

Get started with Bone-Healthy Exercises!

This guide provides examples of the following bone-healthy exercises:

AEROBIC WEIGHT-BEARING

STRENGTHENING

BALANCE & POSTURE TRAINING

Combine exercises from each category to keep your bones strong and prevent fractures. Some activities, such as dance and yoga, fit into more than one category.

If you have lymphedema, metastases, osteoporosis, chronic injury, or had recent surgery or cancer treatment, consult a physiotherapist before starting a new exercise plan.

1 Aerobic weight-bearing exercises

Weight-bearing exercises are the best form of activity for building and maintaining strong bones. Here are examples.

During your daily activities, you can:	If you like the outdoors, you can:		
☐ Walk briskly	Hike		
Climb stairs	☐ Jog		
> At home, you can:	Cross-country ski		
☐ Jump rope			
Use the treadmill	Consider starting a sport at your local community centre:		
Use an elliptical	☐ Basketball		
	Badminton		
Consider taking a class at your local gym:	Soccer (football)		
☐ Dance	☐ Baseball		
Zumba			
☐ Aerobics	Note: Swimming and cycling are great forms of aerobic		
☐ Strength training	exercise, but they are not		
☐ Interval training	examples of aerobic weight- bearing exercise!		

WHY IS THIS BONE-HEALTHY?

Weight-bearing exercises encourage bone rebuilding by working bones against gravity.

HOW MUCH IS ENOUGH?

You should work towards:

- At least10 minutes at a time
- Total of 30 minutes a day
- 5 of more days in a week
- Total of 150 minutes a week

HOW HARD SHOULD I WORK?

Moderate to high intensity.

Moderate intensity means that your heart is beating faster and that you are slightly breathless. You can still speak, but can not sing during the activity.

High intensity means that your heart is beating fast and that you are running out of breath. You can not speak or sing during the activity.

2 Strengthening exercises

Use your own body weight, elastic bands, or weights as resistance to strengthen your arms, shoulders, back, chest, and legs. To get started, try these simple strengthening exercises at home!

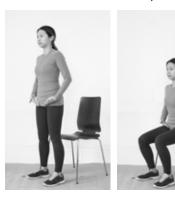
WALL PUSH-UP – for the back, chest, arms



- 1 Place hands on wall a little wider than shoulder-width apart and just below shoulder height
- 2 Bend at the elbows and stop before your forehead touches the wall
- **3** Go back to start position
- 4 Keep your spine in a straight line throughout the entire movement

DO 2 SETS OF 8-12 REPETITIONS

> **SIT TO STAND** – for the upper legs, abdomen



- 1 Place feet hip-width apart, hands in crease of hips
- 2 Push your hips backwards and stick your bottom out
- 3 Slowly bend your knees and lower yourself gently into a sitting position in the middle of the chair
- **4** Lean body forward and push off to stand

DO 2 SETS OF 8-12 REPETITIONS

BRIDGE – for the upper legs, back





- Lie with knees bent and arms placed at your sides, palms face up
- 2 Push lightly into the floor with the back of your shoulders
- 3 Squeeze your buttocks, thighs and abdominal muscles to lift your pelvis. Do not use your back
- 4 Lower slowly until you reach the ground

DO 2 SETS OF 8-12 REPETITIONS

WHY IS THIS GOOD FOR BONES?

These exercises encourage bone rebuilding by activating the muscles which attach to the bones.

HOW MUCH IS ENOUGH?

You should work towards:

- 2-3 sets of 8-12 repetitions for each exercise
- 2-3 days a week
- Use: exercise bands, weights or body weight against gravity
- Do strengthening exercises for major muscle groups: arms, chest, shoulders, back, and legs

HOW HARD SHOULD I WORK?

Aim to work at moderate to high intensity levels (see previous page for definition).

If you can do more than 12 repetitions easily, then the weights are too light. If you can't do at least 8 repetitions, the weights are too heavy. Speak with a physiotherapist or kinesiotherapist to help get you started with the right weights for you.

For a more comprehensive exercise program, try our "Exercise Program for the Prevention/Management of Osteoporosis".

3a Balance exercises

Tai Chi, yoga, dancing, and walking on your toes or heels are some great ways to challenge your balance. To get started, find an activity that you like, or try these simple exercises at home!

TANDEM STANCE



- 1 Stand beside a steady chair or wall;
- 2 Place heel of one foot in front of toes of the other foot;
- 3 Hold position for 20 seconds;
- **4** To increase difficulty, try with eyes closed.

SINGLE LEG STANCE



- 1 Stand beside a steady chair or wall:
- **2** Transfer weight to one foot and lift other foot off the ground;
- 3 Hold position for 20 seconds.
- **4** To increase difficulty, try with eyes closed.

WHY IS THIS BONE-HEALTHY?

