

## Exercises for Your Spine

The muscles of your back support your upper-body weight, enable you to move, and protect the spinal structures from harm. While your muscles must maintain a certain degree of flexibility, they also need strength and endurance.

### Strengthening Your Abdominal Muscles - The Curl-Up

Your stomach muscles may be your spine's best friend. Because they attach to both the ribs and the pelvis, when they weaken, they lengthen as the stomach is pulled down and out by gravity. This lengthening ultimately ends up causing a pot belly, or beer belly, appearance, and an exaggerated curve develops in the low back. The excess curve, in turn, compresses the facet joints in your lower back. You can maintain better posture, a better overall appearance, and a healthier spine by strengthening your stomach muscles.

Lie on your back with your knees bent and your feet flat on the floor. Hold your hands together between your thighs and gently lift your head and upper body only until your shoulder blades are off the ground. (A curl-up is not a sit-up, so don't bring your body all the way up.) Then return to the starting position on the floor. Move slowly, focusing on the abdominal muscles so they get a good strength workout on the way up and on the way down. Taking it slowly also helps to prevent you from pulling anything. Look up at the ceiling so not to strain your neck. Do not flex your neck by looking at your legs or the wall. Start with 5 to 10 lifts (or repetitions) and over the course of a few weeks, try to progress to 25 to 30 repetitions without stopping. Use good technique, don't get sloppy, and don't forget to breathe normally.



### Strengthening Your Upper Back

There are many smaller muscles in the upper back, between the shoulder blades, that also need strengthening.

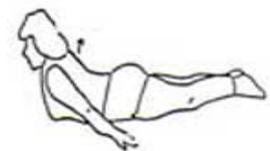


For this exercise, keep your back flat (not hunched over and rounded), abdominals tight, knees slightly bent, and head in line with spine (not hanging down). Stand holding equally weighted bags (or light weights or small tin cans), one in each hand. Bend your knees slightly and lean your upper body forward from the hips, letting your arms and bags hang towards the ground. Row your elbows back and up towards the ceiling, keeping your arms fairly close to your sides. Pause for 2 seconds while squeezing your shoulder blades together then slowly lower your arms keeping the elbows slightly bent as the bags near floor. Repeat 10 to 15 times.

### Strengthening Your Lower Back

Your lower back muscles are mainly responsible for supporting your spine, they are involved in almost every movement and are obviously very important.

The strength exercise for your low back is much like the curl-up, only upside down. Lie down on your stomach with your arms at your sides and your forehead resting on the ground. Start with your head and slowly lift your upper body off of the floor as far as you comfortably can without straining yourself. Then slowly lower your chest back to the floor and repeat 5 to 10 times. As you progress, see if you can do 15 to 20 consecutive lifts using good technique. Remember to breathe normally.



### Strengthening Your Leg Muscles - The Assisted Squat

Learning to squat correctly is very important, because you can use the squat technique to lift heavy objects without straining your back. The assisted squat will train your muscles to perform this manoeuvre correctly and build strength in some of the key muscle groups.

Facing the side of the door frame with your feet slightly more than shoulder-width apart, grasp the frame with both hands (left). Keeping your back straight, letting your buttocks stick out, and holding most of your weight with your arms, drop slowly toward the floor by bending your knees (right). When your thighs are parallel to the floor, slowly return to the starting position and repeat. Initially repeat the exercise 5 to 10 times, and try to build your strength until you can perform 20 to 25 consecutively. If this motion hurts your knees, see if not going down as far prevents the discomfort. The depth of the bend is not the most important aspect.