

Recovery From A Hip Fracture

Information For
Patients And Caregivers



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Lisa Anthony, RN, BN

WRHA Quality Process Improvements
Officer, Orthopaedics
Winnipeg Regional Health Authority
Winnipeg, MB

Lauren Beaupre, PT, PhD

Associate Professor, Departments of
Physical Therapy and Surgery
(Division of Orthopaedic Surgery)
University of Alberta
Edmonton, AB

**Patricia Dickson, MSc, BScOT, BSc,
OT Reg (Ont)**

Advanced Practice
Occupational Therapist
Holland Orthopaedic and Arthritic
Centre
Sunnybrook Health Sciences Centre
Toronto, ON

Heather Francis, RN, BN, MBA

Health Services Director
Capital District Health Authority
Dartmouth General
Dartmouth, NS

Kerry Grady, MHSc, RD

Senior Manager Scientific and
Clinical Programs
Osteoporosis Canada
Toronto, ON

**Valerie MacDonald, RN, BSN, MSN
ONC**

Clinical Nurse Specialist Ortho/Surgery
Fraser Health Authority
Burnaby, BC

Rhona McGlasson, PT, MBA (Editor)

Executive Director
Bone and Joint Canada
Toronto, ON

Janet Legge McMullan, RN, BScN, MN

Consultant
Bone and Joint Canada
Toronto, ON

Katherine Mullin, RN, MC ONC(C)

Bone & Joint Health Coordinator,
Orthopaedic Surgery Program
Surgical Services
Alberta Health Services
Red Deer Regional Hospital Centre
Red Deer, AB

Nancy Schuttenbeld, RN, MN

Clinical Nurse Specialist
Surgical Program
Horizon Health, Zone 3
Fredericton, NB

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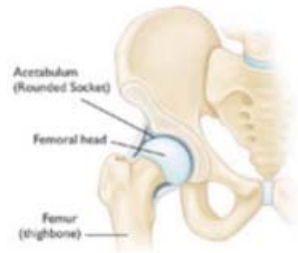
About Hip Fractures

A hip fracture is a serious injury that is most common among older adults. This type of fracture typically requires surgical repair and extensive therapy. When facing major surgery to repair a hip fracture, all the information and processes we're experiencing for the first time can be overwhelming. It's tough to know what we don't know, so it's difficult to prepare or figure out where to start. This resource has been developed to help both patients and caregivers learn about what to expect. More information about recovery from hip fractures is available by calling 1-800-461-3639.

It is important to learn what happened to your hip, as you may need to share this information with health care professionals. Your repair can also affect your activity choices.

Fractures and Surgery

The hip is a ball and socket joint. The "ball" is the top part of the thigh bone (femur). It fits into the "socket" in the pelvis. Ligaments and muscles hold the joint in place. The hip joint provides movement in all directions.

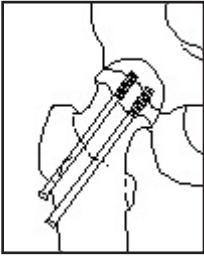


A fractured hip is a partial or complete break in the upper thigh bone. You'll usually feel pain there or deep within the groin. That's where the hip joint is located. If the hip is fractured, the surrounding structures are likely damaged too.

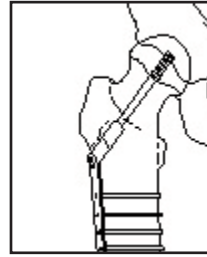
People can break their hip in several ways: Across the neck of the bone, below the neck (the most common), and across the shaft of the bone (the least common).

What type of surgery do you need? It depends on the type of break, how bad it is, your age and your activity level. To fix the break, surgeons can use screws, plates and/or nails. These hold the bones together while they heal. Sometimes your surgeon may completely replace the parts of the hip joint with artificial parts. That's called arthroplasty.

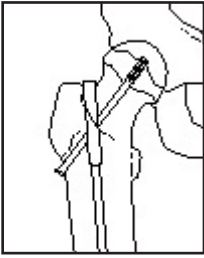
For more on understanding your hip and surgery, visit the Canadian Orthopaedic Foundation website at <http://www.movepainfree.org>



Several screws are placed across the break.



A screw and plate holds the bone in place.



A metal nail may be inserted down into the femur to hold the broken bone in place. A second screw or nail is put into the head of the femur.



A new hip replaces the broken bone.

Next Steps

While in hospital, you'll work with a highly trained health care team including your orthopaedic surgeon, nurses, physiotherapists and occupational therapists. Other members of the team may be a social worker, home care coordinator, pharmacist and dietician.

How will your recovery progress? Good pain control will allow you to move and get up. The health team will show you how to change positions, help you sit up at the edge of the bed, and stand with a walker for support. Over time, you'll use a walker, and perhaps crutches to get around. You'll also practice everyday activities, like getting in and out of bed or the tub, and dressing.

You'll learn exercises to prevent stiffness and weakness and get back strength and movement. The health care team will talk about discharge plans. You may go home, or to further rehabilitation. All of this is just your first step in the months that follow surgery.

Delirium

What is Delirium?

- A common complication after hip fractures.
- Signs: confusion, imagining things, trouble staying awake, and memory problems.
- Causes: traumatic injury, medical changes, medications, infections, pain, and poor nutrition.

