

Resistance Training Program

How to do Resistance Training:

- Warm up for 5 minutes before resistance training e.g., walk or cycle slowly
 - Avoid stretching before resistance training
- Do all exercises in the order prescribed
- Breathe normally. Do not hold your breath
- Lift the weight to a count of 2 and lower the weight to a count of 3
- Keep your rating of perceived exertion (RPE) between 11 and 16

| Rating of Perceived Exertion (RPE) | |
|------------------------------------|-----------------|
| 6 | |
| 7 | Very Very Light |
| 8 | |
| 9 | Very Light |
| 10 | |
| 11 | Fairly Light |
| 12 | |
| 13 | Somewhat Hard |
| 14 | |
| 15 | Hard |
| 16 | |
| 17 | Very Hard |
| 18 | |
| 19 | Very Very Hard |
| 20 | |

Safety Alert!

Stop and talk to your Diabetes Team if you have any symptoms such as pain or shortness of breath

- Take at least a 30 to 60 second rest between exercises
- Cool down for 5 minutes after resistance training e.g., walk or cycle slowly
 - Your cool down can also include stretching exercises
- Do resistance training at least 2 times a week with at least one day of rest in between workouts
- Track your progress on your exercise diary. Your Diabetes Team will review your exercise diary and help you progress your resistance training program

How Much Weight Should You Lift?

To find out if you are using the correct weight or exercise band, answer these questions:

- 1) After doing the last repetition, do you feel that you can do 5 to 10 more repetitions?

If you answer yes, the weight or exercise band is **too light or easy**

- 2) Are you struggling to do the last repetition?

If you answer yes: the weight or exercise band is **too heavy or hard**

- 3) After the last repetition, do you feel as if you could do 2 to 3 more repetitions and no more?

If you answer yes, this is a **good starting weight or exercise band to use**

What is a repetition?

A repetition is one complete motion of an exercise

e.g., 1 bicep curl

What is a set?

A set is a group of repetitions done without stopping

e.g., 1 set of 10 bicep curls



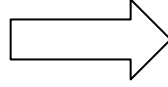
A dumbbell



An exercise band

How to Progress Your Resistance Training Program

When you are ready, slowly increase the number of repetitions you do from 10 to 15



Once you can do 15 repetitions with ease:

- Increase the weight you lift by 2 to 5 pounds

OR

- Change your exercise band for one that has more resistance

Use the chart below to help you select the next correct weight or band colour

Safety Tips

- Report any symptoms to your Diabetes Team
- Not all exercises progress at the same rate
- Not all muscle groups will be ready to progress at the same time
- Not all muscles use the same weight

Tool to Help You Increase the Weight You Lift or Band You Use

| When progressing your dumbbells, follow this order | | | | | | | | | | | | |
|--|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lightest Heaviest | | | | | | | | | | | | |
| 1 lb | 2 lbs | 3 lbs | 5 lbs | 8 lbs | 10 lbs | 12 lbs | 15 lbs | 20 lbs | 25 lbs | 30 lbs | 35 lbs | 40 lbs |

| When progressing your exercise bands, follow this order | | | | |
|---|-----|-------|------|-------|
| Lightest Heaviest | | | | |
| Yellow | Red | Green | Blue | Black |

Getting Up Off the Floor

Many people feel light-headed or dizzy if they get up off of the floor too quickly. This can lead to a fall or injury. The following is a demonstration of how to get up off of the floor safely. Take your time.



Step 1: Bend your knees and place your feet flat on the floor



Step 2: Roll onto your right side, knees bent, right arm supporting your head and your left hand on the floor



Step 3: Place both hands on the floor and push your upper body off of the floor



Step 4: Come up onto your hands and knees as shown



Step 5: Bend your right leg and place your right foot flat on the floor. Place both hands on your right leg for support and push yourself up to a standing position



Step 6: Slowly stand up

Getting Up Off the Floor (using a chair for support)

Many people feel light-headed or dizzy if they get up off of the floor too quickly. This can lead to a fall or injury. The following is a demonstration of how to get up off of the floor safely using a chair for support. Take your time getting up off the floor.



