



Session 4: Move Those Muscles

It's all about moving more.

People sometimes report more difficulty with movement after their injury. The key is starting slow and at a safe pace.

What tasks do you do now with less movement than before your injury?

Moving more is one of two main goals of GLB. It is key to your overall physical health, well-being and independence. An active lifestyle can also help you manage your weight.

To add movement back into your daily routine, **focus on the two important types of activity**.

1. Planned activity:

- Moderate intensity physical activity (similar to a brisk walk) that you add to your schedule
- The eventual goal is to reach at least **150 minutes of moderate intensity activity/week**. Example: 30 minutes of brisk walking on 5 days per week.
- Bouts of activity should last at least 10 minutes
- Build up at a pace that is safe and do-able

2. Spontaneous or unstructured activity:

- Activity choices you make throughout the day
- Hard to keep track of easily but makes a big difference in your physical activity level at the end of the day
- Often these activities are of light intensity (such as housework or gardening)
- Research suggests that replacing your sitting time with physical movement is important for your overall health



Think back. Were there times when you were more physically active?

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What sort of activities did you do? What worked best for you?

Most people begin this program with their own thoughts and feelings about what it is like to be active or inactive (see common examples below). *What are yours?*

	What's good about it	What's hard about it
Being Inactive	<i>"I like to lie on the couch and watch TV"</i> <hr/> <hr/>	<i>"I feel stiff and sluggish"</i> <hr/> <hr/>
Being Active	<i>"I feel strong and healthy"</i> <hr/> <hr/>	<i>"I am really busy"</i> <hr/> <hr/>

What a Bargain: The Many Benefits of an Active Lifestyle

Physical activity is one of the biggest “bargains” you can get. It has many rewards. Here are just a few:

Being more active may:

- Help you have more energy, feel better and sleep better.
- Make you more physically fit. Being more fit will make it easier for you to do your daily tasks (like climbing stairs, keeping up with your children, grandchildren or friends).
- Improve your bone density and muscle strength. This leads to better joint health, flexibility, and balance.
- Lower your risk for diabetes, heart disease and certain types of cancer.
- Improve your mental alertness and brain-function. This can lower risk of dementia and Alzheimer’s disease.
- Help you lose weight and keep it off.

Being more active may:

- Raise your HDL (“good”) cholesterol.
- Lower your triglycerides.
- Lower your blood pressure.
- Lower your blood glucose by making your body more sensitive to insulin.



All of these physical activity benefits can lead to better overall physical function and more independence as you age.

What are the main reasons **you** want to have a more active lifestyle?



What You Can Expect from the GLB Physical Activity Program?

Rest assured that **you can do it**. There are many reasons the physical activity part of GLB is likely to work for you.

- **Realistic starting point:** Begin where you are right now. No judgment, no questions asked. Add small amounts of activity over time.
- **Choose your own types of activities:** Most people choose brisk walking as their main form of activity. It's your choice.
- **Keep track:** Being aware of your activity habits is important. It's key to changing your activity behavior. It also lets you see your progress over time.
- **Plan ahead:** A physically active lifestyle does not happen by chance. Look at your typical week and schedule blocks of time that are most likely to work for you.
- **Progression:** Should be slow and safe. Increase around 30 minutes per week (less than 5 minutes per day). For safety reasons, we recommend that you increase duration of activity (total time) first, not intensity (how hard you are working). Any increase in either duration or intensity should be gradual.
- **Safety:** This program is all about safety. Let your health care provider know that you will be making changes in your eating, activity, and weight. You may be advised to limit or avoid certain types of activity.





Your Physical Activity Goal: Planned Activity

Aim for at least 2½ hours (that’s 150 minutes) of physical activity each week.

This is the “planned” part of your total activity goal. It is safe, gradual, and do-able. It is also in line with many national public health recommendations as well as the DPP itself.

- Choose forms of physical activity that are of **moderate intensity**, like brisk walking.
- Aim to do at least 10 minutes at a time.
- Work up to this goal *slowly*.
- Spread the activity over 3 or more days per week.
- Pick activities you LIKE.

You have thought about activities you used to do and what worked best. What will you do to get started with your activity progression now? Many people choose walking and that is great. List below some of the things that you think will help you put your best foot forward.



