose weight.

In some ways, weight is different from other health problems since it is not something that is hidden, such as high blood cholesterol levels. Patients may have had experience with health care providers who are insensitive about their weight. They may have had encounters where they felt blamed rather than helped. Please be assured that when your health care provider discusses your weight, it's because it is an important aspect of your overall health care.



Your provider also understands that weight management is a long-term challenge influenced by behavioral, emotional, and physical factors.

How To Lose Weight and Maintain It

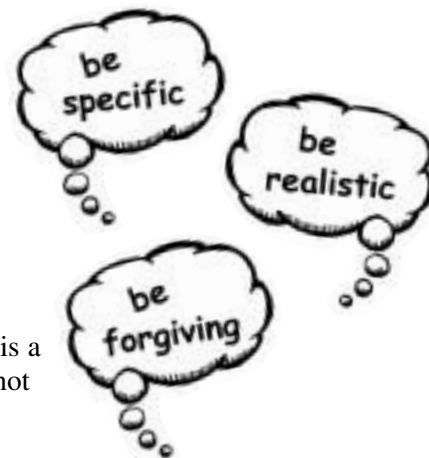
Set the Right Goals.

Setting the right goals is an important first step. Did you know that the amount of weight loss needed to improve health may be much less than you want to lose to look thinner? If your provider suggests an initial weight loss goal that seems too heavy for you, please understand that your health can be greatly improved by a loss of 5 percent to 10 percent of your starting weight. That doesn't mean you have to stop there, but it does mean that an initial goal of 5 to 10 percent of your starting weight is both realistic and valuable.

Most people who are trying to lose weight focus on one thing: weight loss. However, focusing on dietary and exercise changes that will lead to permanent weight loss is much more productive. People who are successful at managing their weight set only two to three goals at a time.

Effective goals are:

- specific
- realistic
- forgiving (less than perfect)



For example:

“**Exercise more**” is a fine goal, but it's not specific enough.

“**Walk 5 miles every day**”

is specific and measurable, but is it achievable if you're just starting out?

“**Walk 30 minutes every day**” is more attainable, but what happens if you're held up at work one day and there's a thunderstorm during your walking time on another day?

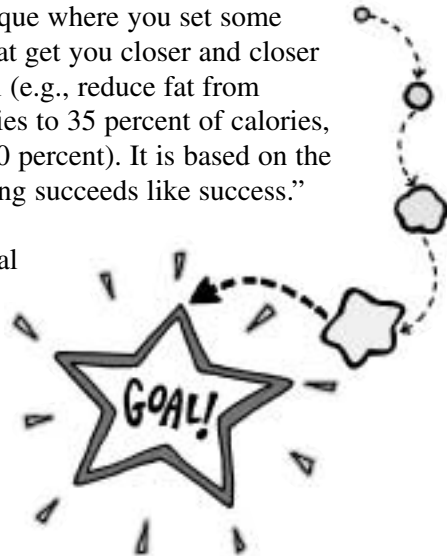
“**Walk 30 minutes, 5 days each week**” is specific, achievable, and forgiving. *A great goal!*

Nothing Succeeds Like Success.

Shaping is a technique where you set some short-term goals that get you closer and closer to the ultimate goal (e.g., reduce fat from 40 percent of calories to 35 percent of calories, and ultimately to 30 percent). It is based on the concept that “nothing succeeds like success.”

Shaping uses two important behavioral principles:

- Continuous goals that move you ahead in small steps to reach a distant point.
- Continuous rewards that keep you motivated to make changes.

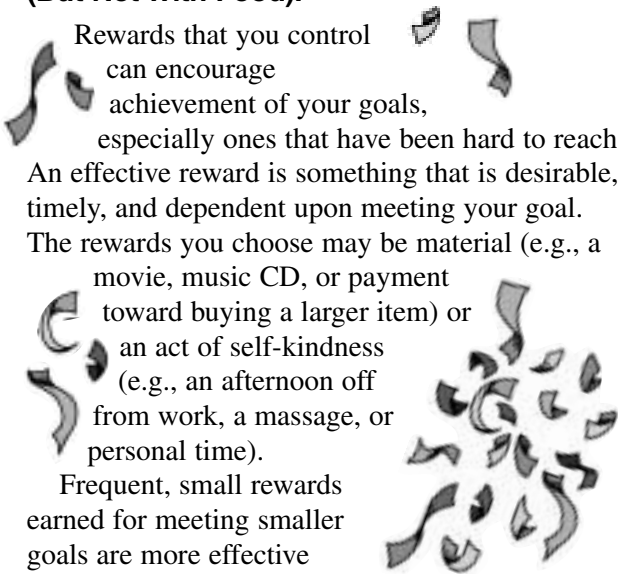


Reward Success (But Not With Food).

