

# Postural Restoration: A New Tool for the Coaching Tool Box

*An Inside and Out Approach to Strength Training*

2013 NSCA Coaches Conference

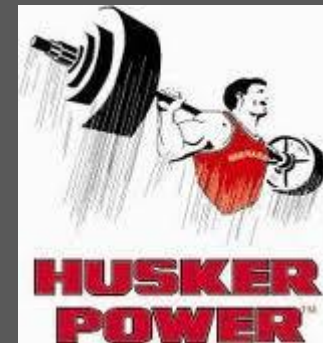
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*Postural  
Restoration  
Institute®*

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# **PRI Concepts Related to the Athlete**

- **The human body is not symmetrical. The neurological, respiratory, circulatory, muscular and vision systems are not the same on the left side of the body as they are on the right, and vice versa. They have different responsibilities, function, position and demands on them.**

- **This system asymmetry is a good thing and an amazing design. The human body is balanced through the integration of system imbalances.**
- **The torso, for example, is balanced with a liver on the right and a heart on the left. Extremity dominance is balanced through reciprocal function; i.e. left arm moves with right leg and vice versa.**

- **All athletes have lateralized functional patterns that are predictable, behavioral, strategical and neurological**



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- **Reduction of strength deficits requires facilitation and integration of muscle in positions that inhibit dominant lateralization**

- **Therefore, early on in training, position is addressed to properly work a muscle group. This is followed by pattern re-training and modification to restore unaltered, reciprocal movement such as arm swing, heel strike, toe off, rib internal rotation, inhalation and exhalation**

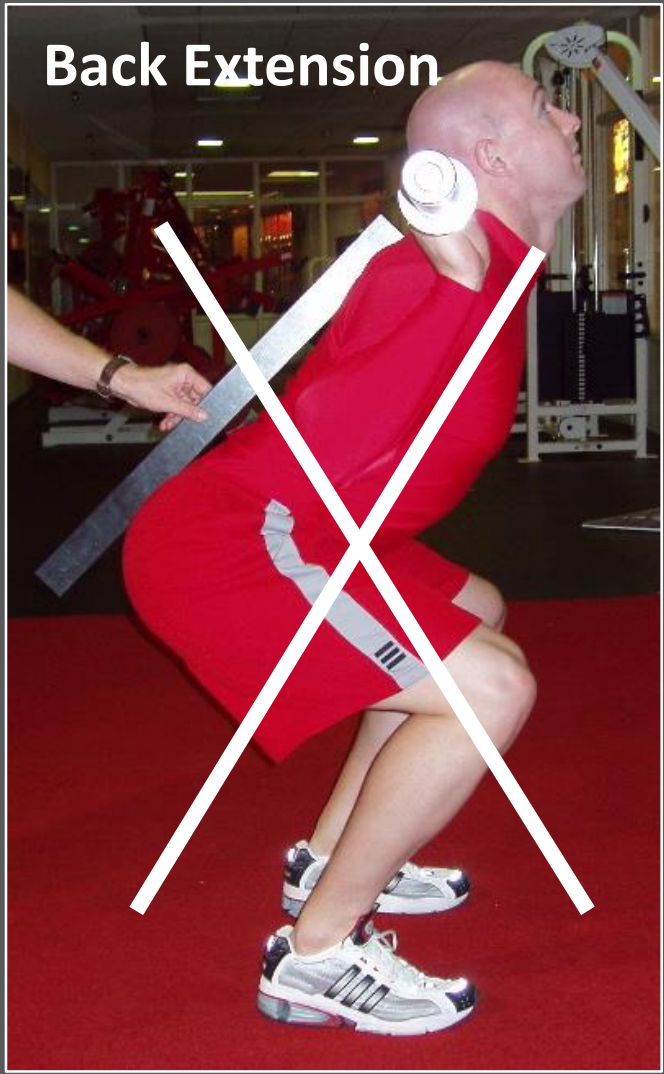
- **Transverse kinetic movement (rotation) is dependent on hemispheric or unilateral sagittal plane competency, and frontal plane reciprocal stability**

- **Therefore, sagittal awareness precedes frontal plane strength:**
  - **Glutes for leg abduction**
  - **Adductors for leg adduction**
  - **Abdominals for trunk lateral stability**
  - **Lower trap for arm abduction**
  - **Latissimus for arm adduction**

- **Sagittal plane mid-range control followed by frontal plane strengthening in this 'neutral mid-range' precedes transverse kinetic ground up performance and functional 'end-range' safety**