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Physical Activity Progression: Where should I start?

How many total minutes did you spend doing moderate intensity physical activity this past week?

- If **less than 60 minutes**, aim for 60 minutes this week.
- If **60 minutes or more**, aim for the same amount this week.
- Track your activity minutes this week.

How to progress: Gradually increase the amount of physical activity you do. A good rule of thumb is to increase by 30 minutes each week. For example:

Week 4:	Walk 60 minutes per week. (12 minutes on 5 days per week)
Week 5:	Walk 90 minutes per week. (18 minutes on 5 days per week)
Week 6:	Walk 120 minutes per week. (24 minutes on 5 days per week)
Week 7:	Walk 150 minutes per week. (30 minutes on 5 days per week)
Week 8+:	Walk at least 150 minutes per week.

Types of Aerobic Activities

Aerobic physical activities when done at a moderate intensity work your heart and lungs. They elevate your heart rate and keep it up for the duration of the activity. Most people choose to do **brisk walking** because it is relatively easy to do and good for you.

- Aerobic dance (step aerobics)
- Bicycle riding (outdoors, or indoor stationary bike)
- Dancing (square dancing, line dancing)
- Hiking
- Rowing (canoeing, rowing machine)
- Skating (ice skating, roller skating, rollerblading)
- Skiing (cross-country, NordicTrack)
- Elliptical, StairMaster®
- Swimming (laps, snorkeling)
- Tennis
- Volleyball
- Walking (treadmill, outdoor, indoor mall or fitness center)
- Water Aerobics

Note: Resistance training is not considered aerobic but is highly recommended; more on this later.



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Plan for an Active Week

"A goal without a plan is just a wish"

-Antoine de Saint-Exupery, French writer

Last week we asked you to be aware of the physical activities that you were doing. Now you will **make a plan** for a more active week and keep track of your physical activity minutes.

Planned Activity: You *can* find the time to be active:

- Set aside blocks of time this week to be active.
- Record bouts of activity that last 10 minutes or longer and are of "moderate" intensity (like a brisk walk).

	What will you do?	When?	Where?	Minutes
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				
Total planned physical activity this week				

Don't just wait for physical activity to happen.

Make it happen by **devoting blocks of time** to be active. Look ahead each week, plan dates with yourself and others, and mark it on your calendar. Try not to schedule other things during those times.

Once you complete your activity, record your minutes and give yourself credit.



The Smart Way to Be Active: Keep It Safe

Being active is usually quite safe. However, in rare cases, problems can arise. *Prevention* is the best approach. **Here are 5 key ways to be sure that you can keep it safe when being active.**

1. WARM-UP and COOL-DOWN

Warm-up

- Slowly increases blood flow and prepares your body for exercise.
- This is even more important if you have high blood pressure or a history of heart conditions.
- Do whatever activity you plan to do but at a lower intensity.
- Take about 5 to 10 minutes to warm up. For example, walk at a slow pace before picking up to a brisk pace.

Cool-down

- Helps keep your heart rate and blood pressure from dropping too quickly. If you stop abruptly, you may feel light-headed.
- Do whatever activity you have been doing, but at a lower intensity (go back to a slow walking pace).
- Take about 5 to 10 minutes to cool-down.
- Once you cool down, you may choose to do a few minutes of mild stretching.

2. KEEP IN CONTROL

- Stay in the driver's seat and don't let gravity be in control.
- Jerky unstable movements (like "bouncing") can lead to injury.
- When doing stretches, or any activity, use your body (or stable object like a chair) to help support yourself and keep in control.
- See page 14, exercise 2 for an example of a supported side bend.

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3. KEEP BALANCED

- Always work BOTH sides of your body equally.
- When you stretch or strengthen on one side, don't forget to do repeat on the other side.
- If you walk laps on a small track, be sure to change direction.

4. BREATHE

- Keep breathing while exerting yourself during physical activity. (Swimming underwater is the exception to the rule).
- Holding your breath during exercise can increase blood pressure.
- Count out loud if that helps.
- Pace yourself.

5. STRETCH

- Stretching may prevent muscle soreness, cramps, and injuries.
- Stretching may also help you become more flexible and feel relaxed.
- WARM-UP before stretching (Example: gentle walking).
- Move slowly until you feel the stretch.
- Hold for 15 to 30 seconds.
- See stretching exercises on pages 13-16.

