



## **Scott's Killer Core Routine**

The “core” of our body contains several layers of muscle, some superficial, like the rectus abdominis that create the “six pack” which is involved in flexing the spine. Some of the deeper core muscles, like the transverse abdominis, (TA) function primarily to stabilize the spine and the hips. While an attractive belly is not a bad thing, there is a lot more to core strengthening than doing sit ups or crunches that target that six pack. In fact, those deeper, and often overlooked, muscles of the core are of more importance to a healthy and functional athlete. By stabilizing the spine to the hips and the hips to the ribs these deep core muscles provide a solid foundation from which all 4 limbs, but especially the legs, can work to propel you.

Because they are the most distant abdominal muscles from the spine, the six pack can exert the most force to flex the spine. Repeatedly training crunches and sit ups is strengthening the strongest link in the chain. To address the weakest links in our core it takes some clever training methods to engage these deeper core muscles. Increasing these muscles' strength is the goal here. To build strength (rather than endurance) you need to have enough resistance and strict form so that you will reach failure within 5-6 reps or 5-6 seconds of an isometric hold. By failure we mean inability to complete another rep with perfect form.

### **Let's review some reasons for developing core strength:**

- All athletic movements originate with the core musculature.
- Your core connects your arms to your legs.
- A weak core results in a less effective use of your arms and legs.
- A weak core exposes you to injury.
- Strength in the core will become the foundation for all your endurance.

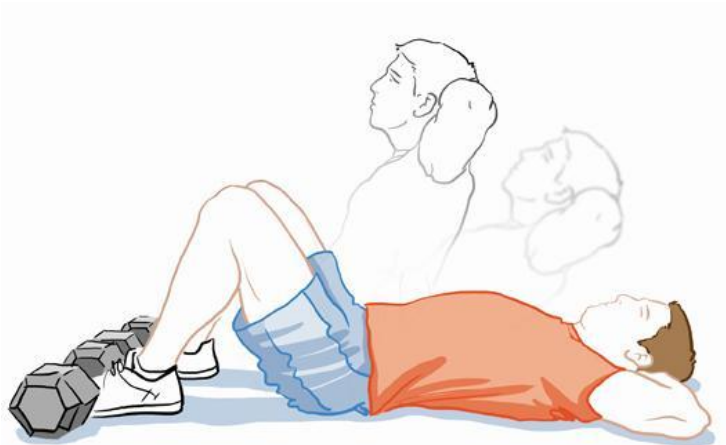
There are many ways to target these deep core muscles. On the following pages is a core strength routine we have developed over the years to build good overall strength of virtually all the core muscles. We offer it here not because it is the best or only way to do this. We just know that this routine works.

### **The principles of the Killer Core Routine are:**

- Do this routine in a circuit fashion with thirty seconds between exercises.
- Strict form is essential. You're finished with the reps (if more than 10, add resistance) for each exercise when you can no longer hold the position, complete another perfect repetition, or if you begin to shake during an isometric (if more than 10 sec add resistance) hold.
- Start with one time through the circuit if you are a beginner or if you find the exercises are difficult for you.
- If you allow poor form to take over in order to get in more reps, you are defeating the purpose of this workout because you'll be compensating for weak core muscles by using some of your stronger ones.
- Don't hold your breath during the poses. Training yourself to breathe through this kind of core tension will transfer positively to all athletic movements.

### **Strict Sit-Ups**

This version of the sit-up is meant to isolate the deep hip flexor muscles by eliminating flexion of the spine. Assume a normal sit up position: knees bent to about a 70 to 90 degree angle, back flat on the floor, toes hooked under something you can pull against. Cross your hands over your chest so that your fingers are resting on your collar bones.

