A healthier life is on the line for you!

If you have low back pain, you may be afraid that exercise will make it worse. In most cases, the opposite is true. Exercise can actually reduce low back pain and speed recovery. It also helps prevent future injuries. The key is to do exercise properly. The guidelines below will help you get the most from exercise.

How exercise helps your lower back
Your spine consists of 33 interlocking bones called vertebrae. They are exposed to countless physical shocks as you move throughout the day.

To handle this, your lower back relies on:
- Support from muscles and ligaments, in your abdomen, buttocks, and legs as well as in your back. (A ligament is a band of tissue that connects bone to bone.)
- Shock absorption from small, compressible “pillows” called discs, which lie between each of your vertebrae.
- The natural curves in your spine, including the curve in your lower back.

Regular exercise plays an important role in keeping all of the above in good working order. It improves blood flow and keeps your muscles and ligaments strong and flexible. It relieves stress and strain on your discs so they keep their shape and stay in their proper position. It also helps your spine maintain its natural curves.

Guidelines for exercising to reduce and prevent low back pain

Important:
- The guidelines below apply to many people. But everyone is different. Before you begin or increase any exercise program, talk with your doctor. Or ask to be referred to a physical therapist.
- Ask your doctor or physical therapist when to start exercising. Ask what types of exercises to do and how often. Ask what exercises to avoid.
- Continue other treatments for your low back pain, as prescribed by your doctor.

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1. **Do some low-impact aerobic exercise every day.** Examples are walking, riding a bike or stationary bike, and swimming.
   - Aerobic exercise strengthens your heart, lungs, and other muscles, including those that support your back. It also improves blood flow to your back and promotes healing.
   - Even a couple of minutes per day are helpful at first. Then slowly increase your time. Check with your doctor about how to progress, depending on the nature of your pain or injury.
   - For most people a good long-term goal is to build up to at least 150 minutes per week of moderate activity, such as brisk walking. The 150 minutes should be spread out over the week. For example, walk briskly for 30 minutes or more on five or more days of the week. Keep in mind that any period of 10 minutes or more counts toward the weekly goal.
   - For some people non-weight-bearing aerobic exercise may be best. Examples are swimming or walking in water up to your waist.

2. **Do some stretches and/or strengthening exercises every day.** Just 10 minutes can make a big difference!

3. **Practice good posture and body mechanics to avoid future injury.** Talk with your health coach for UPMC Health Plan resources on those topics.

**Stretches and strengthening exercises**

Ten stretches and strengthening exercises are shown below. They help many people and can be done at home without any equipment.

Keep these points in mind:
- The best set of stretches and strengthening exercises is one that is designed for you, based on the cause and nature of your pain. Ask your doctor or physical therapist for a plan that fits your needs.
- **Only do those that do not increase your symptoms. If you feel any pain, STOP.** Talk with your doctor or physical therapist.
- It is best to have ongoing supervision. For example, see a physical therapist from time to time to check on your progress and advance your home program.

**Stretches to help your lower back**

Stretch when your muscles are warmed up, after you have been active. For example, walk in place for a few minutes before you stretch.

Only stretch as far as needed to feel a gentle stretch, never to the point of pain.

Hold each stretch steady for 10-30 seconds, breathing throughout. Do not hold your breath, and do not bounce. Repeat each stretch three to five times.

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Ten Exercises to Reduce and Prevent Low Back Pain

1. **Hamstring stretch**
   The hamstrings are the large muscles that run down the back of your thighs.
   - Lie on the floor on your back, with your legs extended and your back straight. Keep your hips level. Tighten your abdominal muscles, pressing your lower back onto the floor.
   - Bend your right knee toward your chest, keeping your left leg extended on the floor. Slowly straighten your right knee, holding the back of your right leg with both hands.
   - Gently pull your leg toward your chest, just until you feel a gentle stretch in the back of your thigh. Keep both hips on the floor.
   - Breathe deeply and hold for 10-30 seconds. Switch legs and repeat to stretch your left hamstring.

2. **Cross leg stretch**
   This stretches the muscle that runs from the base of your spine to the back of your thighbone.
   - Lie on the floor on your back. Bend your knees, and bring them up toward your chest. Cross one leg over the other.
   - Place both hands together under the knee of the other (lower) leg.
   - Gently pull the bottom leg toward your chest and hold both thighs close together. You should feel a gentle stretch in your buttock.
   - Hold for 10-30 seconds, breathing.
   - Repeat, this time with the other leg crossing over.