Important Message from Your Coach:

NO PAIN IS GAIN. *Always listen to your body.*

- Make small, gradual increases in how often, hard, and long you are physically active.
- You may feel sore when you start or increase an activity. Some soreness is normal, but it should ease up over time.
- Physical activity ***should not be painful.*** If a certain activity is quite painful—STOP. If pain persists, seek medical advice.



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When to stop exercising...

Being more physically active is usually quite safe. But in rare cases, problems can arise. **The following may be signs of something serious like a heart problem, so should NEVER be ignored.**

Chest pain or discomfort:

What: Uncomfortable feeling of pressure, pain, squeezing, or heaviness. Especially if it comes on with increased effort or when trying a new activity.

Where: Possibly in the:

- Center of the chest,
- Spread throughout the front of the chest, or
- Radiating to, or even starting, in the shoulder(s), arm(s), neck, jaw, and back.

What to do: Stop and sit or lie down.

If it doesn't go away after 2-4 minutes, call 9-1-1.

If it does go away, let your health care provider know this happened.

Severe nausea, shortness of breath, cold sweats, feeling lightheaded or irregular pulse/palpitations:

What to do: Stop and sit or lie down.

If it doesn't go away in 5-10 minutes, call your health care provider.

If it does go away, let your health care provider know this happened.

We want you to stay safe while you exercise. Following the guidelines above will lessen the risk of exercise-related injury.



Your Physical Activity Goal: Spontaneous/Unstructured Activity

Every day you have many chances to make “the more active choice”. Every time you move it adds up to a “more active you”.

- 1. Start by becoming more aware** of these opportunities.
 - These activity moments will usually be brief and of light intensity.
 - They will often be spontaneous and last a few minutes.
 - These minutes will add up and make a big difference in your total physical activity level.
 - Experts suggest you pay closer attention to this “light intensity activity”. It makes up the largest portion of your total physical movement each day.
- 2. Increase your spontaneous activity.** When you have the chance, choose to move.
 - Walk instead of driving when possible (called “active transport”).
 - Get off the bus a few stops sooner and walk.
 - Take the stairs instead of the elevator, even a few flights.
 - Be active while you watch TV. Get up and move during commercial breaks.
- 3. Decrease the time you spend sitting.** Be aware of how much time you sit (at work, at home, during social activities).
 - Cut down on your TV and screen time.
 - **Break up long bouts of sitting.**



By replacing sitting time with movement of any intensity, you will increase your overall physical activity level. This behavior change may benefit your health.

Name some ways **you** could make an active choice or replace your sitting time. Study your routine. Find strategies that will *work for you*.



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:

- Be active for _____ minutes this week.**
 - How many minutes were you active last week? _____
 - If **less than 60 minutes**, your goal for this week is 60 minutes.
 - If **60 minutes or more**, aim for the same amount this week.
- Follow your Activity Plan**
 - Warm up, cool down, and follow the guidelines for safe stretching.
- Keep track of your minutes of physical activity.**
 - Record only the time when you're **doing** physical activity.
 - Only record activities that last 10 minutes or more.
 - Begin to fill in the "Year-at-a-Glance" chart (optional).
- Make active choices throughout the day.**
 - List some of the ways you increased your spontaneous physical activity.

Session 4: Resources

Stretches and Warm-up Activities

Footwear information: Wear a Good Pair of Shoes

In Case of Injury

Beat the Heat

Keep Warm in the Cold

Tracking Activity: Year-at-a-Glance

References:

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Centers for Disease Control and Prevention, Department of Health and Human Services, Physical Activity Guidelines for Americans (2008): www.health.gov/paguidelines

American Heart Association: Warning Signs of a Heart Attack: http://www.heart.org/HEARTORG/Conditions/HeartAttack/WarningSignsofaHeartAttack/Warning-Signs-of-a-Heart-Attack_UCM_002039_Article.jsp



Stretches

Stretching may prevent muscle soreness, cramps and injuries. It may help you become more flexible and feel relaxed. REMEMBER:

- Always WARM-UP before stretching (such as gentle walking).
- Stretching should not feel painful. Move slowly until you feel the stretch.
- Hold the stretch for 15 to 30 seconds.
- Breathe.