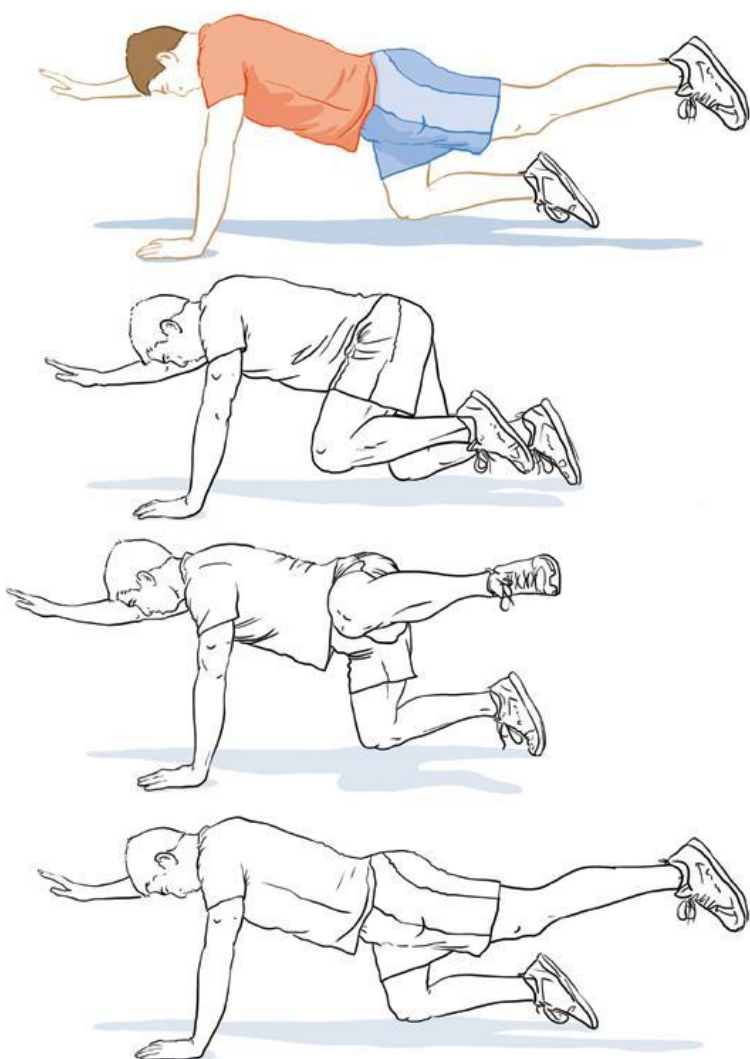


Now slowly, and in control, sit up by only flexing at your hips. Do not crunch by curling your

spine. Keep your spine in a neutral (straight) position while coming up to the point where your elbows touch the top of your thighs. Return to the start position for one repetition. Increase challenge by interlocking your fingers behind your head, keeping elbows even with your ears so as to not “pull” yourself up with your arms. Increase difficulty by holding a weight on your chest.

### **Bird Dog**

This oddly named exercise combines hip flexibility with transverse abdominis and oblique muscles’ strength. Get on all fours with knees directly below your hips and hands directly below your shoulders. From this decidedly dog-like position pick up one leg and, while holding the knee bent at 90 degrees, move the hip joint through the full range of motion. This means drawing a big ellipse with your knee in the air. At the same time you are working hip strength and range of motion, pick up the opposite arm of the leg you are moving, and point it horizontally in front of your shoulder so that it is in line with your back. You may not feel this exercise is too tiring, but more than likely that is because you have poor hip mobility.



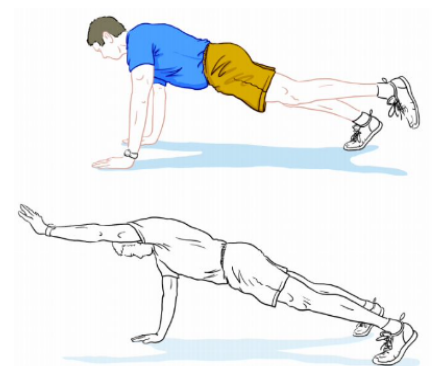
### **Windshield Wipers**



The name for this one suggests the action of your legs as they wipe across an imaginary windshield. Lie on your back with your arms outstretched from your shoulders with palms placed against the floor. Now flex your hips so that your feet are together and pointed at the ceiling. Slowly rotate your hips so that your feet lower to the floor to one side; keep your feet locked together with knees straight. You'll want to resist the rotation of your shoulders by pushing down hard with your hand on the side you are rotating toward. Just lightly touch the floor with the side of the lower foot before raising both feet back to the 12 o'clock position, and on to the other side where the other foot will touch down. Return your feet to the 12 o'clock position to complete one repetition. Do this slowly and with control. If you cannot manage to keep your knees straight, or legs together, then bend your knees and do the same rotation while keeping your knees together and knees pointed at the ceiling when you are in the 12 o'clock position. To increase the challenge wear heavier shoes.

