Exercises
For Chronic Back Pain

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Starting to Move and Exercise Again

If you have chronic pain and stay active, you may have less pain.
You may have found it difficult to increase your activity in the past.
We want to help you get started.

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**Frequency and Time**
- Exercising every day is better than exercising once a week.
- The exercise should challenge your pain but not cause it to flare-up.
- If you walk for 10 minutes and your pain increases to an amount that you can tolerate, it should return to your normal pain level in 1 to 2 hours.

**Intensity**
- Intensity is the amount of physical effort in an activity.
- Some exercises require a higher level of intensity than others.
- Running has a higher intensity of physical activity than walking.
- You can alter the intensity of an exercise like walking by:
  - Walking on a flat surface or up and down hills
  - Walking on a track, treadmill, or a trail
  - Walking with taking larger or smaller steps
  - Walking faster or slower
Type
• There are many ways to exercise and there is no best exercise.
• Examples of types:
  - Cardiovascular training like walking, cycling, and swimming
  - Strength training like weight training and resistance exercise
  - Flexibility exercise like stretching programs
• Some exercises combine strength training, cardiovascular, and stretching such as Yoga, Pilates, Tai Chi, and aqua-aerobics.
• It is important to choose an exercise that you enjoy and able to do.

Using F.I.T.T. Principles – an example
If you walk around your neighborhood once a week for 20 minutes and have a flare-up of pain that lasts for several hours or days, you should:
  - Try walking around the neighborhood for 5 minutes at the same pace.
  - Try increasing the frequency by walking for only 5 minutes every day.

How to increase your exercise level
• We suggest repeating your starting level at least 3 times before increasing.
• Plan on making small increases at a time.
• Only change one of the F.I.T.T. principles at a time.

Here is how to increase your exercise slowly:
1. Increase the amount of time that you walk:
   5mins ▶ 6mins ▶ 7mins ▶ 9mins ▶ 11mins
2. Increase the frequency by walking for 5 minutes 2 or 3 times a day.
3. Increase the intensity by walking for 5 minutes on a different surface or walk at a different pace.

Remember to only change one F.I.T.T. at a time
Principles for Low Back Exercises with Pain

• Only contract or stretch as far as is comfortable, even if this feels like you aren’t doing much.

• If you ‘pay for it later’, you need to modify the exercises with the F.I.T.T. principles (for example, 5 repetitions instead of 10).

• It is very important to keep breathing during the exercise.
Strengthening Exercises

The Basics
People with chronic pain have discomfort when moving around. Here are some basic exercises to help get your body moving slowly, gently, and safely.

Goal: 5 to 15 repetitions ♦ 1 to 2 sets at a time ♦ 1 to 2 times a day

1. Abdominal Contraction
   How:
   1. Feel for the front of your hip bones.
   2. Now move 4 cm. (1 ½ inches) inward towards your belly button.
   3. Gently try to ‘hold your pee in’ or pretend to ‘squeeze into tight pants’ for 10 seconds. You should feel a gentle muscle contraction below your fingers.
   4. Relax.

   Notes:
   - Keep breathing.
   - Shoulders and low back stay relaxed on the floor.
   - Do not arch your back.
   - Do not ‘suck in’ your tummy.

   Why: This muscle helps to support the back. If needed, contract this muscle for all exercises.

   Progression:
   1. Tighten your abdominal muscles (steps 1 to 3).
   2. Hold the contraction.
      Keep breathing.
   3. Gently let one knee fall to the side a few centimeters (an inch or so).
   4. Gently pull the knee back to neutral.
   5. Repeat on other leg.
   6. Relax.
### 2. Knee Fold

**How:**
1. Lie on your back with your knees bent.
2. Tighten your abdominal muscles.
3. Breathe out and lift one knee towards your chest.
4. Lower the leg down.
5. Relax.

**Notes:**
- Do not hold your breath.
- Do not arch your back.

**Progressions:**
- **B:** Same as ‘A’ but straighten the leg.
- **C:** Add arm movements. Raise opposite arm up as other leg straightens (for example: right arm with left leg)

### 3. Heel Slide

**How:**
1. Lie on your back with your knees bent.
2. Slowly straighten one leg by sliding the heel along the floor.
3. Slide the heel back up to the starting position.

**Notes:**
- Only slide as far as comfortable.
- Keep your heel on the floor at all times.
- Do not hold your breath.

**Progressions:** Add arm movements, raising the opposite arm up as you slide the other heel.
4. Bridge

**How:**
1. Lie on your back with your knees bent.
2. As you breathe out, slowly lift your bottom up a few inches off the floor.
3. Squeeze your buttocks muscles as you lift it upwards.
4. Hold for 4 seconds.
5. Slowly lower your buttocks.

**Notes:**
- Keep your hips at an even level when lifting.
- Try to keep your abdominal muscles tight.
- Do not arch your back.

If this is too hard for you then start with modified bridge.