Here is a stretching program for you to try. Some stretches show two options. The second image shows a more advanced option for each specific muscle group. Be sure to listen to your body and choose the stretches that work best for you.

1a. Corner Chest Stretch

- Put your hands up in a corner, keep your shoulders relaxed.
- Gently step forward until you feel a stretch in your chest.
- Hold for 15 to 30 seconds. Repeat 3 to 5 times.



1b. Chest Stretch (more advanced)

Note: Do not do this stretch if you have a shoulder injury.

- Clasp your hands behind your back with your palms facing up.
- Pull your hands down and press your shoulder blades together. Your chest should stick out.
- Gently lift arms up, moving hands away from your back.
- Hold for 15 to 30 seconds. Repeat 3 to 5 times.



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2. Waist Bends

- Stand up tall with your feet shoulder-width apart.
- Bringing your left arm over your head and keep your right arm on your waist. Bend **gently** to the right.
- Look straight ahead.
- Hold for 15 seconds. Repeat 3 to 5 times.
- Repeat the exercise, bending to the left side.



3a. Sitting Hamstring Stretch

- Sit at the edge of a chair with your knees slightly bent. Straighten one leg out in front. Sit up straight.
- Gently bend forward at the waist, **keeping your shoulders back and your back straight.**
- Hold for 15 to 30 seconds. Repeat 3 to 5 times on both legs.



3b. Hamstring Stretch on Floor (more advanced)

- Sit on the floor with one knee bent.
- Reach out your hands towards the extended leg and bend forward at the waist, **keeping your shoulders back and your back straight.**
- Hold for 15 to 30 seconds. Repeat 3 to 5 times on both legs.



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Note: Do not do these stretches if you have had a hip replacement.

4a. Figure 4 Stretch –lower intensity

- Cross one ankle **below** the opposite knee and allow knee to fall out.
- To deepen the stretch, gently bend forward at the waist, **keeping your shoulders back and your back straight.**
- Hold 15 to 30 seconds. Repeat 3 to 5 times on both legs.



4b. Figure 4 Stretch (more advanced)

- Keeping your back straight, cross one ankle over the opposite knee and allow knee to fall out.
- To deepen the stretch, bend forward at the waist, **keeping your shoulders back and your back straight.**



5a. Lower Back Stretch

- Can be done on bed or floor.
- Lay on your back, with legs extended.
- Bring one knee into your chest, clasp hands behind thigh.
- Gently pull knee into chest.
- Hold for 15 to 30 seconds. Repeat 3 to 5 times on both legs.



5b. Lower Back Twist (more advanced)

- Lay on your back, bring both knees to 90 degrees with feet on floor.
- Keeping shoulders flat in the ground, let both knees fall gently to same side.
- Hold for 15 to 30 seconds.
- Repeat 3 to 5 times on both sides



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6a. Hip Flexor Stretch

- Take a big step forward. Gently bend the front knee until you feel a stretch in the front of your hip of the extended leg.
- Keep both toes pointing forward. **Do not allow front knee to go over toes.**
- Hold for 15 to 30 seconds. Repeat 3 to 5 times on both legs.



6b. Kneeling Hip Flexor Stretch (more advanced)

- From kneeling, take a big step forward.
- Keep your upper body straight, while you gently increase the weight on your front foot, **do not allow front knee to go over toes.**
- You should feel the stretch in the front of the hip of the leg that is kneeling.
- Hold for 15 to 30 seconds.
- Repeat 3 to 5 times on both legs.



7. Calf Stretch

- Stand straight with feet shoulder-width apart.
- Holding on to a **stable** chair or countertop, step forward with your right foot, slightly bending your right knee.
- The front of your knee should be in line with the front of your toes. Your left leg should stay relatively straight and your left heel should remain on the floor. Slightly bend your front knee.
- Hold for 15 to 30 seconds. Repeat on the opposite side.





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Wear a Good Pair of Shoes

You don't need to buy new or special shoes if the ones you have now fit well and support your feet. Keep these tips in mind when shopping for shoes:

Visit one or more stores you trust. Try on various styles and brands.

