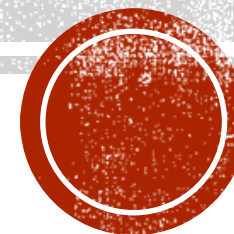


# CORE AND MORE

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تابستان 1400



# اهمیت تمرین مقاومتی

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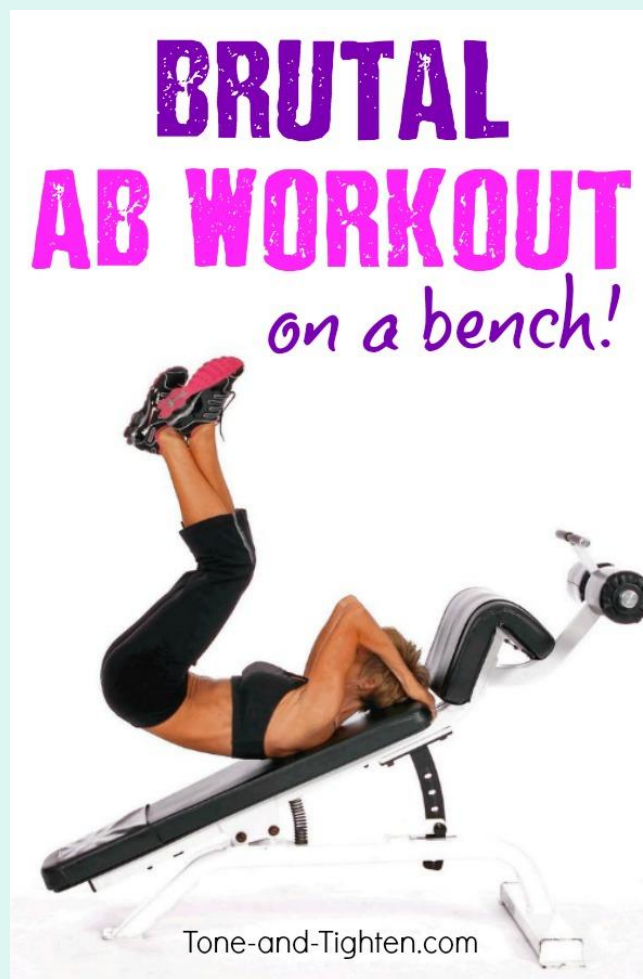
- Improves Your Body Composition
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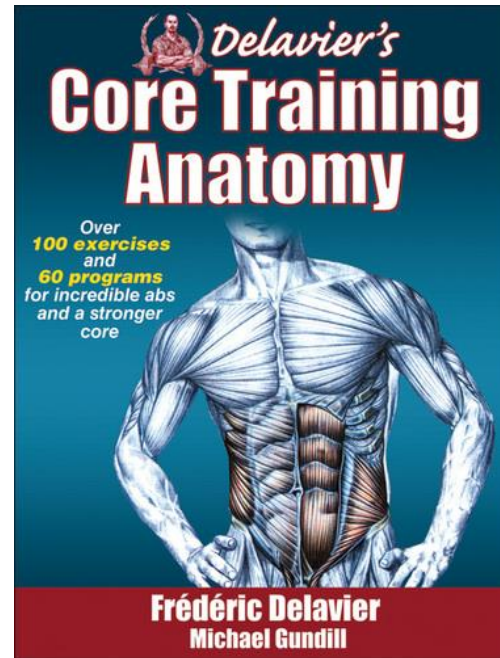
# اصول تمرینات قدرتی



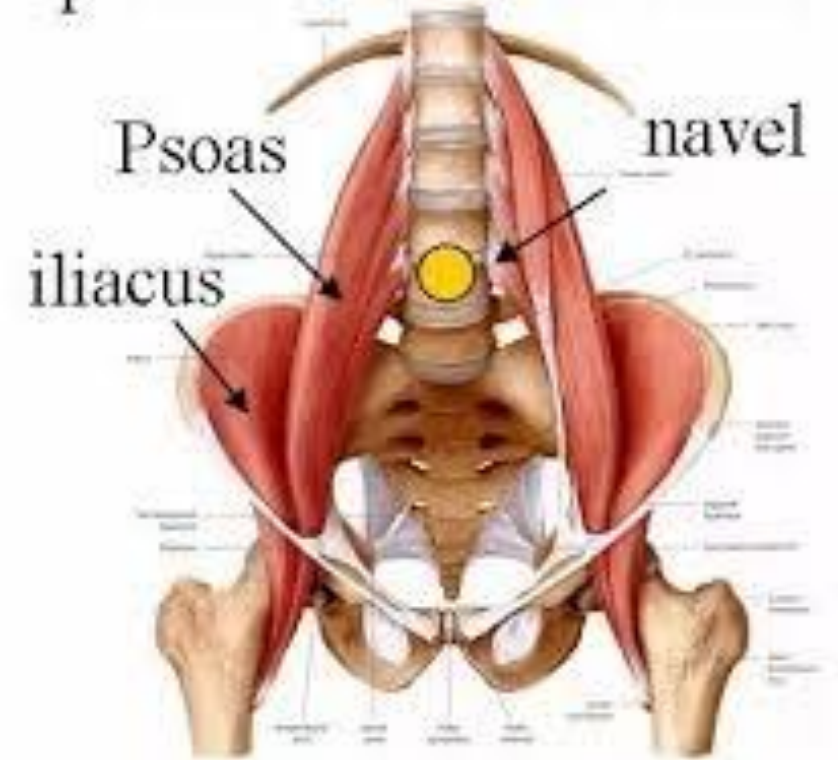
- تعیین حداکثر قدرت
- اضافه بار
- اصل موجی بودن فشار تمرین
- **قدرت مرکزی**
- افزایش حرکات
- ویژگی تمرین
- دوره بندی تمرین



# آناتومی ناحیه مرکزی بدن



Hip flexors include the psoas and iliacus muscles





# آناتومی ناحیه مرکزی

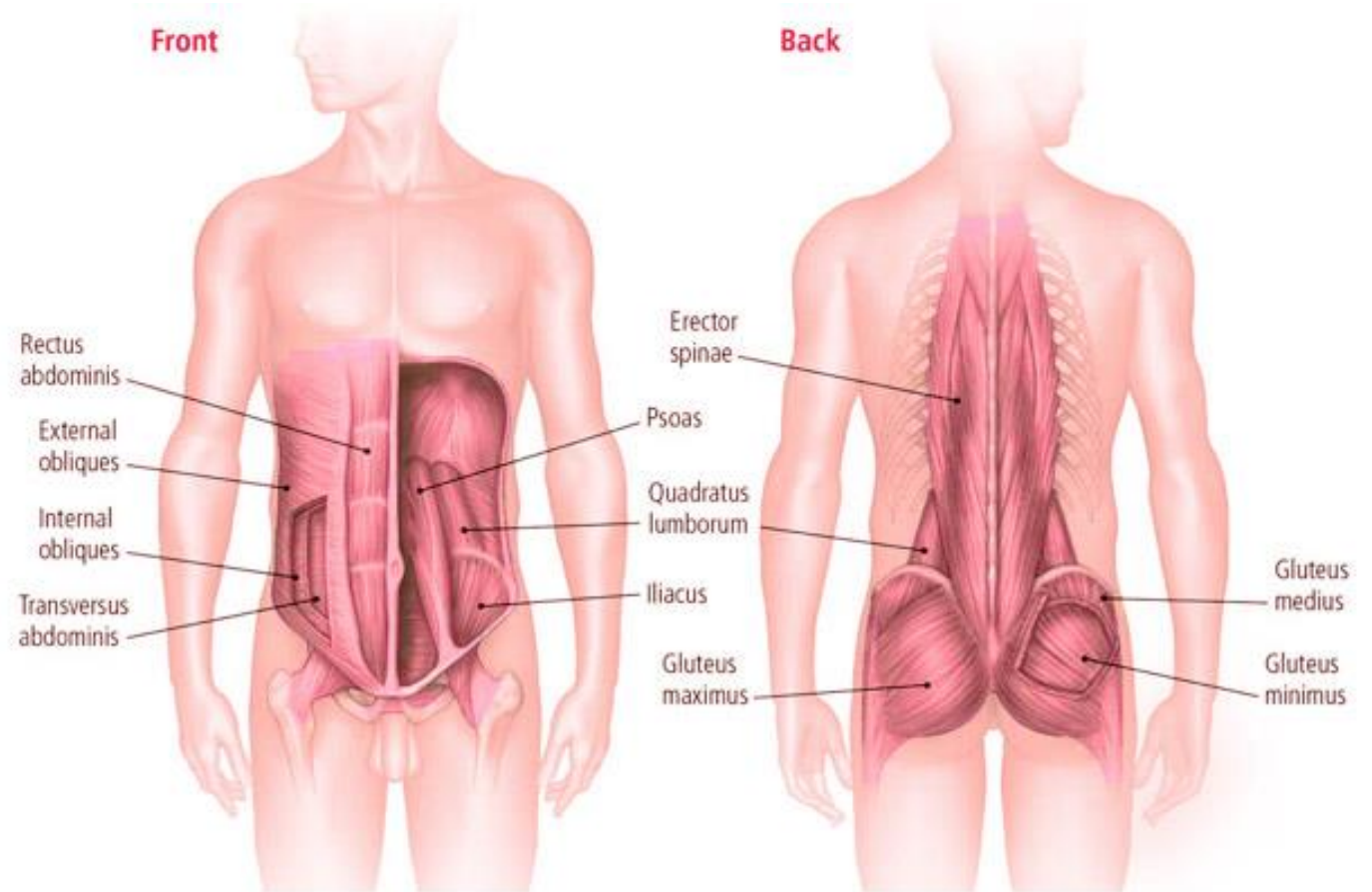
## Components of the Core



- Deep Lumbar spine stabilizer muscles
- Abdominal muscles
- Muscles of the lower and middle back
- Hip muscles
- Thoracolumbar fascia

Kibler, W.B., Press J. and Sciascia, A. (2006) The Role of Core Stability in Athletic Function. Sports Med 36 (3): 189-198 [\[full text\]](#)

Core Stability



# اهمیت تقویت ناحیه مرکزی بدن

## Why is Core Stability important?



### Performance

- The core is a vital link in the “kinetic chain”
- Stabilization and force transmission
- Sport is multi-dimensional
- Sport requires stability and strength
- The evidence is limited...

### Injury Prevention

- Muscles that prevent excessive movement protect the spine
- Dysfunction can arise from injury
- Assessments of trunk function can be used as risk factors for injury

Core Stability

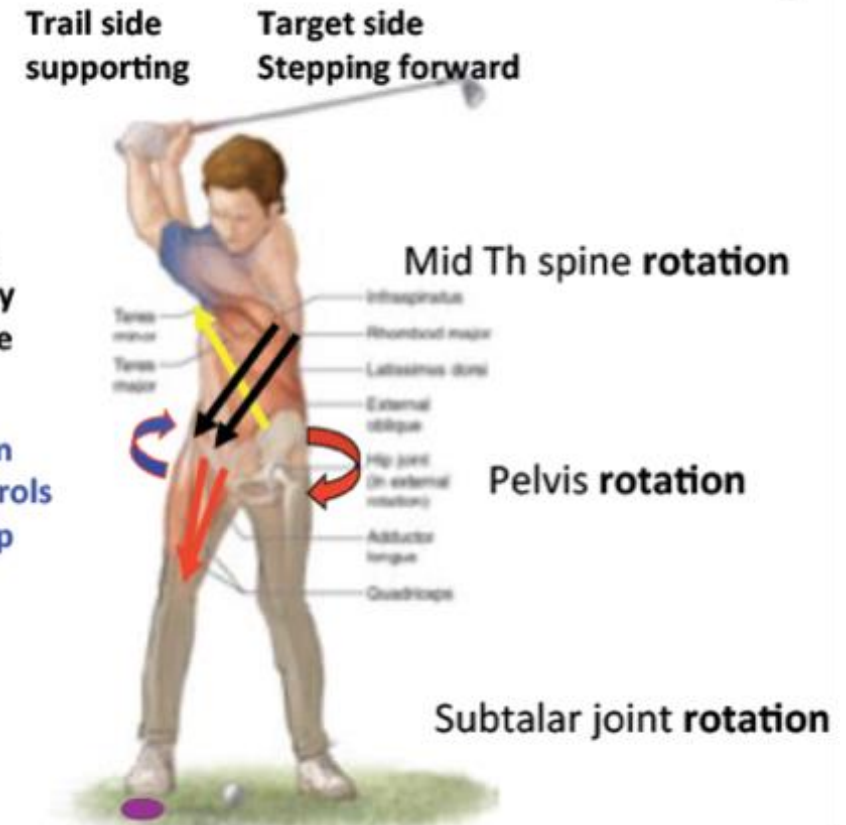
## Centration - Stabilization - Efficiency

Excentric c. of the  
1st oblique m.ch

2nd.oblique muscle  
chain rotates the body  
Above the head of the  
hip

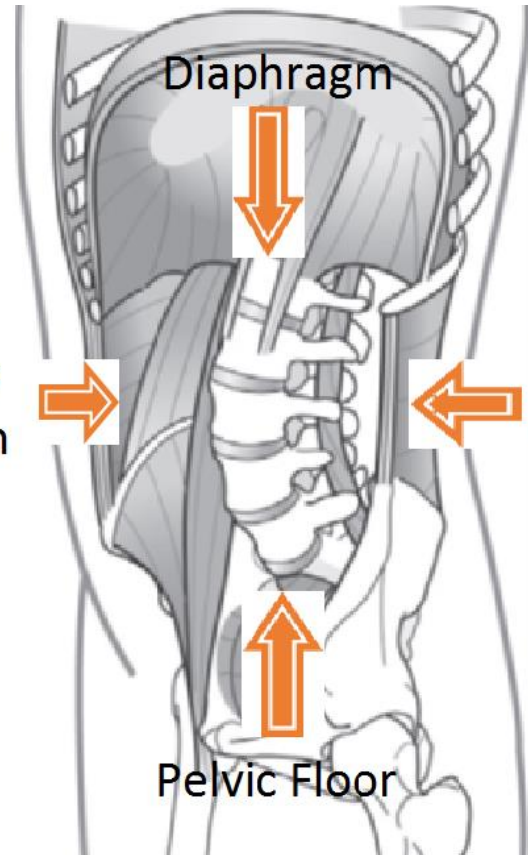
Excentric contraction  
of external rot. controls  
lateral stability in hip

