

SPORTS-SPECIFIC CORE TRAINING

## **BELWEST FOXES SOCCER CLUB** **Incorporated**

### **CONTACT SPORTS**

Contact team sports require high levels of speed and agility combined with strength to fend off opponents in contact situations and the ability to deliver controlled power from unbalanced body positions.

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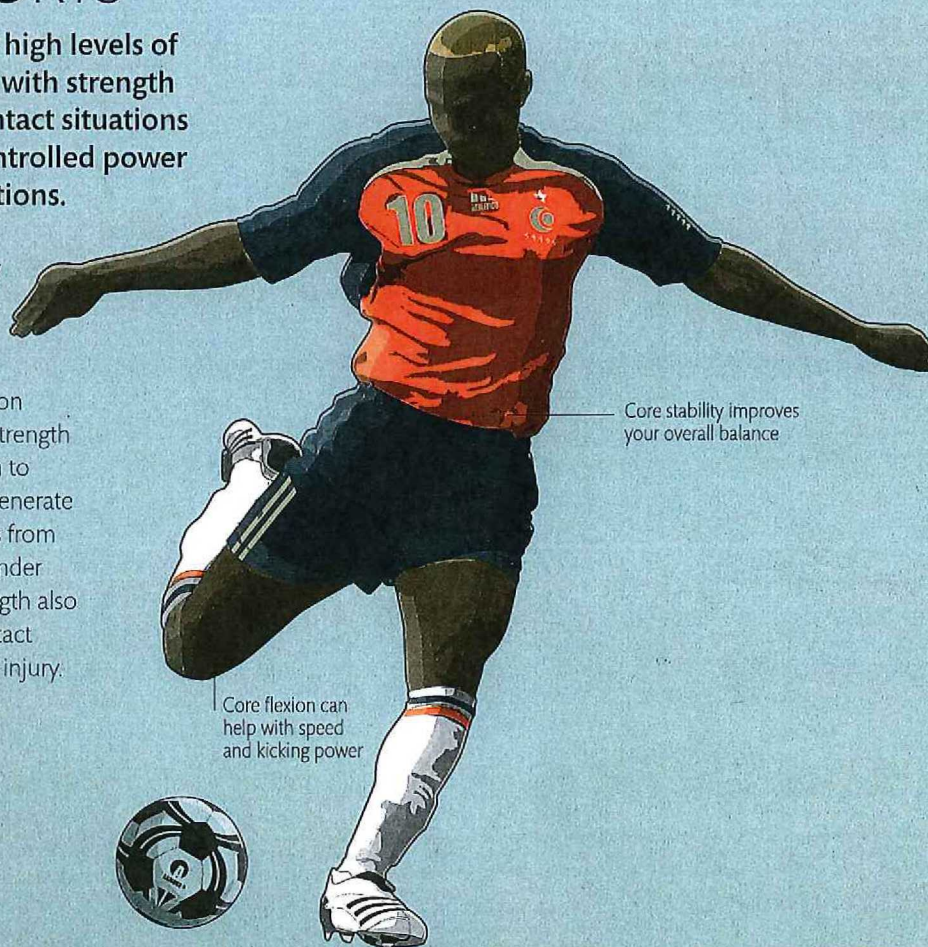




# CONTACT SPORTS

Contact team sports require high levels of speed and agility combined with strength to fend off opponents in contact situations and the ability to deliver controlled power from unbalanced body positions.

Good core stability and mobility play an important role in helping you cope with the demands of twisting, turning, and changing direction – often at high speed – that are common in contact sports. Core stability and strength provide a stable platform from which to bring a ball under control, and help generate controlled power in passes and shots from unstable body positions and when under pressure from opponents. Core strength also helps you to resist the impact of contact with opponents and limits the risk of injury.



## SPORTS SUCH AS...

- Football
- Handball
- Dodgeball
- Field hockey

## CORE-STRENGTH TRAINING FOR CONTACT SPORTS

**All contact sports** require excellent cardiovascular fitness and a range of complex movements. Training should involve a combination of interval training to improve

cardiovascular fitness and strength-training circuits to develop muscular power. The latter should focus on the muscles specific to your sport.

### PREPARATION

Good warm-up and cool-down procedures on match days, and a training programme that offers preparation for games, are essential. Warm-ups should include dynamic stretches and cardiovascular work, such as shuttle runs, to raise your body temperature.



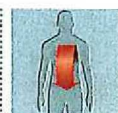
■ **Isometric**  
Isometric exercises such as mountain

climbers (»p.118) help build your core stability. This provides a solid platform for coping with multi-directional movements, controlling shots and passes, and fending off opponents.



■ **Rotation**  
Rotational exercises such as pulley lifts

(»pp.146–47) improve your rotational power. This increases the power of your kicks and passes, and stabilizes your body against torsional movements in contact.



■ **Flexion**  
Flexion exercises such as

partner ball swaps (»pp.108–09) help you to generate greater hip strength and mobility, improving your control and power when you are passing or shooting.



## STANDING ROLL-DOWN

**This dynamic stretch** helps to mobilize the muscles of your lower back, while providing additional benefits to your hamstrings and shoulders. You should perform the exercise with a smooth, fluid movement.

**1** Stand tall with your feet shoulder-width apart and your knees slightly bent. Engaging your core, raise your arms above your head, keeping your elbows soft.



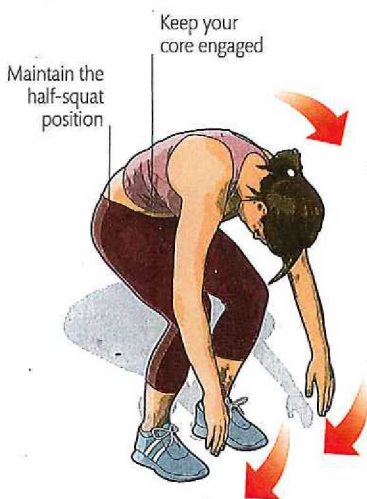
**2** Begin to roll down through the spine, initiating the movement from the head and upper back. Drop your arms forward and below the shoulders in a smooth controlled motion.



**3** Continue the movement until you are as fully folded as possible, without straining. Relax your head, neck, and shoulders. Hold briefly, then return to start position in a slow, fluid motion.



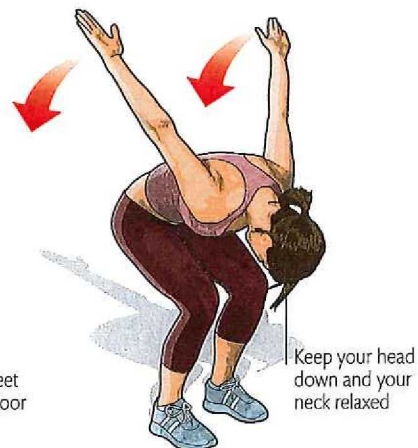
**3** Remaining in the half-squat position, continue the swinging movement with your arms outside your legs, keeping your arms straight and your elbows soft.



**4** Keeping your arms straight, continue the swinging movement of your arms hands past your knees and towards your hips.



**5** Extend the swing back and upwards, rotating at your shoulders until your arms are roughly parallel with your thighs. Pause briefly at the edge of the movement, then reverse the sequence to the start position.



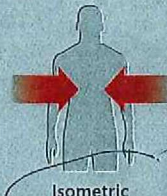



# ACTIVATION

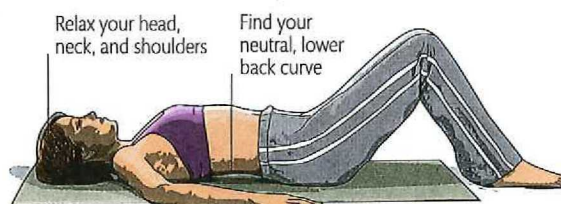
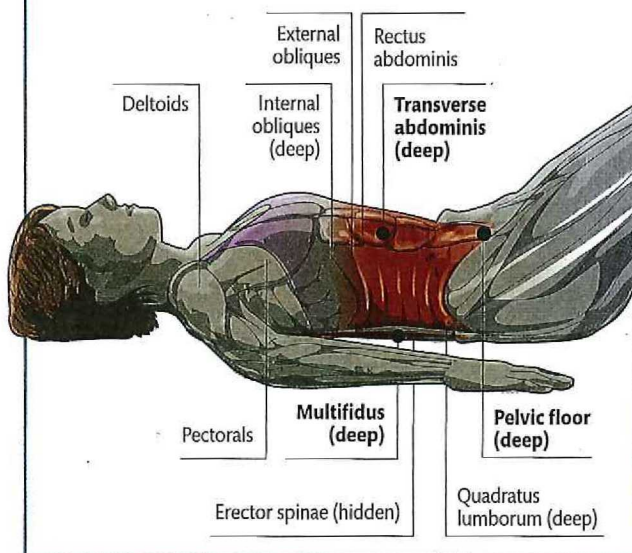
Activation is a fundamental part of core training, helping to strengthen your core and prevent injuries. The "deep" core muscles responsible for stabilization are not as easy to feel as

"surface" muscles, and engaging them therefore requires time, focus, and control. Concentrate on your breathing and technique to ensure you are performing the movements correctly.

## ACTIVE PELVIC FLOOR

TARGET MUSCLES	TARGET MOVEMENT
<ul style="list-style-type: none"><li>■ Transverse abdominis</li><li>■ Pelvic floor</li><li>■ Multifidus</li></ul>	 <p>Isometric</p>
	<b>DIFFICULTY LEVEL</b> 

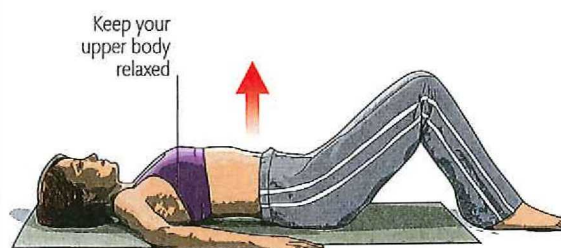
**This exercise** gently stretches the muscles and ligaments of your back, strengthening your core and improving your posture; it also helps relieve pressure on your facet joints. You should perform this exercise on the floor at first, but as your technique improves you can try it standing up.



**1** Lie on your back with your knees bent at a comfortable angle, your feet flat on the floor and hip-width apart, your arms by your sides, and your lower back in a neutral arch. Relax in this position before you begin.



**2** Gently press the small of your back into the floor and tilt your pubic bone upwards by engaging your abdominal and pelvic floor muscles. Hold for at least three seconds.

