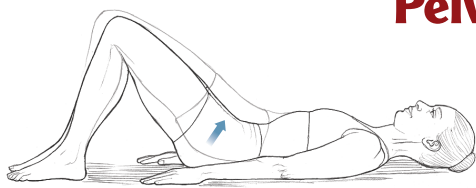
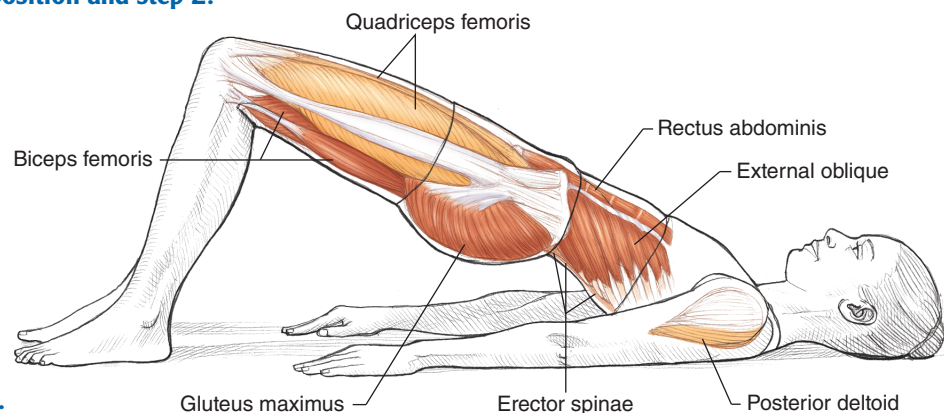


Pelvic Curl



Start position and step 2.



Step 3.

Execution

1. *Start position.* Lie supine with the knees bent and the feet flat on the mat and hip-width apart. Place the arms by the sides with the palms facing down. Focus inward, and consciously relax the neck, shoulders, and lower back muscles while maintaining a neutral pelvic position.
2. *Exhale.* Draw the abdominal wall inward, and slowly curl the pelvis and lower, middle, and upper back sequentially off the mat.
3. *Inhale.* Lift the upper trunk slightly higher to form a straight line on the side of the body running through the shoulder, pelvis, and knee as shown in the main muscle illustration.
4. *Exhale.* Slowly lower the trunk, articulating each vertebra, to return to the start position. Repeat the sequence 10 times.

Targeted Muscles

Spinal flexors: rectus abdominis, external oblique, internal oblique

Anterior spinal stabilizer: transversus abdominis

Pelvic floor muscles: coccygeus, levator ani (pubococcygeus, puborectalis, iliococcygeus)

Hip extensors: gluteus maximus, hamstrings (semitendinosus, semimembranosus, biceps femoris)

Accompanying Muscles

Spinal extensors: erector spinae

Knee extensors: quadriceps femoris

Shoulder extensors: latissimus dorsi, teres major, posterior deltoid

Technique Cues

- In step 2, at the beginning of the exhale, draw the pelvic floor muscles upward and the abdominal wall in toward the spine. This will encourage use of the transversus abdominis just before using the other abdominal muscles that posteriorly tilt the pelvis and flex the spine sequentially from bottom to top as it is curled off the mat.
- Press the feet into the mat, and think of gently pulling the sit bones toward the knees while lifting the bottom of the pelvis to emphasize using the hip extensors, especially the hamstrings. The knee extensors also help raise the thighs upward from the start position.
- In step 3, press the arms down into the mat so the shoulder extensors aid with lifting the upper trunk. Also, focus on activating the upper spinal extensors to align the upper trunk with the shoulders and knees.
- Throughout the movement, keep the knees facing forward.
- *Imagine.* To help achieve the desired motion of the pelvis and spine in step 2, imagine that the area between the rib cage and pubic bone is a shallow bowl. Scoop the abdominal wall inward to touch the inside of the shallow bowl, and then slowly rock that bowl by lifting the bottom rim toward the rib cage.

Exercise Notes

Pelvic Curl can help you learn to focus on activating the deep pelvic floor and transversus abdominis muscles, to sequentially articulate the pelvis and spine, and to cocontract the muscles of the powerhouse in the desired manner.

Focus on the hamstrings. Appropriate contraction of the hamstring muscles is vital for the desired articulation of the pelvis and spine in this exercise. The three hamstring muscles (see the illustration) run down the back of the thigh from the sit bones to below the knee. In this exercise and other similar supine Pilates exercises in which the feet are on the mat in a closed kinematic chain (see chapter 3), the hamstrings produce hip extension by lifting the pelvis rather than moving the legs. Focusing on lifting the bottom of the pelvis can help utilize these important muscles and prevent the common error of lifting the trunk as a rigid unit or arching the lower back. The coordinated contraction of the hamstrings with the abdominals, termed the abdominal–hamstring force couple (discussed in chapter 3), also serves another important role of helping to rotate the top of the pelvis backward in a posterior pelvic tilt. This function is used in the early part of the exercise to curl the pelvis and later to help maintain a neutral position of the pelvis and assist in countering hyperlordosis.