Step 1: Bend your knees and place your feet flat on the floor



Step 2: Roll onto your right side, knees bent, right arm supporting your head and your left hand on the floor



Step 3: Place both hands on the floor and push your upper body off of the floor



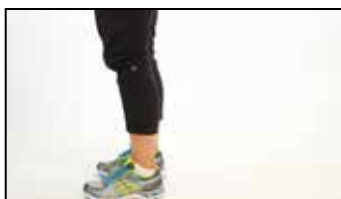
Step 4: Come up onto your hands and knees as shown



Step 5: Place both hands on the seat of a sturdy chair



Step 6: Bend your right leg and place your right foot flat on the floor. Push yourself up to a standing position

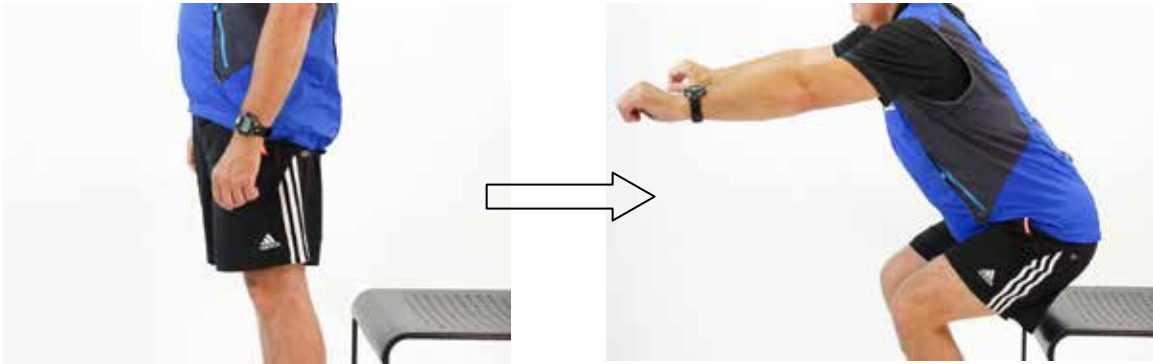


Step 7: Slowly stand up

Resistance Training (Mini-Program)

2) Half-Squat (thigh muscles)

For an alternative see exercise **2A**



Equipment: Chair, as you get stronger add dumbbells for added resistance

Step 1: Stand with feet shoulder width apart, arms at your side and draw your belly button in toward your spine. Keep your feet flat on the floor and toes slightly pointed out

Step 2: Start by pushing your buttocks back and flexing your hips to slowly lower your body to a half-squat position. Make sure you can see your toes when you lower yourself down. At the same time, raise your arms straight out in front of you

Note: This movement should feel like you are sitting back into a chair

Step 3: Return to an upright position and bring your arms back down to your sides. Start with about 10 repetitions and build up slowly to 15

My Diabetes Team Prescribed: ___set(s) of ___repetitions

Health club alternative: Leg press, hack squat machine, smith machine squat

2) Half-Squat with Dumbbells (thigh muscles)

This is a progression to the Half-Squat without Dumbbells



Equipment: Dumbbells, chair

Step 1: Stand with feet shoulder width apart, arms at your side and draw your belly button in toward your spine. Hold 1 dumbbell in each hand with your palms facing toward your sides. Keep your feet flat on the floor and toes slightly pointed out

Step 2: Start by, pushing your buttocks back and flexing your hips to slowly lower your body to a half-squat position. Make sure you can see your toes when you lower yourself down. Keep your arms straight at your sides

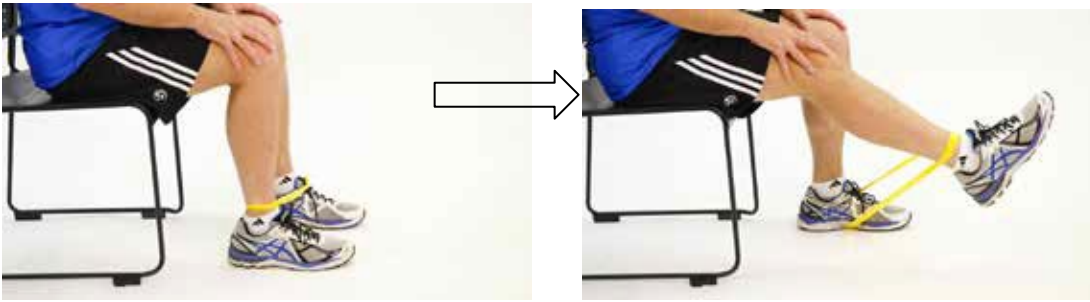
Note: This movement should feel like you are sitting back into a chair

Step 3: Return to an upright position with your arms at your sides. Start with about 10 repetitions and build up slowly to 15

My Diabetes Team Prescribed: _____set(s) of ___repetitions using____pounds

Health club alternative: leg press, hack squat machine, smith machine squat

2A) Seated Leg Extension (thigh muscles)



