

Session 13 Leader Guide:

Strengthen Your Physical Activity Plan

Objectives

In this session, the participants will:

- Discuss the benefits of resistance training.
- Recognize safety issues related to resistance training before, during, and after a session and know when to stop exercising.
- Understand techniques for safe resistance training which emphasize warming up and stretching to prevent injury.
- Learn proper form and technique for each exercise and how to modify the exercises to meet an individual's skill or comfort level.
- Discuss when to increase repetitions or weight.
- Develop an activity plan to use between this and the next session.

To Do Before the Session:

- If providing Food and Activity books; have a supply available for participants.
- Review Food and Activity records from last session; add comments.
- Prepare Session 13 handout for participant notebook.
- Print copies of the **Group Lifestyle Balance Resistance Training Program Poster**. For readability, we suggest copying 8 ½ X 14 (legal size) paper or cardstock. Ideally, have it printed on 11 X 17 paper or cardstock at a print shop.
- Print copies of the **GLB Resistance Training Log**; one per participant.
- Print copies of the handout, **When You Reach Your Weight Goal** to review with participants, as they achieve their weight goals.
- Print copies of the **Group Lifestyle Balance Monthly Calendar**; have a supply available for participants.
- Optional: Visit www.parcph.org for additional information. Determine if you will print copies of the PARC-PH Resistance Training Handout for participants.
- Optional: To become familiar with how to perform resistance training exercises, view the Resistance Training DVD. Ordering information can be found in the GLB Providers Portal.
- Determine if you would like to provide your participants with the Resistance Training DVD to view outside of the group meeting.

Available in the GLB Providers Portal:

<https://www.diabetesprevention.pitt.edu/my/login.aspx>

- **GLB Resistance Training Log**
- **Group Lifestyle Balance Resistance Training Program Poster**
- **Optional: 2017 GLB Supplies Ordering Information** for how to order the Resistance Training DVD
- **When You Reach Your Weight Goal** handout
- **Group Lifestyle Balance Monthly Calendar**
- **Guidelines for Reviewing Food and Activity Records**

Note: The Leader Guide for this session is written as if the participants have no experience with resistance training before this time. Use your judgment to change your presentation of the session for those participants who are already significantly active.

Group Sharing Time (allow at least 5 minutes)

Let's take a few minutes to see how things went since our last meeting.

Overall, how did it go? What went well? What problems did you have? What could you do differently?

The last session was "Ways to Stay Motivated".

Were you able to apply what you learned at the last lesson to something in your life? If yes, how?

- Did you try one of the ways to stay motivated? Was it helpful?
- Did you take steps to connect with others who support your lifestyle goals? How did it go?
- Did you do things you enjoy but rarely do? How did it go?
If you changed how you were recording, how did it go?

[Problem solve with the participants to address any barriers.]

[Praise all efforts to self-monitor and to change eating and activity behaviors. Be positive and nonjudgmental. Encourage group discussion.]

Strengthen Your Physical Activity Plan (page 1)

Introduce this session by reminding the participants that a well-rounded exercise program has four components: aerobic, strength, flexibility, and muscular endurance activities.

Each component benefits your body in a different way. Aerobic activity may have the greatest impact on weight control and cardiovascular disease risk, but resistance training

(also known as strength training) will provide additional benefits for your body and overall health. Flexibility is also an important component, especially for mobility. *[Refer participants to the stretching handout in Session 4 as a resource.]*

It is important to remember that your body is challenged everyday to perform many tasks that require a certain level of muscular strength and endurance. A safe resistance training program can help you maintain a lifetime of physical independence by providing many proven benefits.

Stay Stronger Longer: The Benefits of Resistance Training (pages 2 - 3)

There are many health benefits of resistance training. *[Review pages 2 and 3 and include the following:]*

Helps Prevent Diabetes

- The combination of resistance training **and** aerobic exercise will provide even greater benefits. This is why GLB strongly endorses you to do both.

Helps Maintain and Build Strong Bones

- If you already have osteoporosis or reduced bone density, resistance training can lessen its impact.