Add. rotates  
pelvis around hip



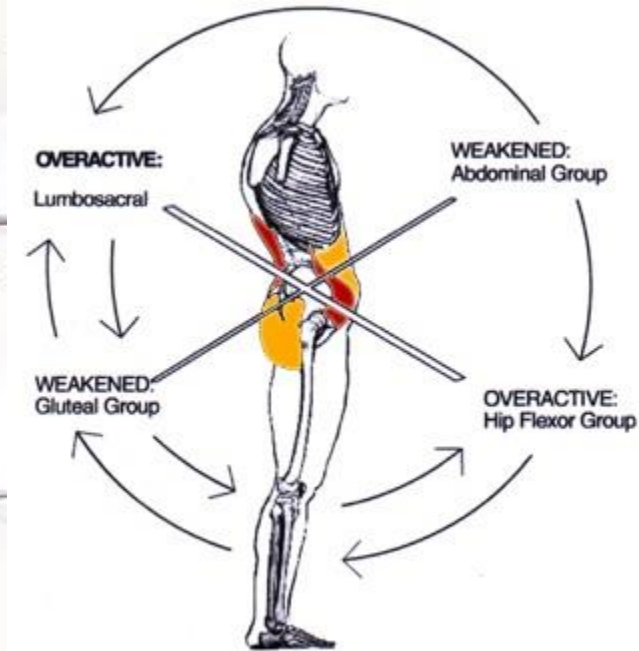


# ضعف ناحیه مرکزی و کمر درد

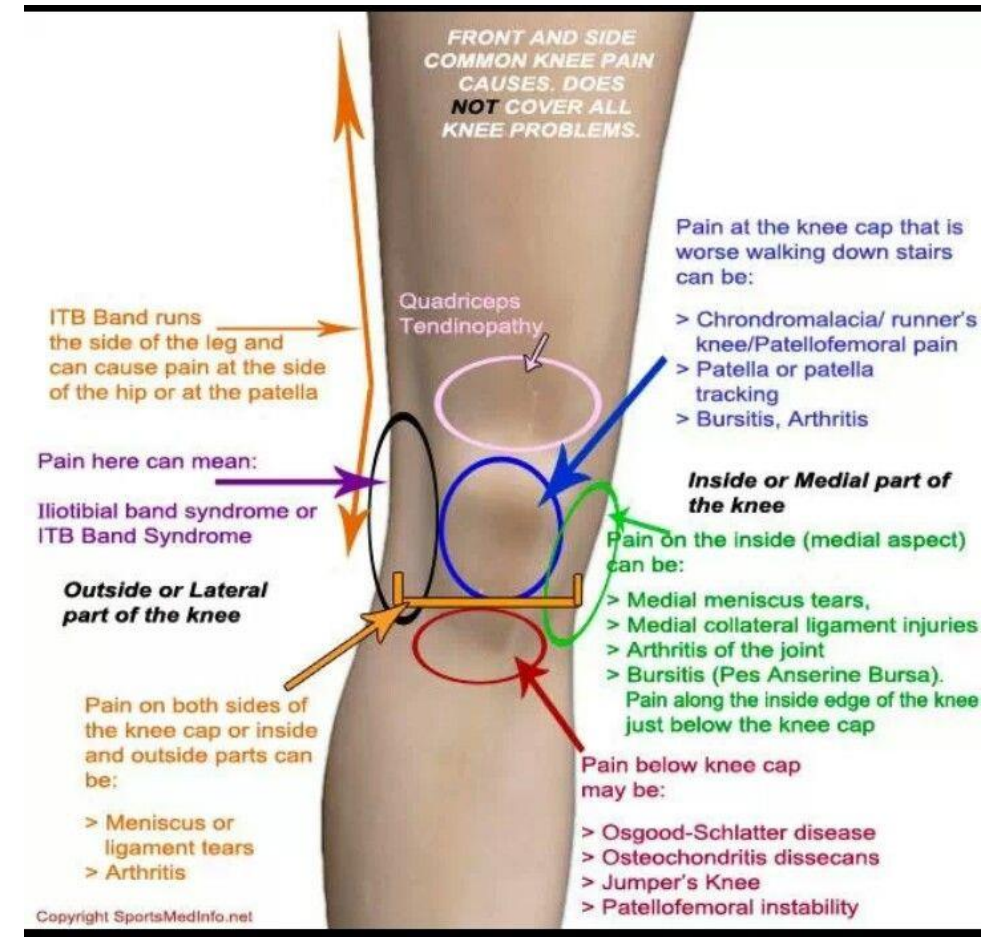
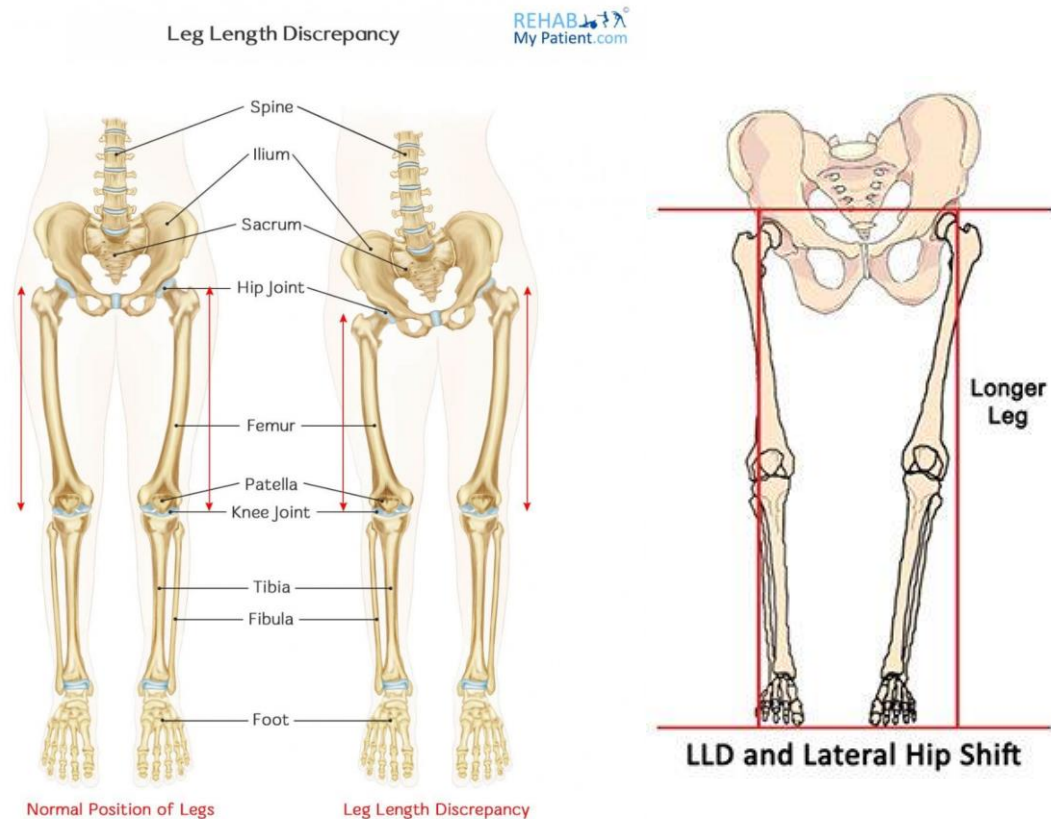


Quadratus Lumborum

Transverse Abdominus



# ضعف ناحیه مرکزی و آسیب های زانو





# ضعف ناحیه مرکزی و آسیب زانو

VANDERBILT UNIVERSITY  
MEDICAL CENTER

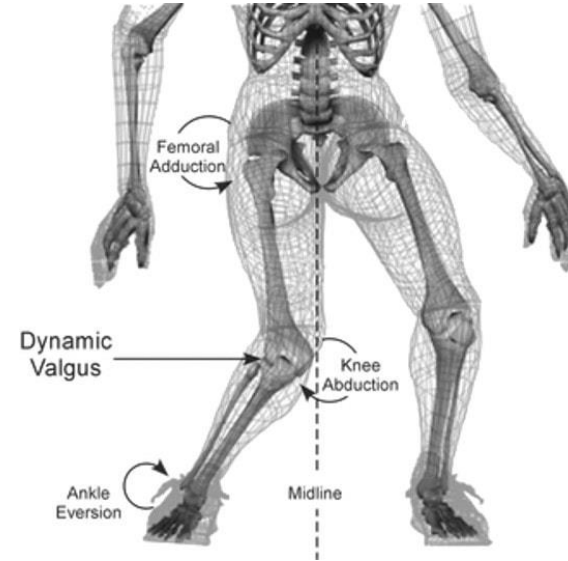
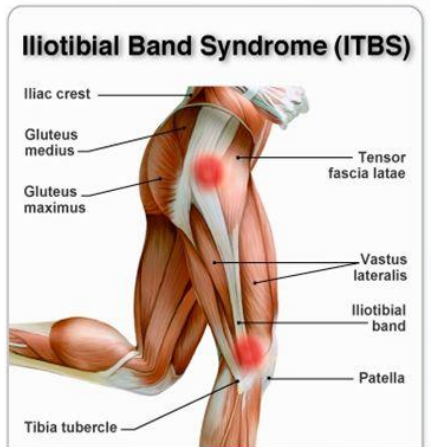
## Iliotibial Band (ITB)

### MOI

- “Runners Knee”
- Repetitive/overuse injury
- Mal-alignment or structural asymmetries
- Muscles imbalances
- Weak core a factor
- Can be the result of running on uneven roads
- Increase in activities
- Common in runners & bikers

### Signs & Symptoms

- Pain and tightness at the knee or hip



**ACL Injury  
Risk is Tied  
to A Weak  
CORE...**

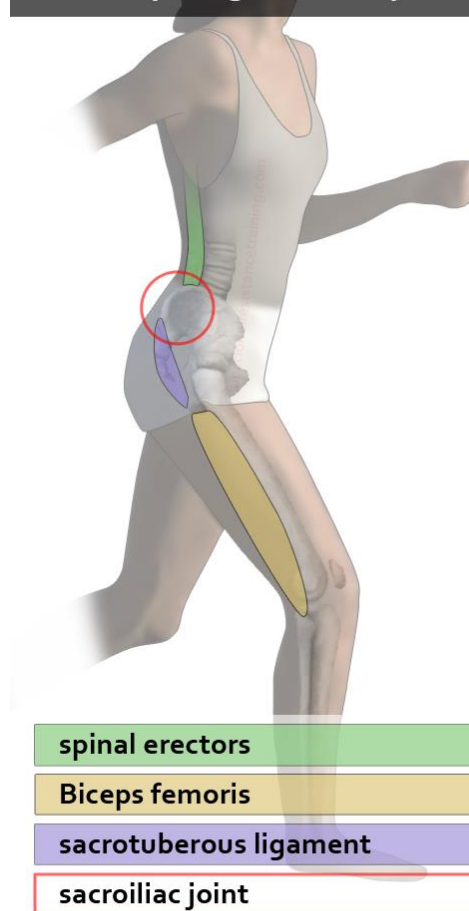


# ضعف ناحیه مرکزی و آسیب های میچ پا

4 BODY ACHES  
*that are signs of*  
**CORE WEAKNESS**



the deep longitudinal system



spinal erectors

Biceps femoris

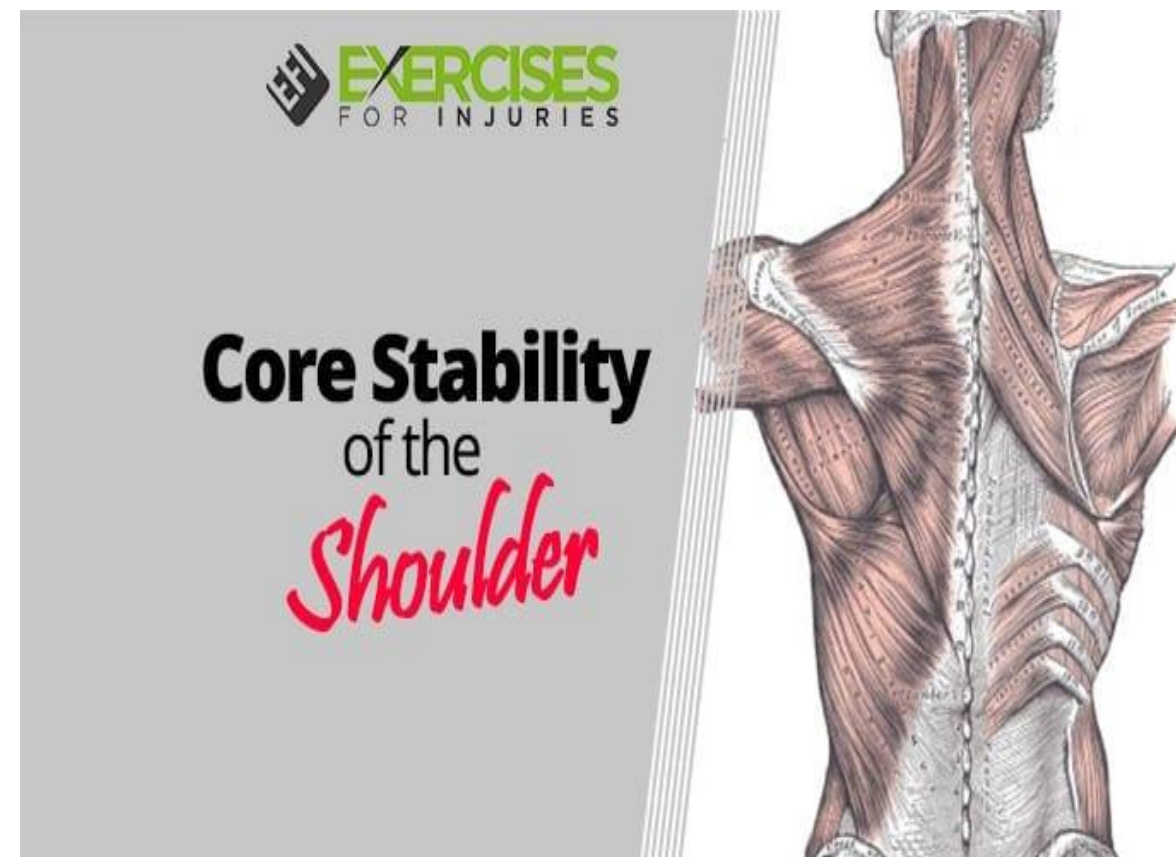
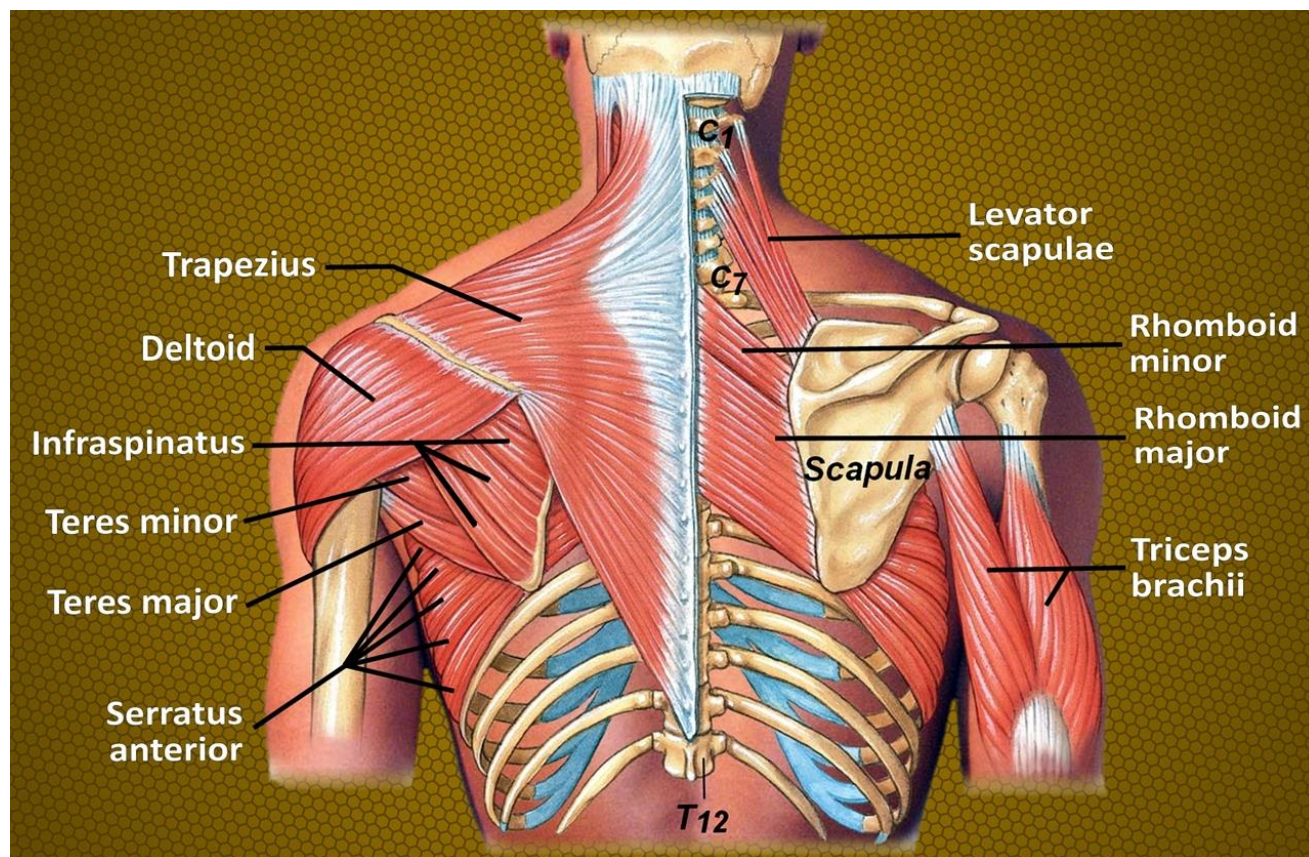
sacrotuberous ligament

sacroiliac joint





# ناحیه مرکزی و آسیب های شانه



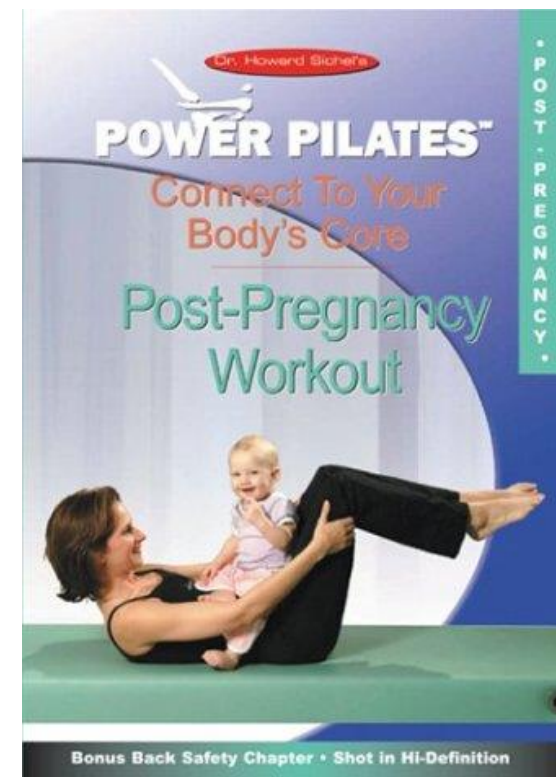
# ضعف ناحیه مرکزی و آسیب شانه

- ▶ **IS THERE A RELATION BETWEEN SHOULDER DYSFUNCTION AND CORE INSTABILITY?**
- ▶ Ahmed Radwan, PT, DPT, PhD,<sup>1</sup> Jennifer Francis, BS, DPT,<sup>1</sup> Andrew Green, BS, DPT,<sup>1</sup> Eric Kahl, BS, DPT,<sup>1</sup> Diane Maciurzynski, BS, DPT,<sup>1</sup> Ashley Quartulli, BS, DPT,<sup>1</sup> Julianne Schultheiss, BS, DPT,<sup>1</sup> Ryan Strang, BS, DPT,<sup>1</sup> and Brett Weiss, BBA, DPT<sup>1</sup>
- ▶ 2014 Feb .; 9(1): 8–13 **IJSPT**
- ▶ Criteria for parametric testing were met and a multi-variate analysis of differences was performed to compare the six dependent variables (Sorensen test, DLL test, right and left Side Plank tests, and right and left SLBT) between healthy participants (control group n = 47) and participants with shoulder dysfunction (experimental group n = 14). MANOVA was significant at p = .038 for the comparison between the experimental group and the control group for the right SLBT. **The experimental group had significantly lower balance than the control group with means ± (SD) of 10.14 ± (5.76) and 18.98 ± (15.22) respectively.** No other significant statistical differences were found between the remainder of the dependent variables.;