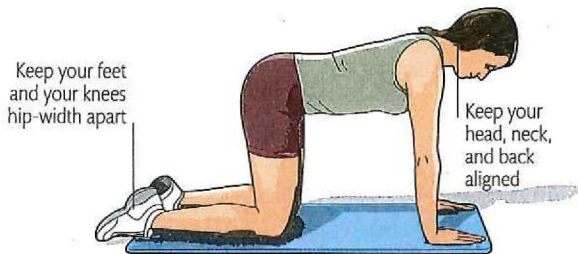


**3** Relax and return to the start position, so that the small of your back is slightly arched once more. Repeat as required and relax.

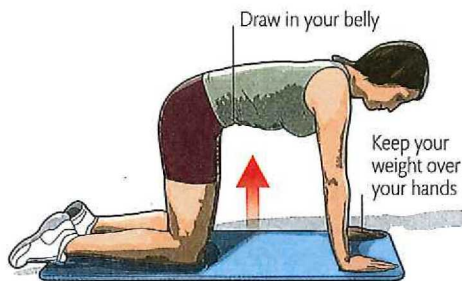


## PROGRESSION 1

**This kneeling pelvic tilt** helps if you have poor posture or a back complaint. Some experts recommend this as an alternative for the supine version of the exercise (left) because it gives you a greater range of movement.



- 1** Kneel on a mat with your hands under your shoulders and your knees under your hips, keeping your back in a neutral position, and breathe in deeply.



- 2** Breathe out, pulling your abdominals in tight, and suck in your belly button towards your spine. With one fluid motion, reverse the curve in your lower back and tilt your hips.

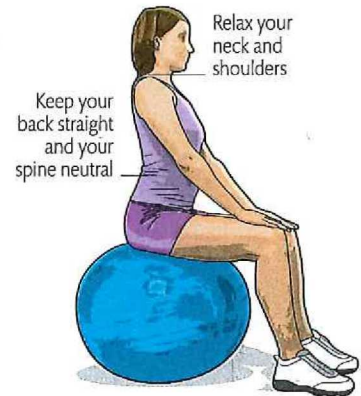


- 3** Release your spine to a neutral position, without dropping through your back. Inhale and exhale, feeling the movement within your abs. Repeat as required.

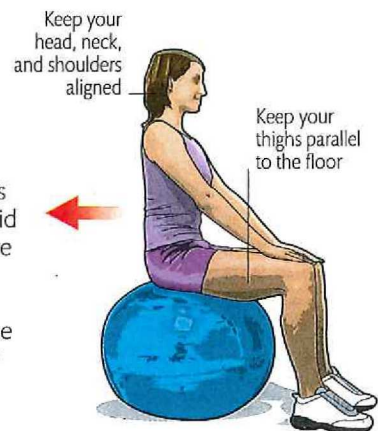
## PROGRESSION 2

**It is harder** to perform the pelvic tilt in an upright posture, either standing or sitting, but doing this movement on an exercise ball provides a helpful guide, as the ball will shift forwards slightly when you do the exercise correctly.

- 1** Sit up straight on an exercise ball, with your feet parallel and hip-width apart. Rest your hands on your knees. Keep your back straight and your spine neutral. Breathe in deeply, maintaining this position.



- 2** Exhale forcefully, pulling your abdominals in tight and drawing them in towards your spine. With one fluid motion, reverse the curve in your lower back by tucking your hips under your torso and rolling the ball forward very slightly as you do so.



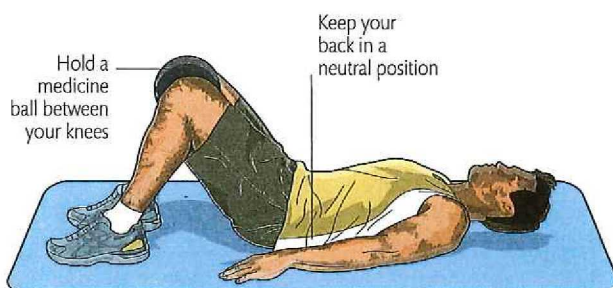
- 3** Hold the position for a few seconds, then release to return to the neutral position in step 1. Repeat as required and relax.



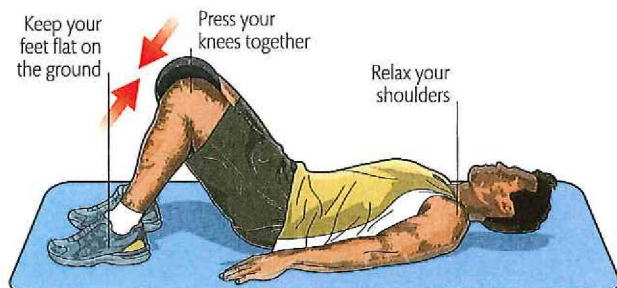


# PILLOW SQUEEZE

<b>TARGET MUSCLES</b> <ul style="list-style-type: none"> <li>■ Transverse abdominis</li> <li>■ Pelvic floor</li> <li>■ Gluteus minimus</li> <li>■ Gluteus medius</li> </ul>	<p><b>This gentle strengthening exercise</b> works the deep muscles of your core, glutes, and inside thigh, helping you to improve hip stability.</p>
<b>TARGET MOVEMENT</b> <p>Isometric</p>	
<b>DIFFICULTY LEVEL</b>	



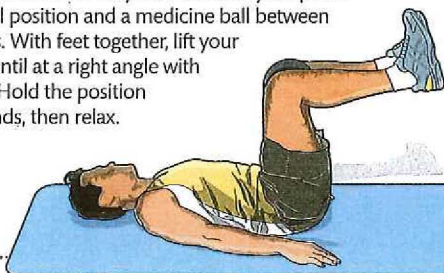
**1** Place a medicine ball between your knees and lie on your back with your pelvis in a neutral position. With your feet flat on the ground, bend your knees at a right angle.



**2** Squeeze your knees together as hard as is comfortable. Hold the position for 5 seconds, engaging all core muscles, then relax to the start position. Repeat as required.

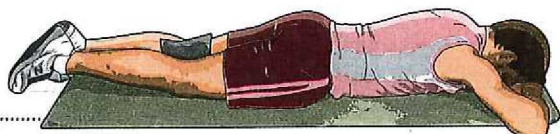
## PROGRESSION 1

Raising your knees off the ground adds instability to the movement. Lie on your back with your pelvis in a neutral position and a medicine ball between your knees. With feet together, lift your knees up until at a right angle with your hips. Hold the position for 5 seconds, then relax.



## PROGRESSION 2

This version of the exercise makes your core and glutes work harder because the squeeze is positioned further away from your hips. With a rolled-up towel between your feet, lie on your front with forehead resting on the back of your hands, and your legs straight. Brace your abdomen and keep your buttocks tight. Squeeze the inside of your feet together. Hold for 5 seconds, then relax to the start position.



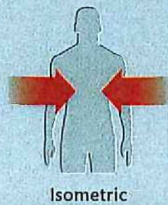


# HEEL SLIDE

## TARGET MUSCLES

- Transverse abdominis
- Internal obliques
- Pelvic floor
- Multifidus
- Quadratus lumborum

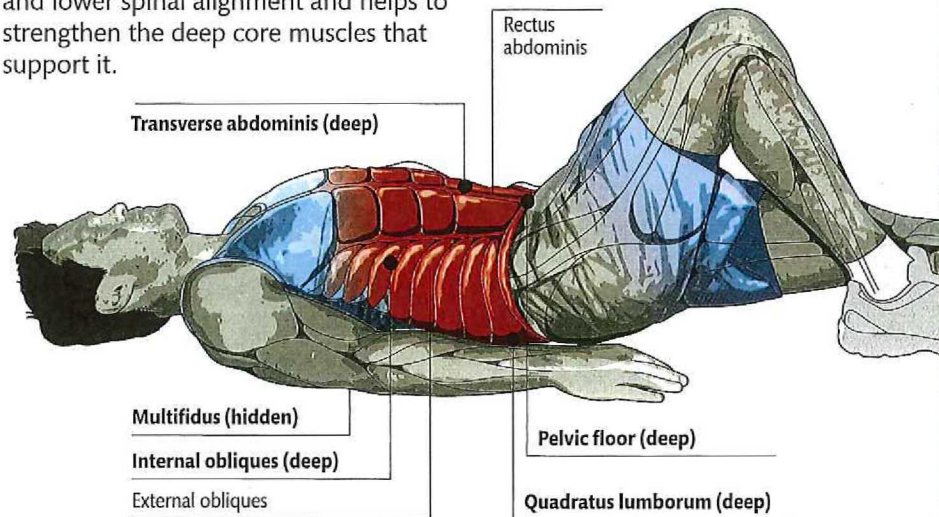
## TARGET MOVEMENT



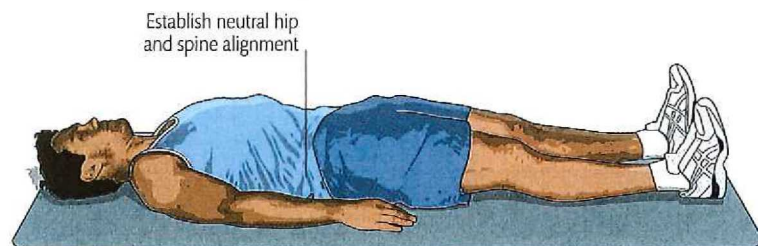
## DIFFICULTY LEVEL



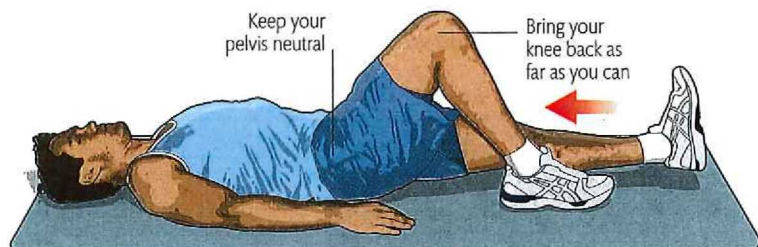
**This exercise** is good for improving your awareness and stability of neutral hip and lower spinal alignment and helps to strengthen the deep core muscles that support it.



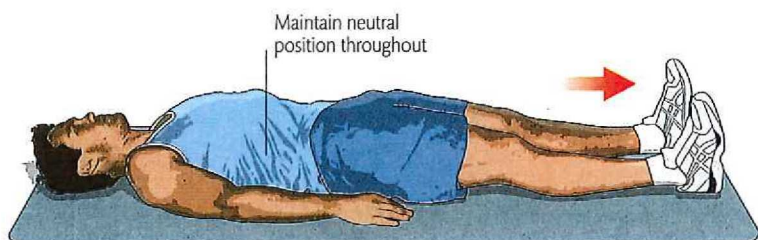
**1** Lie on your back with your legs stretched out straight in front of you, your arms by your sides, and your heels pressed lightly against the floor. Locate your neutral hip and spine position before you begin this exercise.



**2** Slowly bend your right knee up by sliding your right heel along the ground. Bend it as far as you can without rocking or lifting your hips off the ground, or disturbing the lumbar spine position. Keep your core engaged throughout.