Rewards that you control can encourage achievement of your goals, especially ones that have been hard to reach. An effective reward is something that is desirable, timely, and dependent upon meeting your goal.

The rewards you choose may be material (e.g., a movie, music CD, or payment toward buying a larger item) or an act of self-kindness (e.g., an afternoon off from work, a massage, or personal time).

Frequent, small rewards earned for meeting smaller goals are more effective than bigger rewards, requiring a long, difficult effort.



Balance Your (Food) Checkbook.

Self-monitoring refers to observing and recording some aspect of your behavior, such as calorie intake, servings of fruits and vegetables eaten, and amount of physical activity, etc., or an outcome of these behaviors, such as weight. Self-monitoring of a behavior can be used at times when you're not sure of how you are doing and at times when you want the behavior to improve. Self-monitoring of a behavior usually moves you closer to the desired behavior. When you record your behavior, you produce real-time records for you and your health care provider to discuss. For example, keeping a record of your exercise can let you and your provider know quickly how you are doing. When your record shows that your exercise is increasing, you'll be encouraged to keep it up. Some



patients find that standard self-monitoring forms make it easier, while others like their own recording system. Use the form in Appendix K to help you keep track of your daily diet and activity levels.

Regular monitoring of your weight is key to keeping it off. Remember these four points if you are keeping a weight chart or graph:

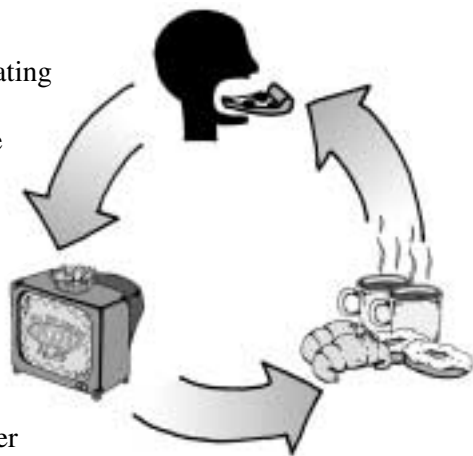
- One day's diet and exercise routine won't necessarily affect your weight the next day. Your weight will change quite a bit over the course of a few days because of fluctuations in water and body fat.
- Try to weigh yourself at a set time once or twice per week. This can be when you first wake up and before eating and drinking, after exercise, or right before dinner, etc.
- Whatever time you choose, just make sure it is always the same time and use the same scale to help you keep the most accurate records.
- It may also be helpful to create a graph of your weight as a visual reminder of how you're doing, rather than just listing numbers.



Avoid a Chain Reaction.

Stimulus (cue) control involves learning what social or environmental cues encourage undesired eating, and then changing those cues. For example, you may learn from your self-monitoring techniques or from sessions with your health care provider that you're more likely to overeat when watching TV, when treats are on display by the office coffee pot, or when around a certain friend. Ways to change the situation include:

- Separating the association of eating from the cue (Don't eat while watching television.)
- Avoiding or eliminating the cue (Leave the coffee room immediately after pouring coffee.)
- Changing the environment (Plan to meet this friend in a nonfood setting.)

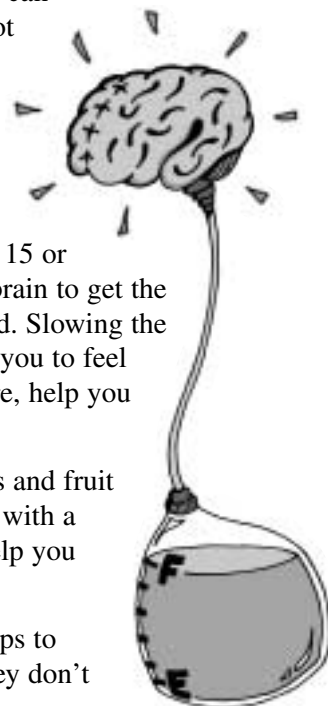


In general, visible and reachable food items often lead to unplanned eating.

Get the (Fullness) Message.

Changing the way you eat can help you to eat less and not feel deprived.