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# پایداری ناحیه مرکزی و عملکرد ورزشی





# Optimizing Performance by Improving Core Stability and Core Strength

Angela E. Hibbs,<sup>1,3</sup> Kevin G. Thompson,<sup>1,4</sup> Duncan French,<sup>1</sup> Allan Wrigley<sup>2</sup> and Iain Spears<sup>3</sup>

- 1 English Institute of Sport, Gateshead, UK
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## Abstract

Core stability and core strength have been subject to research since the early 1980s. Research has highlighted benefits of training these processes for people with back pain and for carrying out everyday activities. However, less research has been performed on the benefits of core training for elite athletes and how this training should be carried out to optimize sporting performance. Many elite athletes undertake core stability and core strength training as part of their training programme, despite contradictory findings and conclusions as to their efficacy. This is mainly due to the lack of a gold standard method for measuring core stability and strength when performing everyday tasks and sporting movements. A further confounding factor is that because of the differing demands on the core musculature during everyday activities (low load, slow movements) and sporting activities (high load, resisted, dynamic movements), research performed in the rehabilitation sector cannot be applied to the sporting environment and, subsequently, data regarding core training programmes and their effectiveness on sporting performance are lacking.

There are many articles in the literature that promote core training programmes and exercises for performance enhancement without providing a strong scientific rationale of their effectiveness, especially in the sporting sector. In the rehabilitation sector, improvements in lower back injuries have been reported by improving core stability. Few studies have observed any performance enhancement in sporting activities despite observing

# RELATIONSHIP BETWEEN CORE STABILITY, FUNCTIONAL MOVEMENT, AND PERFORMANCE

TOMOKO OKADA, KELLIE C. HUXEL, AND THOMAS W. NESSER

Exercise Physiology Laboratory, Athletic Training Department, Indiana State University, Terre Haute, Indiana

## ABSTRACT

Okada, T, Huxel, KC, and Nesser, TW. Relationship between core stability, functional movement, and performance. *J Strength Cond Res* 25(1): 252-261, 2011—The purpose of this study was to determine the relationship between core stability, functional movement, and performance. Twenty-eight healthy individuals (age = 24.4 ± 3.9 yr, height = 168.8 ± 12.5 cm, mass = 70.2 ± 14.9 kg) performed several tests in 3 categories: core stability (flexion [FLEX], extension [EXT], right and left lateral [LATr/LATl]), functional movement screen (FMS) (deep squat [DS], trunk-stability push-up [PU], right and left hurdle step [HSr/HSI], in-line lunge [ILLr/ILLl], shoulder mobility [SMr/SMl]), active straight leg raise [ASLRr/ASLRl], and rotary stability [RSr/RSI]), and performance tests (backward medicine ball throw [BOMB], T-run [TR], and single leg squat [SLS]). Statistical significance was set at  $p \leq 0.05$ . There were significant correlations between SLS and FLEX ( $r = 0.500$ ), LATr ( $r = 0.495$ ), and LATl ( $r = 0.498$ ). The TR correlated significantly with both LATr ( $r = 0.383$ ) and LATl ( $r = 0.448$ ). Of the FMS, BOMB was significantly correlated with HSr ( $r = 0.415$ ), SMr ( $r = 0.388$ ), PU ( $r = 0.407$ ), and RSr ( $r = 0.391$ ). The TR was significantly related with HSr ( $r = 0.518$ ), ILLl ( $r = 0.462$ ) and SMr ( $r = 0.392$ ). The SLS only correlated significantly with SMr ( $r = 0.446$ ). There were no significant correlations between core stability and FMS. Moderate to weak correlations identified suggest core stability and FMS are not strong predictors of performance. In addition, existent assessments do not satisfactorily confirm the importance of core stability on functional movement. Despite the emphasis fitness professionals have placed on functional movement and core training for increased performance, our results suggest otherwise. Although training for core and functional movement are important to include in a fitness program, especially for injury prevention, they should not be the primary emphasis of any training program.

**KEY WORDS** power, agility, muscle endurance

Address correspondence to Tomoko Okada, tokada01@gmail.com.  
25(1)/252-261

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252 *Journal of Strength and Conditioning Research*

## INTRODUCTION

Core stability is achieved through stabilization of one's torso, thus allowing optimal production, transfer, and control of force and motion to the terminal segment during an integrated kinetic chain activity (8,14,15,23). Research has demonstrated the importance and contributions of core stability in human movement (12) in producing efficient trunk and limb actions for the generation, transfer, and control of forces or energy during integrated kinetic chain activities (3,6,8,14,18). For example, Hodges and Richardson (12) examined the sequence of muscle activation during whole-body movements and found that some of the core stabilizers (i.e., transversus abdominis, multifidus, rectus abdominis, and oblique abdominals) were consistently activated before any limb movements. These findings support the theory that movement control and stability are developed in a core-to-extremity (proximal-distal) and a cephalo-caudal progression (head-to-toe) (8).

Functional movement is the ability to produce and maintain a balance between mobility and stability along the kinetic chain while performing fundamental patterns with accuracy and efficiency (20). Muscular strength, flexibility, endurance, coordination, balance, and movement efficiency are components necessary to achieve functional movement, which is integral to performance and sport-related skills (8,20). Direct and quantitative measures of functional movement are limited; however, Cook (9) proposes qualitative assessment to gain insight about whether abnormal movements are present, which purportedly translate to one's level of core stability and how it impacts performance or injury. To determine whether relationships truly exist between core stability and performance, functional movement and individual components of performance, including power, strength, and balance, must be assessed. However, relationships between these variables have not been established. One explanation for the lack of evidence may be a result of the fact that universal definitions and testing methods do not exist (1,2,20,25,26,28). We hypothesized that there would be a significant relationship between core stability and functional movement and between functional movement and performance. Also, a positive relationship would exist between core stability and functional movement.



# عملکرد والیبال و پایداری ناحیه مرکزی



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Why **core strength**  
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|--|---|---|
| <br><b>10</b> burpees       | <br><b>16</b> side planks    | <br><b>16</b> lateral lunges       |
| <br><b>10</b> vertical hop | <br><b>15</b> table thrusts | <br><b>20</b> side tables         |
| <br><b>10</b> L-sit-ups   | <br><b>16</b> split jumps  | <br><b>16</b> plank to hip flare |



# عملکرد بسکتبال و پایداری ناحیه مرکزی



International Journal of Science and Research (IJSR)  
ISSN (Online): 2319-7064  
Index Copernicus Value (2015): 78.96 | Impact Factor (2015): 6.391

## Core Stability Training and Jump Performance in Young Basketball Players

Italo Sannicandro<sup>1,2,3</sup>, Giacomo Cofano<sup>2,3</sup>

<sup>1</sup>Clinical and Experimental Medicine Department, University of Foggia, Italy

<sup>2</sup>Master's Degree of Preventive and Adapted Physical Activity, University of Foggia, Italy

<sup>3</sup>Professional Soccer Fitness Coach

**Abstract:** The strength core is an important prerequisite to perform sport skills and to perform some everyday activities such as walking, climbing stairs, postural control. The literature, so far, is mainly dedicated to the description of the effectiveness of core stability exercises in athletes or insedentary adults, with lumbar pain. The study describes the effects of an integrative training of core stability on jump performance in young basketball players. In total 44 young basketball players (19 female gender, 25 male gender, age 17.07 ± 0.3yrs, height 114.4 ± 4.3 cm weight 26.8 ± 2.7 kg) participated and were assigned to either an intervention (EG) or a control group (CG). The training program has had a duration of 4 weeks (8 sessions twice a week, for one hour); EG, besides the sports-specific exercises and introduced in the warm up 4 core exercises stability. The strength was evaluated through monopodal and vertical jump. The results revealed that the 4-week core stability training program improved the left ( $p < 0.05$ ) and right ( $p < 0.001$ ), hop test, the 6m timed hop left and right test ( $p < 0.0005$ ). The CG has obtained statistically significant benefits only in the bipodal vertical jump ( $p < 0.01$ ). The study confirms the need to introduce integrative core stability exercise, as well as the literature suggests. The study highlighted the functional relationships between core stability and jump performance in prepubertal basketball players.

**Keywords:** core stability – injury prevention – jump

### 1. Introduction

The Core strength is an important precondition for many sports, such as football, basketball, jumping in track and field, to provide a correct posture and to carry out some daily activities such as walking, climbing stairs, downing a step (Granacher et al., 2014; McCurdy et al., 2014; Prieske et al., 2015).

The district of the Core, has the role of controlling and stabilizing the lumbosacral region, and allows as a connection between the upper and lower part of the body (Akuthota et al., 2008; Andorlini, 2013a); this functional unit is able to distribute the forces which are generated by the lower or upper limbs (Andorlini, 2013a,b), as well as demonstrated in soccer training (Shinkle et al., 2012; Afyon, 2014; McCurdy et al., 2014).

To satisfy these two functional requirements, as part of the training methodology, it can identify two different types of training: the core stability tasks have the purpose of control and stability lumbar spine increase; the core strength tasks are intended to allow the transfer of high levels of strength and muscle power, activating local stabilizers and global mobilizers muscles (Faries & Greenwood, 2007; Saeterbakken et al., 2011; Sharrock et al., 2011; Sannicandro, 2014).

So far, the literature has mainly addressed the effectiveness of core stability exercises in athletes or in physically active adults, with special reference to low back pain (Abenhaim et al., 2000; McGill, 2010; Liebson, 2011) and performance, or to the core training programs effects (Prieske et al., 2016).

To date, in fact, only a study conducted as part of the school physical education classes in prepubertal subjects and aimed

to reducing chronic low back pain has described performance increases in trunk muscle strength, after six weeks core training (Allen et al., 2014).

In sports there are very few studies that have described the preventive role of core stability in young (Durall et al., 2009; Hoshikawa et al., 2013; Prieske et al., 2016; Sogut, 2016).

The relationship between the Core stability and sports performance, however, is less clear, and studies are less numerous: it is understood as exercises of Core Stability reduce back pain in sport (Durall et al., 2009; Allen et al., 2014), it may increase balance performance in cross-country skiers (Sato & Mokha, 2009), and performance in the jumping, throwing and sprint (Shinkle et al., 2012).

In the literature there are no studies that have only monitored the core stability training effects; in fact the Core stability exercises have always been associated and integrated with strength lower limb exercises (Reed et al., 2012).

Therefore, an open question remains about what the understanding of the effects on motor performance due only to core stability exercises.

Particularly, mainly because of sedentary childhood lifestyle, it must understand if such types of exercises, that specifically call for a very sensitive target district during this period (Allen et al., 2014), can be advantageous for those prepubescent practicing sport.

The age and motivation to the prepubertal sports should carefully consider the duration of the programs aimed to Core training: they must occupy a limited part of the session, perhaps especially in the initial warm-up, as long suggested in the literature (Faigenbaum et al., 2005).

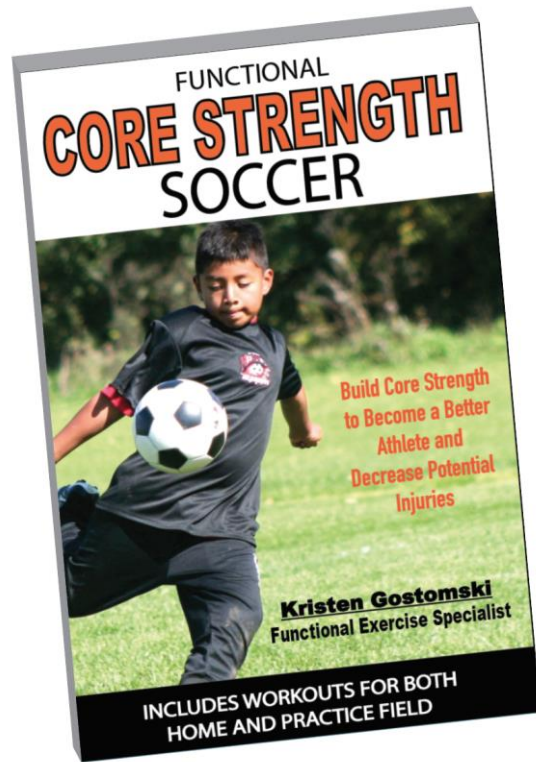
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# عملکرد فوتبال و پایداری ناحیه مرکزی



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<http://dergipark.ulakbim.gov.tr/tjed/index>  
Year: 2016 - Volume: 18 - Issue: 1 - Pages: 110-113  
DOI: 10.15314/tjse.93545



## Relationship between core stability, dynamic balance and jumping performance in soccer players

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Abstract of this study was presented orally at VIII. National Congress of Sport Physiotherapists, November 6-8, 2015, Istanbul.

### Abstract

The purpose of this study was to investigate relationship between core stability, dynamic balance and jumping performance in soccer players. Seventeen male soccer players (mean  $\pm$  SD: age,  $21.06 \pm 1.71$  years) participated as volunteer in this study. Dynamic balance of the participants were evaluated at directions of anterior (A), posteromedial (PM) and posterolateral (PL) with Star Excursion Balance Test (SEBT). The core stability was evaluated with trunk flexion, side bridge, and trunk extension tests. For jumping performance, squat jump height was measured using a contact mat. There was a negative correlation ( $r = -0.705$ ) between trunk flexion test and squat jump height ( $p < 0.002$ ). No significant correlation were identified between trunk flexion, side bridge, trunk extension tests and squat jump height ( $p > 0.05$ ). There was no significant correlation between trunk flexion, side bridge, trunk extension tests and SEBT values ( $p > 0.05$ ). The results of this study suggest that trunk flexion is associated with squat jump height in soccer players, but not side bridge and trunk extension tests. The core stability does not contribute significantly on dynamic balance.

**Keywords:** Core stability, balance, jumping, soccer.

### INTRODUCTION

The core has been described as a muscular cylinder with the abdominals in the front, erector spinae and gluteals in the back, the diaphragm as the roof, and the pelvic floor and hip girdle musculature in the bottom (2). The core is the center of the functional kinetic chain providing the proximal stability for the distal mobility and function of the limbs (8,19). The core stability is essential to prevent injuries (10,20) and improve performance in athletes. Weak core muscles may be a risk factor for low back pain (9). Zazulak et al. (21) reported that trunk displacement was greater in athletes with knee and ACL injuries compared with uninjured athletes. It has been reported that core muscle fatigue decreased dynamic stability of the trunk and loss of balance control (3,6,18). Dynamic balance is define as the ability of an individual to maintain stability of the center of mass during movement and an essential component of many sports activities. Dynamic balance is required for activities of daily living, such as walking, running, and stair climbing. Also, it is an important factor associated with lower extremity injury and performance in athletes (7). Soccer game is required

a good postural control during efforts such as kick, dribble, pass and to recover quickly after sprints, jumps and cutting maneuvers (15). Soccer is one of the most popular sports in the world, with more than 265 million players. Injury rate in male soccer players has been reported to be as high as 18.75 injuries per 1000 athlete-exposures in competitions and trainings. In both games and trainings, more than two thirds of soccer injuries occurred to the lower extremities, followed by the head and neck in games and the trunk in trainings (1).