You may be able to ask the store staff to help you find shoes that fit well, give the support you need, and suit the kind of activity you do.

Look for a good fit.

- Wear the kind of socks you'll wear when you're active.
- Shop right after you've been active. That way, your feet will be the size they are when you're warmed up.
- Shoes should be comfortable right away. Try them on and walk around. They should NOT need to "stretch out" later.
- There should be one thumb's width of space between your longest toe and the end of the shoe.
- The heel should NOT pinch or slip around when you walk.
- Shoes should bend easily at the ball of your feet (behind your toes).

Get the support you need for the kind of activity you plan to do.

- Your shoes should match the shape of your foot and the way your feet strike the ground.
- Take your old shoes with you to the store. The pattern of wear can show the kind of support you need. For example, is the back of the shoe worn down unevenly on the bottom (that is, does it slant toward the inside or outside)? If so, you may need extra support for arches or flat feet.
- You may want to look for shoes that suit the activity you plan to do. Stores offer many types of shoes for activity, such as running or aerobic dance. They are made to give you the kind of support needed for that activity.

The bottom line is good fit, comfort, and support. You may want to visit a store with expert staff who will know how to help you.



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In Case of Injury

Call your health care provider when you suspect a serious injury. If you can't move the injured area, or if there is immediate and severe swelling, these may be signs of a broken bone.

If you get a sprain, strain, "pull" or bruise: Think **R.I.C.E.**

What R.I.C.E stands for	What to do
Rest (restrict movement)	<ul style="list-style-type: none">• Stop doing the activity.• Rest for a few days.• Sometimes splints, tapes, or bandages are needed.
Ice	<ul style="list-style-type: none">• Apply ice or cold compresses for the first 24 to 36 hours after the injury. This reduces pain and swelling.• Schedule: 10 minutes on, 10 minutes off.• <i>Always</i> wrap ice or compresses in an absorbent towel or cloth. Don't apply directly or wrapped in plastic. That can cause frostbite and more injury.
Compression (Pressure)	<ul style="list-style-type: none">• Apply pressure by wrapping the injury with an elastic bandage. This helps to reduce swelling and blood flow (pressure) to the area.• The bandage should be tight enough to reduce blood flow but not cut it off completely. Loosen the bandage if your toes or fingers begin to feel numb or lose their color.
Elevation	<ul style="list-style-type: none">• Lift the injured area above heart level. Keep it elevated whenever possible, not just during icing.• This helps reduce the pooling of blood in the area that can cause pain and throbbing.

If ever in doubt about your physical condition, call your health care provider.



Beat the Heat

- CHECK THE WEATHER ADVISORY. On rare occasions, it may be too hot to exercise outdoors.
- Drink water before, during, and after being active.
- On hot, humid days, be active early or late in the day when it is the coolest.
- Don't overdo it. Go at your own pace.
- Wear light, loose-fitting clothes.
- Wear a hat to shade your face from the sun.
- Know the signs of heat illness: paleness, dizziness, nausea, vomiting, fainting, warm and flushed skin, or not sweating in situations in which you would normally expect to sweat.
- Tell someone your route and when you'll be back.
- Better yet, go with a friend.
- Carry a cell phone and some form of ID.





Keep Warm in the Cold

- CHECK THE WEATHER ADVISORY. On rare occasions, it may be too cold and/or icy to exercise outdoors.
- Be active in the middle of the day when it's the warmest.
- Drink plenty of water, even though you may not be sweating.
- Dress warmly from head to toe.
 - Head: Wear a hat or earmuffs.
 - Body:
 - Dress in several thin layers. Remove or add layers as needed.
 - Full-length long-underwear or tights on your legs.
 - T-shirt, long-sleeved turtleneck.
 - Well-vented wind jacket with a zipper.
 - Hands: Wear mittens or gloves.
 - Feet: Wear well-insulated socks. Wear shoes or boots that keep your feet warm and dry and give you good traction.
- Go out against the wind and come home with the wind.
- Avoid patches of ice.
- Know the signs of frostbite: numbness, tingling or a burning feeling and/or changes in skin color.
- Tell someone your route and when you'll be back.
- Better yet, go with a friend.
- Carry a cell phone and some form of ID.



