



CORE EXERCISES FOR EVERYONE, ESPECIALLY ATHLETES

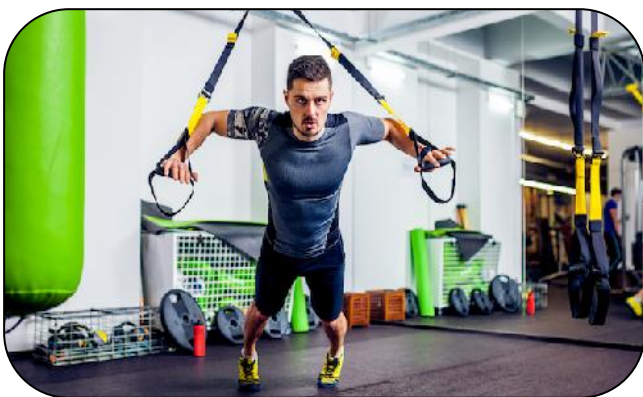
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ABSTRACT :

Core exercise are very important for anyone's fitness routine. Your core is where all of your strength and power originates from, so the stronger your core, the stronger your core, the stronger and more efficient all of your other muscles and muscle groups will become.

*This aspect of training is often overlooked, though, especially for younger basketball players and other athletes trying to increase their vertical or speed. But once again, core strength is essential to being fast and jumping higher! It also improves your balance, agility, and endurance. In other words, **your core strength is extremely important!***

Key Words: Core exercise , younger basketball players.



INTRODUCTION

It is absolutely no replacement for the core exercise on this page, but you can supplement your ab training (not your entire core) with something like the Flexbelt You can wear it at points throughout your day or especially while performing some other non-core exercise like running or upper/lower body workouts to help tone and strengthen your abs.

So, to become even more athletic and to help prevent injury, explore all of the core exercise on this page and incorporate a good mix of them into your routines.

One of the best core exercises, especially for basketball, is the ab rollout. It not only works your core and helps you tone yours abs, but it also works your hip flexors (important for both your lateral speed and your vertical). But, that's not what this page is about, it's about core strength, so here we go...

Ab Rollout

There are many variations of the ab rollout. It may sound and look easy, but wait until you try it, it's not as easy as you think! I suggest starting out doing kneeling rollouts while performing some of the other core exercise on this page and then working your way up to standing rollouts. All you need is an ab wheel or a barbell. Many time you can get either at a sporting goods store, or get the ab wheel online (available to the right) since it's not heavy or large to ship.

Of course you'll get some instructions if you purchase an ab wheel, but there's some direction and variations for you.

To perform the kneeling ab rollout:

1. Start by kneeling on a floor or mat. If you're a beginner, keep your feet on the ground. As you advance, lift your feet off of the ground. Then, as you advance further, lift your feet off of the ground and cross them behind you.
2. With the wheel or barbell right in front of your knees, grab it with an overhand grip while keeping your arms straight or very slightly bent at the elbows.
3. Now roll the wheel/barbell out until your arms are fully extended ahead of/above your head. Keep your abs contracted and right and your lower back straight so that it doesn't arch.
4. Finally, again keeping tight abs, not letting your back arch, and keeping your arms straight, wheel yourself back to the starting position. You should be using your abs and your hip flexors to bring yourself back, not bending your arms to pull yourself back.

If you are not able to prevent your back from arching through the whole process, then start out by not going out all of the way. There is no point in performing the ab rollout if it is not performed correctly, so don't rush it. If this is the case, do the partial rollout and perform some other core exercise below, especially the plank, to build up to doing this properly.

To perform the more advanced standing ab rollout, simply start with your legs straight and your feet on the ground in the same position as they would be for a pushup (on your toes/balls of your feet). This is not a form of the exercise to rush into. Master the kneeling ab rollouts beforehand and then progress to this. These exercises are more effective when done correctly, and this one may take months to master...be patient.

The following core exercise can be performed anywhere. Better yet, they require no equipment!

Plank (aka Bridge)

1. The Mountain Climber
2. Transverse Abdominal Cross Extensions
3. Reverse Plank (aka Reverse Bridge)
4. Side Planks (aka Side Bridges)
5. Back Raises

Plank (aka Bridge)

The plank (or bridge) doesn't involve a lot of movement, rather holding and stabilizing yourself for an extended period of time. It works both your back and your abs, so is a great overall exercise for core strength. It can also help build a better foundation so that you can properly perform some of the other core training exercises.

1. Start out lying face down, palms flat on the floor
2. Push yourself off the floor so that you are on your toes and using your forearms and elbows to support your weights. (note that your palms are not flat on the floor anymore)
3. Now tilt your pelvis and contact your abs so that your body remains in a straight line. This means keeping your back flat and keeping your pelvic bone tilted the whole time that you are holding this position. Be careful to keep pelvis tilted and your abs contracted the whole time.
4. Hold this for a minimum of 30 seconds and continue to breathe (if you cannot hold it this long, hold it as long as you can). Always time yourself (or have someone time you) and continue to add time to how often you hold the plank/bridge.

Mountain Climber

This is one of my more recently discovered core exercises that I have added to my routine. It is a great exercise for core strength because it combines numerous aspects of strength, stabilization and movement. It helps to strengthen your core and to target both your lower abs and obliques.

1. Begin in the Push Up position (the up position). Your hands (palms flat) and toes should be the only thing touching the floor. Your arms should be fully extended, and your body straight from your head to your toes.
2. Brace your core, to help you maintain the “up” position and straight line of your body
3. Lift your right knee as close to your chest as possible.
4. Lower your right knee/leg back to it’s starting position.
5. Now lift your left knee as close to your chest as possible and then back to the starting position.
6. Make sure to keep your back straight through the entire core exercise. Also do not rest in between while alternating between each leg.
7. Repeat for a set amount of time or a set amount of reps.