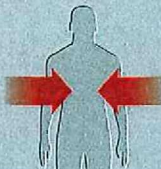



**3** Slide your right leg back to the start position, without allowing the hips to rock to one side. Stay weighted in the tailbone and keep your core engaged. Alternate with each leg for the required number of reps, then relax.

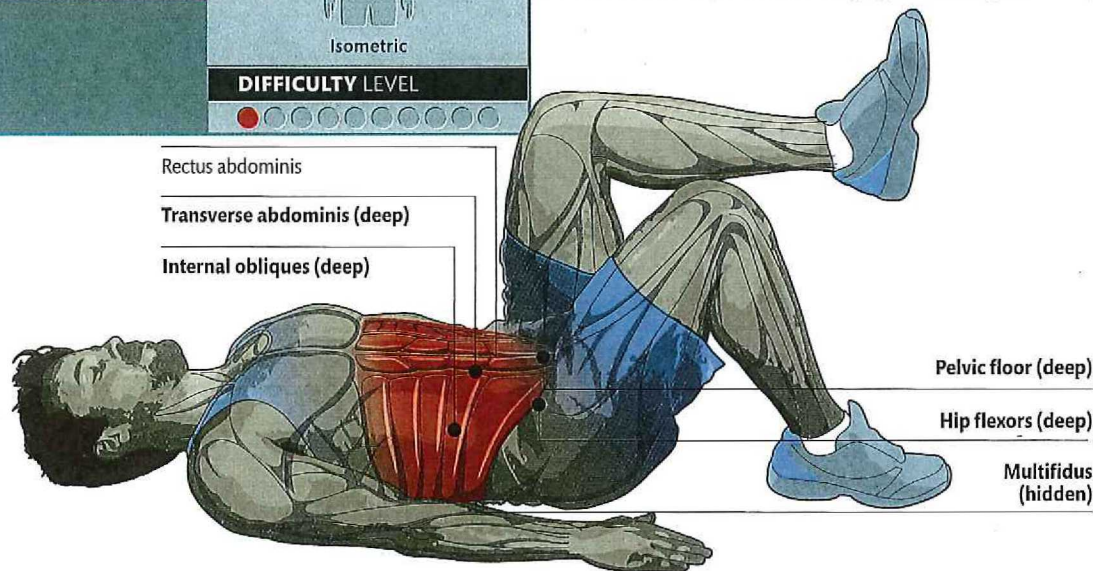




## KNEE FOLD

TARGET MUSCLES	TARGET MOVEMENT
<ul style="list-style-type: none"> <li>■ Transverse abdominis</li> <li>■ Internal obliques</li> <li>■ Pelvic floor</li> <li>■ Hip flexors</li> <li>■ Multifidus</li> </ul>	 <p>Isometric</p>
	<b>DIFFICULTY LEVEL</b> 

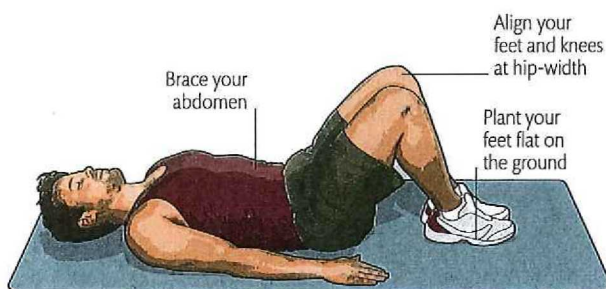
**This is a moderate-impact** core-stabilizing exercise that helps to strengthen the deep muscles of your abdomen and your lower back. It can also be a useful exercise for preventing pain in your lumbar region. To get the best results from the exercise, keep the muscles of your core engaged throughout.



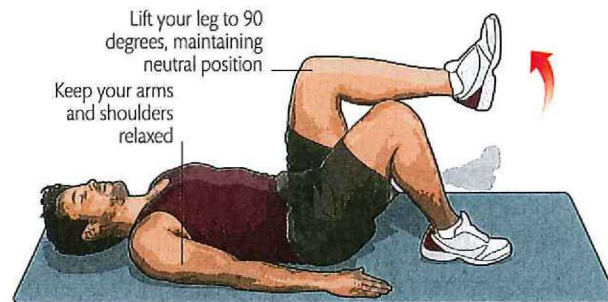
## VARIATION

**This simple version** of the movement keeps one foot anchored on the floor at all times – use this variation if you need a gentle warm-up, or if you

want to try a less demanding version of the exercise. Keep your core engaged throughout and concentrate on maintaining good form.

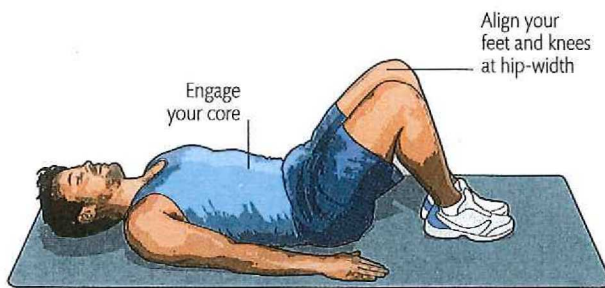


**1** Lie on your back with your spine and hips in a neutral position. Relax your upper back and shoulders, bend your knees, and engage your core.

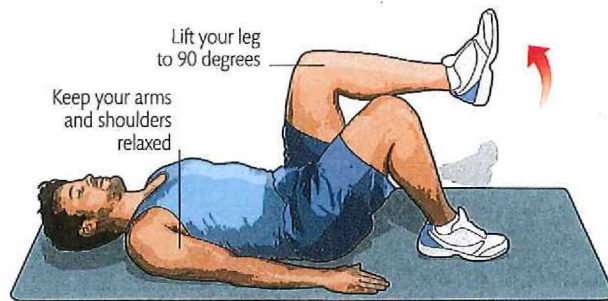


**2** Lift your left leg so that your hip and knee are at right angles, while maintaining hip and lower-back alignment. Hold this position for a few seconds, then slowly lower your legs to the start position. Repeat as required, then switch legs.

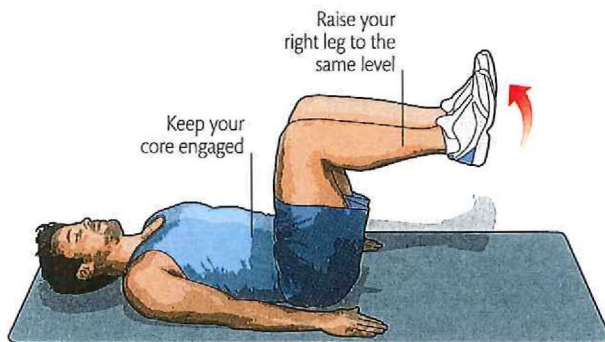




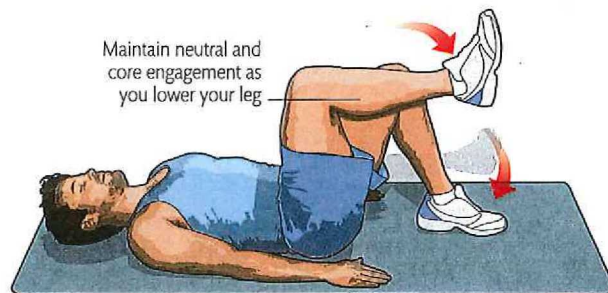
**1** Lie on your back and bend your knees, with your feet flat on the floor. Relax your shoulders and upper back, engage your core, and keep your spine and hips in a neutral position.



**2** Keeping your core engaged, lift your left leg so that your hip and knee are at right angles. Keep your right foot on the floor and maintain neutral position.



**3** With your core engaged, lift your right leg until it is level with your left. Hold this position for a few seconds; avoid tilting your hips and dropping your back.

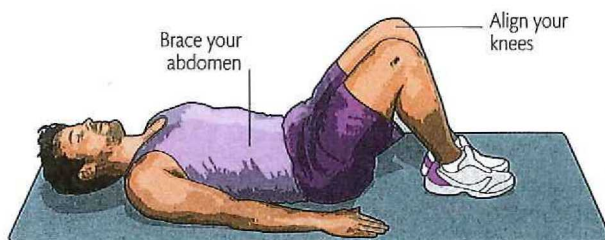


**4** Keeping your core engaged, slowly lower your left leg until your left foot is flat on the floor, without letting your lower back arch, then lower your right leg.

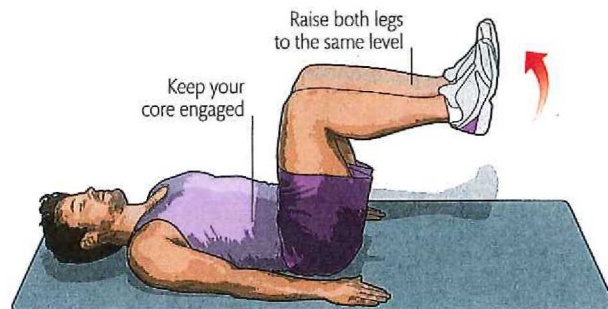
## PROGRESSION

Once you have mastered the basic exercise, try this more demanding progression, in which you raise both legs at once. Focus on maintaining core stability and neutral alignment throughout the

movement. Keep your core engaged and your knees bent at a consistent angle, and avoid dropping or over-arching through your lower back.



**1** Lie flat on your back, relaxing your upper back and shoulders, and with your spine in a neutral position. Bend your knees, while keeping your feet flat on the floor at all times.



**2** Engage your core. Lift both legs off the floor, keeping them aligned and hold neutral spine alignment. Hold this position for a few seconds, then slowly lower your legs to the start position without letting your lower back lift.

