



The Great Abdominal Myths!

Upper vs. Lower Exercises?

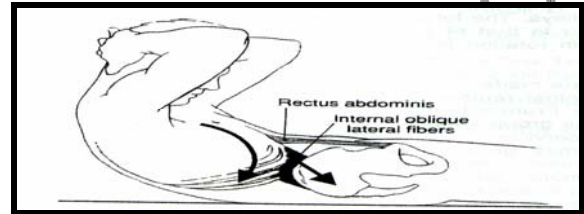
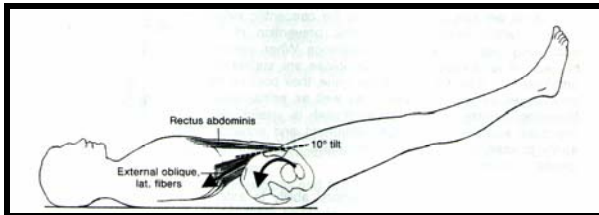
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Here we go, the age-old myth between **Upper Abs training and Lower Abs training. Leg lifts vs. Crunches. Core training vs. abdominal hypertrophy.** Below are pictures of **Hip Flexor action vs. Spinal Flexor action.**



- First let's understand the goals of Abdominal/Core training. Crunches are primarily performed with the intention of the traditional "6-pack" look.
- Core training (EX: **leg lifts**) is primarily performed for stabilization and sports specific reasons.
- An example of Abs training would be for the purpose of "6-pack" spot training; core training might be performed by boxers who require strong midsections but not necessarily for looks.
- The Thoracic spine is generally capable of **30 degrees** of spinal flexion.
- During the action of spinal flexion the Rectus abdominal contracts pulling the ribs toward the pelvis. Also taking place during the crunch is the action of the **Posterior Pelvic Tilt**.
- When the **traditional Crunch** is performed, the ribs move toward the pelvis and thus the "**feeling**" of upper Abs is experienced.
- When **reverse action crunches** are performed, the pelvis is moved towards the ribs and the "**feeling**" of lower abs is experienced
- While performing spinal flexion, not only does the thoracic spine flex but also so does the lumbar spine.
- Every muscle of the core (**Rectus abdominis, internal/external oblique and transverse**) works in spinal flexion. Each side muscle will contract to assist in flexion and keep the spine from rotation.
- The **Psoas Major** (hip flexors) origins are attached from the spine and inserted into the lesser trochanter of the femur.
- **ABDOMINALS ARE NOT ATTACHED TO YOUR LEGS** so it is impossible for the abdominal muscles to pull the legs up.
- During the lowering phase of the leg lift, the abdominal muscles will isometrically (**iso-same, metric-length**) contract to protect the lumbar spine from increased **Lordosis**.
- **Lordosis** is when the spine increases the curvature and leads to bulging of the disc. During this action, the CNS (central nervous system) will send a signal to the Abs to counteract the action and protect the spine.
- If the goal required leg lifts to train for stabilization then the matter of keeping the lumbar spine from rising off the floor would be a priority. When the lumbar arch increases, the abdominal are no longer able to support and protect the spine from compression.
- If we wanted to concentrate on lower abdominal actions, we might try flexing the hips as to take the psoas major muscle out of the way and then performing a reverse crunch (posterior pelvic tilt).
- **SLOW DOWN** when doing crunches, why are ABS the only exercise that we try to do faster then the rest?
- Bottom line, **ABS is created in the kitchen with proper nutrition.** Many exercises are designed for variety but little thought was put into the relationship of spinal movements and excessive repetitions.