#### Greg Arnold, DC, CSCS

4165 Blackhawk Plaza Circle, Suite 250 Danville, CA 94506

(925) 321-4668 <u>PitchingDoc@msn.com</u> www.PitchingDoc.com

# 4 Ways to Identify Core Muscle Weakness

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We all know the importance of CORE STRENGTH in keeping the kids healthy as it is a key contributor to body control and movement consistency.

Here is a paper out of the National Strength and Conditioning Association:

http://www.nsca-lift.org/Perform/articles/070604.pdf

that talks about 4 simple tests to identify core weakness in your athletes:

# THE LUNGE

### What to look for

During a lunge, core weakness will be shown with:

- Side bending of the upper body
- The front knee moving toward the mid-line
- The front toe turning inward
- The back bending as they come up from to finish lunge

# How the fix it

• Strengthen the Gluteus Maximus and Medius muscles by doing 'Swimming Supermans'. (Those who have attended my conditioning camps know how to do this).

# THE SQUAT

#### What to look for

Looking from front, core weakness will show as:

- The knees coming together
- Uneven lowering and tilting of the shoulders

#### From the side:

- The head will move forward ahead of the toes
- The back does not stay straight or slightly extended but will instead become flexed (bent)
- The knees will move forward over the toes

# How the fix it

- Stand with your feet six inches from a wall and squat down to pick up a basketball between your legs
- This exercise is courtesy of a Russian Strength Coach named Pavel who specializes in a
  FANTASTIC training tool that I used called a kettlebell:
   (<a href="http://www.russiankettlebells.com/index2.html">http://www.russiankettlebells.com/index2.html</a>)

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# **Back Extensor Muscle Test**



#### What to look for

- See how long the athlete can keep the spine in a neutral position as in the above picture.
- Unfortunately, the article does not state how long this needs to be held **so I have** contacted the author on this and am awaiting his response.

# How the fix it

• Focus on do 'Swimming Supermans'. (Those who have attended my conditioning camps know how to do this).

# **Lateral Prone Hold Endurance Test**



# What to look for

- Like the Back Extension Test, keep neutral posture like in above picture for as long as possible
- I have also emailed the article author on how long of a hold constitutes satisfactory core strength.
- The National Pitching Association expects their athletes to hold this pose for 3 minutes just to get into their program so I am curious to see what the author responds to me with regarding timing.

#### How the fix it

• Just keep doing this exercise and focus on keeping this posture and NOT letting the hips sink to the ground.

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