Treatment

- Obtain a medical assessment. Treatment might include medication. You might also stop or change medications that make confusion worse.
- Usually clears in a few days or weeks.

Help a Family Member

- Ensure healthy rest and sleep by reducing noise, keeping lights low when the person is resting, and having comfortable pillows and blankets available.
- Encourage physical and mental activity.
- Offer healthy meals and plenty of fluids.
- Limit alcohol and sleeping pills.

Keys Things to Remember

- Delirium is common, yet it may get in the way of recovery and rehabilitation.
- If delirium gets worse or you see new signs, you may need medical attention. Contact your family doctor.
- Learn from a health care provider. What's causing the delirium? How long can it last? Can you prevent it from happening again?
- Sometimes people with delirium also have a mental health condition (e.g. depression). See the section in this booklet on *Depression and Mental Health*.

Depression and Mental Health

What is Mental Health?

Mental health is more than just the absence of mental illness. It's about your ability to:

- Enjoy and appreciate your life, and the people in it;
- Form healthy relationships;
- Have balance (work/family, rest/activity, etc.);
- Be flexible (i.e. go with the flow);
- Have good self-esteem;
- Cope with stress; and
- Bounce back from adversity.

Your physical condition and your mental health work together. Both add to your overall sense of wellness.

Mental Health and Physical Health

Physical and mental health are related. For instance, good nutrition and activity can benefit mental fitness and positive mental health habits can help your physical health. Think of how managing stress can cut the chances of heart disease. An illness or injury can also affect your mental health and overall outlook.

After a hip fracture, many people become anxious. They worry about a fall, another injury, or if they can take part in their favourite activities. They may see themselves as being limited or needing help.

There's a danger: people can be less active or feel lonely or depressed. Research shows that mental health problems can significantly affect the recovery of hip fracture patients. Therefore, it is important to learn ways to improve your mental health.

Staying Mentally Fit

According to the Canadian Mental Health Association (CMHA), here are some of the best strategies to get and stay mentally fit:

- **Be active and engaged:** Spend time with family and friends, volunteer in the community, continue with hobbies that you love and look for new challenges to learn something new. In short, find ways to remain stimulated and connected.
- **Get physical:** Exercise can relieve tension and fatigue, improve your mood, boost your energy, and keep your thinking sharp. That's on top of physical benefits for your muscles, joints, weight, endurance, balance, and the social benefits too. See also the section in this booklet on *The Role of Exercise*.
- **Eat right:** What we put on our plates matters to our brain. Food becomes the raw material to manufacture the chemical substances that control our sleep, mood and behaviour. For physical and mental health, the best diet is a balanced one, so include plenty of fresh fruits and vegetables, protein, whole grains, and foods high in omega-3 fatty acids (e.g. fish, nuts, seeds and eggs). See also the section in this booklet on *Nutrition*.
- **Manage stress:** Stress is about dealing with change, which certainly includes a hip fracture and your recovery. Managing stress starts with understanding what causes it. From there, you can find ways to cope, such as:
 - ▶ Relaxation techniques;
 - ▶ Healthy lifestyle (exercise is a great stress reliever);
 - ▶ Support of family and friends (discuss what's stressing you); and
 - ▶ Healthy outlook (remain optimistic, focus on the good, and picture better times ahead).
- **Deal with physical changes:** Everyone deals with physical changes at some point which can come from an injury, illness, or normal aging. As you do, it's important to accept the changes and find ways to adjust, including getting the appropriate assistance such as equipment like walkers or hearing aids, or help from others. It also means keeping a positive attitude. Focus on what you can do instead of what you can't.

Keys Things to Remember

- Many factors affect your mental health, including illnesses and injuries.
- Physical activity can help treat depression and anxiety. It's not a cure, but it has a positive impact.
- Our diet supplies the vitamins we need for our brain to work. Not getting the right vitamins and amounts can lead to depression, mood swings and anxiety.
- Everyone has stress, but chronic stress can harm your overall health. Stress contributes to:
 - ▶ Migraines;
 - ▶ Ulcers;
 - ▶ Muscle tension;
 - ▶ Fatigue;
 - ▶ Risk of heart attacks;
 - ▶ Anger;
 - ▶ Anxiety;
 - ▶ Irritability;
 - ▶ Fear;
 - ▶ Confusion; and
 - ▶ Loss of enjoyment.
- Recognize the signs of depression: loss of appetite and weight, trouble sleeping, less energy and motivation.
- If you're struggling with your mental health or are concerned about a loved one, talk to your family doctor. He or she can refer you to a mental health professional.
- For mental health services in your community, visit the Canadian Mental Health Association website at <http://www.cmha.ca>.

Pain

After hip surgery, your pain will decrease over the next six weeks, however, you may still feel discomfort after that. Here's how you can cope with pain:

Medication and Alternatives for Coping With Pain

- Take pain medication when the pain affects rest or activities. See also the section in this booklet on *Medication Review and Safety*.
- If you have ongoing pain, learn:
 - How much pain medication you can take safely; and
 - When you can take it, i.e. when you get up, at bedtime, or as needed.
- Try alternatives to medication including relaxation techniques like deep breathing, or distracting yourself with music.
- Lie on your bed and raise the side where you had the fracture or surgery, or raise your leg when sitting.
- Use hot and cold treatments. A warm shower may help relieve pain. For swelling, place an ice pack in a towel and apply it to your hip for 15 minutes. A package of frozen vegetables wrapped in a towel also works.