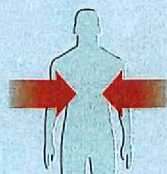


## TOE TAP

## TARGET MUSCLES

- Transverse abdominis
- Internal obliques
- Pelvic floor
- Multifidus
- Quadratus lumborum

## TARGET MOVEMENT

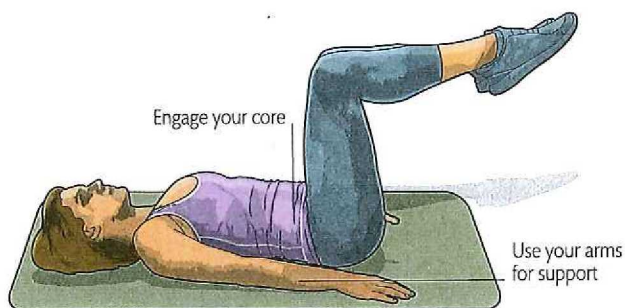
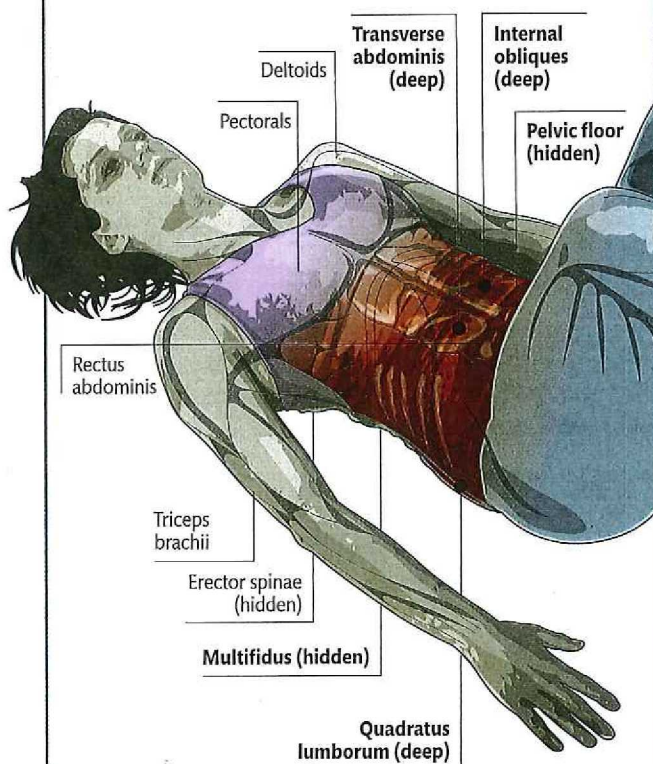


Isometric

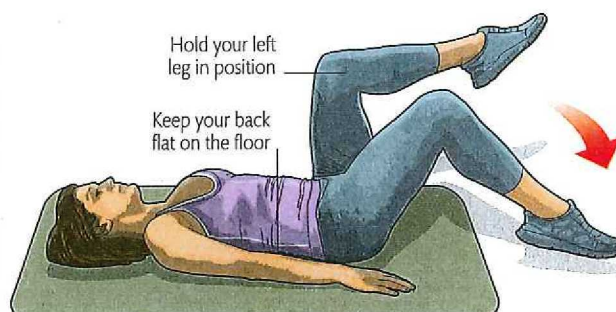
## DIFFICULTY LEVEL



**This is a moderate-impact** core-stabilizing exercise that can be helpful for strengthening the deep muscles of your abdomen and lower back. To get the best results from the movement, ensure you keep your core engaged throughout.



- 1** Lie on your back with your arms by your side. Engage the core and lift your legs in the air with your knees and feet at hip width. Keeping your spine and hips in a neutral position, relax your shoulders, using your arms to stabilize you if you need to.



- 2** Keeping your core engaged, and holding your left leg at a right angle, lower your right leg towards the floor slowly and with control, without letting your back arch off the floor.

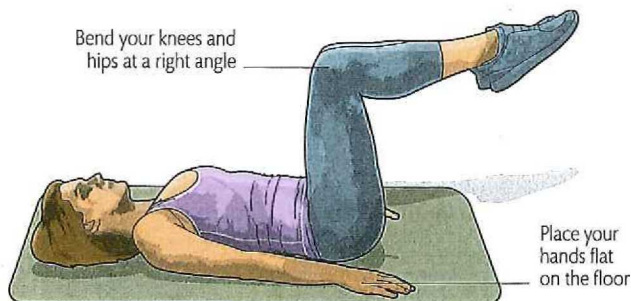


- 3** Hold at the edge of the movement, keeping your core braced, then return to the start position, maintaining control as you do so. Repeat as required, then swap legs.

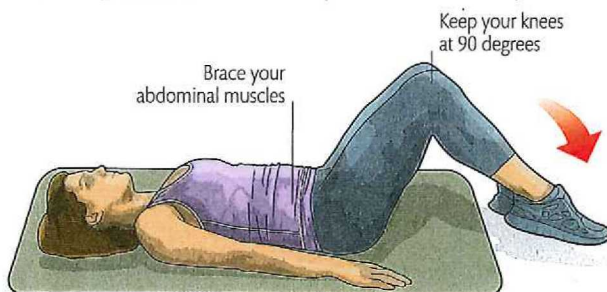


## PROGRESSION 1

Once you have mastered the basic movement you can make it harder by performing the exercise with both legs at the same time. This works the muscles of the abdomen and lower back much more intensely.



- 1 Lie on your back with your arms by your sides. Bracing your abdomen, lift your legs into the air with your knees and feet together, and your toes pointing out. Use your arms to stabilize yourself if necessary.



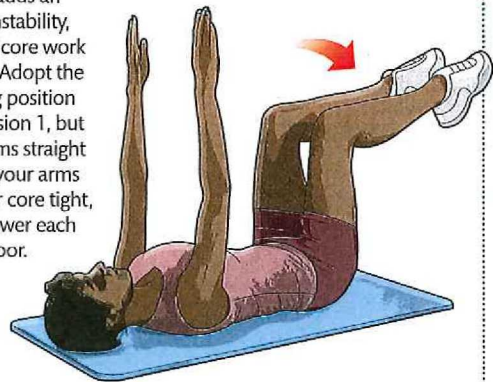
- 2 Keeping your core engaged, slowly lower both feet under control, without letting them drop to the floor.



- 3 Hold at the edge of the movement, then return to the start position, slowly and with good control.

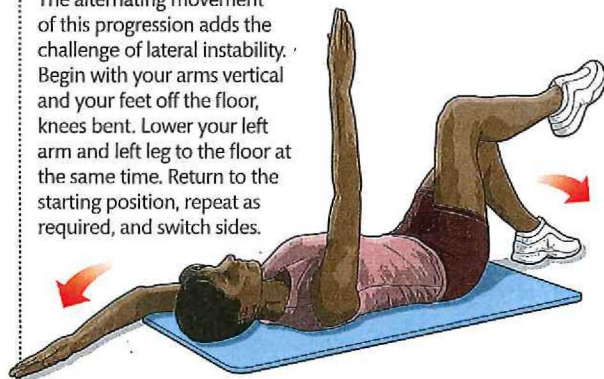
## PROGRESSION 2

Raising your arms off the floor adds an element of instability, making your core work even harder. Adopt the same starting position as in Progression 1, but raise your arms straight up. Keeping your arms still, and your core tight, alternately lower each foot to the floor.



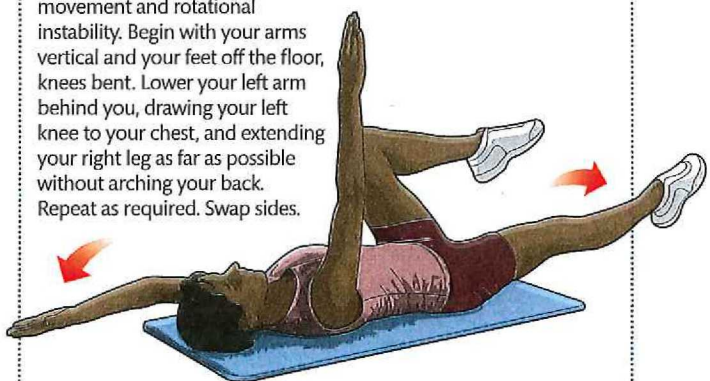
## PROGRESSION 3

The alternating movement of this progression adds the challenge of lateral instability. Begin with your arms vertical and your feet off the floor, knees bent. Lower your left arm and left leg to the floor at the same time. Return to the starting position, repeat as required, and switch sides.



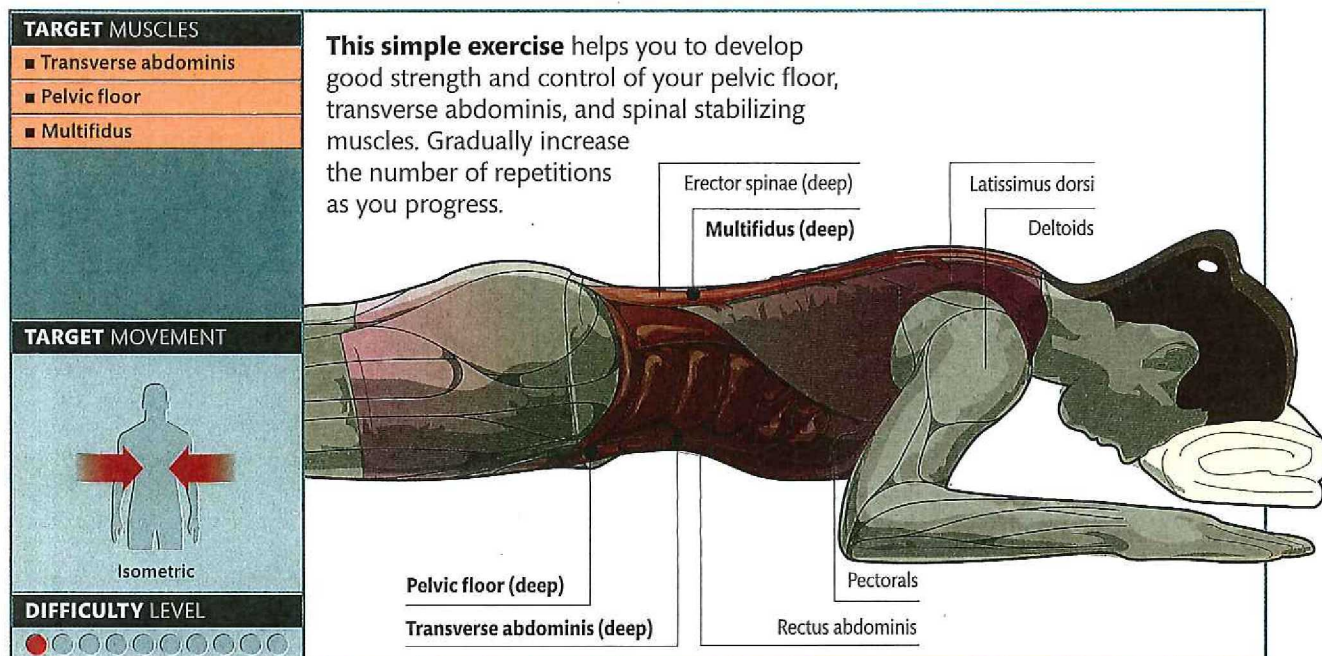
## PROGRESSION 4

This progression adds dynamic movement and rotational instability. Begin with your arms vertical and your feet off the floor, knees bent. Lower your left arm behind you, drawing your left knee to your chest, and extending your right leg as far as possible without arching your back. Repeat as required. Swap sides.





