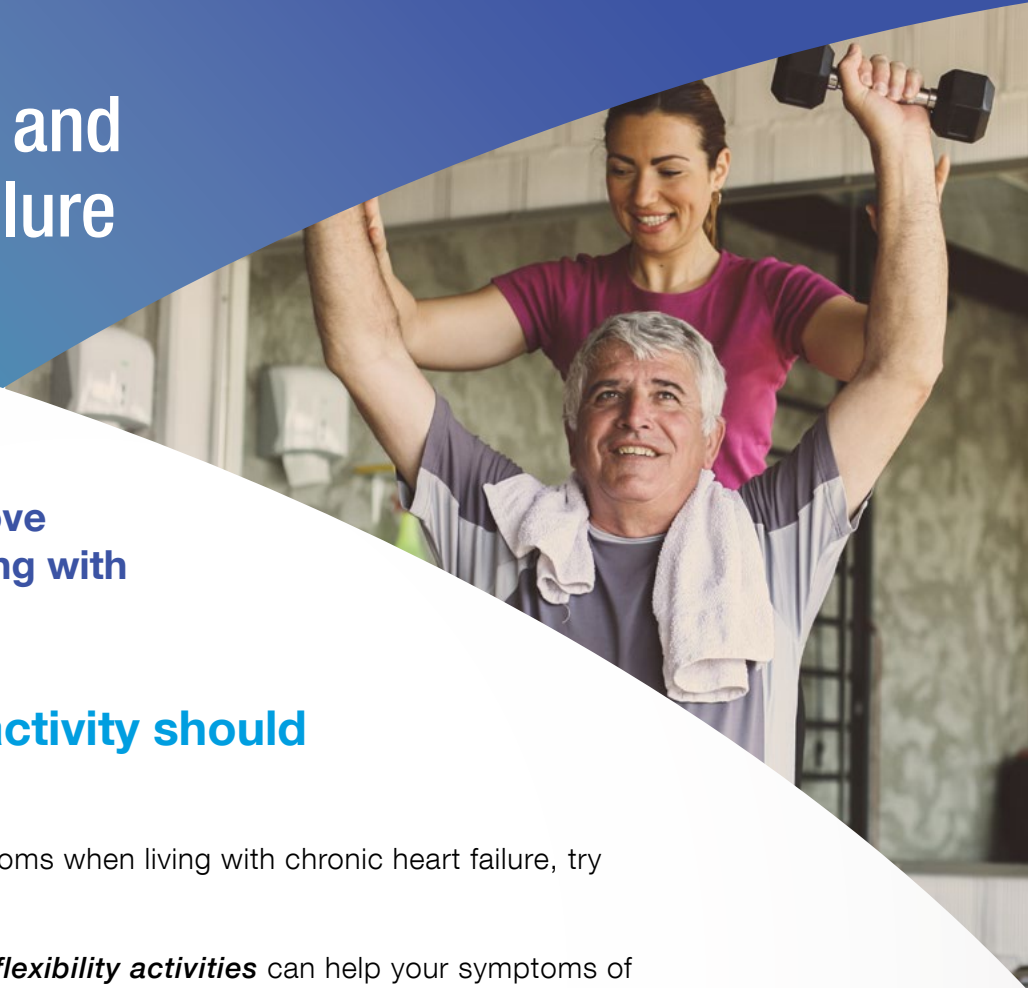


# Physical activity and chronic heart failure



**Physical activity can help you to manage and improve your symptoms when living with chronic heart failure.**

## How much physical activity should I do?

To manage and improve your symptoms when living with chronic heart failure, try to be active most days of the week.

**Aerobic, resistance, balance** and **flexibility activities** can help your symptoms of chronic heart failure.



**Aerobic activities** work your heart and lungs, such as walking, cycling, jogging, cross-country skiing and swimming.



**Resistance activities** strengthen your muscles, such as push-ups, squats, lifting weights and aquatic exercises.



**Balance and flexibility activities** improve your range of motion and stability, reduce your risk of falls, and can prevent injury and strain, such as tai chi, pilates and yoga.