Ease Into Activities – and Listen to Your Body

- When getting active, “start low and go slow”. Being away from any activity, for even just a few weeks, affects your fitness level.
- Why is doing too much too soon a mistake? You can get injuries or aches or become discouraged. That's often why people give up on sports and exercise, even on the routine physical activities that are part of daily life.
- Gradually increase your time and effort.
- Activity is key to treating issues like arthritis and relieving your aches. See also the section in this booklet on *The Role of Exercise*.

Understand the Difference Between Soreness and Pain

- It's normal to get sore muscles after starting a new activity, resuming an activity after time off, or increasing your activity/exercise levels.
- Pain is the body's warning sign. Months after surgery, watch out for any sharp pain in your joint, or lasting pain (into the next day) after an activity. It may be time to change the activity.
- Sudden, sharp and severe pain in the hip isn't normal, especially if it keeps you from moving. Contact your family doctor or go to your hospital's emergency department.

Keys Things to Remember

- Occasional discomfort is normal. Don't wait until the pain is bad before taking pain medication.
- When active, don't push beyond your limit. Rest if you feel tired or uncomfortable.
- During physical activity, soreness can be expected, not pain. If you feel pain, talk to your surgeon or physiotherapist. A trainer who has worked with people with hip fractures or replacements can also help.

Medication Review and Safety

Many people need a variety of medications for their health issues which can involve more than one prescription. It can also include a combination of prescription drugs, over-the-counter products and natural remedies. Learn how to take them safely.

Medication Safety Checklist

	Yes	No
Have you talked to your doctor about alternatives to medication?	<input type="checkbox"/>	<input type="checkbox"/>
Have you informed your doctors and pharmacist about all of your medicine (prescription, over-the-counter or herbal) and about your use of alcohol and/or tobacco?	<input type="checkbox"/>	<input type="checkbox"/>
Do you read instructions to check for side effects, or the effects of combining medications?	<input type="checkbox"/>	<input type="checkbox"/>
Do you take medication as prescribed? Do you know of any other instructions if you forget to take it?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a list of your medications? Is your family aware of it?	<input type="checkbox"/>	<input type="checkbox"/>
Do you wear a bracelet or necklace to tell people about medication allergies?	<input type="checkbox"/>	<input type="checkbox"/>
If you react to a medicine or experience side effects, do you tell your doctor or pharmacist?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use only one pharmacy for all of your prescriptions?	<input type="checkbox"/>	<input type="checkbox"/>
Have you gone through your medicine cabinet to get rid of old medications?	<input type="checkbox"/>	<input type="checkbox"/>
When you get new medicine, do you ask for all of the information on its use and side effects?	<input type="checkbox"/>	<input type="checkbox"/>

Source: Public Health Agency of Canada

Available Medications

Don't wait until your pain is severe before taking medication. Treat and control pain as early as possible as it helps to prevent stress and increased pain. Medications also work better when your pain is less.

- You can often control mild-to-moderate pain with over-the-counter medication, such as:
 - Acetaminophen and anti-inflammatories;
 - Anti-inflammatories like ibuprofen, naproxen, and diclofenac;
 - Muscle relaxants combined with an analgesic; and
 - Topical analgesic creams and rubs.
- Moderate-to-severe pain needs prescription medication such as:
 - Tramadol;
 - Codeine; and
 - Stronger opioids like oxycodone.

Medication Management at Home

- Ask your pharmacist about ways to make it easier to manage your medication. Blister packages (plastic, sealed bubbles) are useful, as are dosettes (which store a week's supply of multiple medications). This helps you keep track if you have to take several medications (or even the same one) throughout a day, or at specific times.
- Make the medication part of your routine. Take it before or after another regular activity, like meals or going to bed. (That depends on how often you need the medication, and if you should take it with food.)
- Make a list with the medication name, the dosage, and when you need to take it. Add any special instructions and keep it current.
- Don't mix alcohol and medications. Alcohol can react with many common medications, including sleeping pills, cold or allergy medicines, high blood pressure pills and pain medication.
- Don't keep old medicine as it's confusing and dangerous. Return it to your pharmacist.

Side Effects and Interactions

All medicines have side effects. Whether you feel them can depend on how much medicine you take, your age, weight, gender, and other health problems. Remember, the benefits of the medicine are more important than minor side effects.

- Talk to your doctor or pharmacist about side effects. Learn how soon they may start, and if they go away on their own. Ask if you can do anything to prevent them (e.g. taking a medicine with food or at a certain time of day). Understand how to manage mild side effects.
- Adjust your activities if you know your medication causes dizziness or sleepiness as it reduces your risk of falling.
- Call your doctor if side effects bother you and you wonder if you should take the medicine. You may be able to lower your dose or change your medicine. Don't quit taking your medicine unless your doctor tells you to.
- Know the signs of an allergic reaction to medicine, which include trouble breathing, hives, or swelling of your face, lips, tongue, or throat. Call your doctor or 911 right away, or go to the emergency room.

Taking certain medicines together may cause an interaction (when one medicine causes side effects that create problems with other medicines, or when one medicine makes another stronger or weaker, or makes another health problem worse). Interactions can happen with any medicines, whether prescription, over-the-counter or others.