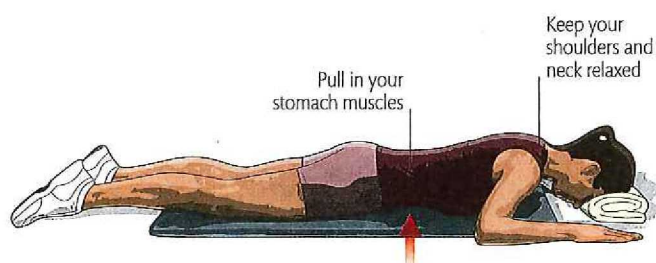
# PRONE ABDOMINAL HOLLOWING



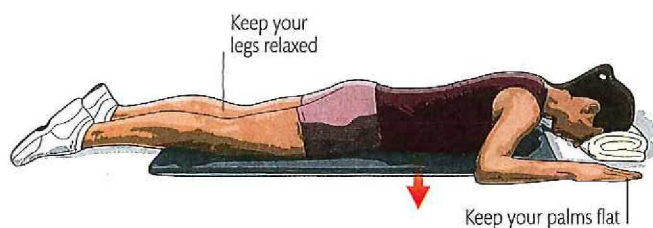
**1** Lie face down on a mat with a small towel beneath your head. Position your arms beside you, pointing forwards, palms down, your elbows bent at right angles. Reach forwards with the top of your head to lengthen your spine, keeping your shoulders apart. Breathe in deeply.



**2** Engage your core, gently pulling your navel up towards your spine and allowing your lumbar spine to lengthen without lifting your hips, breathing out as you do so.



**3** Hold your abdomen in for 5 seconds, then inhale as you return to the start position in a slow, controlled movement. Repeat as required.







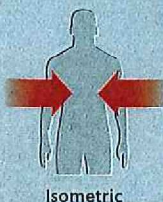


## OYSTER

## TARGET MUSCLES

- Transverse abdominis
- Pelvic floor
- Multifidus
- Gluteus medius
- Gluteus maximus

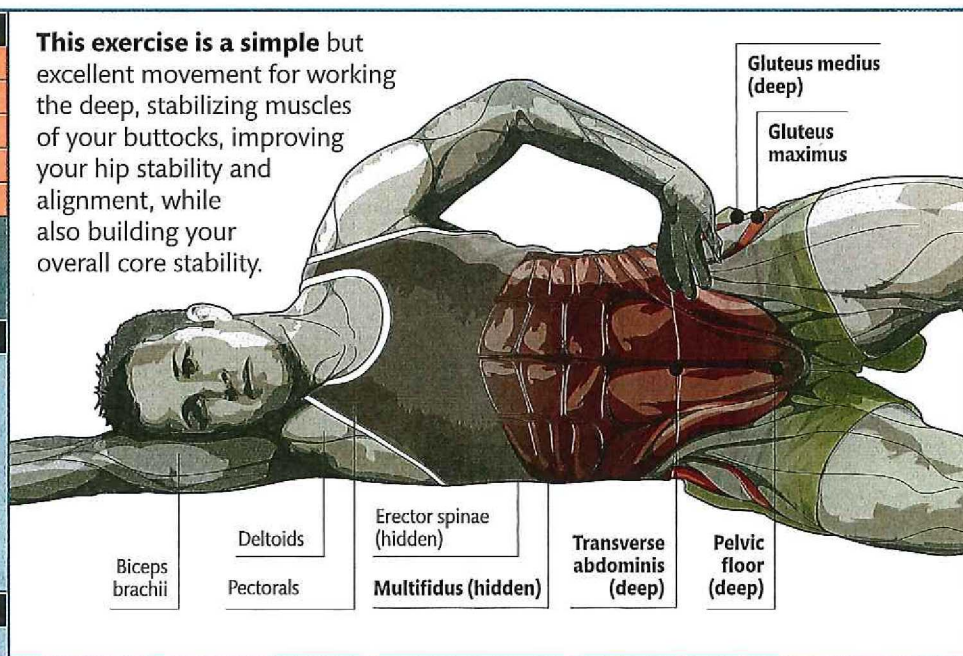
## TARGET MOVEMENT



## DIFFICULTY LEVEL



**This exercise is a simple** but excellent movement for working the deep, stabilizing muscles of your buttocks, improving your hip stability and alignment, while also building your overall core stability.



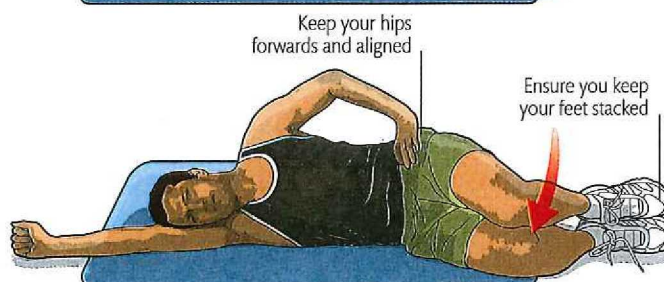
**1** Lie on your right side, bending both the hips and knees at a 45-degree angle. Extend your right arm so that it is in line with the body, and rest your head on it. Bend your left arm at the elbow and place the left hand on to the floor in front of you.



**2** Keeping your neck straight, your hips and shoulders in line, and your feet touching, engage your core and begin lifting the knee of your left leg, rotating at your hip.

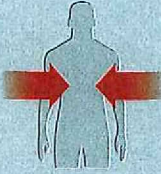



**3** Lift your left knee as far as it will go without straining, keeping your hips aligned. Slowly lower your knee back to the start position, and repeat for the required number of reps before swapping sides.

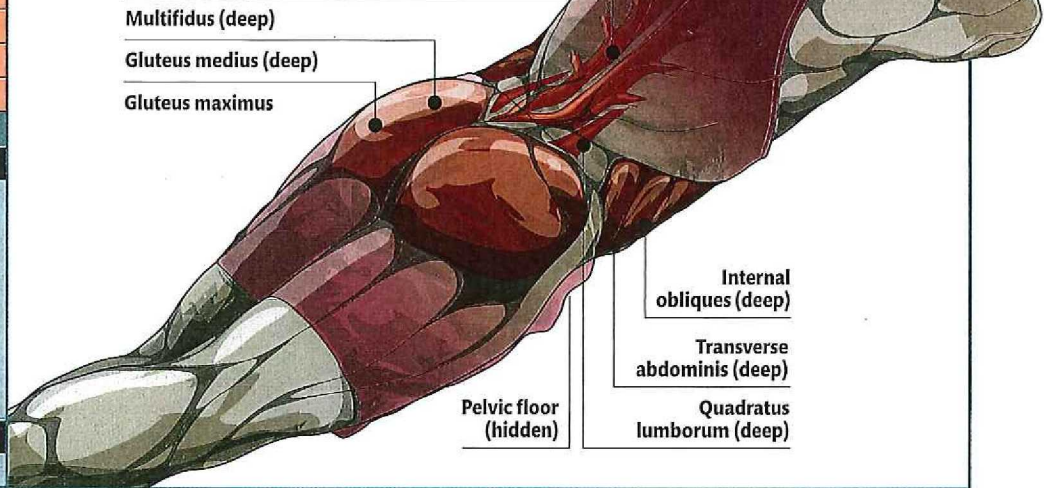




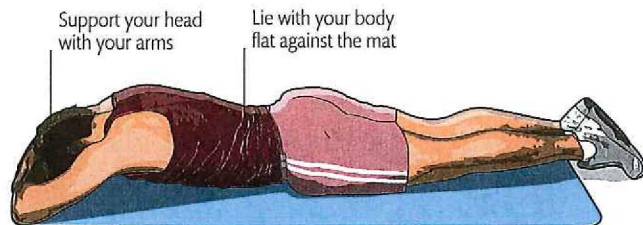
# PRONE LEG LIFT

TARGET MUSCLES
■ Transverse abdominis
■ Internal obliques
■ Pelvic floor
■ Multifidus
■ Quadratus lumborum
■ Gluteus medius
■ Gluteus maximus
TARGET MOVEMENT
 <p>Isometric</p>
DIFFICULTY LEVEL


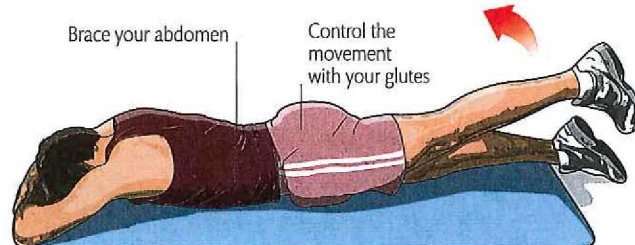
**This exercise strengthens** the large muscles of your buttocks and helps to improve pelvic stability. Avoid using your back in the movement.



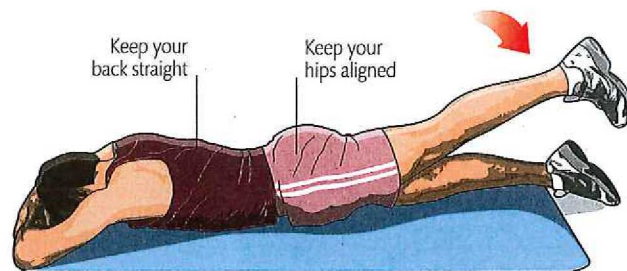
**1** Lie on your front with your forehead resting on the back of your arms and your knees straight. Engage your core to support your back and squeeze your buttocks together.



**2** Keeping your buttocks tight, lift your left leg up in a slow, fluid movement about 30cm (12in) off the floor (or higher as your muscles grow stronger).

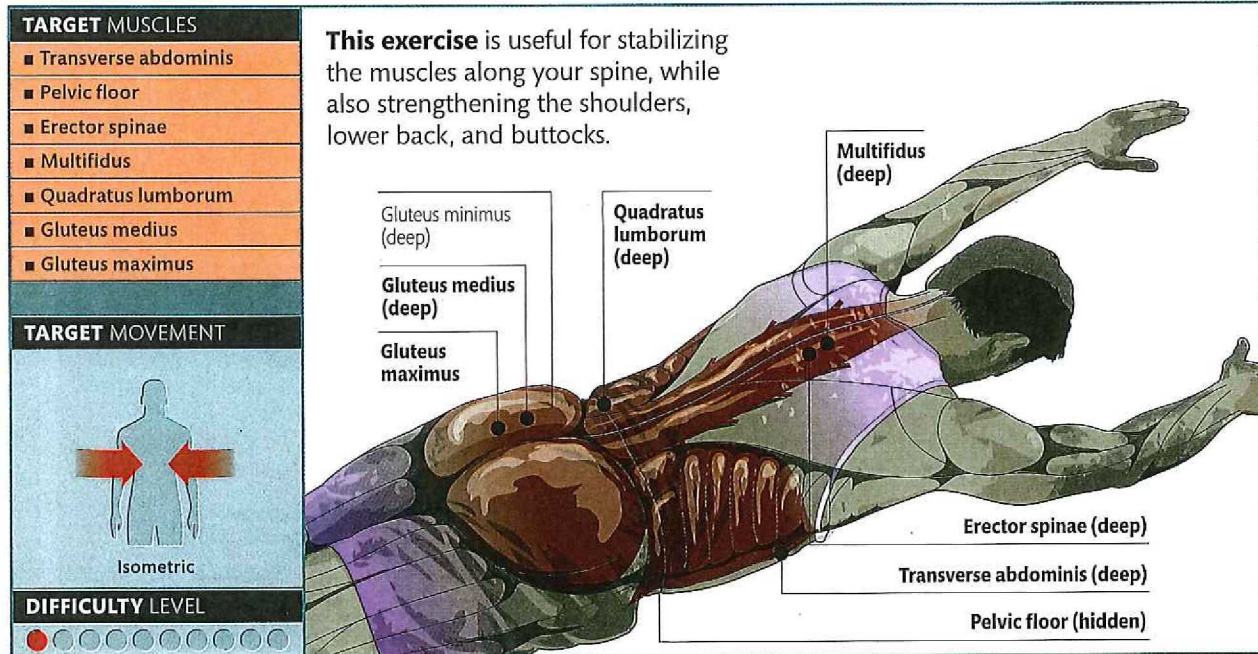


**3** Pause at the top of the movement, then return to the start position, slowly and with control. Repeat the required number of reps, before switching legs.