# 10 Considerations For Your Coaching Toolbox

# 1. Don't go into back extension



## 2. Don't overstretch hamstrings



Overstretched Hamstrings



Ideal Hamstring Flexibility



# 3. Strengthen Hamstrings



Leg Curls -  
Start Position

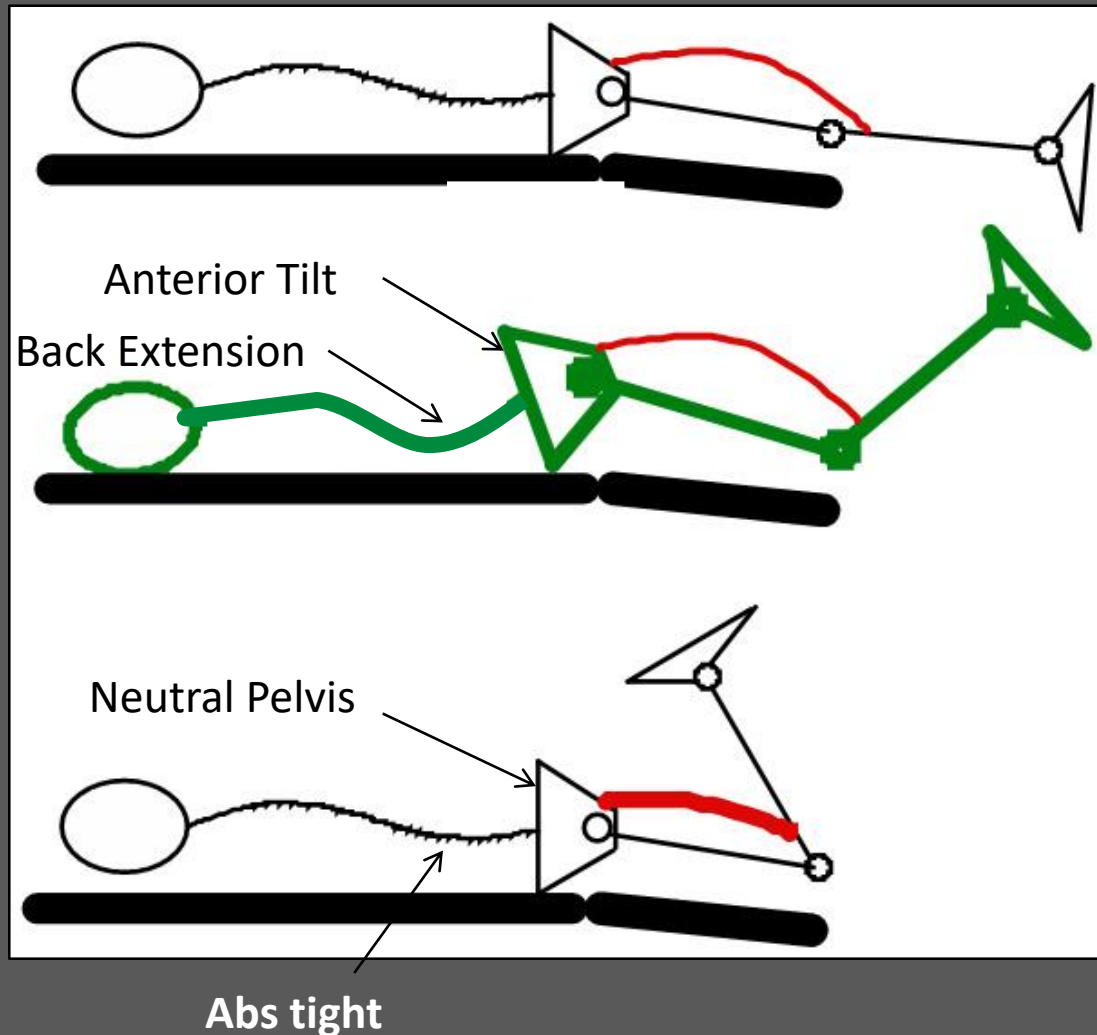


Leg Curls –  
Finish Position

Keep abs facilitated and back flat

# Don't go into back extension

## Keep abdominals tight



### 3. Strengthen Hamstrings



Single leg curls

# 3. Strengthen Hamstrings

## Single Leg Reach

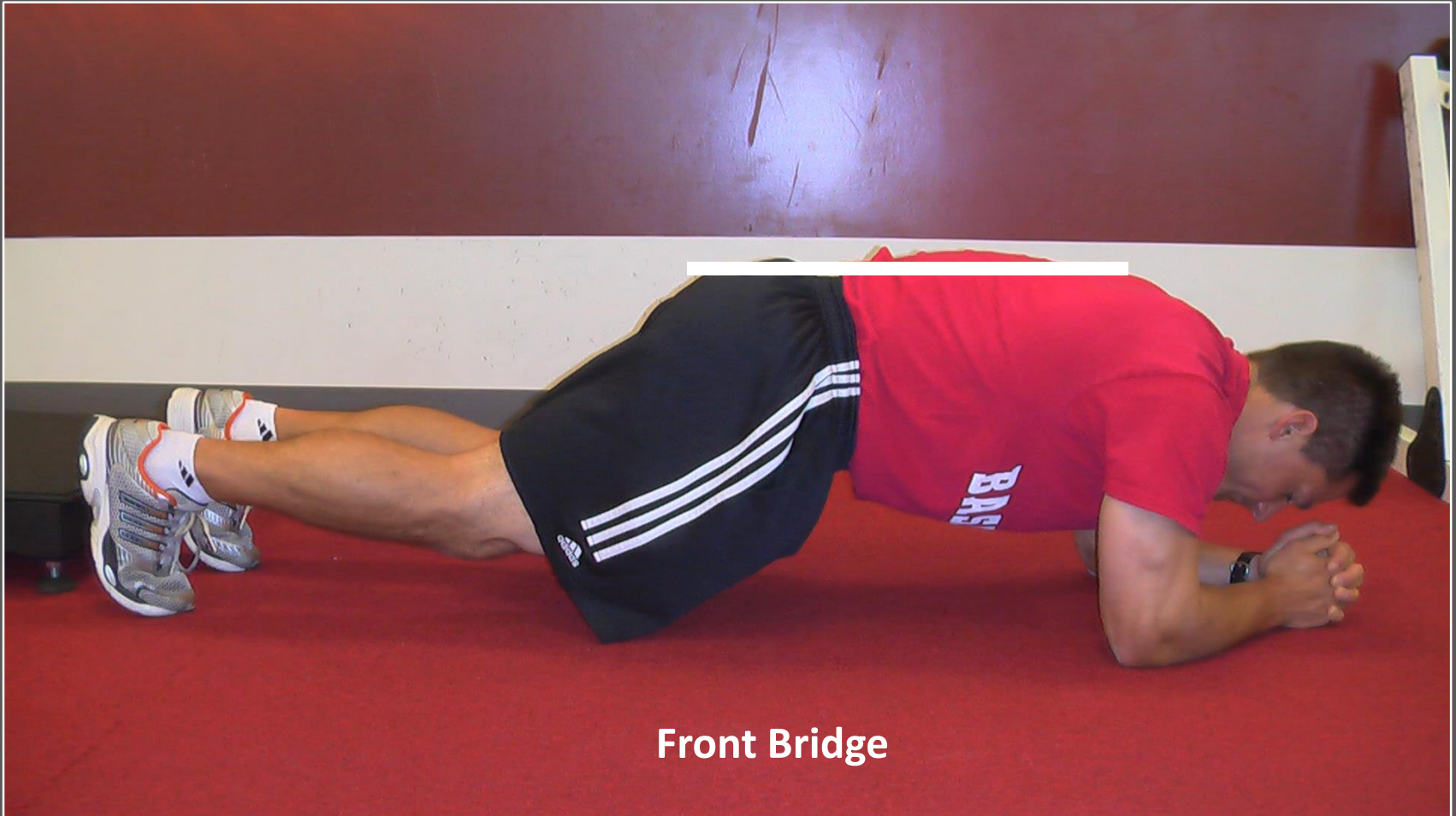


1. Shift weight to left leg.
2. Reach as far as possible with right hand.
3. Raise right leg straight back and up.
4. Raise left hand above hip.



1. Keep weight shifted to left leg.
2. Pull right arm back and up leading with elbow.
3. Bring left elbow and right knee together.

## 4. Strengthen the Abdominals



Front Bridge

1. Use abdominals to pull pelvis and rib cage together.
2. Keep hip joint and shoulder joint level with back flat.

# 4. Strengthen the Abdominals



1. Lie on left side place right foot in front and left leg back.
2. Place right hand behind head and pull both shoulder blades together.
3. Lift hips as high as possible off ground balancing on left forearm.
4. Take deep breaths through nose and out mouth.

# 4. Strengthen the Abdominals



1. Lie on left side place left foot in front and right leg back.
2. Place right hand behind head and pull both shoulder blades together.
3. Lift hips as high as possible off ground balancing on left forearm.
4. Take deep breaths through nose and out mouth.

# 4. Strengthen the Abdominals



Right side bridge top leg forward

1. Lie on right side place left foot in front and right leg back.
2. Place left hand behind head and pull both shoulder blades together.
3. Lift hips as high as possible off ground balancing on left forearm.
4. Take deep breaths through nose and out mouth.



# 4. Strengthen the Abdominals



Right side bridge top leg back

1. Lie on right side place right foot in front and left leg back.
2. Place left hand behind head and pull both shoulder blades together.
3. Lift hips as high as possible off ground balancing on left forearm.
4. Take deep breaths through nose and out mouth.