### **Three Point**

The intention of this exercise is to build a strong neural connection between opposing limbs by fully engaging the transverse abdominis. Assume a good push up position (a straight line running the length of your back and legs) with hands directly under your shoulders and feet spread about two feet apart. To start: pick up one hand without rotating your shoulders or hips. Point that hand straight



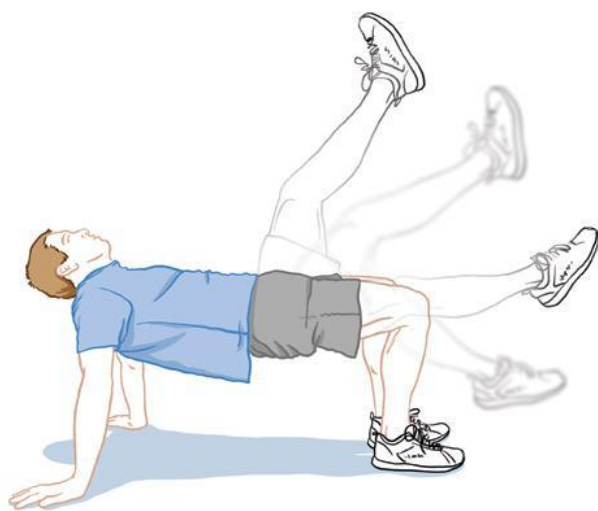
out in front and in line with your spine; hold till you feel your shoulders rotate, hips rotate or your back sag—anything that gets you out of the straight line you were in when you started the push up position. In turn, pick up each limb and hold till failure. When this is no longer a challenge you can pick up the opposite hand and foot, and hold that in line form. We have some athletes who do this exercise with as much as a sixty-pound weight vest.

### **Kayaker**

By mimicking the counter rotation of the hips and shoulders that a kayaker does, we can target some of the deepest core muscles connecting the spine to the pelvis. Sit on the floor with legs stretched out in front of you. Bring your knees up to a 90-degree bend and lift your feet a few inches off the floor. Clasp your hands together in front of you and rotate your shoulders so that you can touch your hands to the floor lightly just beside one hip. Rotate all the way to the other side and touch the floor again. Do this slowly and in control. Hold a dumbbell and touch it to the floor for added resistance.



### **Bridge**



In this exercise you will form a bridge (or coffee table) by getting onto all fours with your belly facing the ceiling. Hands directly below shoulders, feet flat on the floor directly below your knees: all angles should be nice and square. The first step is to push your navel toward the ceiling as far and hard as you can.

Hold that position for as long as you can. For many, this will be enough of a challenge. The next stage is to lift one foot off the floor by straightening that knee. Your straight leg will be in line with

your torso. Hold this while pushing your navel up. If you can do this without dropping your hips, then you are ready for the last stage: flex the hip of that raised leg so that your toes point to the ceiling. Do this all while keeping your navel pressed high. Hold this end position as long as possible without your core sagging.

## **Gymnast L-Sit**



The gymnast L-sit is a very advanced exercise that teaches balance, hip flexibility, and tension from the fingers to the toes. Sit squarely on the floor, toes pointed, knees straight. Place your palms on the floor so that your fingers point toward your toes and the heel of your hand is about even with your crotch. Slowly rock

your shoulders forward so that your shoulders come over your hands as your elbows straighten and your shoulders drop slightly. These two actions combined will lift your hips off the floor. Push down hard through your hands and lift your feet while keeping your knees straight. Don't be dismayed if you cannot get your feet off the floor at all, or if you can, it is only for a split second. Keep working at it no matter how short a time you can get your feet up. Eventually you'll be able to hold your feet outstretched for many seconds. Start with bare feet.