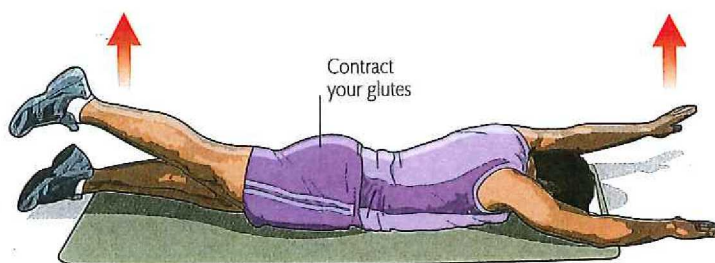
# STAR



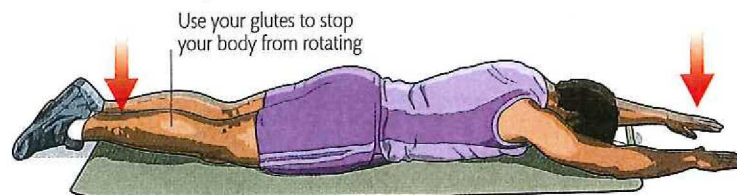
**1** Lie face down with your forehead resting on a mat. Align your neck and head. Extend your arms in front of you with the palms facing down. Lengthen your torso by stretching your neck away from your body, and engage your core.



**2** Keeping your head in line with your spine and your abs tight, raise the left arm and the right leg 8–15cm (3–6in) off the floor. Hold your glutes tight and avoid rocking your hips and dropping through your lower back.

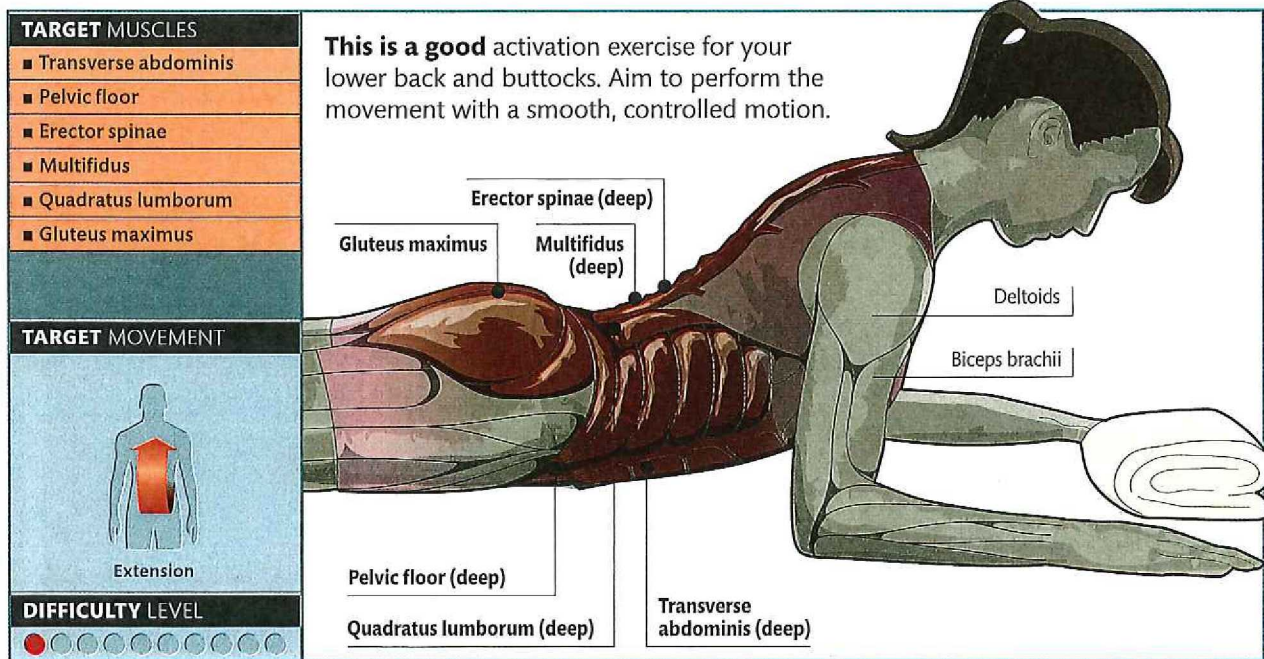


**3** Hold the position briefly. Lower your limbs slowly and with control to return to the start position. Repeat as required and switch sides.

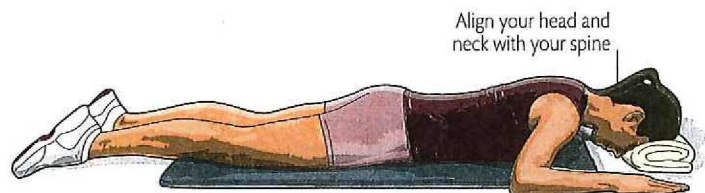




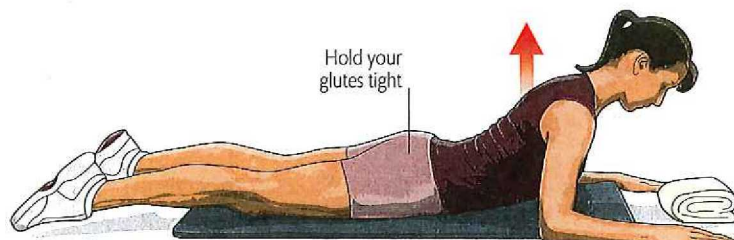
# BACK EXTENSION



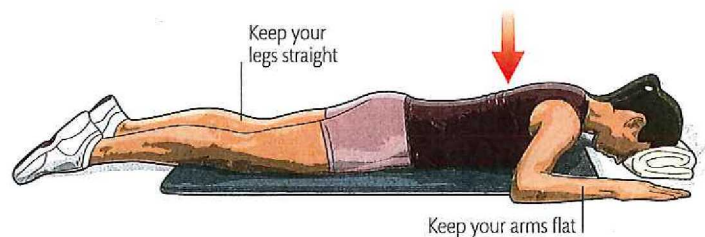
**1** Lie face down on a mat with a folded towel positioned under your forehead to ensure proper alignment of the head and neck with your spine. Bend your arms and rest your forearms on the floor, palms down. Breathe in deeply.



**2** Engage your core and reach forwards with the top of your head to lengthen your spine, keeping your shoulders apart. Then, facing downwards, lift your head and shoulders off the floor, exhaling as you do so without using your arms.



**3** Pause at the top of the movement, then inhale and return to the start position, slowly and with control.



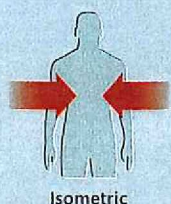


# SUPERMAN

## TARGET MUSCLES

- Transverse abdominis
- Pelvic floor
- Multifidus
- Quadratus lumborum
- Gluteus medius
- Gluteus maximus

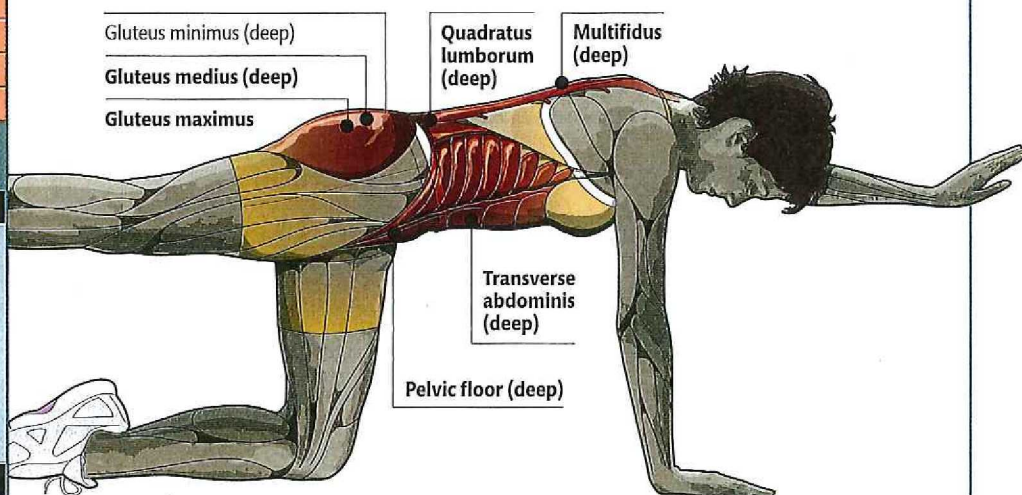
## TARGET MOVEMENT



## DIFFICULTY LEVEL

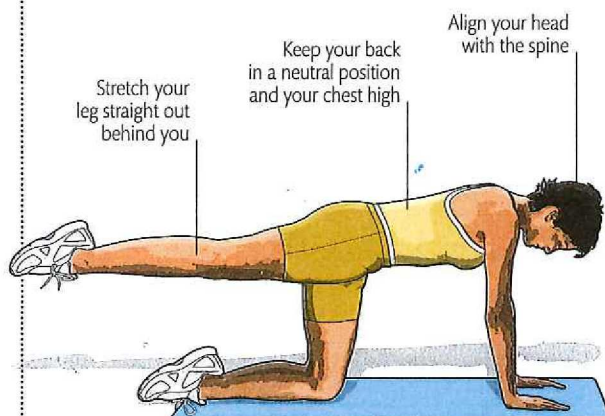


**This exercise strengthens** the spinal extensor muscles and deep spinal stabilizers, which support your spine, and builds strength and stability in your buttocks, lower back, and shoulders.