Few studies investigated relationship between core stability and athletic performance in soccer players. Nesser et al. (14) reported that there were no significant relationship between core stability and performance tests such as sprint, vertical jump, squat, shuttle run in female soccer players. In contrast, Nesser et al. (13) found significant relationship between core stability and sprint, vertical jump, agility in male soccer players. Sharrock et al. (17) demonstrated that the core stability negatively affected medicine-ball throwing performance in basketball, volleyball, soccer, swimming and tennis athletes. Researchers found no



# ناحيه مركزى و قايقرانى

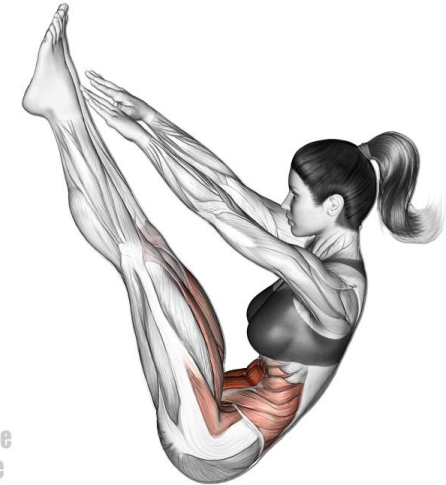
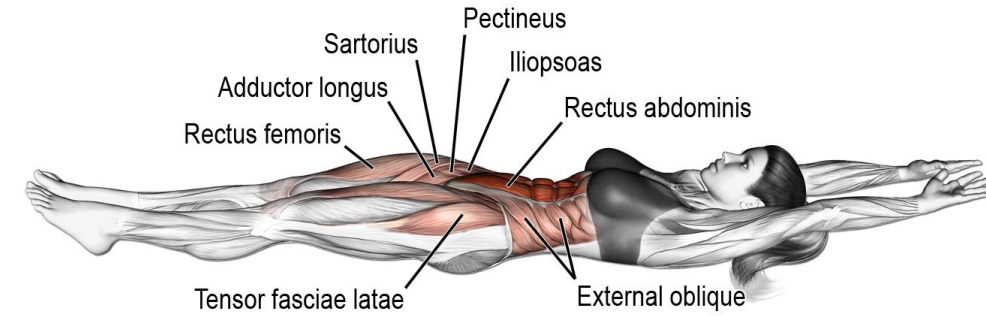
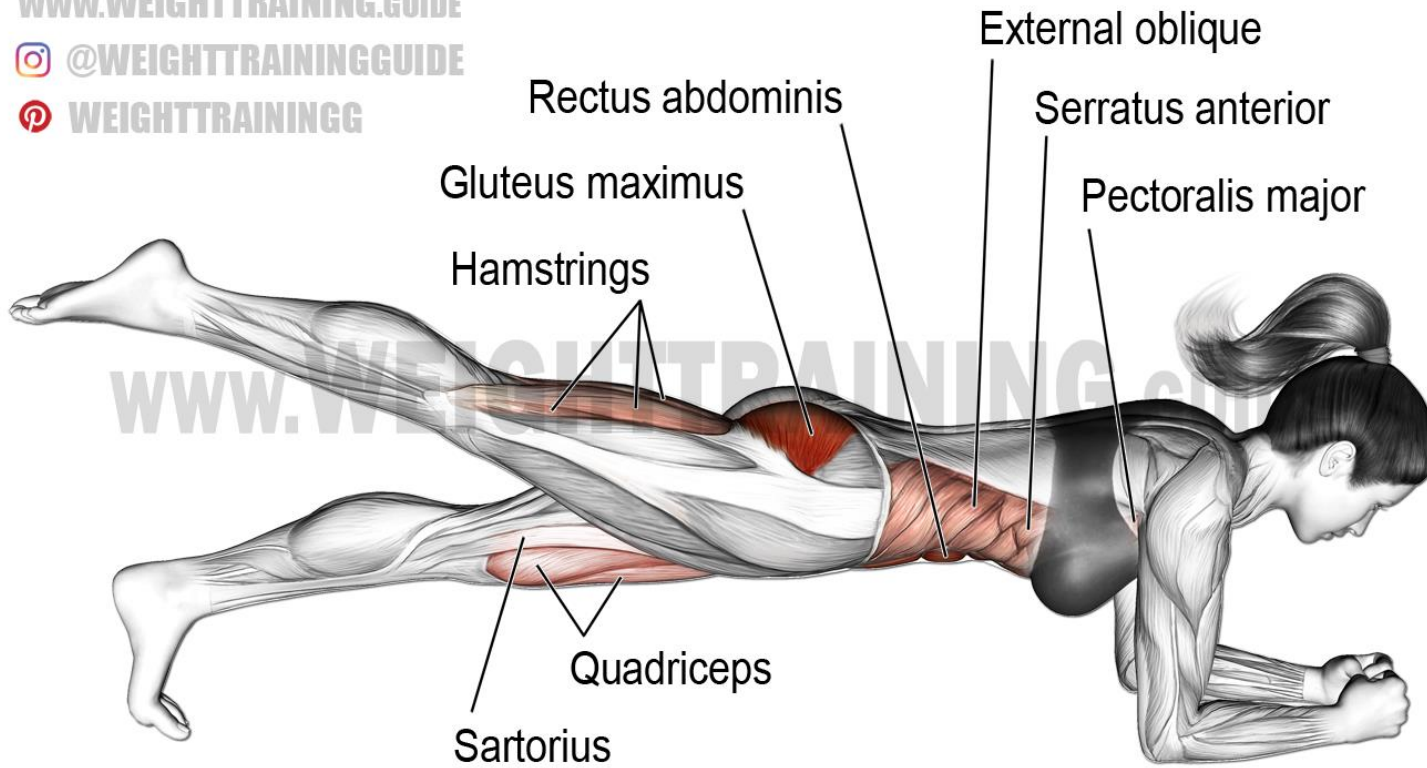


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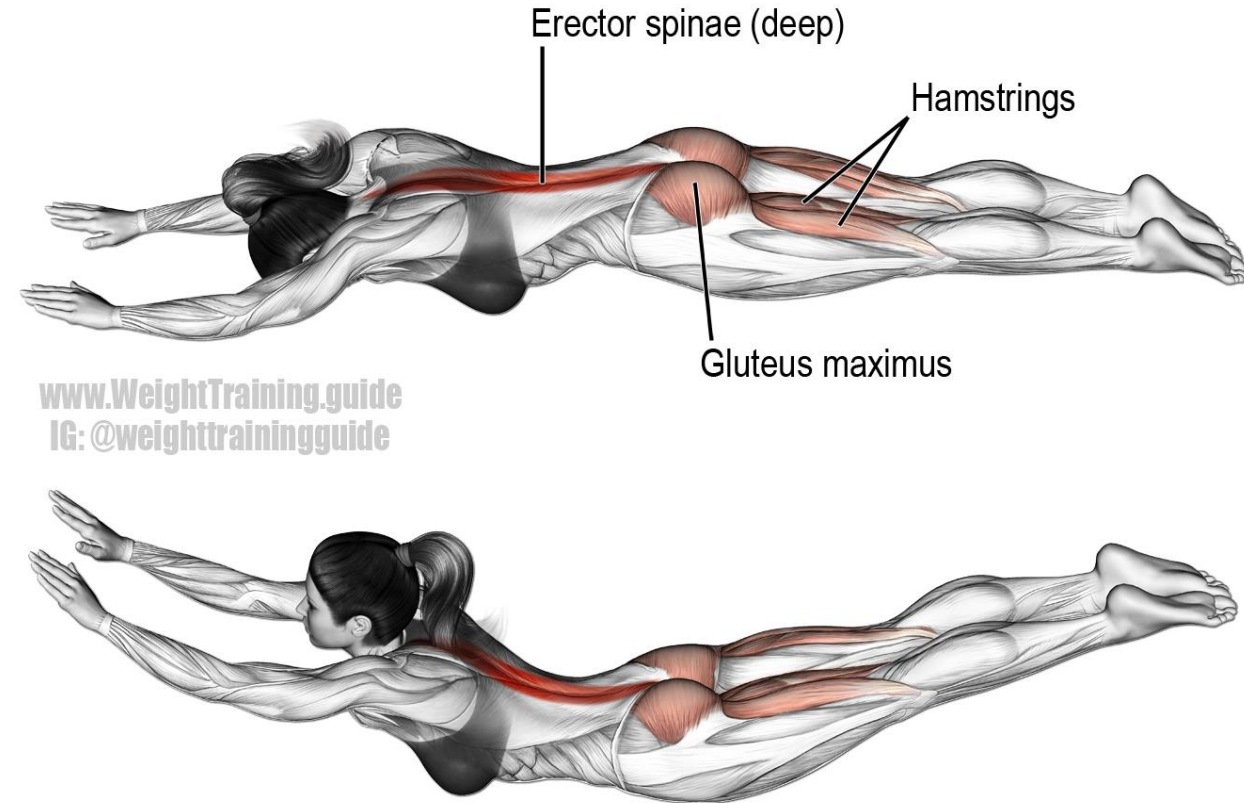
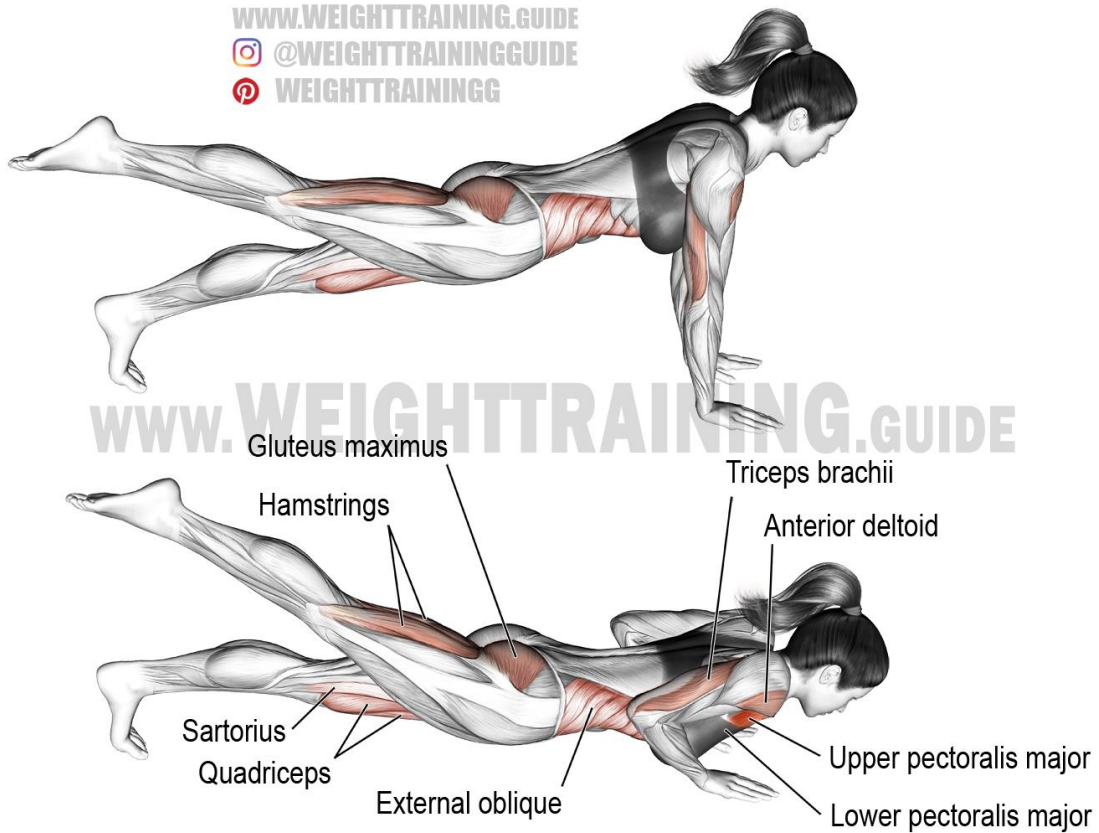


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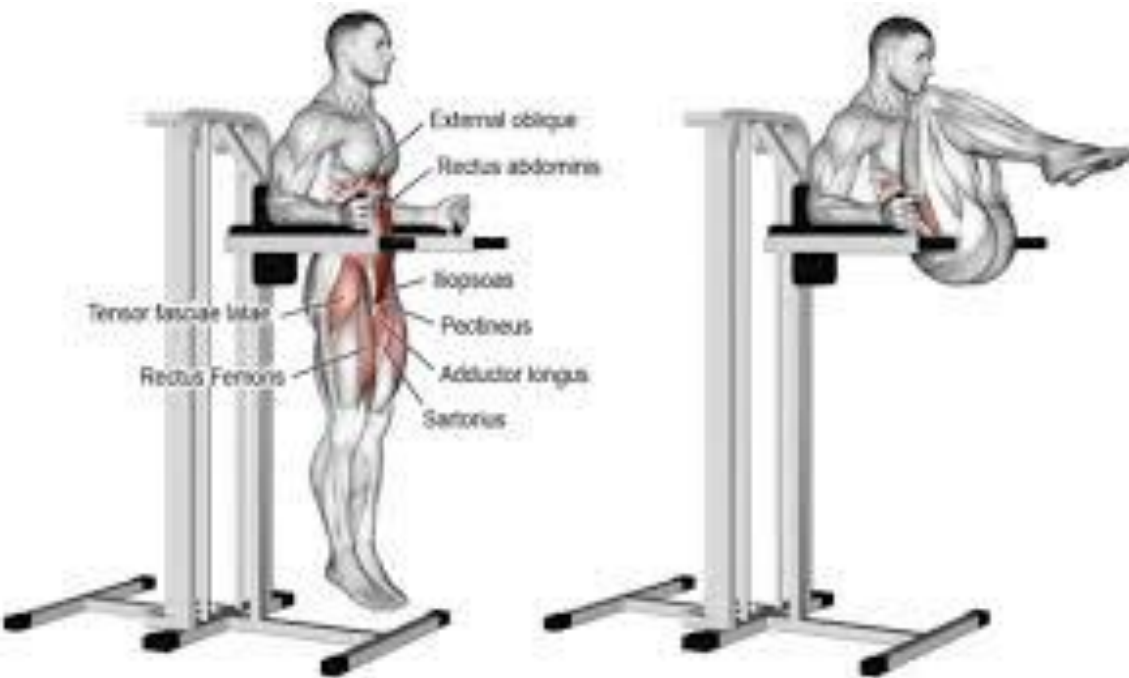




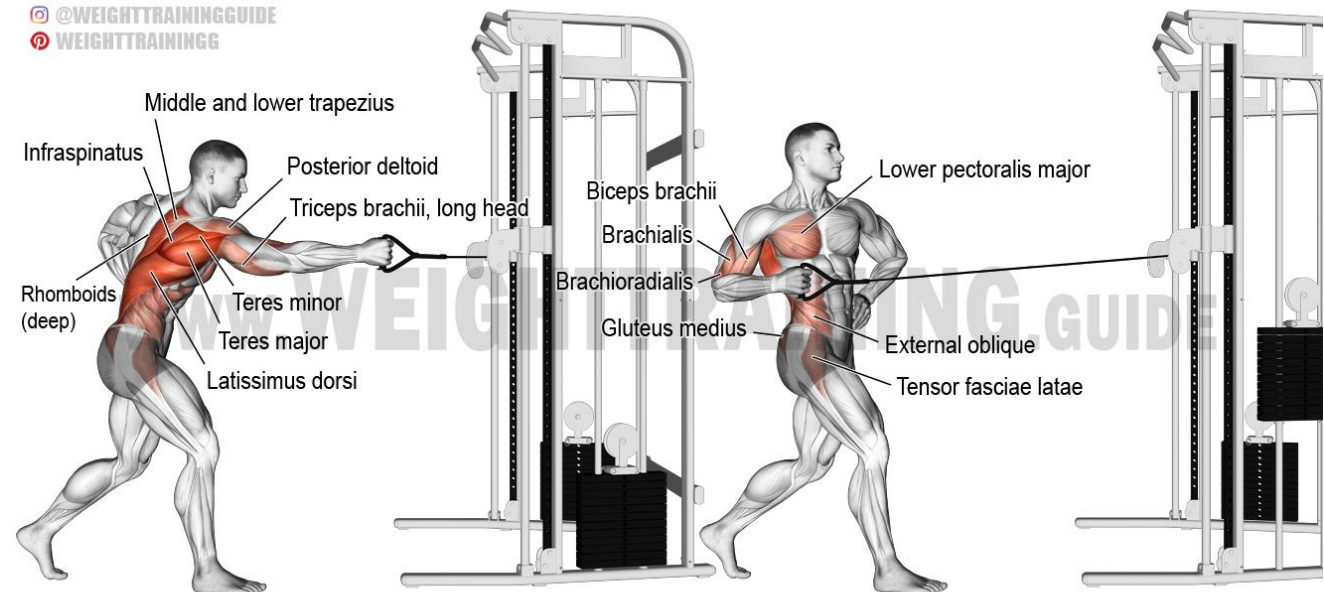
# آناتومی حرکات ناحیه مرکزی



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@WEIGHTTRAININGGUIDE  
WEIGHTTRAININGG

