



Session 8: Step Up Your Physical Activity Plan

In Session 4 you learned that both **planned** and **spontaneous** physical activities are important. Together they make up your total day-to-day activity level.

How are you doing with your physical activity? What has worked for you so far?

What are your challenges?

Balancing your day with a solid physical activity plan takes some effort and sometimes you will find yourself in a slump. You may need a boost to “step up” your activity plan.

Step Up Your Physical Activity with a Pedometer

So far you have been focusing mostly on your planned activity and tracking your weekly minutes. Now you will add in a pedometer.

The pedometer is a tool that can help you learn **a lot** about your **total** physical activity level.

Your **total** physical activity includes spontaneous activity **and** your planned activity.



What is a Pedometer?

- A pedometer is a fun and simple tool that has been shown to help people be aware of and improve their activity levels.
- Pedometers measure your movement such as walking or climbing stairs throughout the day. They capture that movement in the form of steps.
- Wearing a pedometer as part of your daily routine will begin to give you a better idea of how much **total movement** you get. The pedometer estimates total movement by capturing most of your planned and spontaneous activity.

How Does a Pedometer Work?

- It records a “step” each time your foot hits the ground.
- If you wear it correctly, it gives you credit for *most steps you take* throughout the day including:
 - during spontaneous activities such as household chores, or simply walking around the house
 - during planned activity such as brisk walking outside
- It does not matter where the steps are coming from. All steps are added together to give you a total count for the day.
- Pedometers do best counting steps in movement that resembles walking. You can't wear it swimming, and it will not measure biking or arm activities very well.



Why Wear a Pedometer? What Are Some Benefits?

- It can help you keep track of your total daily physical activity.
- It can help you monitor your activity when your routine changes (such as weekdays to weekends, or season to season).
- You can try fun activity challenges and learn new ways to add steps into your daily routine. The next pages will help you get to know your pedometer.



Pedometer Instructions

Wear your pedometer correctly to get a more accurate step-count.

When you first get up in the morning:

- Clip the pedometer to your waistband, on your side, in line with your hip.
- **Reset it to zero.**
- Make sure it is securely attached and worn firmly against your body so that it does not bounce.
- Do not let it flop around in a pocket and never wear it on a jacket.
- **Keep it upright.**
- **Do not let the pedometer get wet.** Don't wear it bathing or swimming. Keep it under your coat when you walk in the rain or snow.



Before you go to sleep at night:

- Take it off. Put it where you can find it easily in the morning.
- Write down the number of steps you took that day in your Food and Activity record.

Important: If you think the batteries need to be changed, return the pedometer to your Lifestyle Coach.



Get to Know Your Pedometer and Your Activity Levels

Test your new pedometer with the “100 Step Test”.

Complete this simple test to see if you're wearing the pedometer correctly and if it is measuring your steps accurately:

1. Clip the pedometer firmly at your waist.
2. Reset it to zero and close the cover.
3. Walk 100 steps.
4. Open the pedometer and check how many steps were recorded.

100 steps = Perfect
95 or 105 steps = Good ($\pm 5\%$ error)
90 or 110 steps = Acceptable ($\pm 10\%$ error)
85 or 115 steps = Unacceptable ($\pm 15\%$ error)

You can repeat this test from time to time to feel confident about the accuracy and placement of your pedometer.

Pedometer Problem Solving:

If you suspect it is not working properly:



- Make sure that it is attached firmly against your torso and does not flop around.
- Try pants with a belt or a better fitting waistband.
- If it won't stay upright, or you are getting unacceptable readings, try securing the pedometer to **the back** of your waistband (see photo). Recount your steps.
- Major increases or decrease in weight may change how you should wear the pedometer. If this occurs, you can do the 100-Step Test again to test the accuracy/placement.

Bottom line: Wear your pedometer in the spot that gives you the most reliable results



Use Your Pedometer to Learn About Your Activity Patterns

Key Challenge #1:

How many steps do you take in an average week?

1. Wear your pedometer every day for seven days in a row. Record your **daily steps** here (or use your own self-monitoring record).

| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | |

2. Add up the daily steps to get your total number of steps per week.

My total steps per week: _____.

3. Divide the total number of steps per week by 7 to get your average steps per day. Write this number in the box below.

My average steps per day = _____

Are your average steps per day about what you expected?



