

## Lower Abdominal Progression — Hip and Knee Extension (Figures A-D)

- Purposes:**
- To improve the isometric performance of the abdominal muscles (e.g., external obliques, rectus abdominis, transversus)
  - To move your leg without movement of your spine or pelvis

**Starting position:** Bend hips and knees with feet on floor. Place fingers on your abdominal muscles (i.e., outside abdomen between pelvis and ribs).

**Level 2: One hip flexed to 90 degrees, the alternate foot lifted and slid to extend the hip and knee** (see Figures A-B)

**Method:**  Perform variation if box is checked

Contract abdominal muscles by “pulling your navel toward your spine”

Lift one leg up until your hip is bent to 90 degrees and your thigh is pointing toward ceiling

If necessary, reinforce the contraction of your abdominal muscles

Do not let your abdomen distend  
Do not push your head back into supporting surface

Breathe

Lift your alternate foot off the table  
Slide your foot down the table, while lightly touching the table

Straighten your leg completely

Relax

Reinforce your abdominal contraction  
Slide your foot back to the starting position

Repeat with the same leg

Lower your nonmoving leg to table, so both feet are on table

Repeat starting with your opposite leg

**Level 3: One hip flexed to 90 degrees, foot lifted and then extend without the leg touching the supporting surface** (see Figures C-D)

**Method:** Perform the same movements as outlined in Level 2 except the following:  
Hold your foot off table while straightening your leg out  
Set your leg down on table  
Bring your leg back to starting position by holding your foot off the table  
Make certain to contract your abdominal muscles  
Do not let your back move  
Repeat with the opposite leg

**Repetitions:** \_\_\_\_\_