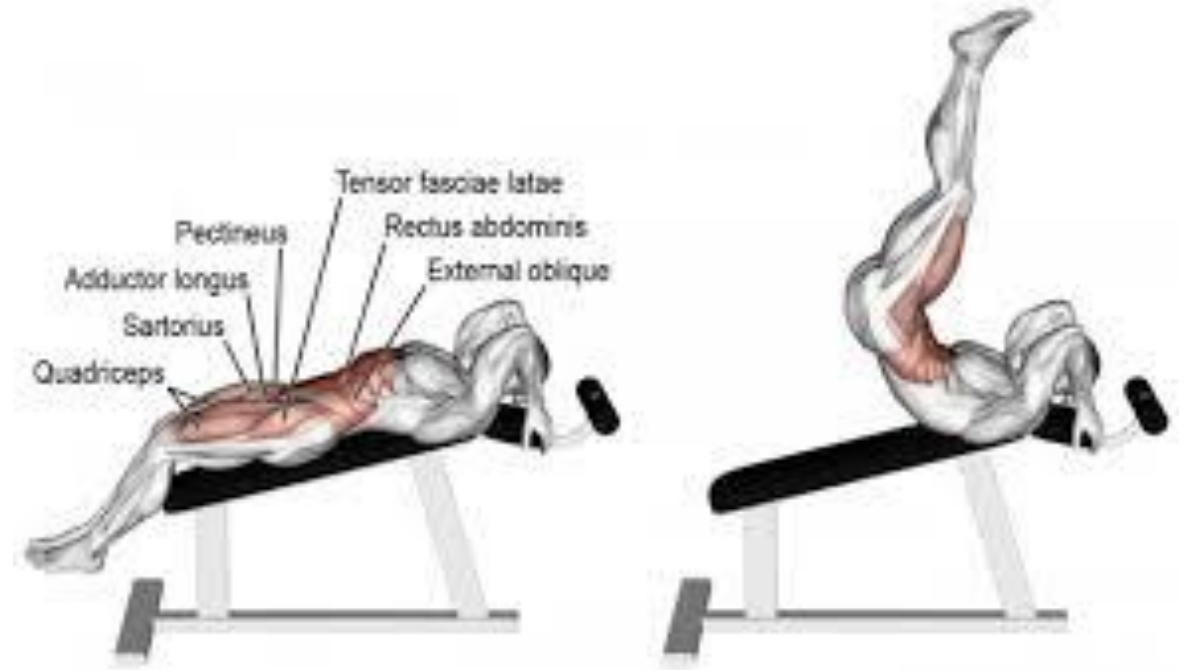
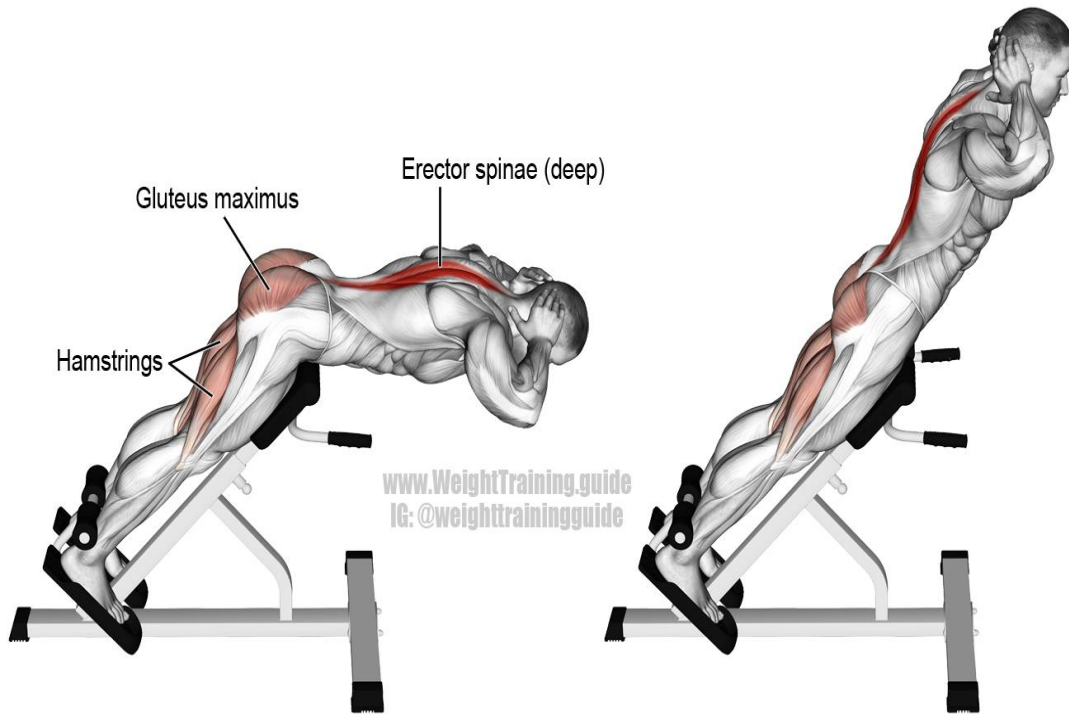


# آناتومی حرکات ناحیه مرکزی





# آناتومی حرکات ناحیه مرکزی



# ab exercises



upper



lower



six-pack



obliques



complete



core



crunches



reverse crunches



flutter kicks



sitting twists



knee to elbow



half wipers



high crunches



scissors



elbow plank



cross crunches



knee-to-elbow v2



arm / leg raises



sit-ups



leg raises



L-sit



side jack-knives



dead bug



wipers



long arm crunches



pulse-ups



star plank



toe taps



plank crunches



plank rolls



hundreds



bicycle crunches



hollow hold



sitting punches



side plank crunches



knee-in twists



knee crunches



crunch kicks



V-ups



side plank



V with rotations



climber taps







FIGURE 2: Posterior core line (PCL)



FIGURE 3: Medial core line (MCL)



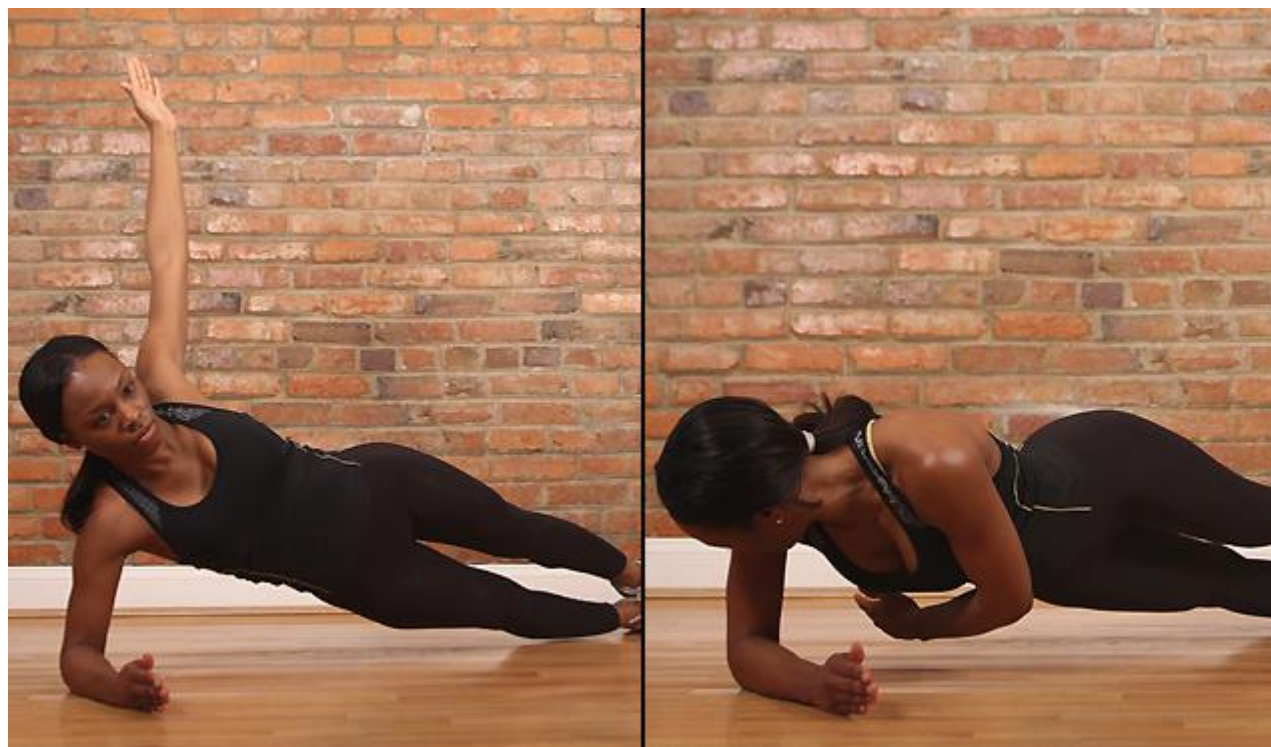
# 31 day PLANK CHALLENGE

1 FOREARM PLANK	2 FOREARM SIDE PLANK	3 EXTENDED ARM PLANK	4 EXTENDED SIDE PLANK
5 KNEE TAPS	6 SHOULDER TAPS	7 PLANK UP-DOWNS	8 FRIDAY FLOW
9 TRICEPS PUSH-UP	10 FOREARM HIP DIPS	11 PLANK JACKS	12 SIDE PLANK DIPS
13 KNEE TO OPPOSITE ELBOW	14 KNEE TO SAME ELBOW	15 FRIDAY FLOW	16 WIDE GRIP PUSH-UP
17 PANTHER	18 SIDE PLANK ROTATION + LEGLIFT	19 PLANK REACH	20 SIDE PLANK HIP DIP + LEG LIFT
21 MOVING PANTHER	22 FRIDAY FLOW	23 TRICEPS PUSH-UP + ROTATION	24 PLANK ROWS
25 THREAD THE NEEDLE + LEGLIFT	26 ARMY CRAWLS	27 SIDE PLANK CRUNCH + TOE TAP	28 ONE-LEG PULL
29 FRIDAY FLOW	30 CROUCHING TIGER PUSH-UPS	31 PLANK HOLD	

instructions:  
fitnessmagazine.com  
/plankoff

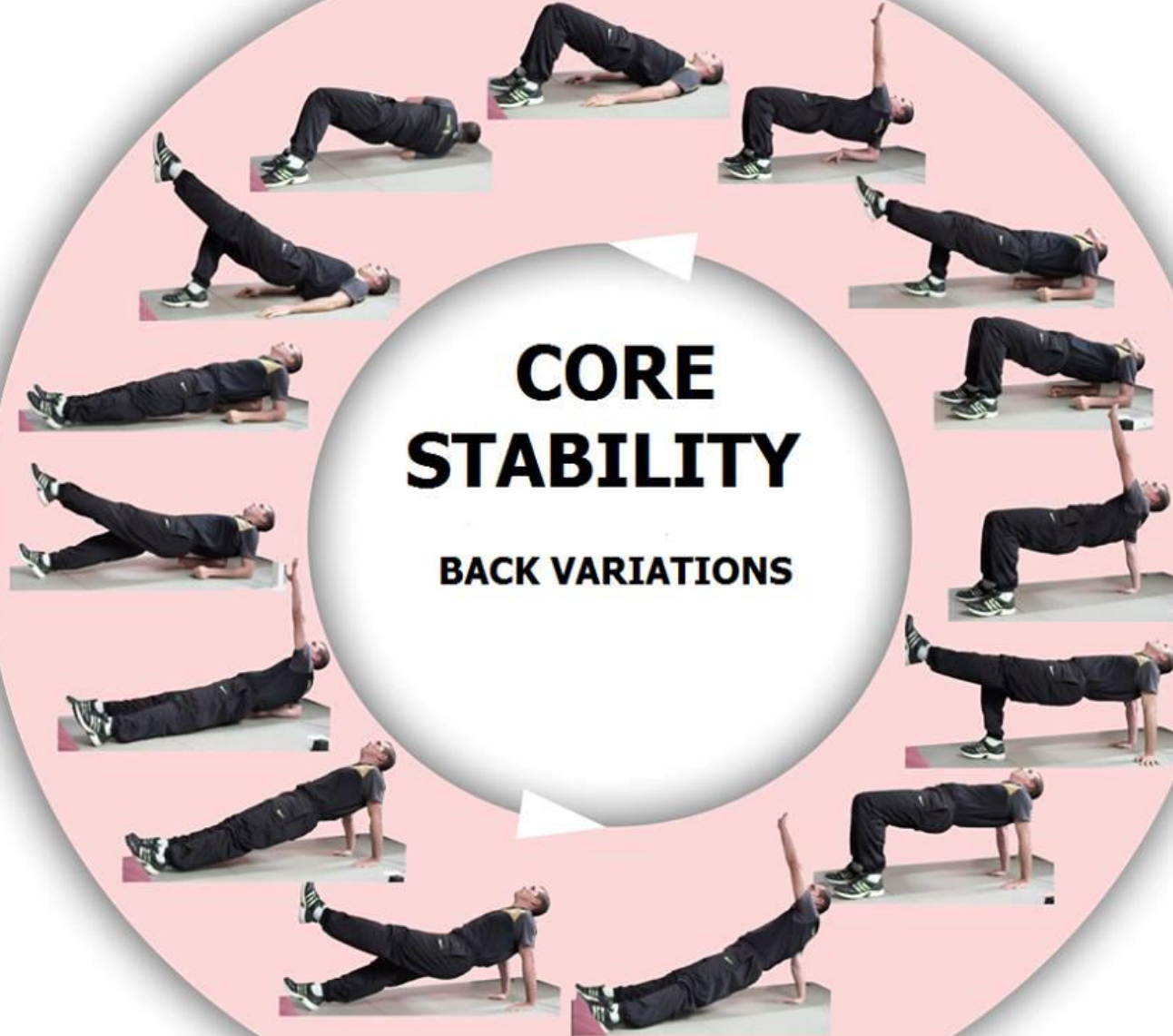


# تنوع در حرکت پلانکی



# CORE STABILITY

## BACK VARIATIONS



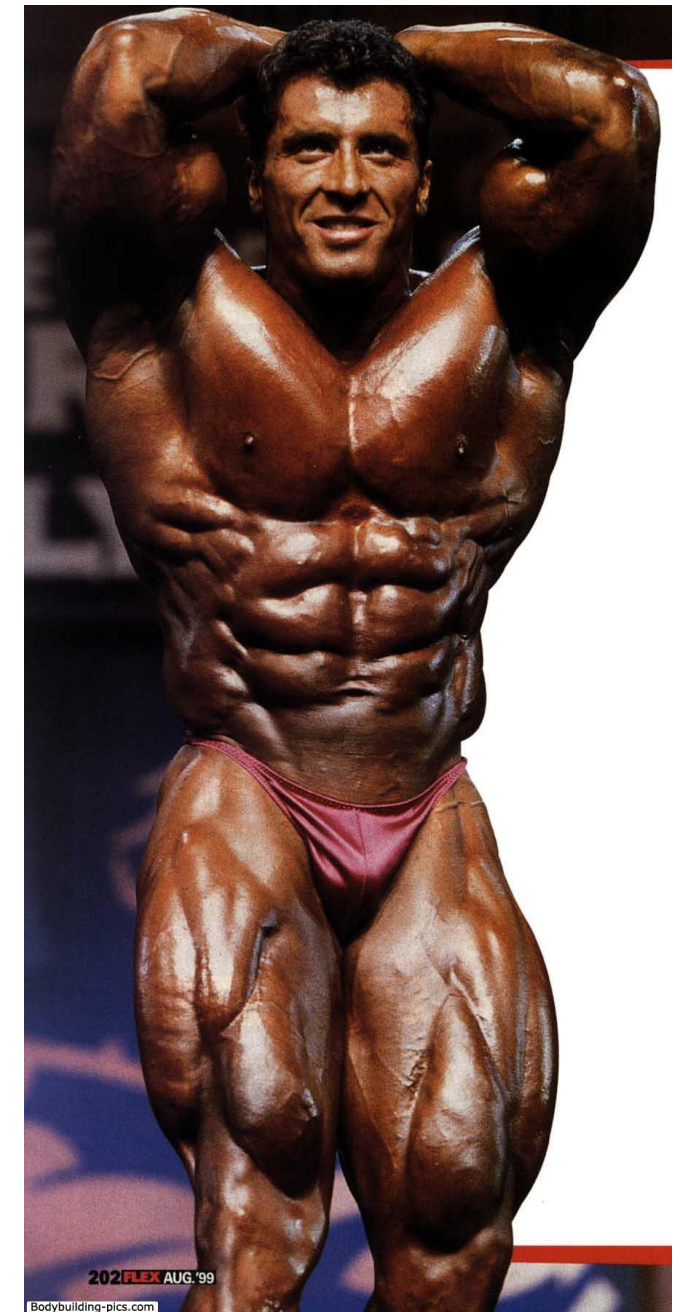


<sup>a</sup>Multi-joint exercises are recommended for older adults and children.

<sup>b</sup>Programs for children and adolescents should be closely supervised by trained personnel.