Are you experiencing a side effect of an interaction? It can be hard to know. Talk to your doctor or pharmacist. They can review the medicines to see if there's a problem, and make suggestions about getting the treatment you need.

Antibiotics Before Minor Surgery or Dental Work

Tell your dentist and doctors about your hip surgery as you may need antibiotics to prevent an infection in your hip. It's especially important if you're having minor surgery or any dental work.

Keys Things to Remember

- Our bodies can be sensitive to the effects of many medications. The combination can also cancel the benefits of some medications, or it might create bad reactions. Talk to your doctor or pharmacist about side effects and interactions.
- Addiction to pain medication is rare. If you're worried about physical dependence, lower your dose before stopping completely. Your doctor will help you.
- Talk to your pharmacist about ways to keep track of your medications.
- Share your medication list with your doctor or pharmacist. If it's easier, bring all your medications to the appointment.
- Give all of your doctors the same information regarding your medication routine.

The Role of Exercise: Improving Mobility and More

During your recovery, certain exercises will improve how well you can move. Over time, exercise in general can increase your endurance, strength, balance, and flexibility. All of these will help you move independently and will help to prevent falls and injuries.

During Your Recovery

Your physiotherapist can tell you which exercises to do and how often. Daily walking is also an important part of your program. Try to walk more each day.

If you've had a hip replacement, don't:

- Cross your legs past the mid-line of your body;
- Bend past 90 degrees; or
- Lean forward when exercising.

Consult your physiotherapist or doctor if any exercise increases joint pain, or causes swelling, or stiffness.

Basic Exercises

The following exercises may help you in your recovery:

1. Foot and ankle exercise

- ▶ Lie on your back (on your bed) with your legs straight.
- ▶ Pump your feet up and down.
- ▶ Move your feet in circles.

2. Static quadriceps

- ▶ Lie on your back (on your bed) with your surgical leg straight and the non-surgical leg bent.
- ▶ Push the back of your straightened surgical leg down into the bed.
- ▶ Tighten the muscles at the top and front of your thigh.

3. Static gluteals

- ▶ Lie on your back (on your bed).
- ▶ Bend both knees, and keep your feet flat on the bed.
- ▶ Raise your buttocks and squeeze the buttock muscles.

4. Static abdominals

- ▶ Lie on your back (on your bed) with your hips and knees bent and your feet flat.
- ▶ Place your fingertips on each side of your abdomen just above the pelvis and below the rib cage.
- ▶ Pull your abdomen up and in as if to tuck it under your ribs.

5. Knee extension

- ▶ Lie on your back (on your bed) with legs straight and a rolled-up towel under your knees.
- ▶ Straighten the knee of your surgical leg by lifting your foot off the bed.

6. Hip abduction

- ▶ Lie on your back (on your bed).
- ▶ With both legs straight, slide your surgical leg out to the side.
- ▶ Keep your knee straight, and your knee cap and toes pointing to the ceiling.

7. Hip and knee flexion

- ▶ Place a sliding board at the bottom of the bed.
- ▶ Lie on your back (on your bed) with legs straight and feet on a sliding board.
- ▶ Bend your knee by sliding your heel along the sliding board towards your buttocks.

8. Hip extension

- ▶ Stand on your non-surgical leg and hold onto something sturdy (e.g. kitchen counter).
- ▶ Swing your surgical leg backwards keeping your knee straight.
- ▶ Keep your back straight and abdominal muscles pulled in. Do not lean sideways.

9. Knee flexion

- ▶ Stand on your non-surgical leg. Hold onto something sturdy (e.g. kitchen counter)
- ▶ Bend the knee of your surgical leg, pulling the heel up towards your buttock.
- ▶ Keep your back straight. Do not lean forward from the waist.

Reference: "After your Hip Fracture Surgery"; Interior Health Orthopaedic Working Group, B.C.

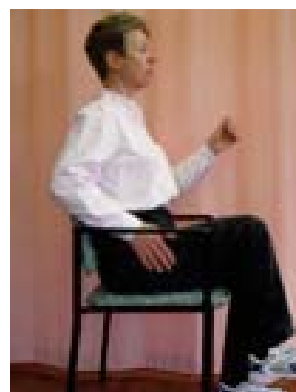
Functional Exercises

Some additional functional exercises you may wish to try.

1. Practice rising from a chair. To make this easier, use a cushion on the chair and keep your feet wide. As a challenge, keep your feet 6 inches apart, or rise from the chair without using your hands to push off. Repeat 5-10 times.



2. Sitting in a comfortable chair with good back support, march in place. Add an arm swing if you wish. Perform for 30-60 seconds. Take a rest and repeat 3-5 times.



3. Stand in front of a step with a handrail. Holding onto the railing, touch the top of the step with your foot. Place your foot back on the floor. Alternate feet for 30 seconds. For a challenge, turn sideways and lift your right leg for 30 seconds. Turn 180 degrees and repeat with left leg.



4. Stand facing a counter or at the back of a chair. Lightly hold on with both hands. Push up onto your toes and hold for 5 seconds. Repeat 5-10 times.



5. Challenge your balance. Standing at a counter or at the back of a chair, try holding your feet together for 30 seconds. Then hold one foot in front for 30 seconds. Change feet.