Transverse Abdominal Cross Extensions

This is one of the most important exercises that any athlete can perform, as the transverse abdominal muscles and the muscles mostly responsible for stabilizing your spine, and, therefore, your core.

1. Begin in the 4-point stance (on your hands and knees)
2. “Hollow Out” your stomach: basically, you are sucking in your stomach so that your belly button is getting closer to your spine.
3. Hold your stomach sucked in and continue to breath
4. Still holding your stomach sucked in and breathing, straighten out one arm and one leg that are opposite each other so that they are parallel to the floor (i.e. if you straighten out your right arm, then also straighten out your left leg).

Reverse Plank (aka Reverse Bridge)

You guessed it, it’s just like plank, except for reversed.

1. Start our laying on your butt with your legs extended straight in front of you and your forearms alongside your body on the ground
2. Lift yourself up so that your forearms and heels are supporting your weight
3. Remember to breath and tilt your pelvic bone up and in so that your body is in a straight line
4. Hold this position for a minimum of 30 seconds (or as long as your can) and continue to progress your way up by holding it longer

Added difficulty:

Instead of using your forearms to support your weight, keep your palms facing down on the ground and completely extend your arms so that you’re also using your triceps to support yourself.

Even more added difficulty:

Using the extended arm pose, also lift one leg up at a time at different angles and hold that position

Side Planks (aka Side Bridges)

The side plank is a variation of the plank that works your obliques and mid-back muscles. It is slightly more advanced than the normal plank core exercise because it uses muscles that are typically weaker in individuals.

1. Lay on your side with your elbow and forearm under you and one foot on top of the other
2. Lift yourself up with your forearm squarely under you (your forearm and hand will be pointing out, away from your body, as you support your weight) and your bottom foot also supporting you.
 - o Remember to keep breathing and keep your body in a straight line: your hips should not be sagging.
3. Hold this position for a minimum of 30 seconds (or as long as you can if you can't hold it for 30 seconds). Remember to keep breathing, keep your hips from sagging, and support yourself with your forearm and one foot. Your obliques and, to a lesser extent, your back muscles will also help to support you and keep your body aligned.

Back Raises:

Back raises work both your back and your abs, so they are another one of the great exercises for core strength.

1. Start out by lying face down with your legs extended out and feet crossed one over the other
2. Now lock your hands/fingers behind your head so that your elbows are bowed out
3. Contract your back muscles (and somewhat your abdominal muscles) to raise your upper body off of the ground. Your legs should remain out and on the ground.
4. Repeat this for at least a set of 10 repetitions

Core Training with a Swiss ball

These core exercises can be done at home or at the gym as well, but require a swiss ball.

Exercise Ball Crunch

1. Swiss Ball Trunk Twist
2. Lumbar Flex
3. Balancing on Swiss Ball

Exercise Ball Crunch

The exercise ball crunch is performed pretty much just like a regular crunch, except for it's done on a swiss ball. It is one of the best core training exercises you can do and will help achieve those six pack abs you're reaching for.

Start out by sitting on the ball and then slide forward until you're balanced with your back centered on the ball but not so far down that your hips are not touching the ball. Your feet should be firmly on the ground helping to balance you (about shoulder width apart) and knees bent about 90%.

Now, placing your hands behind your head, raise your chest and shoulders up and forward to "crunch" your abs. When your mid back loses contact with ball, lower yourself back down and you're completed one crunch. This is a fairly short range of motion and not like a regular sit-up.

Do Not use your arms and hands to pull your neck forward or yourself up, use your core. Do not exceed the range of motion, either.

Swiss Ball Trunk Twist

This is one of my favorite core exercises. It uses stabilizer muscles in your hips and requires quite a bit of control that can also improve your lateral movement core. The biggest target is your obliques, but many more muscles are engaged.

- Start out by sitting on the exercise ball with your feet flat on the floor. Walk yourself forward until your shoulders are resting on the ball.
- *Tilt your pelvic bone/hips up and keep them up.* This is key for this core exercise to be most effective. You're pelvis shouldn't be sagging/resting, but up and in line with your thighs.
- Now, keeping your pelvic bone up, fully extend your arms straight up and lock your fingers.
- Twist to one side, keeping your hips and pelvis up, until you can't go any further without failing off of the ball.
You should be able to go until one shoulder is on the ball, but not far enough that your hands touch the floor.
- Now twist to the opposite side and repeat. You should not stop in the middle.

Lumbar Flex

The lumbar flex is similar to the back raises on the no equipment required core exercise page. This time, though, you are going to do them on a swiss ball.

- Start facing the swiss ball on your knees.
- Flex your torso over the ball so that your knees and things are touching the ball and your head is off the swiss ball on the other side. You should be "crunched" forward a little bit. (lumbar flexion).
- Now, with your hands locked behind your head, use your back muscles to lift your head and body so that your back is parallel to the ground and aligned straight. (lumbar neutral)
- Hold this neutral position for a set time and then repeat.

Balancing on a Swiss Ball

This is somewhat self explanatory, but the biggest benefit of this core training exercise is that they don't really have to be "exercises," but can be done while you're sitting around at home watching tv.

Sit on a swiss ball and being with your feet on the ground for balance. Then, raise your feet off of the ground and balance yourself on the ball for as long as possible. Your core muscles will be incorporated to help stabilize and support your balance. You should see improvement on the amount of time that you can balance yourself as you continue to do this balancing exercise.