These exercises may help prevent falls, reduce risk of fractures and maintain your independence.

HOW MUCH IS ENOUGH?

You should work towards:

- 10-20 minutes of exercise at a time
- 2 or more days a week

HOW HARD SHOULD I WORK?

Progress at your own pace! Start with exercises that involve good posture and use of abdominal muscles. Advance your exercises to more challenging positions. Supervision is encouraged for safety.

For a more comprehensive exercise program, try our "Exercise Program for the Prevention/ Management of Osteoporosis".

TANDEM WALK







- Make sure to perform this exercise near a wall or counter top for increased safety;
- 2 Walk forwards by placing one foot directly in front of the other, heel to toe;
- **3** To increase difficulty, try to walk backwards.

3b Posture exercises

Posture exercises are important not just for balance, but also to ensure a healthy spine. These exercises make your neck, back, and core muscles stronger. To get started, try these exercises!

SHOULDER SHRUGS & CIRCLES





- 1 Shrug shoulders up towards ears;
- 2 Then back and down.

DO 2 SETS OF 8-12 REPETITIONS

SHOULDER BLADE RETRACTION





- 1 Pull shoulder blades together and down, trying to get them to "kiss";
- 2 Hold for 5-10 seconds.

DO 2 SETS OF 8-12 REPETITIONS

NECK RETRACTION





- 1 Stand or sit tall;
- 2 Slowly move head back over shoulders and tuck chin in.

DO 2 SETS OF 8-12 REPETITIONS

WHY IS THIS BONE-HEALTHY?

These exercises help improve your posture. Good posture helps reduce pressure on your backbone (spine), helps minimize risk of injuries to your back, and maintain a healthy spine.

HOW MUCH IS ENOUGH?

You should work towards:

- 5-10 minutes a day
- Everyday

BACK AND NECK STRETCH





- 1. Stand or sit tall;
- **2.** Place hands behind the head as shown
- 3. Lean back slightly

HOLD FOR 15-30 SECONDS

3c Postural awareness

Postural awareness means thinking about good posture not just during exercise, but throughout your daily activities. To get started, use the tips below!

THE BOX





Imagine your upper body is a box. The corners of the box are at your shoulders and hips. Lift your chest slightly as if to show off a necklace or tie. Think about keeping your upper body like a box as you go about your daily activities.

EXAMPLES OF POSTURAL AWARENESS IN YOUR **DAILY ACTIVITIES**



Avoid side bending or leaning over to one side



Avoid twisting to reach with the broom or vacuum



Sweeping or vacuuming: step to turn your body so that your feet and torso are facing the same direction as the broom or vacuum

WHY IS THIS BONE-HEALTHY?

Good posture helps reduce pressure on your backbone (spine), helps minimize risk of injuries to your back, and maintain a healthy spine.

HOW MUCH IS ENOUGH?

You should work towards:

- Postural awareness throughout your activities every day
- Limiting or modifying your activities that cause forward bending, side bending, and/ or twisting, alone or in combination, especially if you have osteoporosisis



Avoid bending down to tie your shoelaces



Sitting on a chair: Sit up straight in your chair





Tying shoelaces: keep your back straight and prop your foot on a stool or rest it on your chair

Weekly Exercise Log

This is one way to keep track of your physical activity. Aim for 150 minutes of moderate exercise per week. Exercise in bursts of 10 minutes count! Combine sessions of aerobic weight-bearing, strengthening, and balance & posture exercises.

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	Physical Activity	Intensity	Time Spent	Notes
	☐ Weight-bearing	Light		
	☐ Strengthening☐ Balance / Posture	☐ Moderate ☐ High		
Tuesday	☐ Weight-bearing	Light		
	☐ Strengthening	\square Moderate		
	☐ Balance / Posture	\square High		
Wednesday	☐ Weight-bearing	Light		
,	☐ Strengthening	\square Moderate		
	☐ Balance / Posture	\square High		
Strengthenin	☐ Weight-bearing	Light		
	☐ Strengthening	\square Moderate		
	☐ Balance / Posture	\square High		
···aay	☐ Weight-bearing	Light		
	☐ Strengthening	\square Moderate		
	Balance	\square High		
Saturday	☐ Weight-bearing	Light		
	☐ Strengthening	\square Moderate		
	Balance	\square High		
Sunday	☐ Weight-bearing	Light		
<i>-j</i>	☐ Strengthening	\square Moderate		

This resource was compiled using information from the American College of Sports Medicine, American Cancer Society, National Osteoporosis Foundation, Osteoporosis Canada, and the Compendium of Physical Activities by Ainsworth BE et al (2011).

Disclaimer: This information should not be considered as medical advice. It is not to be used in place of a visit with a doctor, nurse or other healthcare professional. If you have questions about your individual medical situation, please consult with your healthcare professional.



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