6. Lying on a firm surface (bed), bend your knees and keep your feet flat. Keeping your knees together, let your legs fall to one side, then the other. Keep your shoulders flat. Repeat 5 times in each direction.



7. In the same position, push up to lift your hips off the surface. Keep your knees together. Hold for 5 seconds and lower your hips. Repeat 5 times.



8. Lying on your back with a rolled towel under your knee, lift your foot off the bed until the knee is straight. Hold for 10 seconds and lower. Repeat 10 times. Change to other leg.



Reference: "Home Exercises," Geriatric Day Hospital Physiotherapy, Sunnybrook Health Sciences Centre, Toronto.

Household Activities

A hip fracture can affect your daily life at home. The Canadian Association of Occupational Therapists offers some tips on moving around the home, meal preparation, grocery shopping, and common household maintenance. See also the section in this booklet on *Preventing Falls*.

Moving Around the Home

Take steps to stair safety

- Have lights and switches at the top and bottom of your stairs.
- Make sure that you can see the edges of the steps clearly. If necessary, paint a contrasting color on the edge, or buy and apply special strips that make each step more visible.
- Keep one hand free to use the handrail.
- Remove your reading glasses on the stairs.
- Keep all your steps in good repair (e.g. no uneven surfaces).
- Ensure that all steps are the same size and height. Have a carpenter correct uneven steps.
- Fasten any covering on your stairs securely, or consider removing or replacing them with rubber stair treading.
- Make sure the handrail is well-secured to the wall. Proper height is 34-38 inches (86-97 cm).
- Avoid storing things temporarily on your stairs.
- For outside stairs, have sturdy, easy-to-grip railings on both sides (and along the walkway too).



Getting on and off the bed

- Turn on the light. When sitting, make sure you feel the bed on the back of your legs first. If you're using a walker or cane, turn slowly until the bed touches the back of your legs before sitting down.
- Adjust your furniture if needed. For example, if the bed is too low, raise the height. You can use blocks from a home health care store. A soft mattress may also make it harder to get up from the edge of the bed and to move around in bed.
- Get rid of scatter rugs or any obstacles next to the bed (and in the path to the bathroom).



Getting on and off chairs

- Choose the right chairs:
 - ▶ Firm so you don't sink too far into the cushions;
 - ▶ Armrests so you have someplace to push off; and
 - ▶ High enough so when you sit, your knees are bent at about a 90° angle.
- Lean forward. You want your nose over your knees, while placing your hands on the armrests. Push up with your hands as you straighten your knees.
- When sitting, make sure you feel the chair on the back of your legs first. If using a walker or cane, turn slowly until the chair touches the back of your legs before sitting down.



Getting in and out of the bathtub

- Consider installing grab bars on the side and back walls of the bathtub.
- Use non-slip mats inside and outside of the bathtub.
- Consider using a bathtub seat and a hand-held shower.
- Take your time. Rushing after being in a hot tub or shower can make you dizzy or weak.
- Dry your legs and feet before you get out, to decrease the chance of slipping.
- Stay away from bath oils. They will make your hands and feet oily or slippery.

Getting on and off a toilet

- Consider installing grab bars, or use a transfer pole to help pull yourself up.
- Consider a raised toilet seat or a higher toilet if you have trouble bending your hips.
- Keep toilet paper in easy reach.
- Adjust your clothes before stepping away from the toilet.
- When sitting, make sure you feel the seat on the back of your legs first.
- If using a walker or cane, turn slowly until the toilet touches the back of your legs before sitting down.

Meals and Groceries

In the kitchen

- Keep the items you use most often on lower shelves.
- Put your “company” dishes up higher. Ask the company to help you get them.
- Consider pullout shelves or drawers under your counters so you can reach the items easily.
- Use lightweight dishes, pots, and pans.
- Sit at the table to prepare food.
- Slide heavy items across the counter instead of carrying them.
- Use a kitchen trolley to move plates or dishes to the table.
- Use a steady stepstool, ideally with a handle, instead of a chair.

Grocery shopping

- If needed, use a store scooter or a wheeled walker.
- Use anything on wheels – a cart, trolley, wagon, even a suitcase – to move groceries into your home.
- Schedule your day so you shop for groceries when you have the most energy.
- Shop when the stores are less crowded so you're less hurried.
- When you're back home, take fewer bags at a time to the kitchen.

Household Maintenance

- Use cleaning or gardening tools with long handles. Avoid bending and over-reaching.
- Use a light-weight vacuum. Consider keeping a vacuum upstairs and one downstairs so you won't have to carry it.
- Be realistic about how much you can do at one time. You're more likely to fall if you're overtired.
- Keep a container of ice melt or sand inside the door to prevent slipping on the ice.

Key Things to Remember

- For household safety, learn how to get on and off your bed, chairs and toilet, and in and out of the tub.
- Stairs are a high-risk area for falls. Keep them in good repair, lit, clear, and use handrails.
- In making meals, shopping for groceries and doing chores, learn to reduce carrying and reaching.
- Improve your strength, flexibility, and balance. Taking part in a regular exercise program can help. It makes any chore easier.
- Take it slow. Rushing – on the stairs, racing to the phone, or cooking dinner – can lead to accidents.