Equipment: Exercise band (tie band to form a loop), chair

Step 1: Sit back in a chair and place one end of the loop under your left foot and the other end around your right ankle

Step 2: Sit with a straight back. Draw your belly button in toward your spine. Keep your hands on your thighs to keep yourself stable

Step 3: Start by flexing your right foot towards you and straightening your right leg. Do not completely straighten your right leg or lock your right knee. Keep your right thigh on the chair

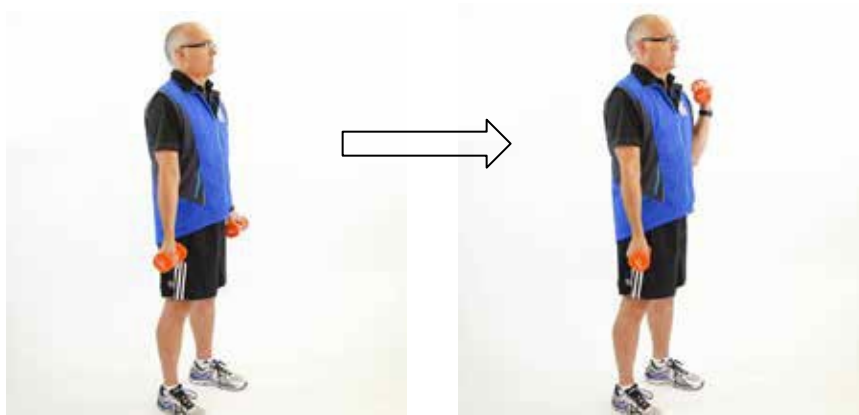
Step 4: Slowly return to the starting position. When you are done 10 to 15 repetitions, switch to your left side

My Diabetes Team Prescribed:

__ set (s) of __ repetitions using _____ (colour) band

Health club alternative: Leg extension machine

3) Bicep Curls (arm muscles)



Equipment: Dumbbells, a chair if you need to sit during this exercise

Step 1: Stand with feet shoulder width apart, knees slightly bent and draw your belly button in toward your spine. Hold a dumbbell in each hand, with your arms at your side and palms facing forward. Roll your shoulders back and down before starting

Step 2: Start by curling your right arm up to your right shoulder, keeping your elbow close to your body

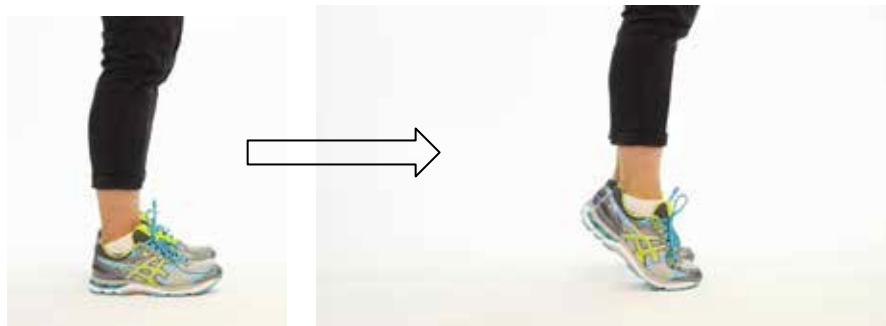
Step 3: Slowly lower to the starting position. Repeat with your left arm and continue switching between your two arms. Start with about 10 repetitions on each arm and build up slowly to 15

My Diabetes Team Prescribed: ___set(s) of ___repetitions using___pounds

Health club alternative: Seated bicep curl machine or bicep cable curl

6) Heel Raises (calf muscles)

For an alternative see exercise **6A**



Equipment: Chair for balance (if needed), as you get stronger add dumbbells for added resistance

Step 1: Hold a dumbbell in each hand and your arms at your sides. Stand with your feet hip width apart, heels on the floor and draw your belly button in towards your spine

Step 2: Start by slowly raising your heels so you are standing on your toes

Step 3: Slowly return to the starting position. Start with about 10 repetitions and build up slowly to 15

My Diabetes Team Prescribed:

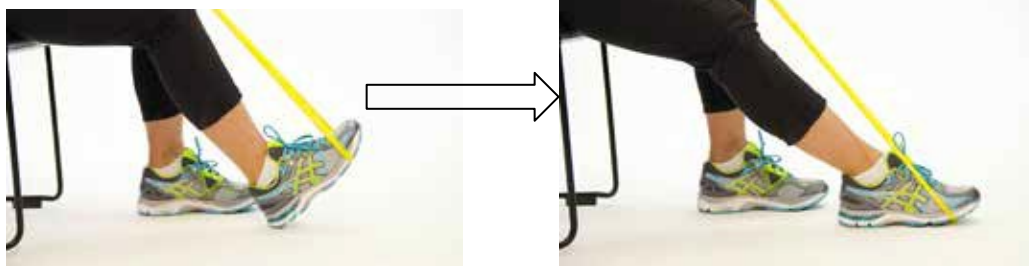
__ set (s) of __ repetitions (no added dumbbells)

OR

__ set(s) of __ repetitions using __ pounds

Health club alternative: Seated calf raise or standing calf raise machine

6A) Toe Press (calf muscles)



Equipment: Exercise band (tie band to form a loop), chair

Step 1: Sit in a chair. Loop the middle of the band around the ball of your right foot and grasp the ends of the band with both hands. Wrap the ends of the band around your hands. This will help you hold onto the band during the exercise

Step 2: Extend your right leg out in front of you resting your right heel on the floor and your toes pointing up. Sit with a straight back. Draw your belly button in toward your spine

Step 3: Start by pushing your right foot down against the resistance of the band pointing your toes forward towards the floor

Step 4: Slowly return to the starting position. When you are done 10 to 15 repetitions, switch to your left side

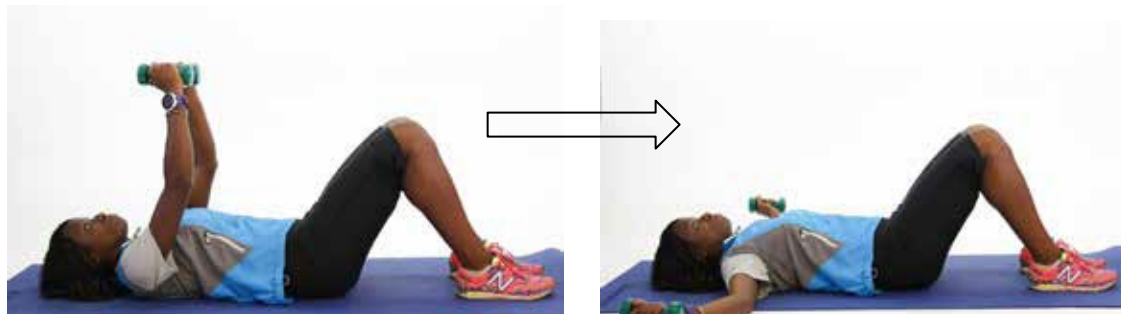
My Diabetes Team Prescribed:

__ set (s) of __ repetitions using _____ (colour) band

Health club alternative: Seated calf raise or standing calf raise

7) Chest Fly (chest muscles)

For alternative exercise see exercise **7A**



Equipment: Dumbbells, exercise mat

Step 1: Bend your knees and place your feet flat on the floor

Step 2: Grab 1 dumbbell in each hand. Extend your arms straight up (over your chest) towards the ceiling. Draw your belly button in toward your spine

Step 3: **Start** with your palms facing in and elbows slightly bent, lower the dumbbells to the floor, extending your arms straight out sideways from your shoulders. Palms should be about 1 to 2 inches off of the floor

Step 4: Slowly return to the starting position. Start with about 10 repetitions and build up slowly to 15

My Diabetes Team Prescribed: ___set(s) of ___repetitions using___pounds

Health club alternatives: Seated fly machine or cable fly

7A) Wall Push-Up (chest muscles)



Equipment: Wall

Step 1: Stand facing a wall, then take one step back

Step 2: Place your palms against the wall directly in front of you and in line with your shoulders. Next, move your hands across the wall so they are slightly wider apart than your shoulders. Draw your belly button in toward your spine

Step 3: Start by bending your elbows and leaning your whole body towards the wall

Note: to make this exercise more difficult, place feet further away from the wall