- Eating slowly will help you to feel satisfied when you've eaten the right amount of food for you. It takes 15 or more minutes for your brain to get the message you've been fed. Slowing the rate of eating can allow you to feel full sooner and, therefore, help you eat less.
- Eating lots of vegetables and fruit and also starting a meal with a broth-based soup can help you feel fuller.
- Using smaller plates helps to moderate portions so they don't appear too small.
- Drinking at least eight glasses of noncaloric beverages each day will help you to feel full, possibly eat less, and benefit you in other ways.
- Changing your eating schedule, or setting one, can be helpful, especially if you tend to skip or delay meals and overeat later.



Appendix J. Weight and Goal Record

PATIENT _____						
DATE	WEIGHT	WEIGHT CHANGE THIS VISIT	TOTAL WEIGHT CHANGE	WAIST	BMI	PATIENT GOALS SET THIS VISIT
						DIET
						PHYSICAL ACTIVITY
						BEHAVIOR
						NOTES
						DIET
						PHYSICAL ACTIVITY
						BEHAVIOR
						NOTES
						DIET
						PHYSICAL ACTIVITY
						BEHAVIOR
						NOTES

Weight Management Chart

You can't drive a car if you can't see where you are going. You can't control your weight if you can't see where it's going. An important behavior change is to keep a visual record of your weight, along with your physical activity habits. Beginning now, weigh yourself every day and record each day's weight and minutes of physical activity using the graph on the next page, as shown in the example below. Weigh yourself at the same time under the same conditions every day. The bottom horizontal lines show the days of the month. The vertical lines on the left side will show a range of your weights, while the vertical lines on the right side will show the minutes of physical activity.



Chart Your Weight.

Write in your first weight on the third line from the top of the graph on the left side. List successive weights up and down from there, one pound per line. Each day go up the line above that day until you are on the same horizontal line as your weight that day, and mark the spot with a dot. Connect the dots with a solid line.

Chart Your Physical Activity.

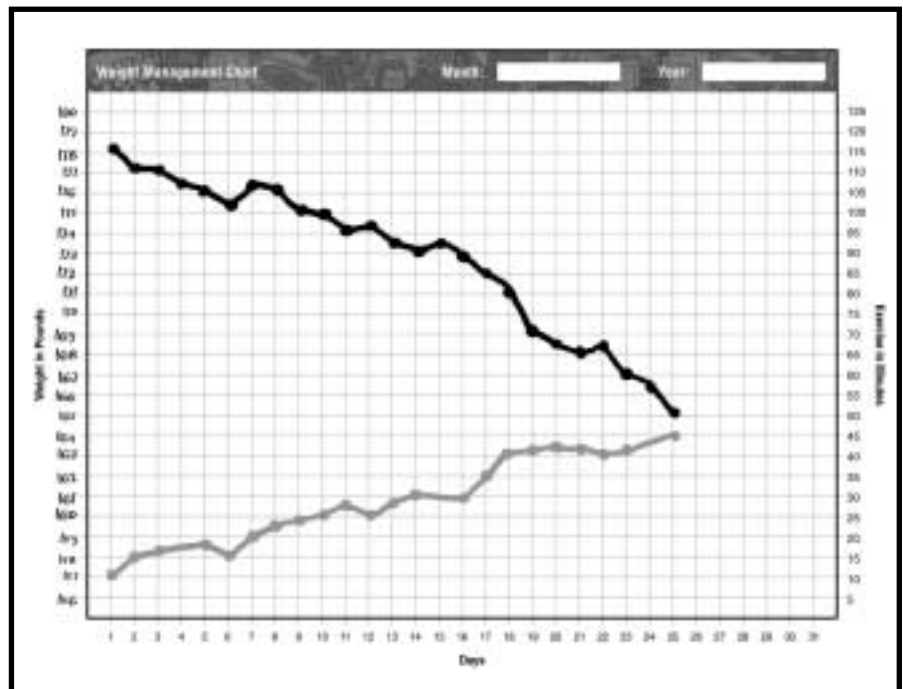
Do the same for physical activity. Write in 5 minutes of physical activity on the first line from the bottom of the graph on the right side. List additional

minutes of activity up from there using 5 minute intervals. Each day go up the line above that day until you are on the same horizontal line as your physical activity for that day, and mark the spot with a dot. Connect the dots with a solid line.