Nutrition

Recovery After Surgery

You need calories and nutrients to help you heal properly and as quickly as possible. Here are some tips:

- Protein rich foods help build and repair body tissue, and build and maintain muscles. Women and seniors especially don't get enough protein. Ensure you have 2-3 servings a day of these foods – meat, fish, poultry, eggs, dairy, legumes, and nuts.
- Calcium can help bones renew, slow bone loss and lower the risk of fracture. Consume 2-4 servings a day. One serving equals 1 cup of milk, 2 ounces of cheese, or $\frac{3}{4}$ cup of yogurt. Products should contain vitamin D, which helps the body absorb calcium.
- Vitamin C helps to promote healing. Eat plenty of fresh fruits and vegetables.
- You may be constipated due to pain medications and moving less. Eat plenty of fibre like grains and bran and drink lots of water.
- If your appetite is limited, you can still increase calories. Eat small meals more often. Drink nutritious liquids like milk, juice and milkshakes, or add fats (e.g. cream, margarine, butter, oil, mayonnaise, salad dressing) and sweets (e.g. jams, honey, syrup, sugar) to foods.
- Consider nutritional supplements (like Ensure™ and Boost™) if you're struggling to eat a well-balanced diet.

Canada's Food Guide

How much food do you need, and what's best for you? *Canada's Food Guide* helps you make healthy choices. Check the guide at Health Canada's website, <https://food-guide.canada.ca/en/>

Vegetables and fruit

A diet rich in a variety of vegetables and fruits can reduce the risk of heart disease and some cancers. Leafy green vegetables are also a source of calcium, which is important for your bones.

- Try to have at least one vegetable or fruit at every meal and as a snack.
- Enjoy vegetables steamed, baked or stir-fried instead of deep fried.
- Choose vegetables and fruit prepared with little or no added fat, sugar or salt.
- Short on time? Use pre-bagged vegetables. You can quickly toss baby carrots, leafy greens, green beans, etc. in a salad, stir-fry or casserole.

Grain products

Grain products, particularly whole grains, are a source of fibre and are typically low in fat. Fibre-rich foods can help you feel full and satisfied. A diet rich in whole grains may also help reduce the risk of heart disease.

- Make at least half of your grain products whole grain.
- Eat a variety of whole grains – barley, brown rice, oats, quinoa and wild rice.
- Buy whole grain bread. Check the first ingredient listed – it should be whole wheat, whole oats, whole rye, whole grain corn, brown rice, wild rice, barley, bulgur, or oats.
- Pick a cereal made with whole grains, bran or oats, or add a spoonful of unprocessed bran or bran cereal to oatmeal for added fibre.

Milk and alternatives

Calcium-rich milk and alternatives are easy to include at meals and snacks. Drink milk or fortified soy beverages by the glass or use them in recipes.

- Drink skim, 1% or 2% milk, or fortified soy beverages each day. Check the food label to see if your soy beverage is fortified with calcium and vitamin D.
- Pick lower-fat milk alternatives. Examples: yogurt with 2% milk fat or less, or cheeses with less than 20% milk fat.

- Limit cream cheese, ice cream, coffee cream, whipping cream, and sour cream as these foods are high in fat and calories.
- Include milk or fortified soy beverages in your cooking. For example, you can use milk in scrambled eggs, or instead of water in canned tomato soup.

Meat and alternatives

Meat and alternatives provide protein, fat and other important nutrients such as iron, zinc, magnesium and B vitamins.

- Use lean or extra lean cuts of meat. Examples: inside round roast, outside round roast, eye of round steak or roast, strip loin steak, sirloin steak, rump roast, lean and extra lean ground meat, or ground poultry.
- Trim visible fat from meat and skin from poultry before cooking. Drain extra fat after cooking.
- Bake, grill, broil or poach instead of frying. Serve without rich sauces, butter or gravy.
- Have meat alternatives like beans, lentils and tofu often. These are a cheap source of protein and they're high in fibre and low in fat. You can add them to soups, casseroles, salads and burritos.

Understand the Obstacles to Good Nutrition

Poor nutrition is bad for your overall health and can also increase your chance of falling. For instance, skipping meals or not getting enough fluids can make you dizzy. (See the section in this booklet on *Preventing Falls*.) Deal with some obstacles to good nutrition by:

- Talking to your doctor or pharmacist about medications and how they affect your appetite.
- Seeing a dentist if you have mouth or teeth issues that affect eating.
- Learning how to change your diet to suit chronic conditions like arthritis, osteoporosis, heart disease and diabetes. See also the section in this booklet on *Osteoporosis*.

- Consider talking to a dietitian/nutritionist. They can help if you have a poor appetite, have lost lots of weight without trying, are underweight, or can't eat a wide variety of food.
- Plan meals to suit your schedule. You may prefer a large meal at noon, or a combination of small meals and snacks through the day. The pattern doesn't matter. What's important is eating a variety of foods to meet your nutritional needs every day.
- Buy foods in small, easy-to-open packaging to make meal preparation easier.
- Double the recipe and freeze the extra in serving sizes for another day.
- Make meals social. Share a potluck dinner or cook with friends. You can take meals home and freeze them for a time you don't feel like shopping or cooking.