Use Your Pedometer to Develop an “Active Head”

Key challenge #2:

1. Wear your pedometer on two days during the week when you would typically get about the same level of physical activity or movement.
2. On the first day, go about your routine activities as you normally would do. This is your **Normal Day**.
3. On the second day, include as many short bursts of *spontaneous activity* as you can. Do not make any major changes to your day. Rather, turn any spare minute into an active minute.

Examples: take the stairs instead of using the elevator, walk across the hall or street to talk to your neighbor instead of using the phone.

Think of other quick and simple ways that might work for you. This is your **Active Head Day**.

Record your steps below.

| | |
|--------------------------|-------------------------------|
| Day 1: Normal Day | Day 2: Active Head Day |
| Total steps= _____ | Total steps= _____ |

Compare the number of step taken on these two days.

- Do they differ? YES NO
- If yes, what do you think explains the difference?

- If no, what could you have added to your day to make a difference?

Subtle increases in movement throughout the day can lead to an increase in your total physical activity levels. Developing an **Active Head** is one way to make this happen. Your pedometer can help you measure these small increases in movement.

Other pedometer challenges to try:

Measure Your Mile in Pedometer Steps

- Wear your pedometer to a local school track, or any fairly level surface (a sidewalk or street) where you can walk one mile. Choose a location where the exact distance is known.
- Reset your pedometer to zero, walk the mile, and record the number of steps you took. Now you can use this "personal steps per mile" number in the future to estimate distances (miles) walked.

It takes me _____ pedometer steps to walk one mile.

Keep in mind:

- It takes, on average, about 2000 steps to walk *one mile*.
- This step count varies from person to person. A taller person will take fewer steps per mile compared to someone who is shorter because of longer stride length.
- For a moderate walking pace of 3 miles/hour, it takes about *20 minutes to walk one mile*.

Measure Your Weekday vs. Weekend Pedometer Steps

Some people tend to be more active during the weekdays while others are more active on the weekends. What is your pattern?

- Wear your pedometer and record the number of steps taken each weekday (Monday-Friday). Add up your Monday-Friday steps and divide by 5. This is your weekday average.
- Next, record the number of steps taken each day on Saturday and Sunday and divide by 2. This is your weekend average.

Average weekday steps _____.
Average weekend steps _____.

When are you more active? Did your answer surprise you?



Adding Steps Throughout Your Day

Try some of the simple ideas and tips below.

At Home

- Make an after-dinner walk a family tradition.
- Walk your dog.
- Try to take half of your goal steps by noon.
- Get up and move around once every 30 minutes.
- Walk while you talk on the phone.
- Reward your family for meeting step goals with fun activities.
- Walk around your house during TV commercials (they average 17 minutes per one hour of TV programming)
- Walk while your kids play sports.
- Walk to your neighbor's house instead of calling.
- Start a walking club with your neighbors or friends.
- Turn off the TV and do something active with family.
- Take a walk and pick up litter in your neighborhood or in a park.
- Plan active weekends (longer walks, scenic hikes, playing in the park).
- Plan walks into your day (a friend at the beginning, with your family at the end).

On the Town

- Park farther away in parking lots.
- Limit use of elevators and escalators – use the stairs instead.
- Plan active vacations.
- Walk at the airport while waiting for your plane.
- Avoid people movers at the airport.
- Walk your grocery cart back to the store.
- Walk, don't drive, for trips less than one mile.
- Take several trips to unload groceries from your car.
- Avoid the drive-through at the bank. Instead, walk inside.

At Work

- Get off the bus earlier and walk farther to work.
- Take several 10-minute walks during the day.
- Host "walking" meetings.
- Start a break-time walking club with your coworkers.
- Walk a few laps on your floor during breaks, or go outside and walk around the block.
- Get up and move at least once every 30 minutes.
- Choose the farthest entrance to your building, then walk the long way to your office.
- Take a longer route to your meeting.
- Walk during your lunch break.
- Take 5 minute walking breaks from your computer.
- Take the stairs rather than the elevator or the escalator.
- Walk to a colleague's office rather than calling or sending an email.
- Park farther away in morning or when you go to lunch.
- Walk to a restroom, water fountain, or copy machine on a different floor.



Mixing It Up and Staying Active

There are many ways to add variety to your activity routine. “Mixing it up” can make activity more fun and help to prevent boredom.