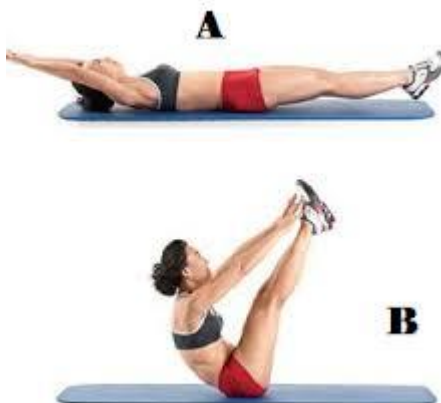
**Table 7.3 Guidelines for Designing Dynamic Resistance Training Programs**

Type	Intensity	Repetitions	Sets	Frequency	Length of program
Strength (novice)	80-85% 1-RM or 6-8 RM	6-8	3	3	6 weeks or more
Strength (advanced)	80-90% 1-RM or 4-8 RM	4-8	5-6	5-6	12 weeks or more
Toning	60-70% 1-RM or 12-15 RM	12-15	3	3	6 weeks or more
Endurance	≤60% 1-RM or 15-20 RM	15-20	3	3	6 weeks or more
Hypertrophy (advanced)	70-75% 1-RM or 10-12 RM	10-12	5-6	5-6	12 weeks or more





# حرکات ناحیه مرکزی با وزن بدن



# حرکات مرکزی با وزن بدن



## 5 CORE EXERCISES YOU SHOULD DO EVERYDAY

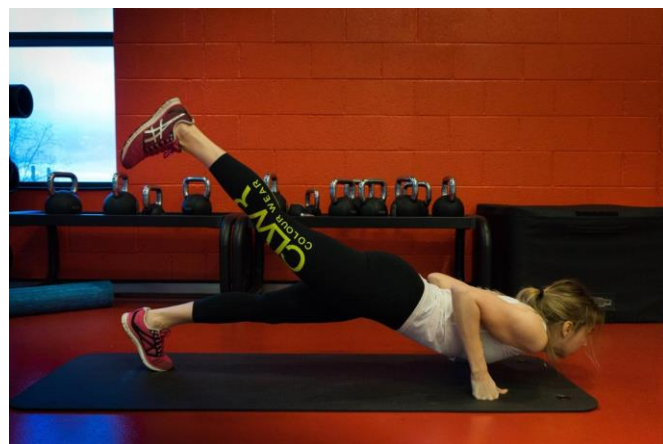
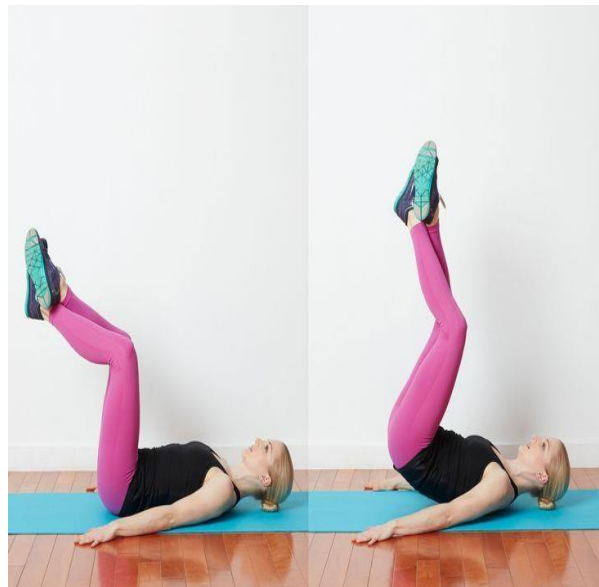


TONE & TIGHTEN  
small fitness tips and tricks





# حرکات مرکزی با وزن بدن





# حرکات مرکزی با وزن بدن



# حرکات مرکزی با وزن بدن





# حرکات مرکزی با وزن بدن



RICK CLIMMINGS



DAVID MARTINEZ



# حرکات مرکزی با وزن بدن

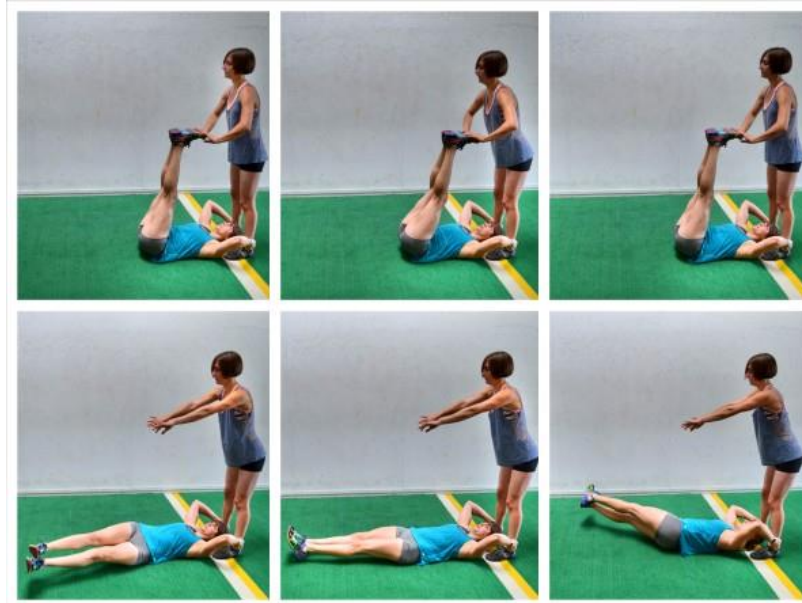


# حرکات دو نفره با وزن بدن





# حرکات دو نفره با وزن بدن



# حرکات دو نفره با وزن بدن





# حرکات کلیستنیک با وزن اضافه



# حرکات کلیستنیک با وزن اضافه

**20 MIN.  
WEIGHTED  
ABS  
WORKOUT**



**15-MINUTE  
CORE  
WORKOUT  
WITH WEIGHTS**



**T** TONE & TIGHTEN  
*real fitness for real people*

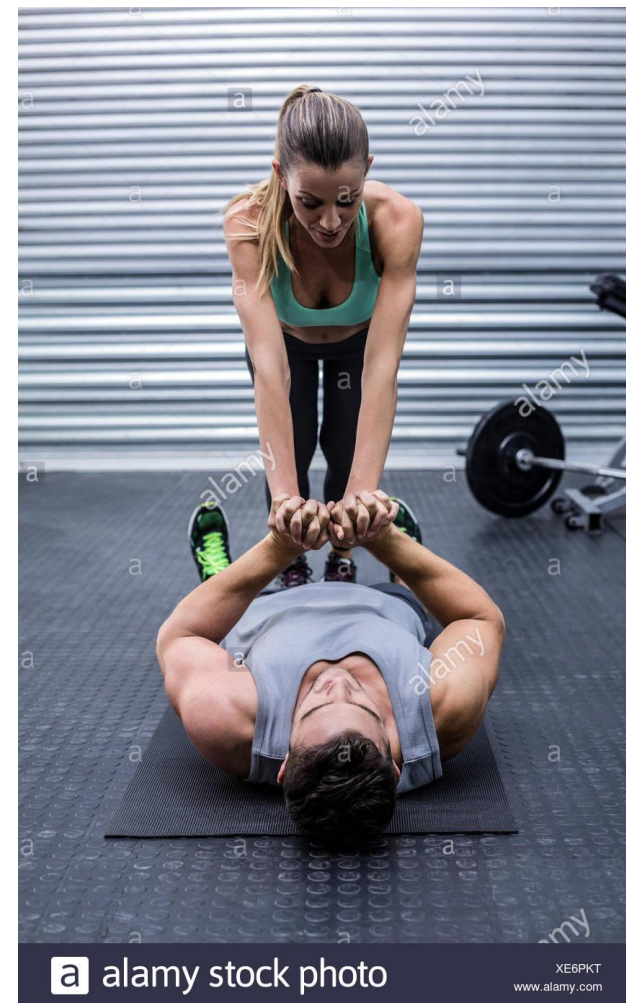




# حرکات کلیستنیک با وزن اضافه



# حرکات کلیستنیک با وزن اضافی

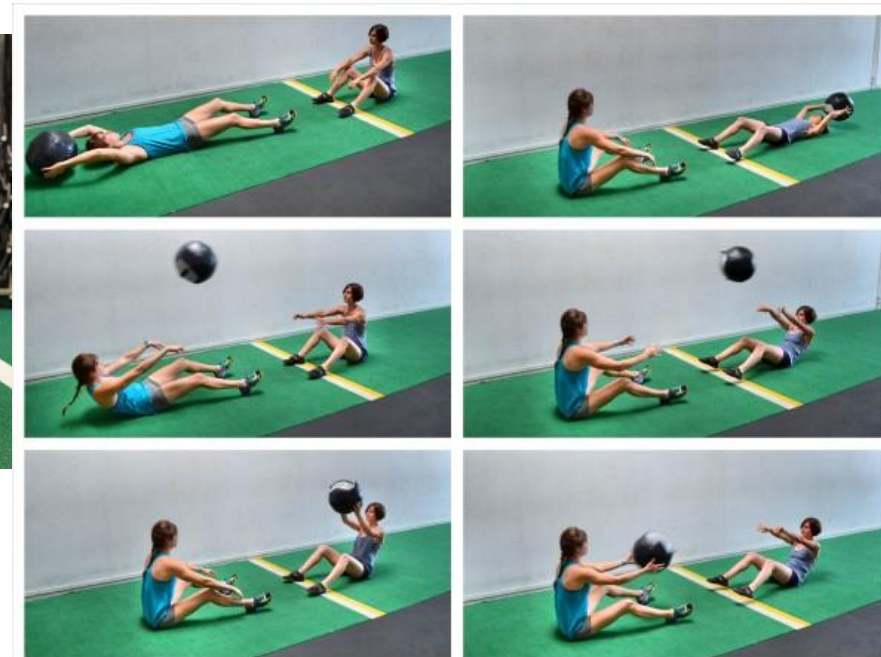




# حرکات کلیستنیک با وزن اضافی



# حرکات ناحیه مرکزی با مدیسن بال



fitness  
BLENDER.COM



alamy stock photo

FXW2J  
www.alamy.com



# حرکات مرکزی با مدیسن بال



# حرکات ناحیه مرکزی با مدیسن بال





# حرکات ناحیه مرکزی با جیم بال



# حرکات ناحیه مرکزی با جیم بال



## tone your gut

### side sculptor

works obliques, inner thighs

Lie faceup with ball between feet. Roll onto right hip and elbow. Left hand flat on floor behind you. Squeeze ball and lift legs as high as you can (as shown). Hold for 1 count; return to start for 1 rep. Do 12 reps; switch sides.



### rad roll-up

works abs

Lie faceup, heels on top of ball, arms extended on floor above head. Engage abs and slowly roll up to touch fingertips to toes (as shown). Reverse movement for 1 rep. Do 12 reps.



### belly buster

works abs, lower back

Sit on ball and lean back with hands on floor behind you, palms down and turned out, legs extended. Bring right knee toward chest (as shown); return to start. Repeat with left knee for 1 rep. Do 12 reps.



### core climber

works abs

Start in a plank with forearms on ball, hands clasped. Pull right knee up to touch ball (as shown); then quickly return to start and repeat with left knee for 1 rep. Do 12 reps.



### ball-cycle

works obliques, inner thighs

Lie faceup with hands behind head, elbows out, ball between feet, legs extended above floor. Lift left shoulder and crunch right knee to left elbow (as shown). Return to start; repeat on opposite side for 1 rep. Do 12 reps.



### waist definer

works obliques

Lie faceup on ball, knees bent, arms extended above head. Crunch up as you pull an imaginary rope with right arm (as shown), then left arm. Continue until you're sitting. Reverse movement to return to start for 1 rep. Do 12 reps.



click! We're pinning our favorite #ButtAndGut moves. Check out our board at [Pinterest.com/SelfMagazine](https://www.pinterest.com/SelfMagazine).

81

## 10 Reasons to Use an Exercise Ball as Your Chair

1. Forces proper spine alignment.
2. Causes you to frequently change positions
3. Fitness is at your fingertips.
4. Improve your balance.
5. Get that 6-pack you've been wanting.
6. Improves your circulation.
7. You'll feel more energetic.
8. Burn up to 350 calories per day.
9. Really cheap
10. C'mon, its fun!

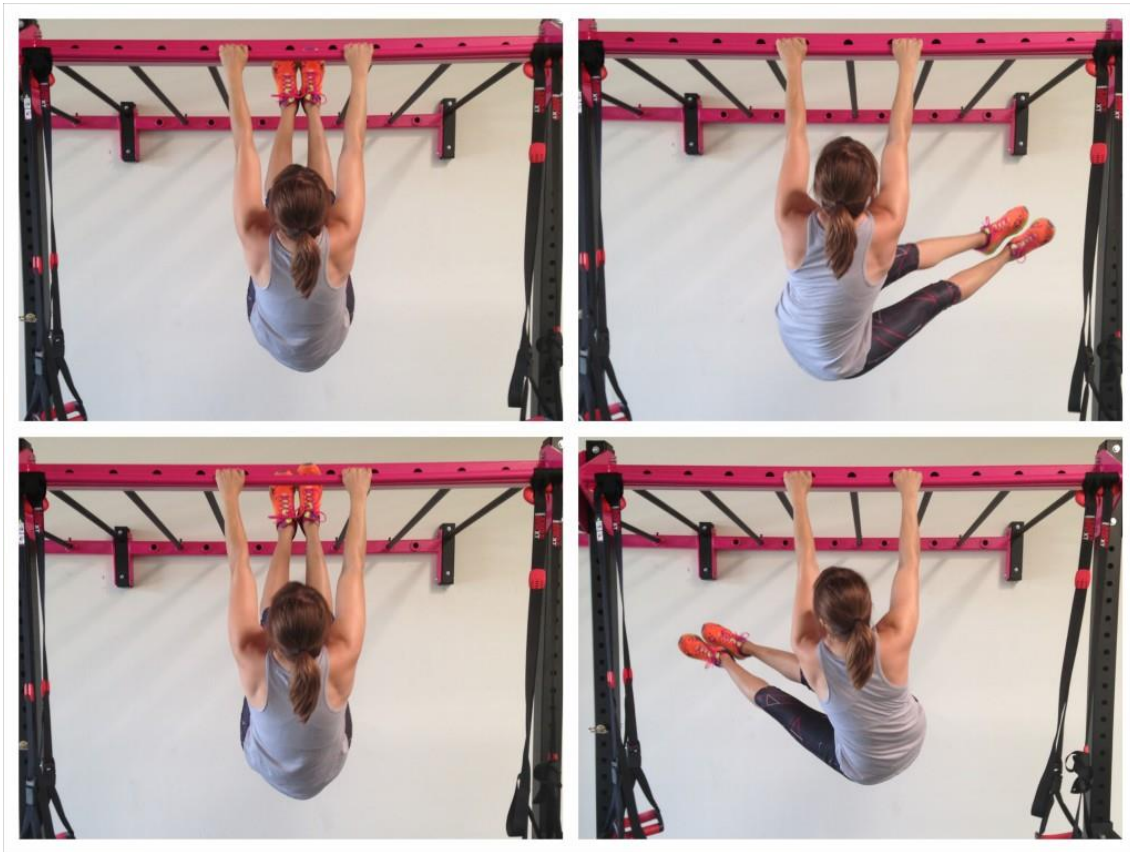
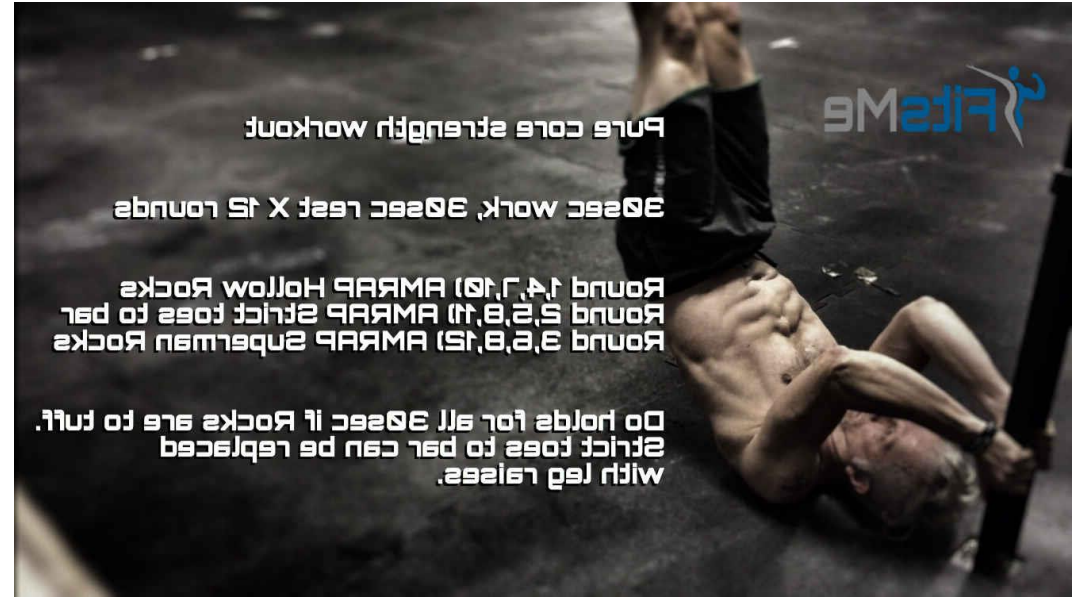