Key Things to Remember

- Good nutrition after surgery:
 - ▶ Promotes rapid recovery;
 - ▶ Reduces the risk of infection; and
 - ▶ Maintains good health.
- Learn about healthy food choices by checking *Canada's Food Guide*.
- Many people face nutritional obstacles including changes in digestion, lack of appetite, dental problems, and lack of motivation to cook (especially if living alone). These problems can increase as we age.
- Meal preparation strategies can help. Talk to a doctor, pharmacist, dentist, dietitian or nutritionist for advice.

Osteoporosis

Many hip fractures are related to osteoporosis (where your bones get thinner and weaker). People who've had a fracture are at higher risk of another. For more information, visit Osteoporosis Canada's website at www.osteoporosis.ca, or call toll-free at 1-800-463-6842.

What is Osteoporosis?

What characterizes this condition?

- Bone loss, which has no symptoms. A hip fracture may be your first sign of osteoporosis.
- Everyone starts losing bone in their mid-30s. With osteoporosis, bone loss occurs faster.
- Osteoporosis raises the risk of broken bones, mainly in the hip, spine and wrist.

What's the difference between osteoporosis and osteoarthritis?

- Osteoporosis: bone disease.
- Osteoarthritis: disease of the joints and surrounding tissue.

Is osteoporosis a "woman's disease"?

- No. Men do have more bone mass than women. Women also lose bone faster as they near menopause. However, osteoporosis is a serious health issue for everyone.
- Osteoporosis Canada says at least 33% of women and 20% of men will break a bone due to osteoporosis.

How do I get an assessment?

- Most fracture patients don't get diagnosed or treated properly for the condition.
- Tell your doctor about:
 - ▶ Your hip fracture;
 - ▶ Any other bones you've broken as an adult;
 - ▶ Loss of height; and
 - ▶ Previous falls.
- Ask for a:
 - ▶ Height measurement;
 - ▶ Spine X-ray if you've lost height;

- ▶ Falls assessment;
- ▶ Fracture risk assessment (called FRAX or CAROC); and
- ▶ Bone mineral density test (a simple X-ray).

Drug Treatments

Drug treatments can increase bone density and reduce the risk of fractures. Review the options with your doctor. You may need to explore several treatments to find what works best.

Bisphosphonates

- Family of drugs for men, post-menopausal women, and anyone using steroid medications.
- Reduces the risk of spinal fractures.
- Certain types also reduce the risk of hip and other fractures.

SERMs

- Family of drugs for post-menopausal women.
- Prevents spinal fractures.

Hormone Therapy or estrogen/progesterone

- Option if you also want relief from menopause symptoms.
- Can prevent spine and hip fractures.

Calcitonin

- Nasal spray that prevents (or reduces the pain of) spinal fractures.
- Treats osteoporosis in post-menopausal women.
- Can also treat osteoporosis in men and non-pregnant, pre-menopausal women.

Denosumab

- Bone metabolism regulator for post-menopausal women.
- New class of treatment that reduces the risk of fractures at the spine, hip and other sites.

Parathyroid hormone (PTH)

- New class of treatments called bone formation agents.
- Injections can cut the risk of vertebral and other fractures.
- For men and post-menopausal women with severe osteoporosis, where other therapy hasn't worked.

Preventing Falls

Falls are the major cause of hip fractures. They also pose a great risk of future fractures, head injuries, sprains and bruises. It is important that you understand the potential hazards and ways to address them.

Assess Your Home

Have a physiotherapist or occupational therapist come to your home and tell you how to reduce hazards that can lead to falls. Bathrooms, kitchens and stairs are especially high-risk spots for falls. Consider ways to make these areas safer. See also the section in this booklet on *Household Activities*.

Bathroom

- Use floor mats with rubber backings.
- Install grab bars or handrails in the shower or bath (side and back walls).
- Use rubber tub mats or adhesive strips in the tub.
- Use a bath chair or seat that fits across the bath, and a hand-held shower.
- Use a shower organizer to keep your soaps, shampoos and other bath products in reach.
- For the toilet, consider a riser for the seat or a frame with arm rests.
- Wipe up moisture or spills right away.
- Use a night light so you aren't fumbling around in the dark.

Kitchen

- Keep every day supplies and equipment within easy reach.
- Use a long-handled reacher with rubber grips to pick up out-of-reach items.
- Store heavy items in lower cupboards.
- To climb, use a sturdy step stool with handrails.
- Wipe up spills right away.
- Use non-skid floor wax.

Stairs

- Keep your stairs well lit.
- Have solid handrails on both sides of the stairway.
- Remove your reading glasses when you're on the stairs.

Lighting

- Check to see if your house is well lit, inside and out.
- Use night lights in areas like hallways and bathrooms.
- Add extra or remote switches (e.g. "clappers") to make it easier to get up at night.

Develop Safe Habits

As you go through your day, be aware of certain routines that can reduce the risk of falling.

Footwear

- Wear footwear with non-skid soles.
- Shoes should be low-heeled, fit well and give good support.
- Repair or replace shoes with worn heels or soles.
- Do not wear socks without shoes on smooth floors.
- Take care of your feet; painful feet may affect your ability to remain stable.

Getting up and moving around

- Get up slowly after lying down or sitting (including sitting on the toilet).
- Do not lean against unstable furniture or objects.
- Sit in a sturdy chair when you are getting dressed.
- Watch for uneven ground, sidewalks and floors.
- Do not try to carry too many things at the same time.