Reduces Your Risk of Injury

- Specific types of resistance training, such as free weights, resistance bands, and body weight exercises can enhance balance, coordination, and posture.

Prevents Loss of Muscle Mass with Weight Loss

- Your body burns calories while at rest. You use calories for just staying alive (for bodily functions like breathing).
- As you lose muscle, your body burns calories less efficiently. This can lead to increases in body fat and make it difficult to lose weight.

Improves Your Sense of Well-Being

- Regular resistance training can improve sleep patterns and aid in a better night's rest.
- A program of consistent resistance training will allow you to perform activities of daily living with greater ease.
- Enhanced skeletal muscle strength and endurance can help prevent exhaustion and soreness associated with strenuous activities of daily living.

[Review the list of activities of daily living listed. Ask participants to name some other activities that need strength and/or endurance. Encourage group discussion. Note that "taking care of your personal needs" includes any type of self-care such as bathing, getting dressed, cooking, etc.]

The latest recommendations from the American College of Sports Medicine and the American Heart Association states that resistance training exercise should be performed on all major muscle groups (8-10 exercises) 2 to 3 days per week on non-consecutive days. This means you should have at least one day of rest between days of resistance training.

These benefits of resistance training are in addition the benefits of aerobic exercise. Resistance training is only one of the four components of an exercise program along with aerobic, flexibility, and muscular endurance activities. The benefits that each provides are important, and resistance training is meant to complement **NOT** replace aerobic exercise or any of the other components of an exercise program.

The F.I.T.T. Principle: A Guide for Resistance Training (page 4)

We discussed the F.I.T.T. Principle and how it relates to your aerobic fitness program in Session 8. The F.I.T.T principle can also be used to with resistance training to increase muscular strength and endurance in a safe manner. *[Review page 4.]*

Keep it Safe: Guidelines for Resistance Training (page 5)

[Review page 5 and include the following:]

Before your workout:

Check your equipment

- Inspect machines, free weights, and bands/tubes to ensure they are in good condition

Warm up

- Perform low intensity exercises (e.g. walking in place) and gentle stretches as a good warm up.

Other things to consider:

- Get comfortable - Wear clothing that allows you to move freely through a complete range of motion

During your workout:

- Only Do the Exercises That You Are Able to Do Safely
 - Know what joints and muscles each exercise targets
 - Know how to modify or eliminate exercises that may be inappropriate for you
- Do Not Hold Your Breath
- Breathe throughout the exercise, especially when moving against any resistance

- Keep Each Movement Slow and Controlled
 - Always use proper form (do not use momentum)
 - Use slow and controlled movements (never fast or jerky motions)
 - Rest for 30-60 seconds in between sets

After your workout:

- Cool down
 - It is a good idea to do some gentle stretching after the resistance exercises.
 - Allow your body to ease back down to where you were before you began the workout

Move it Forward: Guidelines for Progression (page 6)

Some soreness after a workout is natural but there are steps you can take to minimize soreness. Making slow progressions, resting, and warming-up/stretching are important for helping to minimize soreness.

[Review page 6 and include the following:]

Progression is Key

You should start out performing only 1 set and gradually increase over time. *[Refer to the box that shows the suggested plan for progression.]*

It's important to know when to increase sets, repetitions, and the level of resistance. *[Emphasize the importance of gradually increasing their intensity and review some rules of thumb for knowing when to step it up.]*

Increasing Sets: Once you are able to perform 1 set of 12-15 repetitions with your choice of equipment without any problems, you should increase to 2 sets of 12-15 repetitions, and finally 3 sets of 12-15 repetitions. *[Refer to box.]*

Increasing Weight: A good indication that you are working at the proper weight or tension is that the last two or three repetitions of the set become somewhat challenging.

For example, if you are performing an exercise for 15 repetitions, then the exercise should become somewhat difficult and challenging around the 12th or 13th repetition. However, you should be able to work through the difficulty to complete the 15 repetitions.