# حرکات مرکزی با میله

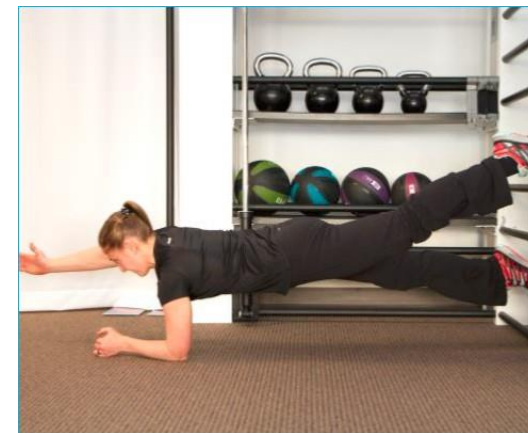








# حرکات مرکزی روی میله



# حرکات مرکزی روی میله



shutterstock.com • 228735076





# حرکات ناحیه مرکزی با دستگاه بدنسازی



# حرکات مرکزی با دستگاههای بدنسازی





# حرکات مرکزی با دستگاههای بدنسازی



**BRUTAL  
AB WORKOUT**  
*on a bench!*



# حرکات مرکزی روی دستگاههای بدنسازی

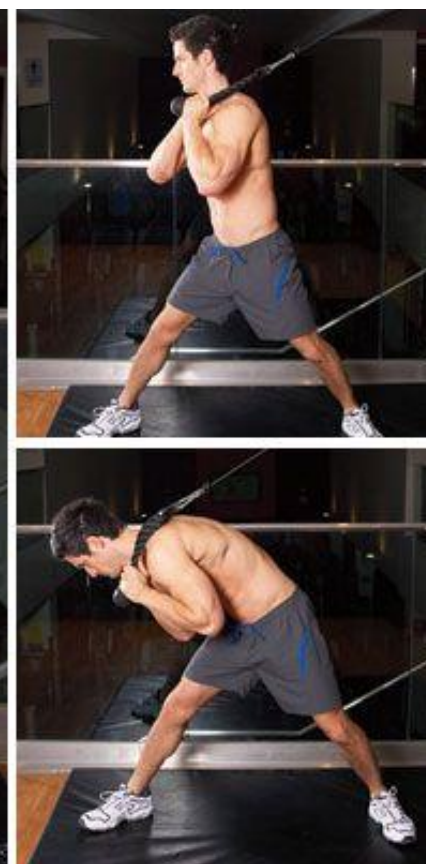
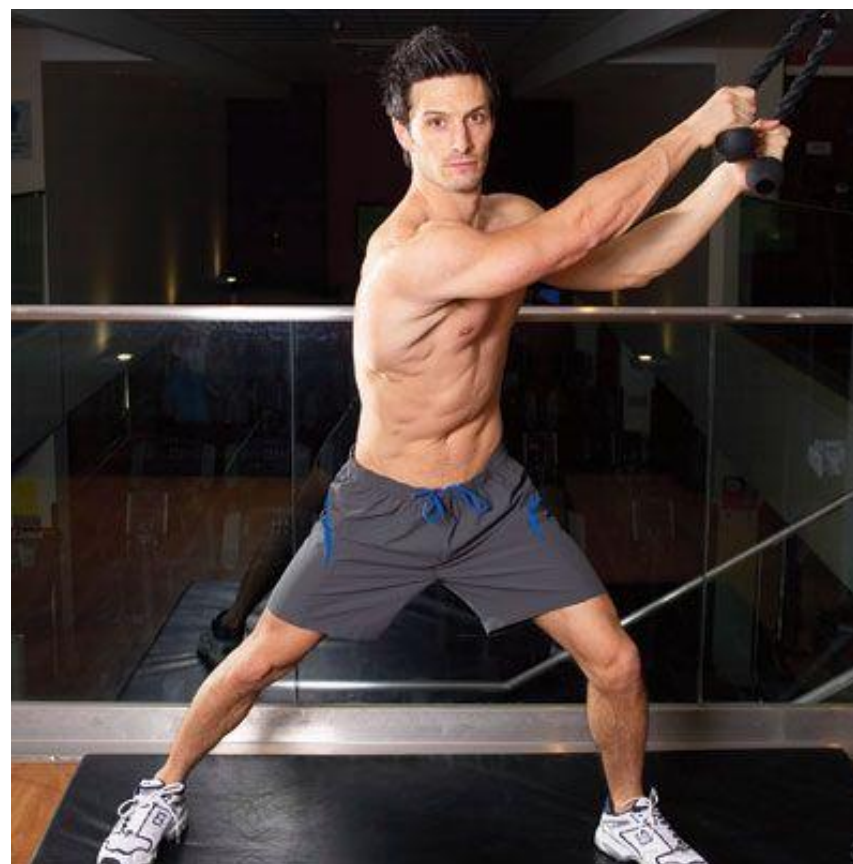




# حرکات ناحیه مرکزی با انواع کش



# حرکات مرکزی با کش





# حرکات مرکزی با کش



# حرکات مرکزی با کش





# حرکات ناحیه مرکزی در آب

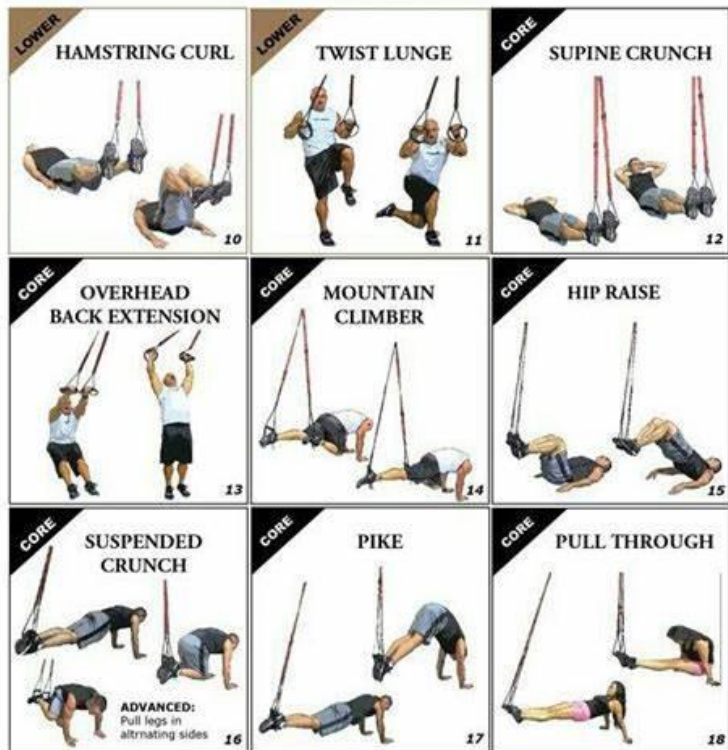


# حرکات ناحیه مرکزی در آب

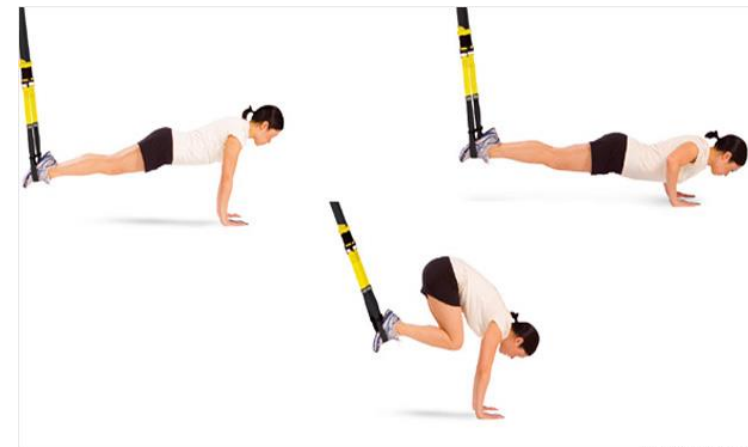
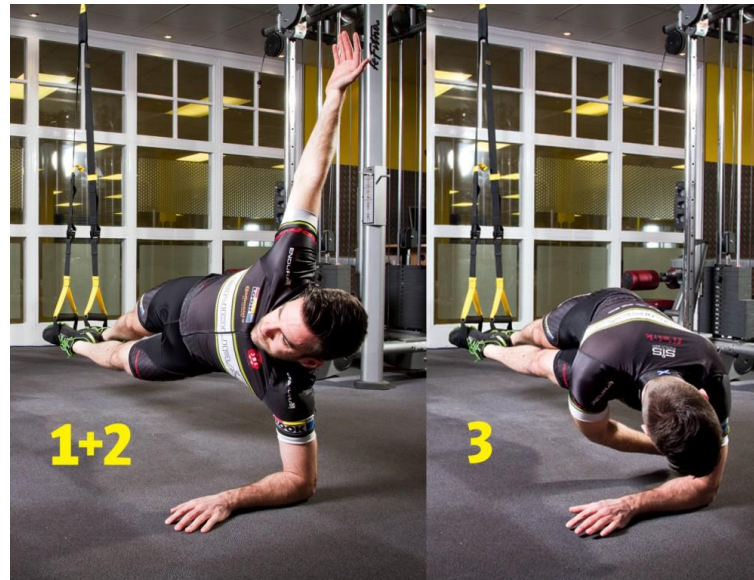




# TRX و حرکات ناحیه مرکزی



This program assumes you are healthy. Consult your physician before beginning this or any exercise program. Before use always inspect your suspension trainer for worn or damaged parts, use a strong, secure anchor point that can hold three times your body weight, and make sure the exercise surface is flat and not slippery. Failure to follow these guidelines may result in injury. The user assumes the risk of injury and all liability resulting from the misuse of the WOSS Trainer.

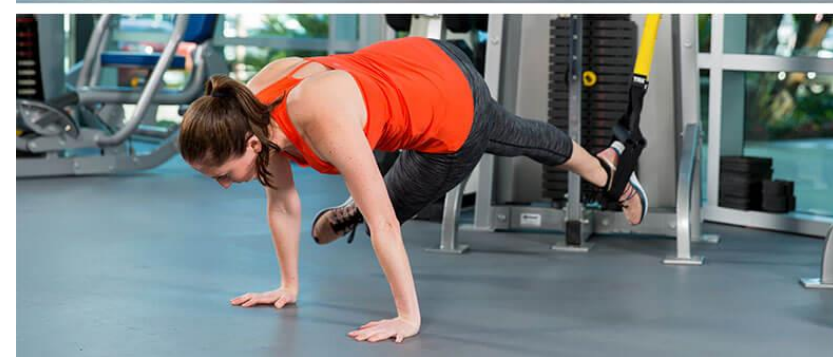


Source: www.trxsystem.cz



# حرکات مرکزی با TRX

## 5 TRX Variations PLANK for a killer core





# CROSS CORE



# CROSS CORE





# حرکات مرکزی عملکردی

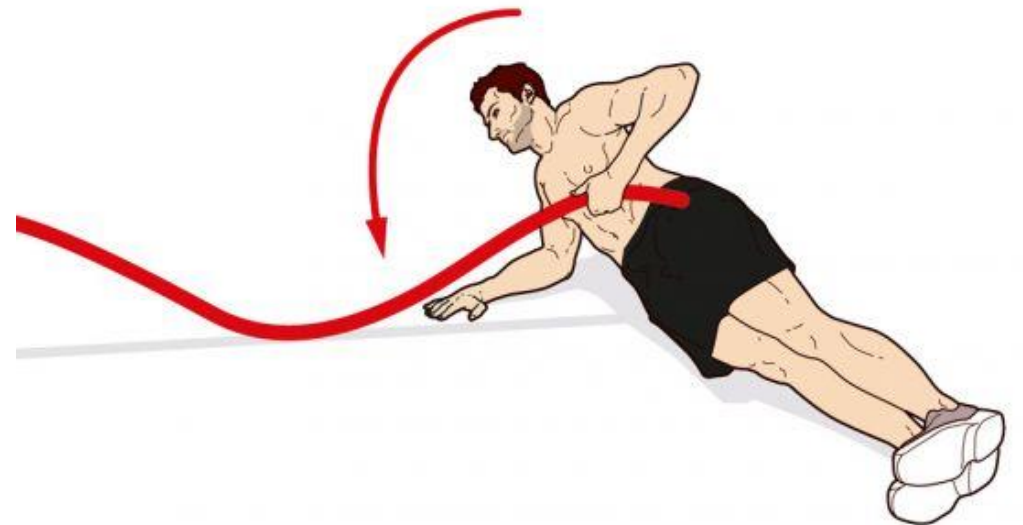
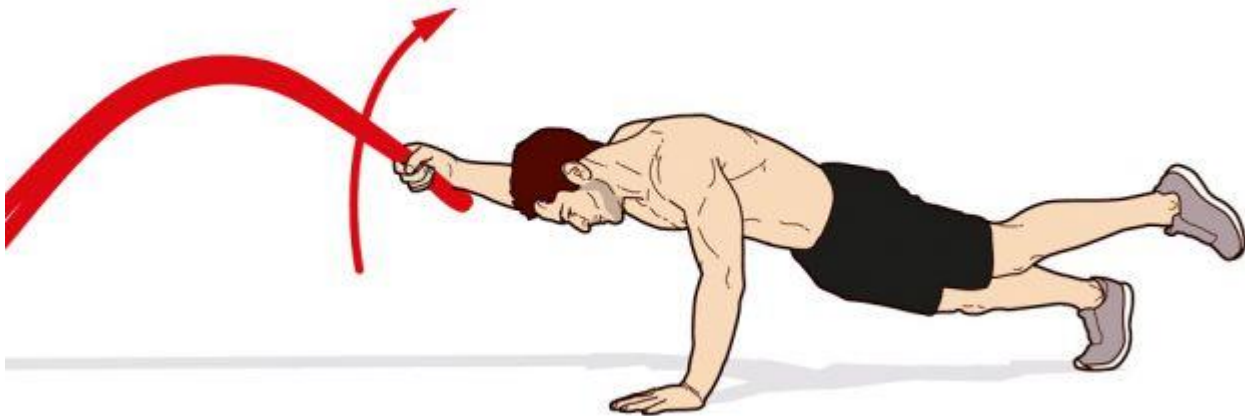


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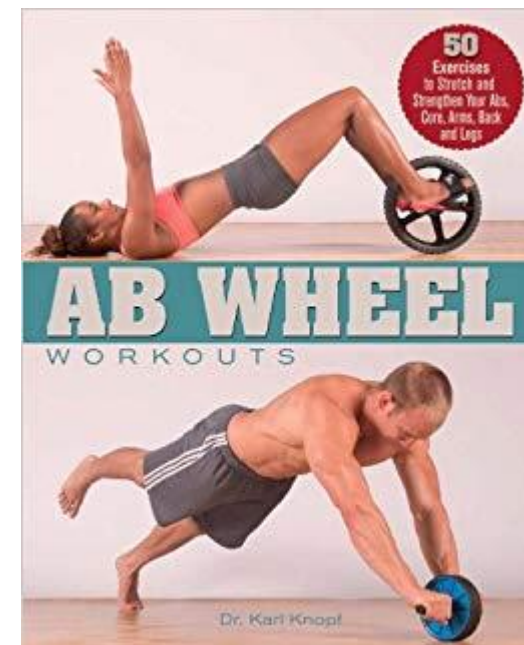




# حرکات مرکزی عملکردی



# حرکات مرکزی عملکردی





# حرکات مرکزی عملکردی

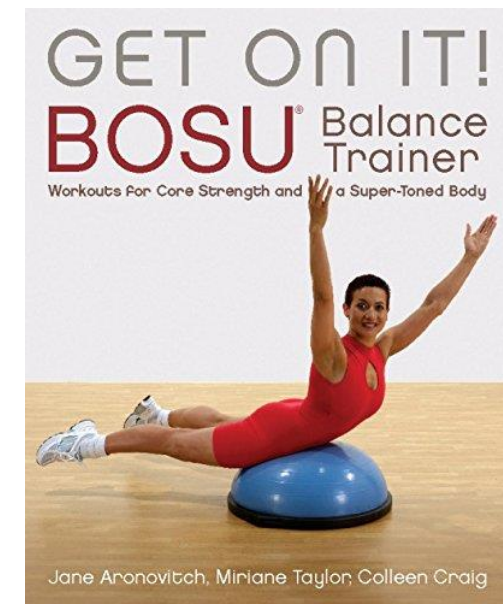


# حرکات ناحیه مرکزی با بوسو بال





# حرکات مرکزی با بوسوبال



# حرکات مرکزی با بوسوبال





# حرکات مرکزی با بوسوبال





# حرکات مرکزی با AQUA STAND





# حرکات مرکزی با AQUA STAND



# حرکات مرکزی روی SLACKLINE





# حرکات مرکزی روی SLACKLINE





# حرکات مرکزی با فوم رول



24 CORE EXERCISES

## PLANK PROGRESSIONS

Since crunches and sit-ups reinforce rounded posture, the plank is a great way to support an erect stance. This exercise outlines three progressions—advance your plank when you master the previous one with strength and perfect posture.