Improve strength and balance

- See the section in this booklet on *The Role of Exercise*. Strength exercises make it easier to do everyday activities and are also important to keep you from losing muscle as you get older.
- Many leg strengthening exercises – like standing on one foot, walking on your heels or toes, toe raises, Tai-Chi – will improve your balance.
- People who have had hip surgery, or have osteoarthritis of the hip, often develop weakness in certain muscle groups including the front thigh and side hip muscles. Strengthening these muscle groups (with weights and resistance bands) has many benefits. It can help you to reduce pain, walk normally, improve balance, and increase your ability to function.

Get mobility aids and equipment

- Have a physiotherapist assess your need for walkers, canes and other mobility aids.
- If you need them, wear your glasses and hearing aid. Those may not be mobility aids, but they can help you from falling by keeping you more aware of your surroundings.

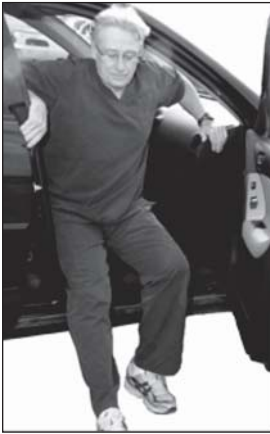
Understand the effect of medications

- Discuss your medications (prescription, over-the-counter and herbal) with your doctor and pharmacist.
- Side effects like drowsiness or dizziness can increase your risk of falling. Change your activities as needed. See the section in this booklet on *Medication Review and Safety*.
- Read directions carefully. Be aware of potential reactions with other medications.
- Don't mix alcohol and medications as that combination can cause falls.

Travel

Car Trips

- Move the front passenger seat as far back as possible. Roll the window down. If you have an artificial joint, place a wedge cushion on the seat (thick portion at the back).
- Back up to the seat. Place one hand on the window ledge and the other on the back of the car seat. Lower yourself slowly. Slide back until you can comfortably swing your legs into the car. Reverse the process to get out. Have any walking aid ready when you stand.



Plane Trips

- The screws and other parts used to fix your hip may set off metal detecting devices in airports. Tell the security officer that you've had hip surgery. Security may then pass a hand-held wand over your hip area.
- Don't stay in one position too long. Get an aisle seat on the side of the fracture. That way, you can stretch your leg even if you can't get up.

Key Things to Remember

- Avoid trips of more than an hour for six weeks. Your hip will feel uncomfortable and stiff.
- Most airlines advise that you shouldn't fly within three months of surgery due to the added risk of a deep vein thrombosis (DVT).
- Get out of your seat every 1-2 hours. Walk around to relieve back, hip and knee stiffness.

Get Help and Learn More: Service and Information Resources

Following a hip injury and surgery, you likely have many questions about the impact of your fracture and safe recovery. To learn more about your bones and joints, assistive devices/equipment, pain and medication, home care, falls, mental health, activity/exercise and nutrition, review the resources listed here.

Consider some of the other most important resources – your personal support network. Some people are fortunate to have someone else in the household to assist. Others might be reluctant to ask for help, but everyone has someone they can turn to. Take advantage of that.

Family members, friends and neighbours can play a pivotal role in ensuring that many of your practical needs are met, such as meal preparation, rides to appointments and errands, medication reminders, and more. Whether people help in ways large or small, every way that someone pitches in matters. In fact, there's evidence that the level of social connections after a hip fracture can improve outcomes.

Your Bones and Joints

- Canadian Orthopaedic Foundation: <http://www.movepainfree.org>
- Osteoporosis Canada: <http://www.osteoporosis.ca>

Assistive Devices/Equipment

- Red Cross depots.
- Service clubs (e.g. Kiwanis, Rotary, Lions Club).
- Public health units.
- Veterans Affairs Canada: <http://www.veterans.gc.ca> (Canadian veterans may be eligible for assistance with the purchase of special equipment or with services such as homemaking).

Home Care

- Victorian Order of Nurses: <http://www.von.ca>.

Falls

- Falls Prevention Tips, Canadian Orthopaedic Foundation: <https://movepainfree.org/stay-healthy/injury-prevention/fall-prevention/>

Mental Health

- Canadian Mental Health Association: <http://www.cmha.ca>

Activity/Exercise

- “Get Moving: Maximizing Your Activity After a Hip or Knee Replacement”, Canadian Orthopaedic Foundation: <https://movepainfree.org/patient-information-resources/>
- “Physical activity and your health”, Government of Canada: www.canada.ca/en/public-health/services/being-active/physical-activity-your-health.html

Medication Safety

- [*“Keeping Track of Your Medicine”*](#) Public Health Agency of Canada

Pain

- Pain Canada: <https://www.paincanada.ca/>

Nutrition

- *Canada's Food Guide*, Health Canada: <https://food-guide.canada.ca/en/>
- Meals on Wheels (or similar): Connect with your community program



1.800.461.3639
www.movepainfree.org

This booklet is produced free of charge by the Canadian Orthopaedic Foundation, Canada's charity dedicated to bone and joint health.

Still Have Questions?

Access free, reliable, surgeon-approved resources and support programs at no charge to help with your return to mobility. Call today! We are here to support you every step of the way.



This booklet provides general, practical information only and should not replace consultation with, or care or instructions provided by, qualified health care professionals. The Canadian Orthopaedic Foundation does not endorse any product, treatment or therapy.

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