3. **Hip flexor stretch**
   The hip flexors are a group of muscles that move the hip forward when you walk and run.
   - Kneel on the floor, with one leg bent and the other knee and lower leg on the floor behind you. Put your forward knee over your foot. Keep the other knee on the floor.
   - Slowly push your hips forward until you feel a gentle stretch in the upper thigh of your rear leg. Hold for 10-30 seconds, breathing.
   - Do the same with your other leg.

**Strengthening exercises to help your lower back**

Warm up before you do the exercises below. For example, walk in place for a few minutes beforehand. Or do them after you go for a walk or swim.

Skip one or two days between doing the exercises. Your muscles need time to repair themselves.
It will take time to get used to doing the exercises. It may be helpful to have someone read each step as you do each new exercise. With practice you will remember the steps.

How many times should you repeat each exercise?
• If you are a beginner, start with one repetition, or “rep.” Then slowly increase the number of reps until you are comfortable doing 10-12. This is called one “set.”
• At that point, begin to slowly build up to a second and third set.
• Rest for 30-60 seconds between sets.

4. Cobra
• Lie on the floor on your stomach, with your hands directly under your shoulders and your fingers facing forward. Your legs should be straight and toes pointed.
• Gently exhale. Firm your abdominal muscles to support your spine, and press your hips into the floor. Then lengthen your torso and curl your chest up off the floor. While doing this, keep your hips on the floor and your shoulders back and down.
• Hold. Gently lower your upper back to the floor, lengthening your spine as you do so.

Note: As you lift your chest up off the floor, do not extend your arms completely if doing so would lift your hips off the floor. Your hips should stay on the floor.

5. Alternate arm and leg lifts
• Lie on the floor on your stomach. Place your arms straight out ahead of you.
• Raise your right arm and left leg a few inches off the floor. Hold for 5 seconds, breathing. Lower them to the floor.
• Raise the opposite arm and leg (left arm and right leg). Hold for 5 seconds, breathing. Lower them to the floor.

6. Knee to chest exercises
• Lie on the floor on your back. Bend your knees at a right angle. Keep your feet flat on the floor, about 12 inches from your buttocks.
• Bring one knee to your chest, keeping your lower back pressed into the floor. Hold for 5 to 10 seconds, breathing. Return to the starting position.
• Do the same with the other leg.
• For more stretch, start with both legs flat on the floor. Do not bend your knees. Do this only if it does not cause or increase back or leg pain.
7. **Curl ups**
   - Lie on the floor on your back. Bend your knees at a right angle. Keep your feet flat on the floor, about 12 inches from your buttocks.
   - Cross your arms over your chest.
   - Pull in your stomach muscles and raise your shoulder blades off the floor. Keep your head in line with your body. Do NOT press your chin to your chest.
   - Hold for 1 to 2 seconds, breathing. Slowly return to the starting position.

8. **Pelvic tilts**
   - Lie on the floor on your back. Bend your knees at a right angle. Keep your feet flat on the floor, about 12 inches from your buttocks.
   - Pull in your stomach muscles and imagine your belly button moving toward your spine. It should feel like your lower back is pressing into the floor.
   - Hold for 10 seconds, breathing smoothly.

9. **Heel dig bridges**
   - Lie on the floor on your back. Bend your knees at a right angle and lift your toes off the floor. Your heels will be digging into the floor.
   - Pushing your heels into the floor, squeeze your buttocks. Lift your hips off the floor until your shoulders, hips, and knees are in a straight line.
   - Hold for a few seconds, breathing. Return to the starting position.

10. **Wall sit**
    - Stand with your back about 10-12 inches from a wall.
    - Lean into the wall until your entire back rests flat against it.
    - Slowly slide down the wall until your knees are slightly bent. Press your lower back into the wall.
    - Hold for 10-30 seconds, breathing. Slide back up the wall.
Ten Exercises to Reduce and Prevent Low Back Pain

Take Action
1. Ask your doctor or a physical therapist for an exercise program that fits your needs.
2. Ask your health coach for UPMC Health Plan resources on good posture and body mechanics.
3. Use My Exercise Record on the next page to keep track of the exercises you do for your low back pain.

This tip sheet is provided for informational purposes only and is not medical advice. Always consult with a physician prior to engaging in any new physical activity.

Source
Ten Exercises to Reduce and Prevent Low Back Pain

My Exercise Record for the Month of ____________________

Copy this page to use, and keep the original blank to copy from in the future. Label the columns with the exercises you plan to do. Include aerobic exercise, stretches, and strengthening. In each row record the minutes or number of reps or sets you do on that day of the month.

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
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UPMC Health Plan