Consider attending a cardiac rehabilitation program. Cardiac rehabilitation offers structured programs led by qualified healthcare providers. Research shows that cardiac rehabilitation improves quality of life for patients with chronic heart failure.

Before starting a physical activity program, ask your physician when exercise is safe for you.

This handout for adults describes:

- how much physical activity you should do, and
- how physical activity can affect your symptoms when living with chronic heart failure.

## Start at a level that is right for you

When you begin a new activity, start at your own comfort level.

As the exercise becomes easier, you can slowly increase:

- **how long** you are active,
- **how often** you are active,
- **how many** activities you do,
- **how hard** you work.

## Monitor your intensity

Use the “talk test”:

- **low-intensity activity** is when you can talk or sing with ease; you do not experience any shortness of breath.
- **moderate-intensity activity** is when you can talk, but not sing.
- **vigorous-intensity activity** is when you are unable to say more than a few words before you need to pause for a breathe.

Examples of low- to moderate-intensity physical activities include walking at different speeds, gardening, swimming, and cycling.

Examples of moderate- to vigorous-intensity physical activities include brisk walking, jogging, and cycling.

Moderate-intensity endurance exercise programs are generally safe and beneficial for individuals with chronic heart failure and who are stable. Be sure to discuss this type of exercise with your doctor before beginning a program.

*Aim for 150 minutes of aerobic activities per week.*



## Aerobic Physical Activity

Aerobic activities work your heart and lungs, such as walking, cycling, jogging, and swimming

The following table describes your physical activity “prescription” for aerobic activities.

### Aerobic Physical Activity Prescription

#### HOW MUCH?

- Warm up for 3–5 minutes *before* aerobic exercise.
- Aim for *150 minutes of aerobic activity per week*. For example,
  - ▶ 10 minutes, 3 times/day for 5 days,
  - ▶ 30 minutes/day for 5 days, or
  - ▶ 50 minutes/day for 3 days.
- Cool down for 3-5 minutes *after* aerobic exercise.

#### HOW HARD?

Aim for a *low- to moderate-intensity* level.

- Low- to moderate-intensity means:
  - ▶ your heart beats faster than when you are resting or sitting,
  - ▶ you are sweating lightly,
  - ▶ your breathing is deeper and faster,
  - ▶ you can talk and sing easily.

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What aerobic activities would you like to do?

## Resistance Physical Activity

Resistance activities strengthens your muscles, such as training with free weights and bodyweight exercises such as a squat.

### Work all your major muscle groups

It is important to do resistance activities for all of your major muscles.

- Choose 6–10 different activities for each session.
- Start at any duration and intensity and slowly increase them as you feel comfortable.
- Do each exercise slowly in a controlled way.
- Alternate between muscle groups to speed up your workout by allowing some muscles to rest while you work others. For example, you can choose a lower body exercise, such as squats, followed by an upper body exercise, such as chest presses.
- If you feel pain or cannot complete your set, the intensity may be too high. Reduce the weight you are using or the number of repetitions you are doing.
- Over time, you can slowly increase the number of sets that you do for each activity or slowly increase how much you lift.

*Choose 6–10 different activities for each session.*



The following table describes your resistance physical activity “prescription”.

## Resistance Physical Activity Prescription

### HOW MUCH?

- Use light free weights (5–10 lbs.) or resistance bands.
- Do one “set” of an exercise for 10–15 repetitions, such as 10–15 calf raises or knee extensions.
- Aim for:
  - ▶ 6–10 different resistance exercises,
  - ▶ 2–3 sets of *each* exercise per session,
  - ▶ 1–4 days per week.

### HOW HARD?

- Aim to work at a *moderate intensity* level. This means:
  - ▶ your heart beats slightly faster than when you are resting,
  - ▶ you are sweating lightly,
  - ▶ breathing is deeper and faster.
- Your muscles should feel exhausted by the end of the set, that is, you cannot do another repetition.
- *Rest* for
  - ▶ 2–4 minutes before starting a new set or muscle group,
  - ▶ at least 1 day between resistance training sessions.

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What resistance physical activities would you like to do?

