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# BACKACHE PREVENTION

# **Causes of Backache during Pregnancy**

Lower backaches are a universal discomfort for expectant mothers. In addition, the sacroiliac joints, where the small of the back and the buttocks join, are another area where pain is common. When you are pregnant, physiological changes place stress on your spine, ligaments attached to your spine and pelvis, and surrounding muscle that give your spine support and flexibility. Specifically, there are three factors that contribute to ligament discomfort:

- The expansion of your pelvis and abdomen, and increased weight.
- The stretching, thinning and weakening of abdominal muscles.
- The baby's growth pulling and straining ligaments connecting the vertebrae.

Special attention to your posture and some simple exercises to strengthen your lower back, abdominal and gluteal muscles, and inner and outer thighs, help you feel more comfortable and energetic as your pregnancy progresses.

During pregnancy, your body releases the hormone relaxin, which causes stretching of the ligaments holding the pubic bone and sacroiliac joints together. This, plus the expansion of your pelvis in preparation for your baby's birth, causes your normal gait to change to a waddle. The side-to-side motion of this new gait can contribute to pain in your hips and lower back.

## Ten Minute Exercise Program for Prevention and Relief

The following exercise program takes about five to ten minutes a day. As you gain strength, you may choose to gradually increase the repetitions. If your back hurts now, you should feel some relief after doing these exercises. If your back does not hurt, don't wait for it to start!

#### **Exercise 1**

Lie on your back with knees bent and feet on the floor. Clasp your hands behind your head and lift your chin and chest straight up, raising (not jerking) your head off the floor about six to eight inches. Your eyes should be looking up at the ceiling. Hold five seconds: repeat 10 times. You will feel this exercise in your upper abdominal muscles.

#### **Exercise 2**

Lie on your back with hands clasped behind your head. Raise your head just a little, then bring your knees towards your chest, keeping your knees spread apart. (If you are near the end of your pregnancy, you may only be able to bring your knees in a little, which is fine. The exercise is still effective.) Repeat 10 times. This exercise strengthens your lower abdominal muscles.

#### **Exercise 3**

Lie on your back with your hands clasped behind your head, your feet on the floor and your knees apart. Let your knees fall to one side, then lift your head straight up, about five or six inches, with your eyes facing the ceiling. Repeat 10 times on each side. This exercise strengthens the side muscles attached to your ribs and upper hip bone.

### **Exercise 4**

Lie on your side with your body straight, leaning on the bottom forearm and elbow to support your upper body. With your foot flexed, bring the top leg straight up about six inches, then lower it without resting it on the bottom leg. Repeat rapid lifts about 20 times. Then point your flexed foot down and repeat lifts 20 more times. Then position your top leg, foot flexed, back as far as it goes comfortably. Repeat 20 more times and finally 20 more times with the flexed foot now pointed down. Do entire series of exercises on both legs.

### **Exercise 5**

Use the same beginning position as in exercise 4, but cross the top leg over, with the knee bent and your foot on the floor. Keeping your foot flexed, raised the bottom leg 20 times. Repeat on the other side. You feel this in your inner thighs. At the end of this set of left lifts, while still lying down, pull each knee toward your chest and hold to prevent cramping and tightening. Exercises 4 and 5 are excellent for firming and strengthening your thighs.

### **Exercise 6**

Lie on your back with your knees bent, legs apart and feet on the floor. Place your hands at your sides. Raise your hips off the floor, then bring them down without touching the floor during the lifts. Repeat 10 times. Then repeat the exercise 10 times with your knees pressed together. You feel this exercise in your lower back, buttocks and thighs.

#### **Exercise 7**

Position yourself on your hands and knees with your arms and thighs perpendicular to the floor and your knees comfortably apart. First, allow your lower back and abdomen to sag towards the floor. Then raise your back to level, and tighten your buttocks until your lower back curls upward (like a cat with an arched back). Relax to level, and then let the back and abdomen sag again. Repeat 20 times. The motion should be continuous, slow and wave like.

If you have any additional questions or concerns, please ask a provider at your upcoming visit.