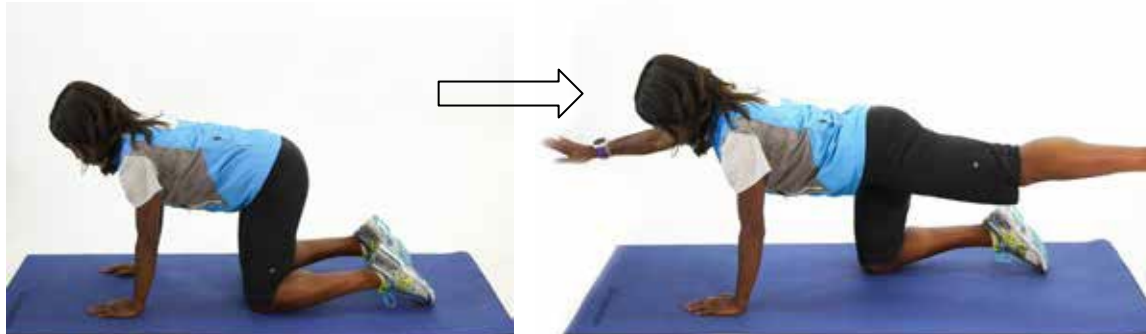
Step 4: Gently push against the wall until you are back to your starting position. Start with about 10 repetitions and build up slowly to 15

My Diabetes Team Prescribed: ___set(s) of ___repetitions

Health club alternative: Chest press

10) Bird Dog (back muscles)

For alternative see exercise **10A**



Equipment: Exercise mat

Step 1: Get onto your hands and knees on an exercise mat. Draw your belly button in towards your spine

Step 2: Start by slowly raising your right arm and left leg off of the floor

Note: If it is too difficult, lift only one arm or leg individually

Step 3: Slowly lower to the starting position. Repeat the same movement now with your left arm and right leg. Alternate back and forth. Start with about 10 repetitions and build up slowly to 15

My Diabetes Team Prescribed: ___set(s) of ___repetitions

10A) Standing Bird Dog (back muscles)



Right Leg



Left Leg

Equipment: Wall

Step 1: Stand facing a wall. Place your hands on the wall to help keep your balance. Draw your belly button in toward your spine

Step 2: Start by slowly lifting your right leg behind you. Extend from the hip, keeping your right leg straight

Note: You only need to pull your leg out a small distance behind you

You can also alternate your arms with this exercise

Step 3: Slowly return to the starting position. Repeat with you left leg. Alternate legs back and forth. Start with about 10 repetitions and build up slowly

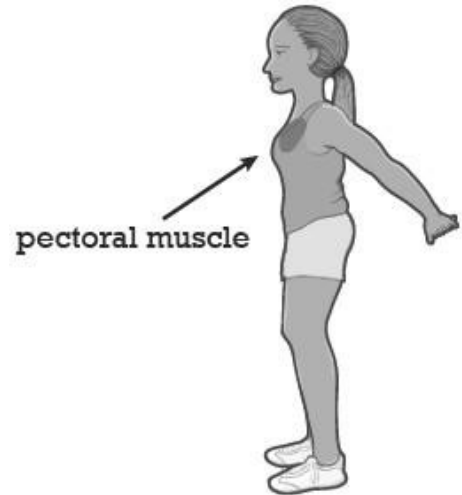
My Diabetes Team Prescribed: ___set(s) of ___repetitions



Stretches

1) Chest Stretch (Pectoral Muscle)

- Stand with your feet shoulder width apart
- Relax your shoulders and make sure they are not hunched up
- Clasp your hands behind your back (if you cannot clasp them, then place them behind your back)
- Looking straight ahead, open up the chest and squeeze your shoulder blades together
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort



2) Shoulder Stretch (Deltoid Muscle)

- Stand with your feet shoulder width apart, arms by your side
- Relax your shoulders and make sure they are not hunched up
- Take one arm and bring it across your chest
- Take the other arm and place it on your elbow to help hold it in position
- Ensure your arm is across your chest and not across your neck
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite shoulder



3) Thigh Stretch (Quadricep Muscle)

- Using a wall for support, stand sideways to the wall
- Take hold of your ankle, foot, sock, or pant leg as you bend your leg back from the knee (see figure)
- The knee should be facing down toward the floor and in line with the leg that is planted on the floor
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite thigh



4) Hamstring Stretch

- Using a wall or table for support, stand sideways to it
- Put all of your body weight on one leg and bend that leg
- Take the opposite leg and place the heel on the floor or on a small step with the toes pointed up. Keep this leg straight
- From this position, bend forward from the waist – you will feel a stretch in the back of the upper leg that is straight
- Hold the stretch while continuing to breathe for 15-30 seconds.
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite hamstring



5) Calf Stretch

- Using a wall for support, face the wall standing with both feet close to it. Place your hands on the wall at chest height
- Take a step back with one leg keeping that leg straight and lean into the wall keeping the front leg bent
- Ensure both feet are facing forward
- As you lean into the wall, you will feel a stretch in the calf of the back leg
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite calf