- If you have difficulty before you get to the last 2-3 repetitions, then the weight or tension may be too advanced for your current level of training. You may need to work with less weight or tension.
- If you can perform the entire set with no difficulty at the last 2-3 repetitions, then you should increase to the next dumbbell weight or resistance band/tubing tension

increment or add weight to body weight exercises (i.e. holding dumbbells or soup cans in each hand during a Chair Sit-to-Stand).

[Note: While working with the proper dumbbell weight or resistance tubing tension for your workout program, the difficulty experienced in the last 2-3 repetitions of your set should not in any way affect the proper form of the exercise being performed or your breathing.]

Group Lifestyle Balance Resistance Training Program (page 7)

*[Distribute the **Group Lifestyle Balance Resistance Training Program** poster. Aim to allow time to review and try all of the exercises.]*

*[Demonstrate proper form and technique for each exercise before the participants give them a try. If the exercise requires resistance band/tubing, make sure that you have the participants perform the exercise **WITHOUT** it first. Correct form is important and must be corrected to avoid injury. If you notice that the participants cannot perform the exercise without any equipment, then they will definitely be doing the exercise wrong once they have the equipment in hand.]*

Although there are cues written on the poster for each exercise, here are a few tips on common mistakes to look for and correct:

1. Wall Pushups:
 - people commonly raise their shoulders up; keep them down and neutral
 - don't allow the back to sag; keep abs tight
2. Seated Row:
 - Again, people may raise their shoulders up; keep them down and neutral
 - Keep spine straight; do a posture check
3. Bicep Curl:
 - Keep elbows tucked into the sides of your body in order to isolate the bicep
4. Tricep Extension:
 - Keep elbow tucked into your side
 - It is not a very big movement
5. Lateral Raise:
 - Keep thumb pointing up
 - Don't lift arm higher than parallel with the floor; raising it higher (more than 90 degrees) can impinge the joint space
6. Chair Sit-to-stand:
 - Don't swing torso for momentum
 - Don't allow knees to come together; keep them in line you're your ankles
 - Don't let knees go over toes; no knock knees

7. Inner Thigh Squeeze:
 - Keep proper posture with spine straight.
 - Remember to breathe
8. Sitting Hip Exercise
 - Keep proper posture with spine straight and abs engaged.
9. Heel Raises:
 - Keep it safe for your balance
 - Use control in lowering heel; don't let them just "plunk" onto the floor

*[Distribute the **Resistance Training Log**. Explain how to record each of the 9 exercises in the Log. Point out that the suggested progression plan seen on page 6 of their handout is also printed on the Log. Tell participants that they will turn in the Log at the next session for the coach to review.]*

*****Optional*****

The Resistance Training DVD is an available option for coaches to use. It provides instructions and tips on how to correctly perform some of the exercises. It is not a "follow along" exercise video. Information on ordering the Resistance Training DVD can be found in the GLB Providers Portal.

(Optional) Provide participants with the Resistance Training DVD and encourage them to watch it if they are interested in more information. It is recommended that the Coach watch the DVD so s/he is aware of the content.

Note: Although the GLB resistance training exercise session has been updated, many of the exercises remain the same so the video can be a useful tool.

To Do (page 8)

Turn to page 8 and let's focus on what you can do between now and the next session.

New Things to Practice

Pick a resistance training activity. Add this to your exercise program twice a week. Record it.

[Emphasize the importance of the GLB goal of at least 150 minutes of moderately intense physical activity per week.]

[Announce the day, time, place for the next session. Ask participants to dress in comfortable clothes because they will be reviewing the resistance exercises.]

After the session:

- Weigh participants who did not do so prior to the group meeting.
- Complete data forms and documentation required in your setting.
- Follow your program's protocol for managing absences.
- Review the self-monitoring records. Write brief comments. Be positive and nonjudgmental.
 - Praise all efforts to self-monitor and to change eating and activity behaviors.
 - Highlight any positive changes made that relate to the previous session topic: trying ways to stay motivated, doing something they enjoy but rarely do, connecting with others who support their lifestyle goals, coming close to their calorie, fat gram and activity goals.
 - Refer to **Guidelines for Reviewing Food and Activity Records** available in the GLB Providers Portal.