**Modified bridge:** Practice squeezing your buttocks muscles without lifting it off of the floor.

5. Hip Extension

**How:**
1. Lie on your stomach with a pillow under hips.
2. Tighten your abdominal muscles.
3. Slowly lift one leg up a few inches, keeping your knee straight.
4. Hold for 4 seconds.
5. Slowly lower your leg.

**Notes:**
- Do not arch your back.
- Do not hold your breath.

If your back hurts with this exercise, just contract the leg/buttocks without lifting the leg.
6. **Hip Slide**

**How:**
1. Start on your hands and knees.
   - Keep knees hip width apart.
   - Keep hands shoulder width apart.
   - Keep back and neck in a straight line.
2. Tighten your abdominal muscles.
3. Slowly straighten one leg backwards.
4. Hold for 4 seconds.
5. Slowly lower your leg.
   - Notes:
     - Do not arch your back.
     - Keep abdominal muscles tight.

*If this is too hard, slide your leg back but keep foot on the floor.*

7. **Superman**

**How:**
1. Start on your hand and knees.
2. Tighten your abdominal muscles.
3. Slowly lift one arm upwards.
4. Hold for 4 seconds.
5. Slowly lower your arm.
   - Notes:
     - Do not arch your back.
     - Keep abdominal muscles tight.
     - Keep your neck and back in line.

*If this is too hard, slide your hand forward but keep contact with the floor.*

**Progressions:** Combine the Hip Slide and Superman, using the opposite arm and leg (for example: left arm and right leg)
8. **Clamshell**

**How:**
1. Lie on your side with your knees and hips bent.
   - Keep your heels together.
2. Roll slightly forward.
3. Tighten your abdominal muscles.
4. Slowly lift the top knee upwards a few inches.
5. Hold for 4 seconds.
6. Slowly lower the knee down.

**Progressions:** To make it harder, tie a TheraBand™ around your knees.

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9. **Back Extension**

**How:**
1. Lie on your stomach with a pillow under your hips.
2. Tighten your abdominal muscles.
3. Slowly lift your chest a few inches.
4. Hold for 4 seconds.
5. Slowly lower your chest back down.

**Notes:**
- Do not extend the neck.
- Do not hold your breath.
Stretching Exercises

Goal: 1 to 2 repetitions • Up to 3 times a day • Hold the stretch for 20 to 30 seconds.

1. Knee Hugs

How:
1. Lie on your back with your knees bent.
2. As you breathe out, gently pull one knee towards your chest.

Progression:
A: Knee hug with one leg straight
B: Double knee hug

2. Prayer Stretch

How:
1. Start on your hands and knees
2. As you breathe out, lower your bottom towards your feet.
3. Slowly reach your arms forward.

Option:
Place your hands under your forehead, or by your side. You can also use a pillow in between your heels and buttocks.
3. **Hip Stretch**

**How:**
1. Sit up tall.
2. Bend one knee up toward your chest.
3. Cross the foot over the other leg.
4. As you breathe out, gently pull your knee up towards your chest.
5. Twist your upper body towards the bent knee.

**Option:**
Lie on your back and pull the knee across your body.

4. **Hamstring Stretch**

**How:**
1. Lay down with one leg up on the wall.
   You should feel a gently stretch at the back of your leg.
2. Move closer to the wall for more of a stretch.
   If you feel any sharp pain, move away from the wall.

**Option:**
A: Without a wall, you can hold your thigh and gently pull the leg towards your head.

B: Straighten one leg out while sitting in a chair.
Stretch by leaning forward from your hips.

5. **Piriformis Stretch**

**How:**
1. Lie on your back.
2. Cross one ankle over the other knee.
3. Reach to the bottom leg’s thigh.
4. Gently pull the thigh towards you.
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Community Activity Resources

Yoga
- Examples of gentle styles of yoga: Restorative, Therapeutic, Flow, Hatha
- Purchase DVDs or try on-line classes. See www.gaia.com or www.yogo.tv.
- Attend yoga studios or through community recreation centres. Search www.yogadirectorycanada.com for a teacher/studio
- Canadian Institute for the Relief of Pain and Disability: Yoga for People in Pain Webinar www.cirpd.org/resources/Webinars/

Tai Chi
- All around B.C. through Taoist Tai Chi organization: www.taoist.org/bc
- You pay a small membership fee, which can be pro-rated based on income
  Gives you access to any class in B.C.
- Different levels: Beginner, Continuing, and Health Recovery

Arthritis
- The Arthritis Society runs JointWorks and WaterWorks across the province, usually out of community recreation centres/pools
- Some community pools may call this Gentle Joints

Walking Groups
- Hearts in Motion walking clubs through Heart and Stroke Foundation: www.heartandstroke.bc.ca
- Walk Fitness walking program from the Running Room www.runningroom.com

Seniors
- Get up and Go!: Entry Level exercise program through Fraser Health www.fraserhealth.ca