### TARGETED MUSCLES

This exercise targets the obliques, the abdomen, and the shoulder blade stabilizers. Strengthening these muscles makes the body more stable and efficient.



1 Lie on your stomach and place the foam roller beneath your knees. Put your forearms and palms flat on the ground.



2 Lift your body off the ground by pushing through your forearms and contract your abdomen. Hold for 1 minute.

HOW IT HELPS  
Planks strengthen the core to restore posture. The spinal position is often compromised, but engaging the abdomen stabilizes the vertebral column.

PLANK PROGRESSIONS 25



3 Progress to a more difficult plank by shifting the roller closer to your feet. Hold for 1 minute.



4 Shift the roller down beneath your toes. Hold the plank for 1 minute.



5 Place the roller beneath your shins and reach your arms out, one at a time. Alternate your reach with each arm for 1 minute.







# حرکات مرکزی با فوم رول

**LEVEL 1**  
This level engages the core and teaches the foundational "push-pull" movements needed to perform all the SMRT-CORE exercises. A great starting point for increasing strength and stability.

**LEVEL 2**  
Incorporating the foundational movements from Level 1, Level 2 adds intensity with a 'press' after many 'push-pull' exercises to build power, increasingly work the core and further improve performance.

**LEVEL 3**  
We step it up from Level 2 by taking the "push-pull-press" and adding a "pause" at the peak intensity of each movement. We go to the hardest part of each exercise and hold that position to give you the most challenging strength and stability workout.





# حرکات مرکزی با فوم رول





# برنامه تمرینی ناحیه مرکزی

## THE FOAM ROLLER WORKOUT THAT SCULPTS YOUR BODY

Grab a roller and follow this routine three or four times a week. Perform each of the following exercises in order, without rushing through, resting for a few seconds after each move. Repeat the sequence up to three times total.

### 1 GRASSHOPPER DO 8 REPS



### 2 LEG PULL DO 8 REPS



### 3 ROLLER DIP DO 10 REPS



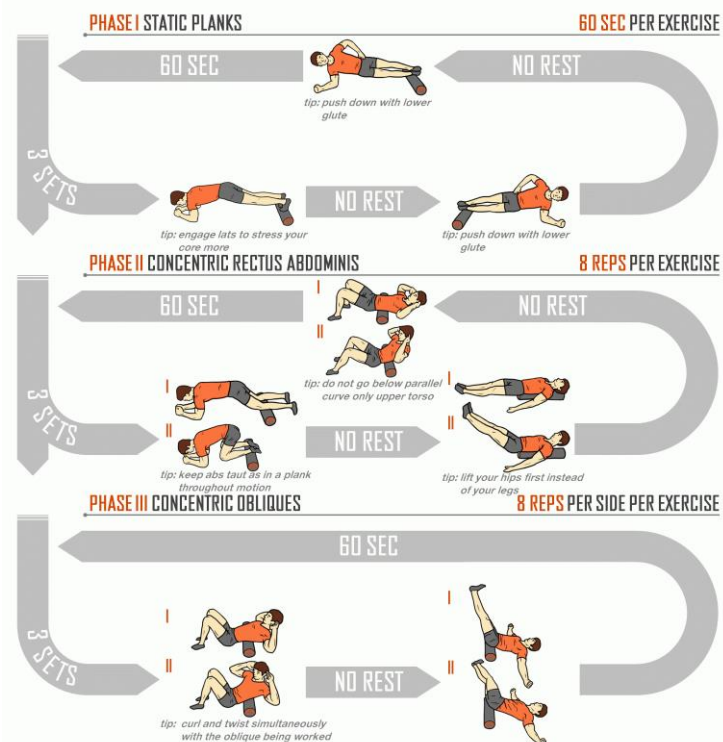
### 4 STOMACH MASSAGE DO 8 REPS



Women's Health

## SIX PACK abs workout

COMPLETE ALL SETS IN A PHASE BEFORE MOVING ON TO THE NEXT



<http://foamroller.sg>

MYOTRIGGER  
FOAM ROLLERS

## The 30-Minute Foam Roller Workout for Strength

GREATIST

Complete 4 sets of the following exercises in order. Rest for 30 seconds between each set.



# CORE Complete WORKOUT

SET 1

SET 2

SET 3

SET 4

CRUNCH



REVERSE CRUNCH



V CRUNCH



SIT UP



SUPERMAN



OBLIQUE CRUNCH



SIDE PLANK



BICYCLE KICKS



HEEL TOUCHES



FLUTTER KICKS



BRIDGE



BRIDGE AND REACH



TOE TOUCH



BIRD DOG



PLANK



HIP LIFT CRUNCH



SIDE V CRUNCH



MOUNTAIN CLIMBER



BIRD DOG KNEE TOUCH



RAISED LEG CRUNCH



BEGINNER

10-15 REPS X 2 SETS

INTERMEDIATE

10-15 REPS X 3 SETS

ADVANCED

10-15 REPS X 4 SETS

RESTS BETWEEN SETS:

1 MIN MAX

© PRODUCTIVE FITNESS PRODUCTS INC. 2016 Printed in Canada  
WE STRONGLY RECOMMEND YOU CONSULT A PHYSICIAN BEFORE BEGINNING ANY EXERCISE REGIME.

www.FIGHTTHROUGH.com





## تمرین مرکزی و کاهش وزن (پویایی و پیوستگی)



# WEEK EIGHT WORKOUT!

Congrats on finishing the first 7 weeks of Diet.com's 8-week plan to get fit – this is the last week! You'll just need an exercise ball to complete this week's plan. Run through this workout 3 times, doing 8-12 reps of each move!

Push Up w/ Exercise Ball Toe Tuck



Bridge 'n Curl



Single Leg Bridge 'n Curl on Exercise Ball



Ball Pass



The Scorpion



Side Crunch w/ Exercise Ball



Back Extension on Exercise Ball



Bird Dog on Exercise Ball



diet.com

## RESISTANCE BAND CORE WORKOUT

By @snaponfitness  
Complete 3 round of each exercise

10 Plank Dip W/Overhead Press



10 Sit-Up Row



20 Bicycles



20 Flutter Kicks



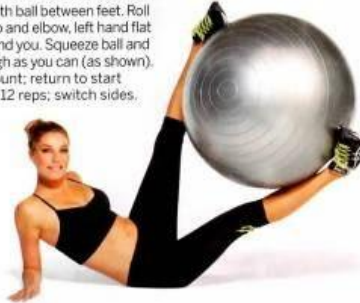


# tone your gut

## side sculptor

works obliques, inner thighs

Lie faceup with ball between feet. Roll onto right hip and elbow, left hand flat on floor behind you. Squeeze ball and lift legs as high as you can (as shown). Hold for 1 count; return to start for 1 rep. Do 12 reps; switch sides.



## rad roll-up

works abs

Lie faceup, heels on top of ball, arms extended on floor above head. Engage abs and slowly roll up to touch fingertips to toes (as shown). Reverse movement for 1 rep. Do 12 reps.



## belly buster

works abs, lower back

Sit on ball and lean back with hands on floor behind you, palms down and turned out, legs extended. Bring right knee toward chest (as shown); return to start. Repeat with left knee for 1 rep. Do 12 reps.



## core climber

works abs

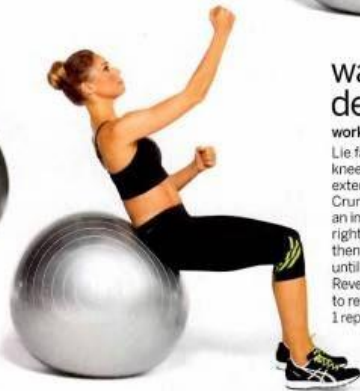
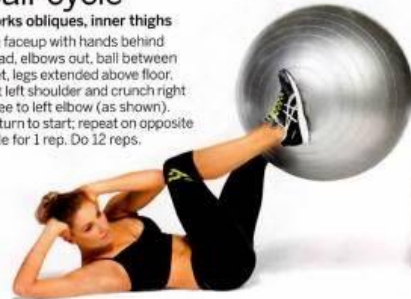
Start in a plank with forearms on ball, hands clasped. Pull right knee up to touch ball (as shown), then quickly return to start and repeat with left knee for 1 rep. Do 12 reps.



## ball-cycle

works obliques, inner thighs

Lie faceup with hands behind head, elbows out, ball between feet, legs extended above floor. Lift left shoulder and crunch right knee to left elbow (as shown). Return to start; repeat on opposite side for 1 rep. Do 12 reps.

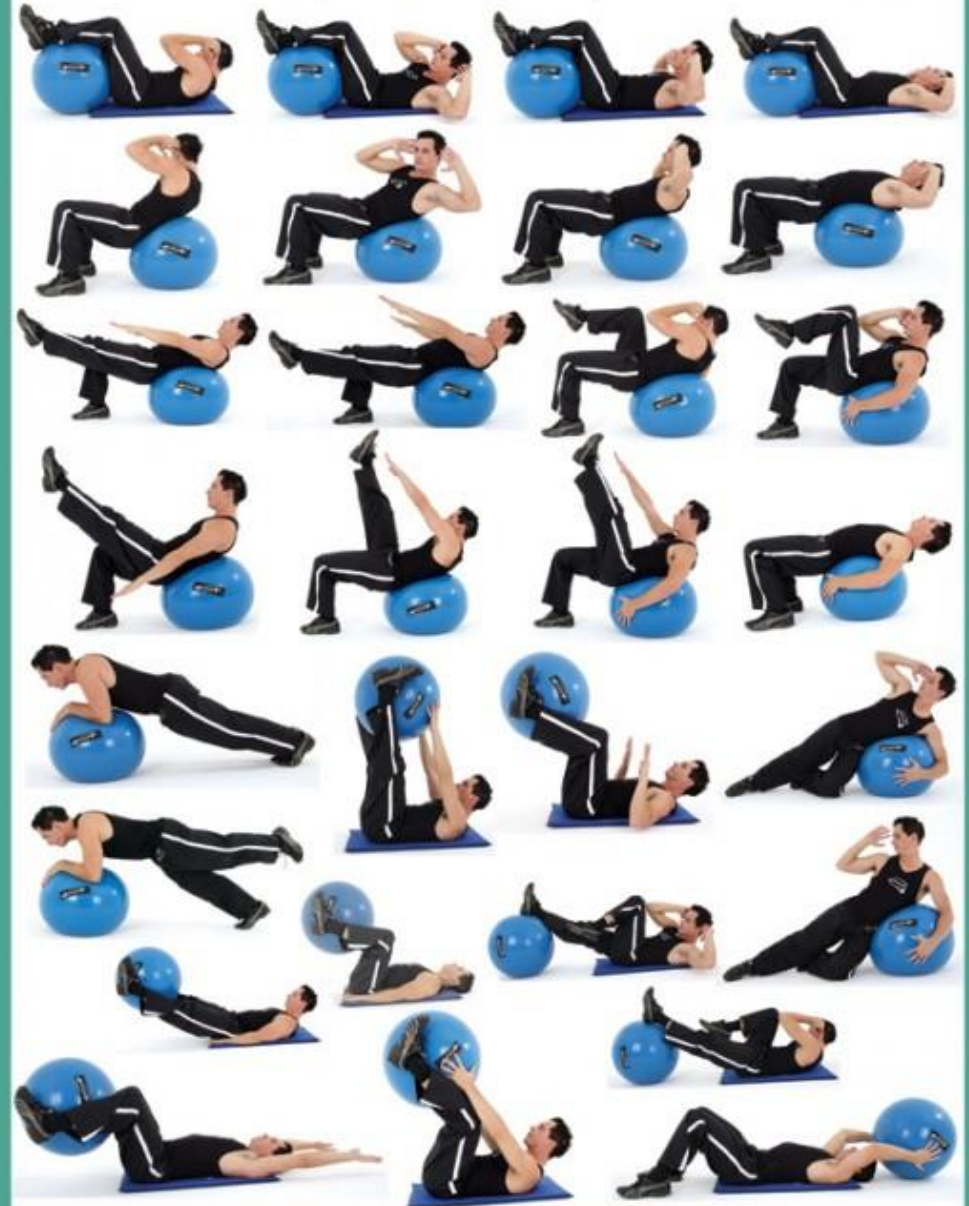


## waist definer

works obliques

Lie faceup on ball, knees bent, arms extended above head. Crunch up as you pull an imaginary rope with right arm (as shown), then left arm. Continue until you're sitting. Reverse movement to return to start for 1 rep. Do 12 reps.

Equilíbrio - Resistência - Força - Coordenação Motora





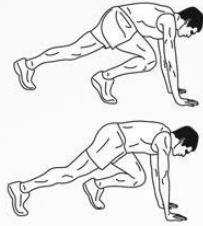
# Cardio & Core

DAREBEE WORKOUT @ [darebee.com](https://darebee.com)

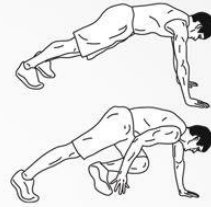
LEVEL I 3 sets LEVEL II 5 sets LEVEL III 7 sets REST up to 2 minutes



60 high knees



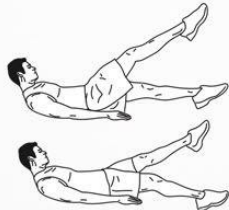
10 climbers



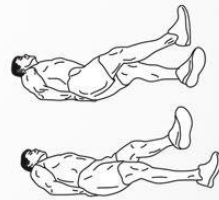
10 climber taps



60 high knees



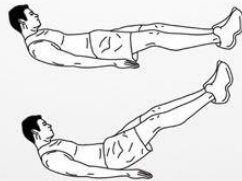
10 flutter kicks



10 scissors



60 high knees



10 leg raises



10 raised leg circles





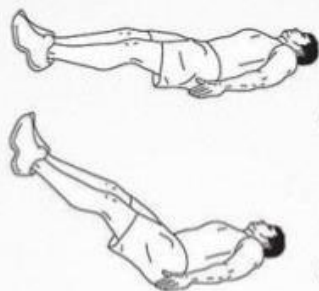
NEILA REY WORKOUT [neilarey.com](http://neilarey.com)

# Bruce Lee abs

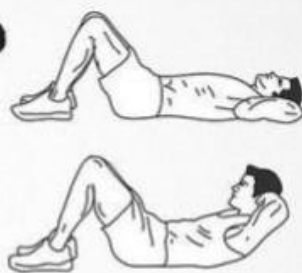
reps each **level I** 20 reps **level II** 30 reps **level III** 40 reps **bruce lee** 90 reps



1. Russian twist



2. leg raises



3. crunches



4. heel touches



5. modified V-sits



6. hundreds

**level I** 3 sets **level II** 5 sets **level III** 7 sets **rest between sets** up to 2 minutes

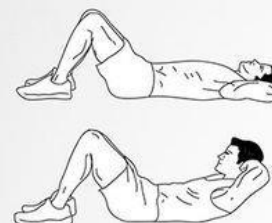
# 6-PACK ABS

## CRUNCH WORKOUT

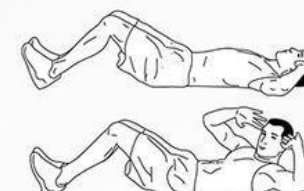
**BEGINNER: 5 REPS**

**INTERMEDIATE: 10 REPS**

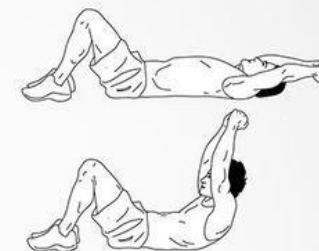
**ADVANCED: 20 REPS**



crunches



twisting crunches



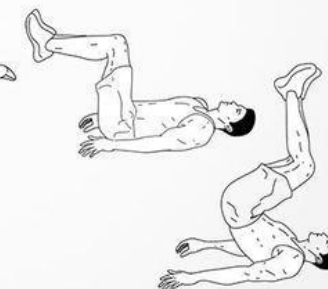
long arm crunches



cycling crunches



knee crunches



reverse crunches

**REST** **BEGINNER: 45 SECONDS** **INTERMEDIATE: 30 SECONDS** **ADVANCED: 20 SECONDS**

Thank you  
for your kind  
attention!