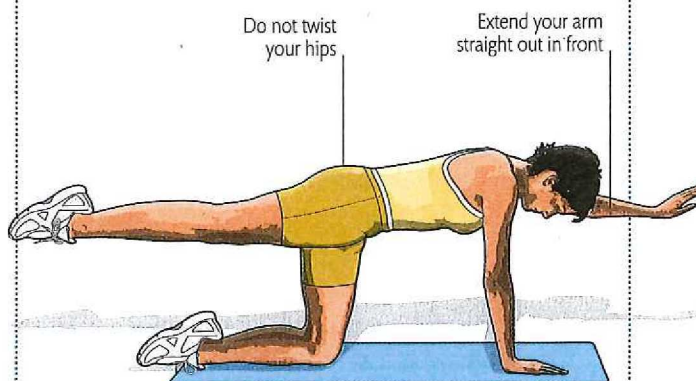
## PROGRESSION 1

Assuming the main position with a leg raised, rather than an arm, demands greater balance and core control, because it increases the level of rotational instability working your spinal stabilizers and deep core muscles. To perform the movement, engage your core and lift your right leg behind you to hip height. Balance and hold for 10 seconds, then return to the start position, then switch legs. Be sure to keep your back straight and your shoulders and hips aligned.

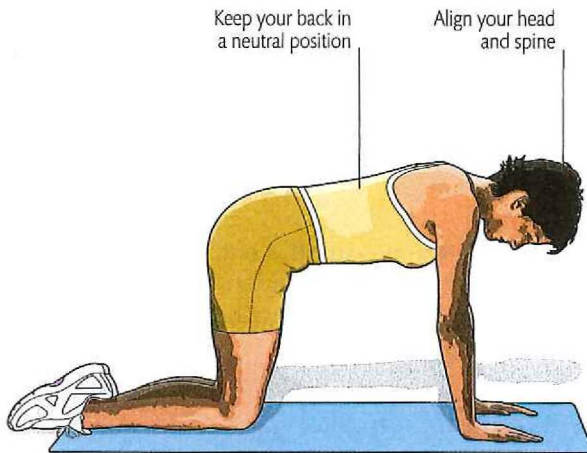


## PROGRESSION 2

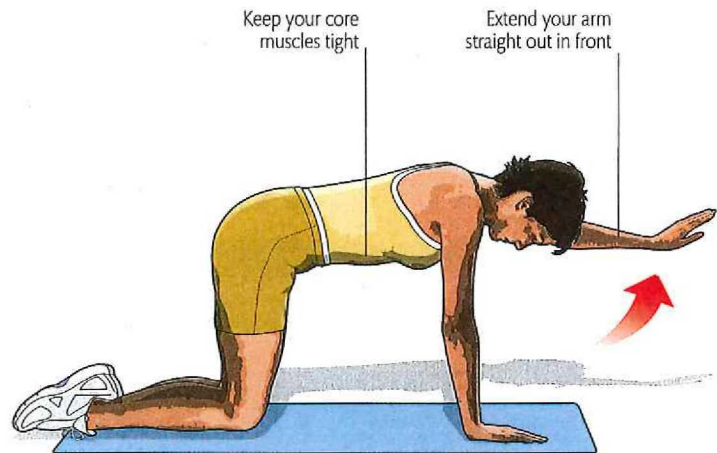
Combining an arm lift and a leg lift requires additional strength and stability as it increases rotational instability even more than removing the support of a leg. Contracting your abs, simultaneously lift your right leg behind you to hip height and your left arm forwards to shoulder height. Hold for 10 seconds, return to the start position, then repeat with your other leg and arm. Maintain a straight line from your shoulders to your hips throughout.







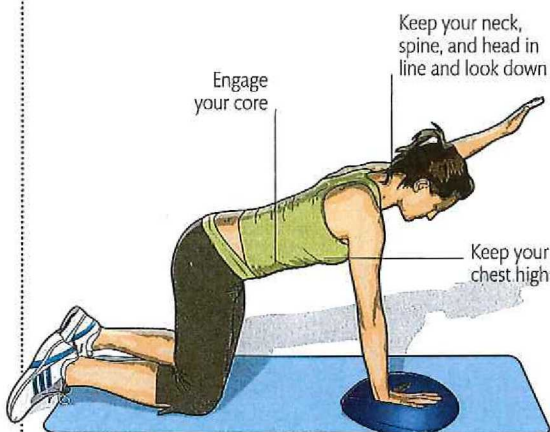
- 1** Kneel on all fours, with your knees aligned squarely beneath your hips. Keep your back straight and position your hands directly beneath your shoulders, pressing them flat on the ground and pointing forwards.



- 2** Engaging your core, raise one arm in front of you. Hold for 10 seconds, then return to the start position. Repeat the movement with your other arm and relax to the start position.

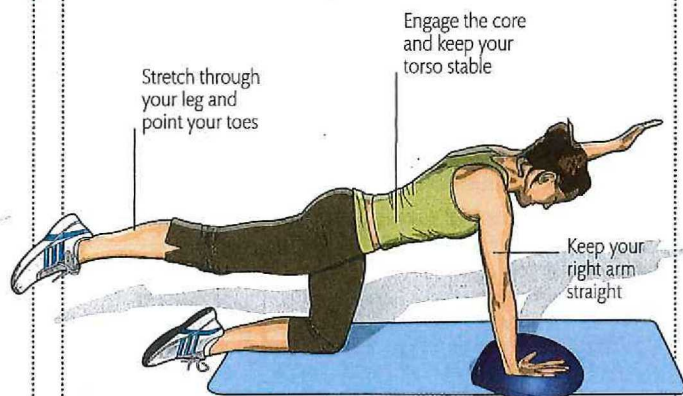
### PROGRESSION 3

Placing a stability disc beneath your supporting arm makes your core work even harder to stabilize your spine. Assume the same position as in the main sequence, kneeling with your feet hip-width apart, and your right hand on the stability disc. Supporting your body weight on your right arm and knees, extend your left arm up, keeping it in line with your torso. Hold this position, then lower your left arm, relax, and swap arms. Keep your core engaged, your shoulders and hips in line, and your spine in a neutral position.



### PROGRESSION 4

Using the body position of Progression 2 but placing a stability disc beneath your supporting arm offers an even greater challenge to your core. With your feet hip-width apart, support your weight on your right arm. In one smooth, controlled movement, extend your right leg out straight behind you and reach your left arm out in front. Hold, then return to the start position and switch arms and legs. Maintain a straight line from your shoulders to your hips and keep your core tight throughout.







# FOUNDATION

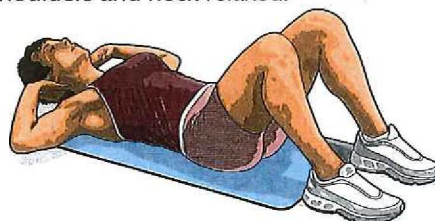
The exercises in this section are the building blocks of good core strength and stability. You should aim to master them before moving on to those in the Intermediate and Advanced

sections. To ensure you get the best results, focus on performing each exercise correctly, maintaining good form throughout and controlling the movements with your core.

## ABDOMINAL CRUNCH

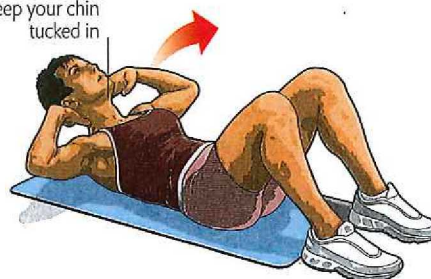
TARGET MUSCLES	TARGET MOVEMENT
■ Rectus abdominis	 <p>Flexion</p>
■ Transverse abdominis	
■ Internal obliques	
■ Pelvic floor	
<b>DIFFICULTY LEVEL</b> 	

The **basic abdominal crunch** is one of the simplest and most popular of all core exercises. Good form is key – control the movement with your core and keep your shoulders and neck relaxed.



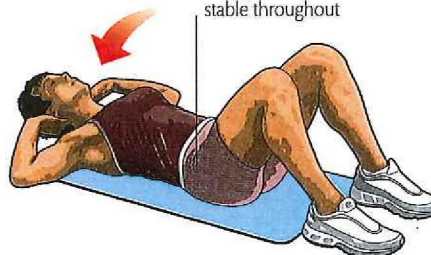
- 1** Lie on a mat with your knees bent, your feet flat on the floor, and your fingers against the sides of your head.

Keep your chin tucked in

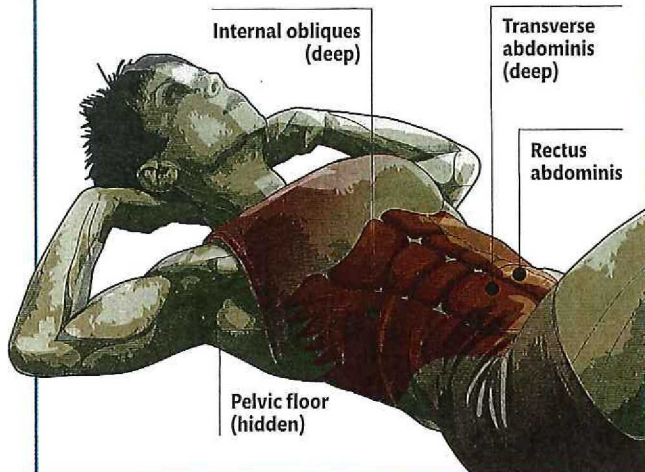


- 2** Crunching up from your core, lift your shoulders and upper back off the floor without straining.

Keep your hips stable throughout



- 3** Hold the position briefly, then lower your upper body slowly to the floor, controlling the downward phase with your core.



### VARIATION

To work your abdominal area in a different way you can use a "pulsing" action. Pause at the top of the movement and slide your hands up and down your thighs. The movement of each pulse is very small, but aim to squeeze your abs a little bit tighter each time. Aim for around five pulses per crunch.



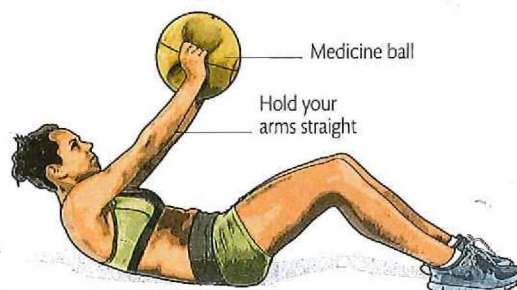


**PROGRESSION 1**

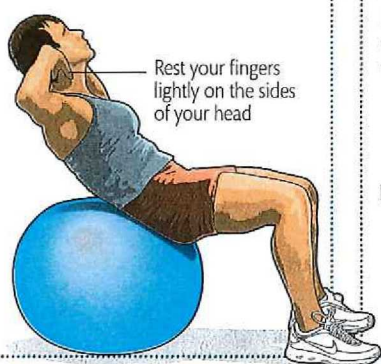
Removing the support of your legs adds an element of instability, making the muscles of your core work a little harder as you perform the crunch. From the original start position, extend your legs straight into the air with your knees together. Using your abs, crunch up as far as you can, then hold briefly before returning to the start position slowly and under control.