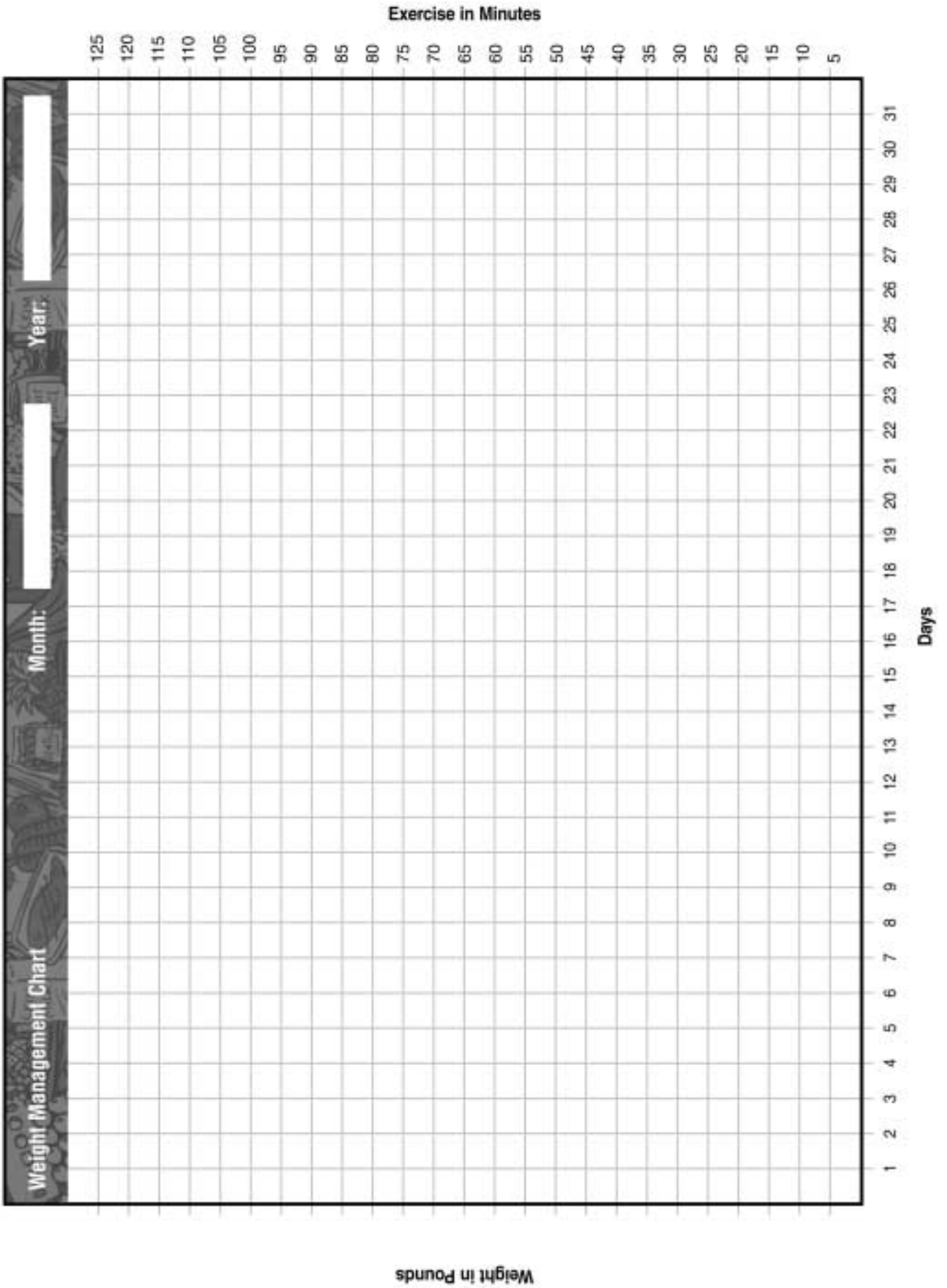
See Your Success.

The beginning of a weight loss program is when weight graphing is most fun—a good time to start the habit. Your graph will show ups and downs because of changes in fluid balance and differences in fluid intake from day to day. You will learn to understand these variations and use the overall trend to guide your weight control plan. Post the graph near your scale or on your refrigerator as a reminder of your progress.

Weigh yourself at the same time under the same conditions every day. The bottom horizontal lines show the days of the month on the left side will show a range of your weights, while the vertical lines on the right side will show the minutes of physical activity.



Source: Adapted from the Weight Management Center, Medical University of South Carolina



Appendix K. Weekly Food and Activity Diary

Weekly Food and Activity Diary		Week of: _____						
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Breakfast								
Lunch								
Dinner								
Activity								
Notes:								