## RPE = Rating of Perceived Exertion

Pick the number matching the word or phrase that best reflects your total amount of physical stress, effort, and fatigue while exercising. This number identifies your exercise **intensity.** Record on your exercise log after each session.

## RPE

- **0** Rest
- **1** Very light
- 2 Light
- 3 Moderate
- 4 Somewhat hard
- **5** Hard (breathing deeply)
- 6
- 7 Very hard (out of breath)
- 8
- 9
- 10 Maximal

### Intensity is Important

Your resistance training should be in the **moderate** (**RPE 3 - 6**) **range.** Use a weight or resistance band that feels somewhat strong to heavy for you.

#### Remember the Following Guidelines:

- Only do the exercises you can.
- Maintain proper posture.
- Keep movements slow and controlled.
- Breathe with each repetition.
- Keep to a comfortable range of motion.

## **Resistance Exercise Guidelines**

**Start** with 2 sets of 8 repetitions for 6-8 exercises, and do this 2 times a week. **Work up to** 3 sets of 8-12 repetitions for up to 12 exercises, and do this 3 times a week. Take 1-2 minutes of rest between sets.

It is recommended you see a diabetes care provider or a qualified exercise professional, or refer to the resistance training video, to learn how to do the exercises provided in this handout.

# **Additional Exercises**

Below are three additional exercises that can help strengthen your lower back, abdominals, and hips. These are important to help you be more active in your activities of daily living. You can do these exercises on the same or different days from the rest of your program.

## Hips

**Start:** Stand beside a chair; hold the back of the chair for support if needed.

### Finish: Extend leg straight out to the side, about

30 degrees, or as comfortable as possible, without bending body. Pause. Return slowly. Repeat on other side.

### **Lower Back**

**Start:** Lie on side with legs bent behind body. Support your body on a bent elbow directly under your shoulder.

**Finish:** Lift your hips straight up so that the spine is in a straight line to the knees. Keep hips forward. Hold for 10-15 seconds and repeat on other side.



### **Lower Abdominals**

**Start:** Start lying on back with one leg bent to 90 degrees, hands at your sides. Contract your lower abdomen by pulling your belly button toward your back.

**Finish:** Raise extended leg to just above opposite knee. Hold briefly; lower slowly. Perform all repetitions on one side, then repeat on other side.





# **Resistance Training and Diabetes**

Keeping your muscles active and healthy through regular resistance training will greatly improve your management of diabetes. Diabetes Canada recommends resistance exercise 2-3 times a week.

# **Benefits of Resistance Training**

Resistance exercise uses more muscles than just walking. It uses upper body muscles that are rarely used in modern society today.

Resistance training also maintains or increases lean muscle. This helps to burn calories at rest throughout the day. This is important for weight control and diabetes management, especially as we age.

**REMEMBER:** You don't have to go to a gym to get the benefits of resistance training. All you need are simple forms of resistance such as:

- Exercise bands (available at most stores).
- Light dumbbells or hand weights.
- Other types of resistance you may find around the house such as milk jugs filled with water.
- Simply use your own body weight.

The resistance program shown in this handout works all muscles in the body, using light dumbbells, to better manage your diabetes and improve your health.

If you are unsure about how to do the exercises in this handout, seek the help of an exercise resource, diabetes care provider or qualified exercise professional to help you get started and keep you going.

# **DIABETES** CANADA

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# Resistance Exercise





## Perform 2-3 sets of 8-12 repetitions for 6-12 exercises, 2-3 days per week.

### □ Hips & Thighs

Modification

□ Chest

Modification

Modification

### Upper Back



**Start:** Stand with weight at your sides, chest up, feet hip-width apart, and knees bent. Slowly lower yourself with knees over your toes. Keep your back straight and chest up.

**Finish:** Hold the bottom position with knees bent. Don't drop down into a squat. Slowly raise yourself back up. Breathe.





**Start:** Sit at the edge of the chair. Tighten abdominals and keep chest up. Weight is held at shoulder level with palms forward or facing your ears.

**Finish:** Extend one arm overhead until directly over the shoulder. Try not to lean to one side. Pause. Slowly lower to starting position. Alternate arms.



**Start:** Lie on the ground (or stand slightly away from a wall) with hands just below your armpits. Tighten your abdominals and hips to keep your body straight. Press up from your toes or knees (or away from the wall) keeping elbows at your sides.

**Finish:** Press out, extending your elbows. Pause at the top. Breathe. Slowly return to starting position.

□ Shoulders



**Start:** Stand in a balanced, comfortable position with arms down to the side. Shoulders back and relaxed, chest up, and knees slightly bent.

**Finish:** Lift arms to side, trying to not shrug shoulders. Lift to shoulder height with palms down or facing forward (modification). Pause. Slowly lower to starting position.



**Start:** Stagger feet for balance. Keep back flat to maintain neutral spine. Place a hand on the seat of the chair for support.

**Finish:** Weight is lifted up to the side even with the shoulder, so the palm is facing down. Slowly return to starting position.

## □ Upper Arm – Front



**Start:** Stand with weight to the side. Relax shoulders. Palms facing forwards.

**Finish:** Curl hand to shoulder, keeping your elbow at your side at the lower ribs. Pause. Slowly lower to starting position.

# □ Legs – Front



**Start:** Stand with legs staggered. Hold weight in outside hand. Hold the back of the chair with your free hand.

**Finish:** Bend down so your back knee moves towards the floor. Only go down as far as you feel comfortable. Keep chest up.

# □ Legs – Back



**Start:** Lie on the floor with your knees at 90°. You can also do this with your feet up on a chair.

**Finish:** Push heels into the floor while lifting your bottom off the floor. Tighten abdominals and buttocks without over-arching your back. Return to starting position.

# □ Lower Back



**Start:** Start on all fours. Tighten abdominals and maintain neutral spine (natural back curve).

**Finish:** Extend leg straight back, without arching in the back, while contracting your abdominals. Pause. Return to starting position. Alternate legs.

## □ Middle Back



**Start:** Stagger feet for balance. Keep back flat to maintain neutral spine. Place a hand on the seat of the chair for support.

**Finish:** Pull weight upwards until your outside hand is beside your ribcage. Pause. Slowly lower to starting position. Alternate sides.

## □ Upper Arm – Back



**Start:** Seated at the front edge of the chair, chest up. Place one hand holding weight behind your head with your elbow up beside your ear.

**Finish:** Extend only from the elbow until your arm is straight over your head. Pause. Lower weight to starting position. Alternate sides.

## □ Abdominals



**Start:** Lie on your back with both knees bent. Hands down by your side.

**Finish:** Tighten abdominals as you curl upward. Slide hands towards your heels, moving them about one-hand distance. Slowly return to starting position.