**PROGRESSION 2**

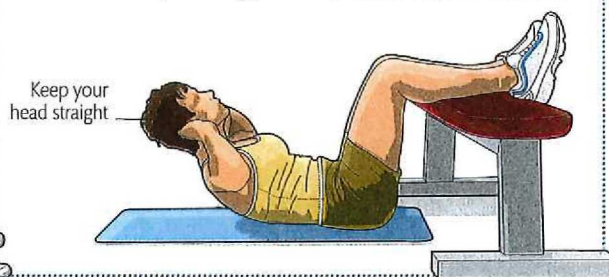
Performing the exercise while holding a medicine ball increases the load on your abs, making the movement more challenging. Holding the ball firmly with both hands, assume the normal starting position, then raise the ball in the air with your arms straight. Hold the ball in this position while you carry out the desired number of repetitions.

**PROGRESSION 3**

Resting your hips on an exercise ball requires good balance and stability. It makes it even harder for you to support your weight with your legs, because the ball can also move in any number of directions. To start, carefully lie back against the ball with your feet firmly planted on the floor and your knees bent at right angles. Crunch up with your upper body, hold, and return to the start position.

**PROGRESSION 4**

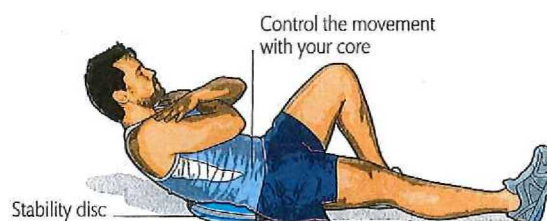
Positioning your feet on a bench works your core stabilizers harder and increases the range of movement. Lie on your back with your calves on the bench, so that your hips and knees are bent at right angles. Control the movement with your core, curling your torso towards your knees, and avoid "cheating" the movement by hooking your heels on the edge of the bench.

**PROGRESSION 5**

Using an unbalanced legs position introduces an element of lateral instability, which provides a further challenge to your core stabilizers. Lie with your back on the mat, and your hands across your chest. Straighten one leg along the floor and bend the other at 90 degrees with your foot flat on the floor. Crunch up with your abdominals to control the movement, pause at the edge of the movement, then return to the start position. Repeat as required and switch legs.

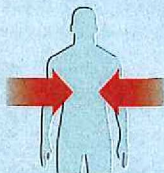

**PROGRESSION 6**

This even more challenging version of the movement involves a variation of the Progression 5 crunch – with your lower back resting on a stability disc to add even more instability. Lie at an angle with the disc under your lumbar spine and your hands crossed lightly on your chest. Control the crunch with your core, pause at the edge of the movement, before returning to the starting position. Repeat as required and change legs.

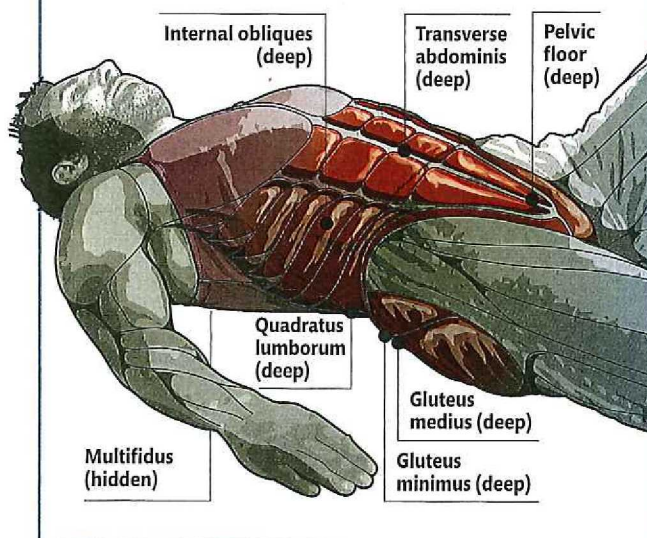




# LEG CIRCLE

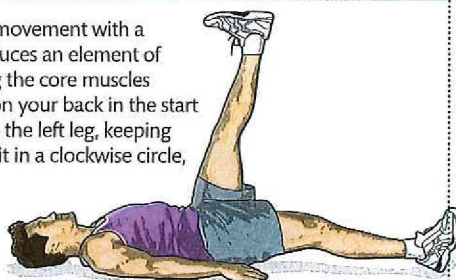
TARGET MUSCLES	TARGET MOVEMENT
<ul style="list-style-type: none"> <li>■ Transverse abdominis</li> <li>■ Internal obliques</li> <li>■ Pelvic floor</li> <li>■ Multifidus</li> <li>■ Quadratus lumborum</li> <li>■ Gluteus minimus</li> <li>■ Gluteus medius</li> </ul>	 <p>Isometric</p>
	<b>DIFFICULTY LEVEL</b> 

**This activation exercise** is simple but demands good form and hip flexibility. Keep your pelvis and core stationary, and avoid rocking from side to side. Use your palms to brace yourself against the floor, and keep your head as still as possible.

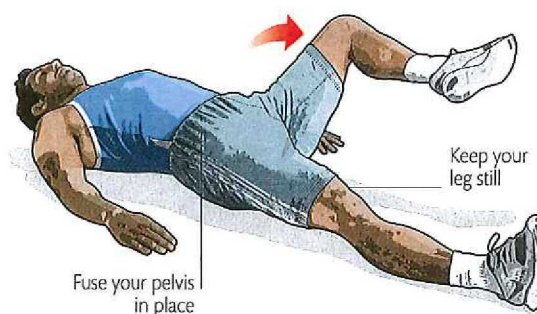


## PROGRESSION 1

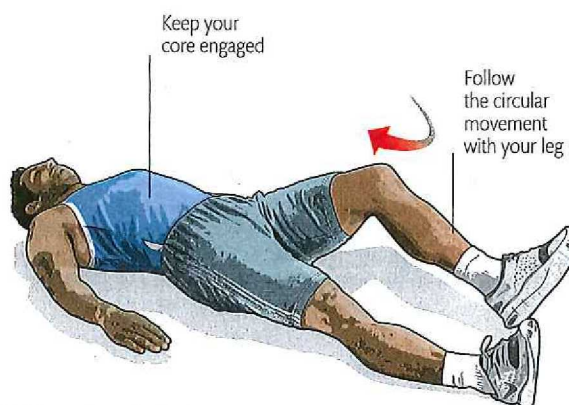
Carrying out the movement with a straight leg introduces an element of instability, making the core muscles work harder. Lie on your back in the start position and raise the left leg, keeping it straight. Rotate it in a clockwise circle, keeping your pelvis anchored. Repeat and switch sides.



**1** Lie on your back with your palms on the floor. Raise your left leg with the knee bent at a 90-degree angle.



**2** Rotate your left leg in a clockwise circle down and to the left, keeping your core engaged and your pelvis firmly anchored.



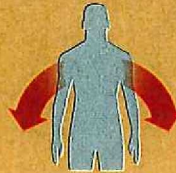
**3** Follow the clockwise movement down to the bottom of the circle, keeping your left knee bent. Continue the movement around to the start position, repeat, and switch sides.



## TARGET MOVEMENT ICONS

**ISOMETRIC**

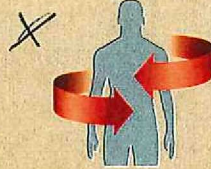
Isometric strength is the ability to hold your body in a fixed position or resist an external force, such as when you are carrying a heavy weight.

**SIDE FLEXION**

This movement involves bending from side to side from your waist or reaching overhead to either your left or your right.

**FLEXION**

Flexion involves bending forwards – for example, when you are picking something off the ground, or moving to sit or stand from a lying position.

**ROTATION**

Rotation involves turning movements from your waist, such as twisting to look over your shoulder.

**EXTENSION**

Extension involves bending your back to stand from a bent-over position, or arching your back to stretch up to reach something.

**COMPLEX**

Complex movements involve a combination of one or more of the other five movements listed in this table.

## CORE-TRAINING PROGRAMMES

This chapter offers five easy-to-navigate three-part programmes to help you get the most out of your core training (»pp.174–85). There are also two handy tables to help you to create your own workouts (»pp.186–89), and a final programme you can use as a test or a fun challenge you can include in your training.

## SPORTS-SPECIFIC CORE-TRAINING

This section profiles a comprehensive range of sports according to their principle core movements, with example exercises that may help to improve your performance. The table at the start of the chapter (»pp.195–97) offers a user-friendly reference to help you understand the key movements of your chosen sport.

**FUNDAMENTAL CORE**

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PROGRAMME	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
PLANK	30s	45s	1m	1m30s	2m
BRIDGE	10s	15s	20s	25s	30s
CRAB	10s	15s	20s	25s	30s
BEAR	10s	15s	20s	25s	30s
WOLF	10s	15s	20s	25s	30s
DOG	10s	15s	20s	25s	30s
COAT	10s	15s	20s	25s	30s
WOLF	10s	15s	20s	25s	30s
DOG	10s	15s	20s	25s	30s
COAT	10s	15s	20s	25s	30s

**SPORTS-SPECIFIC CORE-TRAINING**

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SPORT	THROWING-BASED FIELD SPORTS	JUMPING-BASED FIELD SPORTS
Baseball	Core strength is essential for throwing a baseball. Exercises include: - Side plank with leg lift - Russian twist - Medicine ball throw	Core strength is essential for jumping. Exercises include: - Jumping lunges - Box jumps - Plyometric push-ups
Soccer	Core strength is essential for kicking a ball. Exercises include: - Side plank with leg lift - Russian twist - Medicine ball throw	Core strength is essential for jumping. Exercises include: - Jumping lunges - Box jumps - Plyometric push-ups
Basketball	Core strength is essential for shooting a ball. Exercises include: - Side plank with leg lift - Russian twist - Medicine ball throw	Core strength is essential for jumping. Exercises include: - Jumping lunges - Box jumps - Plyometric push-ups

## THREE-STAGE PROGRAMMES

Each of the easy-to-use programmes offer three levels of difficulty to help you progress in a safe and structured way and get the very best results from your training regimen.

## SPORTS-SPECIFIC CORE MOVEMENTS

Information on the core movements for each group of sports helps you to gain a better understanding of how to train for your chosen activity.