Bent Knee and Hip Lift-Spinal Stability

Starting Position: With knees bent, lie on back and, one at a time, put soles of feet on ball.

Movement/Exercise: Maintaining optimal posture, press feet into ball and lift hips and lower back as a unit until knees, hips and shoulders are in a straight line. Slowly reverse to return to start. Repeat.

CAUTION: IF THERE IS ANY LEG CRAMPING, SLOWLY REVERSE AND RELAX. DO NOT ARCH BACK. STAY IN PAIN FREE RANGE.

Breathing: Do not hold breath. Breathe comfortably.

Modification: Only lift hips to partial range.

Progression:
1. Decrease arm support on floor.
   a. Bend elbows.
   b. Lift arms off floor.

Beats/min ______
Repeat ______ Times
Do ______ Times/day

Purpose/Goal:

Comments: Not only does this exercise strengthen the knee flexors and hip extensors, it also challenges balance and trunk control while not allowing movement of vertebrae.

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**Straight Leg Ball Lift**

**Starting Position:** Lie on back with knees bent. Prop head and shoulders up on elbows. Grasp ball between ankles.

**Movement/Exercise:** Tighten abdominal muscles and squeeze ball. Keeping knees straight, lift ball as high as comfort allows. Slowly lower ball to floor and repeat.

**CAUTION:** STAY WITHIN PAIN FREE RANGE. DO NOT ALLOW BACK TO ARCH.

**Breathing:** Do not hold breath. Breathe comfortably.

**Modification:** Only lift ball to partial range. Hands can be placed under buttocks to increase low back stability.

**Progression:** Lie with head and shoulders on floor. This adds difficulty to maintain spinal stability in optimal posture.

Hold____ Seconds
Repeat____ Times
Do____ Times/day

**Purpose/Goal:**

**Comments:** This exercise also activates hip adductor muscles.
Frog Legs Supine


Movement/Exercise: Tighten abdominal muscles and squeeze ball. Straighten hips and knees so that ball moves in a diagonal line. Bend hips and knees back toward chest to return. Repeat. Return to start. Rest.

CAUTION: STAY WITHIN PAIN-FREE RANGE. DIFFICULTY INCREASES AS LEGS ARE STRAIGHTENED. DO NOT ALLOW BACK TO ARCH.

Breathing: Exhale as legs extend, inhale as legs bend.

Modification: Straighten knees and hips only as far as comfortable.

Progression: Lie with head and shoulders on floor. This adds difficulty to maintain spinal stability in optimal posture.

Hold____Seconds
Repeat____Times
Do____Times/day

Purpose/Goal:

Comments: This exercise also activates hip adductor muscles.
**Leg Press-Supine**

**Starting Position:** Lie on back with knees bent. Grasp ball between ankles and raise ball off floor.

**Movement/Exercise:** Tighten abdominal muscles and squeeze ball. Straighten knees and lift ball toward ceiling. Hold. Bend knees toward chest. Repeat. Return to start. Rest.

**CAUTION:** STAY WITHIN PAIN-FREE RANGE. DO NOT ALLOW BACK TO ARCH.

**Breathing:** Exhale as legs straighten, inhale on return.

**Modification:** Straighten knees only as far as comfort allows.

**Progression:** To increase abdominal muscle participation, prop on elbows to lift head and shoulders off floor. Maintain proper neck alignment.

Hold _____ Seconds
Repeat _____ Times
Do _____ Times/day

**Purpose/Goal:**

**Comments:** This exercise also activates hip adductor and abdominal muscles.