Using a pedometer is one way to help you to mix it up. Can you think of any other ways?

| Ways to Mix It Up: | Ideas: |
|--|---------------|
| <p>Add Variety:</p> <ul style="list-style-type: none">• Do something new.• Do the same activity in a new place or at a new time.• Be active as a way to be social.• Be active with someone new. | |
| <p>Make Being Active Fun:</p> <ul style="list-style-type: none">• Dance.• Listen to music or audio books while being active.• Look for active events such as a walking tour or a group bike ride. | |
| <p>Challenge yourself:</p> <ul style="list-style-type: none">• Find ways to add steps to your day.• Train for an organized event such as a charity walk.• Take a nature hike. | |

Changes in the weather/seasons can be a barrier to keeping up with your activity plan. Can you think of ways to stay active in bad weather?



The F.I.T.T. Principle

Physical activity is made up of several components. It is not just about what type of activity you do, but how long you do it each time, how often you do it, and how hard you perform the activity.

One way to remember all of these components is the acronym, **F.I.T.T.**: **F**requency of activity, **I**ntensity of activity, **T**ype of activity and **T**ime of activity.

So far, we have discussed frequency, type of activity and time (or duration) of your physical activity program. **Intensity** is the final component to consider.

| F.I.T.T. | What to Do: |
|--|---|
| Frequency How often are you active? | <ul style="list-style-type: none">• Try to be active on most days of the week (at least 3 days per week is recommended, 5 to 7 days are even better). |
| Intensity How hard are you working while being active? How fast is your heart beating? | <ul style="list-style-type: none">• Two methods that will be described in this session are:<ol style="list-style-type: none">1) Rating of Perceived Exertion2) Estimated Target Heart Rate |
| Type of Activity Aerobic activity is the foundation of this program. <i>Note: We will discuss resistance training in a later session.</i> | <ul style="list-style-type: none">• For heart fitness, do aerobic activities that challenge your heart and lungs.• Use larger muscles such as your legs. Examples: Brisk walking, swimming |
| Time How long are you active? | <ul style="list-style-type: none">• Stay active for at least 10 minutes at a time.• Increase slowly. |



Physical Activity Intensity Level

So far, your GLB activity focus has been on frequency (most days of the week), type (aerobic activities that strengthen your heart) and time (at least 150 minutes per week). Now let's focus on intensity.

Increasing physical activity intensity can improve how well your heart works. Remember, your heart is a muscle, too. If you exercise your heart by doing aerobic activity, it will become stronger and more fit over time. This is just like the muscles in your arm becoming stronger if you lift weights.

As your heart becomes stronger over time, that means your aerobic fitness is improving. "Aerobic fitness" refers to how well your heart can pump oxygen in your blood to your muscles, like those in your arms and legs. When you perform aerobic activity regularly, your aerobic fitness improves and your heart does not need to beat as fast for the same effort. As your heart becomes stronger, you may notice that it's easier for you to do things like walking up stairs and hills.

After you have reached the 150 minutes per week activity goal, consider kicking up the intensity of your activity a bit. For example, walk a little faster, just enough to notice that you are breathing a little bit harder, or add hills to your walking route.

How to Measure your Physical Activity Intensity

There are several ways that you can measure your physical activity intensity. Below are two common ways:

1. **Rating of Perceived Exertion or RPE** (see next page)
2. **Estimated Target Heart Rate** (see page 15).

In GLB, we use the RPE but both are good options.

Please check with your health care provider if you plan to make major increases in the intensity of your activity.



How Hard are You Working? Estimating Rating of Perceived Exertion

Rating of Perceived Exertion (RPE) is:

- A tool that allows you to measure how hard you feel you are working while performing your physical activity.
- Based on a scale of **1 to 10** with a **1** being that the activity was very easy and a **10** being the hardest you've ever worked.
- Aim for a rating between **4** and **6**. This is considered a good training range for making your heart stronger.

Most people have a good sense of how hard they are working when they're being active. Listen to your body.

Rate yourself on the following RPE scale while you are being active.

How Hard are You Working?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|--------------------------|--------------------------|---|--|--|--------------------------|---|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Very easy | Easy | | Moderate | Somewhat hard | Hard | | Very hard | | Very, very hard |
| Examples: | | | | | | | | | |
| "I'm not working hard at all. I can talk and even sing easily." | | | "I'm working and breathing harder than usual. I can still talk easily." | "I'm working and breathing somewhat hard. I can talk fairly easily." | "I'm working hard and breathing deeply. I can still talk." | | "I'm working very hard. I can't catch my breath or talk." | | |
| ← Stay in this range → | | | | | | | | | |



To Do:

Check the boxes when you complete each item:

- Keep track of your weight.** Weigh yourself at home at least once a week. Record it.
- Record everything you eat and drink every day.** Come as close as you can to your calorie and fat gram goals.