## Balance Physical Activity

Balance is important as you age and can be practiced daily or as often as possible. Balance activities improve your motor skills and coordination, as well as reduce your risk of falling. They can be simple exercises, such as standing on one leg. They can include resistance or flexibility activities that emphasize balance and coordination, such as tai chi, pilates or yoga.

Activities should be challenging, but you should not feel unsafe, like you are about to fall. If you are at risk of falls, use supports, such as a chair or walker while doing the activities.

Examples of seated activities:

- range of motion exercises using arms and legs, such as arm or leg circles,
- coordinated movement of arms and legs.

Examples of standing exercises that can be done with or without hand support:

- standing on one foot,
- standing with feet close together,
- sit-to-stand,
- dynamic movements, such as kicking and catching,
- walking sideways and backwards or walking on or near a line.

### Balance Physical Activity Prescription

#### HOW MUCH?

Aim for *at least*

- 30 seconds/exercise
- 15–30 minutes per session,
- 2–3 days per week.

#### HOW HARD?

Aim for a *moderate-intensity* level. This means the activities:

- are challenging,
- require concentration, and
- may require you to hold a chair or wall for support sometimes.

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What balance physical activities would you like to do?

## Flexibility Physical Activity

Flexibility physical activity improves your range of motion. Daily flexibility activity is the most effective. Do a variety of stretches that target both upper and lower body muscle groups. Include some stretching regularly in your warm-up and cool-down every time you exercise.

If the stretching activities are too hard, ask an exercise professional how to adapt them to match your level of flexibility.

### Flexibility Physical Activity Prescription

#### HOW MUCH?

Aim for *at least*

- 2–4 repetitions of each exercise targeting the major muscles,
- 10 minutes per session,
- 2–4 days per week.

#### HOW HARD?

- Stretch to the point of mild discomfort or tightness (but not pain) and hold the stretch just below this discomfort.
- Build up to holding stretches for 30 seconds.

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What flexibility physical activities would you like to do?

Note: A qualified exercise professional can show you what exercises work best for you and how to work at a safe intensity. For example, a physiotherapist can teach you exercises and stretches to do at home to improve posture, strength, flexibility, and endurance. A physical or occupational therapist can help you move more efficiently in your daily living activities (such as bathing and dressing) so that these activities are easier and less tiring. Enrol in a cardiac rehabilitation program near you.

## How does physical activity help my chronic heart failure?








Being physically active on a regular basis can give you many benefits.

### Mobility

As you become more active, you will notice that you have more energy for activities around the house, hobbies, and other recreational opportunities.

### Quality of life

Regular physical activity helps you to:

-  feel less tired,
-  feel less short of breath,
-  sleep better,
-  decrease risk of falls,
-  improve cardiac symptoms,
-  have more energy to do the activities you enjoy, and
-  feel happier.



*Regular physical activity helps you to have more energy to do the activities you enjoy.*



## More benefits

Being physically active on a regular basis can give you many other benefits, such as:

- having more muscle strength and muscle mass when you combine resistance and aerobic training,
- improving your ability to exercise, and
- feeling more confident and in control.

## Remember:

- Aerobic and resistance physical activities can help you manage and improve your chronic heart failure.
- You will see many other benefits from being more active.
- Set goals that you can reach. If you expect too much, you are likely to get discouraged and stop exercising.
- Use a diary or journal to track your exercise routine and how you are feeling during exercise.
- Keep it fun! Make fun physical activity a lasting part of your life.

What is one thing you can do *today* to start being more active?

Topics in this toolkit:

- A. Taking the first step: deciding to be physically active
- B. Making a physical activity plan
- C. Setting goals for physical activity
- D. What stops you from being physically active?
- E. Benefits of physical activity
- F. Physical activity and your blood pressure
- G. High blood pressure safety
- H. Physical activity and Type 2 diabetes
- I. Diabetes safety
- J. Healthy weight and physical activity
- K. Physical activity and anxiety
- L. Anxiety safety
- M. Physical activity and chronic heart failure
- N. Chronic heart failure safety
- O. Physical activity and stroke
- P. Stroke safety
- Q. Physical activity and Parkinson's Disease
- R. Parkinson's Disease safety
- S. Physical activity and dementia
- T. Dementia safety

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