New things to practice:

- Wear your **pedometer every day this week.** Calculate your average steps per day (see page 5).
 - My average step counts **per day** _____
- Complete the **Active Head** challenge on page 6.
- Estimate activity intensity** using the rating of perceived exertion (RPE). Record it each time you are active.
- Optional: Calculate your estimated target heart rate (see pages 15-16).
- Be active for _____ minutes this week.** Record what you do.
 - The suggested activity goal for last week was **150 minutes**.
 - If you reached **150 minutes**, congratulations. This will continue to be your minimum goal throughout GLB. If you are doing more, great work and keep it up.
 - If you were active for less than **150 minutes**, that's okay. Start at your current activity level and try adding 30 minutes more.

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Estimating the Intensity of Your Workout by Taking Your Heart Rate

You can calculate your **estimated target heart rate**. This range is a guide that you can use during your aerobic activity workout. But, **always** listen to your body first.

Several things can affect your heart rate, such as:

- Stress
- Sickness
- Heat
- Medications (in particular blood pressure medications such as beta-blockers)

If you are interested, follow these steps:

First you need to measure your resting heart rate. You will need a clock, watch, or stopwatch with a second hand.

- Use your index and middle fingers. Don't use your thumb, which has a pulse of its own.
- Place your fingers on your wrist, just above the base of the thumb.
- Or place the tips of the fingers on your neck, on either side of the Adam's apple. Do not press too hard on the neck or you may feel dizzy or light headed. This option is less preferred.

Next, find your estimated target heart rate.



To calculate your estimated target heart rate:

1) Maximum heart rate: Subtract your age from 220.

$$220 - \underline{\quad} = \underline{\quad} \text{ (estimated maximum heart rate)}$$

2) Resting heart rate: Measure your heart rate at rest by counting beats for 30 seconds and multiplying by two.

$$\text{Resting beats in 30 seconds } \underline{\quad} \times 2 = \underline{\quad} \text{ (resting heart rate)}$$

3) Target heart rate =

((maximum heart rate – resting heart rate) X % intensity) + resting heart rate.

$$\text{Lower range 50\%} = (\text{maximum heart rate} - \text{resting heart rate}) \times 0.5) + \text{resting heart rate} = \underline{\quad}$$

$$\text{Upper range 70\%} = (\text{maximum heart rate} - \text{resting heart rate}) \times 0.7) + \text{resting heart rate} = \underline{\quad}$$

Your target heart rate range is to
beats per minute (bpm).

Finally, measure your heart rate while you are exercising.

- Take your pulse as directed above while you are in the middle of your activity, long after your warm up. Keep moving, rocking side-to-side.
- Stay within your target heart rate range.

Example for a 40-year old:

This person has an estimated maximum heart rate of **180 bpm** and a resting heart rate of **70 bpm**.

- 50% Target Heart Rate: $[(180 - 70) \times 0.50] + 70 = 125$ bpm
- 70% Target Heart Rate: $[(180 - 70) \times 0.70] + 70 = 147$ bpm
- The Target Heart Rate range = 125 – 147 bpm



Step Credit Calculation

For activities that are not recorded by your pedometer

Some types of physical activity aren't recorded by the pedometer or there may be situations when the pedometer cannot be worn.

The two most common examples are biking and water activities such as swimming and rowing. However, you can estimate a "step credit" for these activities and add it to your daily pedometer count.

Determine your step credit:

1. Figure out how many steps you take to walk one mile (see page 7). At a normal walking pace (3 miles/hour), it takes about 20 minutes to walk a mile.
2. Divide your number of steps by two. This will give you the number of steps you took in 10 minutes. Don't worry if you took a little more or less than 20 minutes to walk the mile. This is only an estimate.
3. Credit yourself the number of steps you calculated above for every continuous 10 minutes "non-pedometer" activities you do.

Step Credit Example

1. It takes Jane **2,000** steps to walk one mile.
2. **2,000** divided by 2 = **1,000**
3. **1,000** is the number of steps that Jane will record for every **10 minutes** of "non-pedometer" activities like biking, swimming, or rowing.