# 4. Strengthen the Abdominals

## Med ball throws front stance



1. Stand facing wall about 3 to 4 feet away.
2. Turn shoulders and throw ball at slight angle, so you can catch ball to opposite side.
3. Catch ball as you turn to the opposite side and throw, keeping hands below shoulders.
4. Repeat alternating sides for 20 throws as fast as possible.

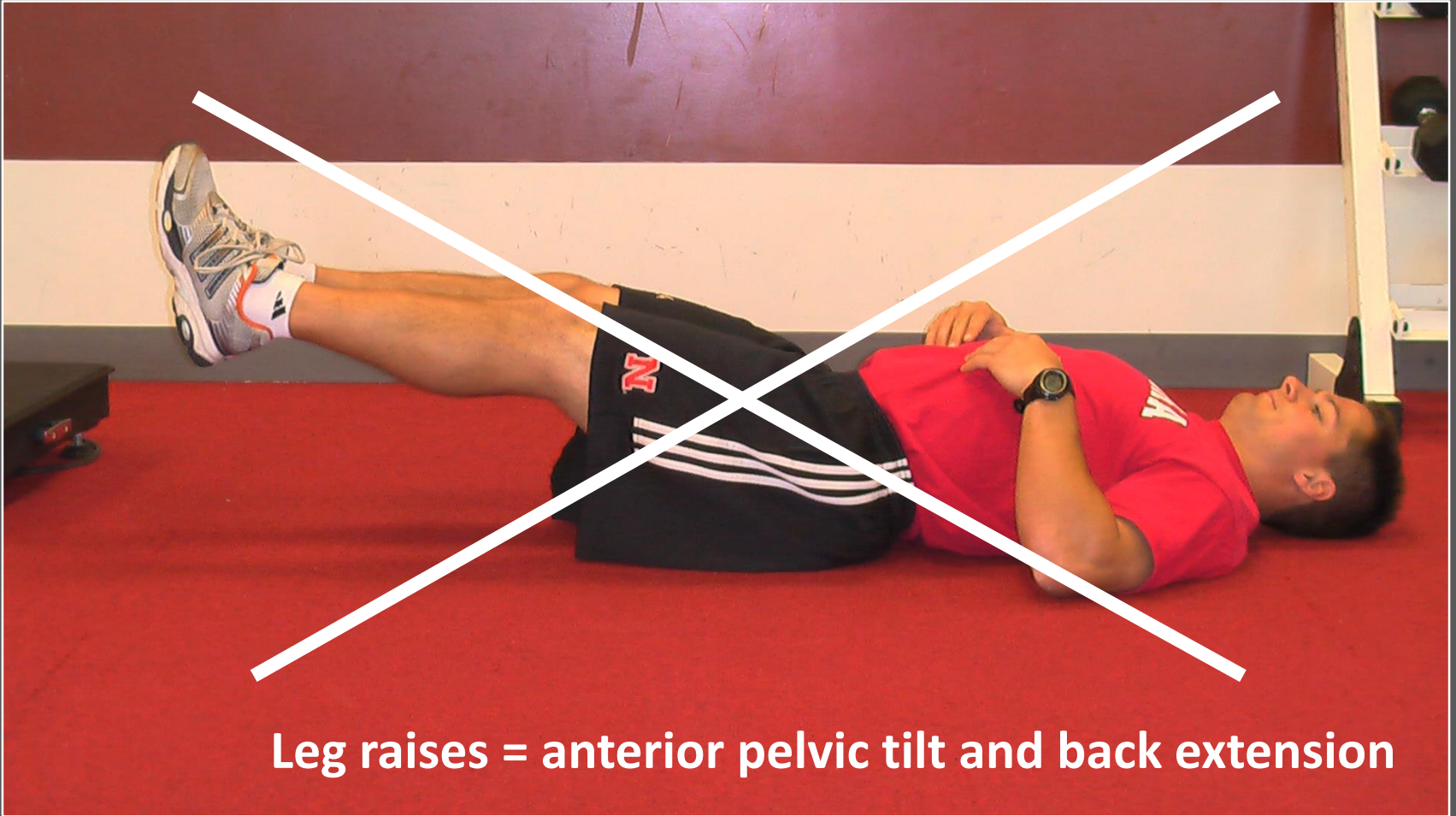
# 4. Strengthen the Abdominals

## Med ball throws side stance



1. Stand with side facing wall about 3 to 4 feet away.
2. Throw ball into wall so that ball bounces straight back to same side.
3. Catch ball let it turn you reverse direction and back to wall. Keep hands below shoulders.
4. Throw ball ten times, switch sides and throw ten more times.

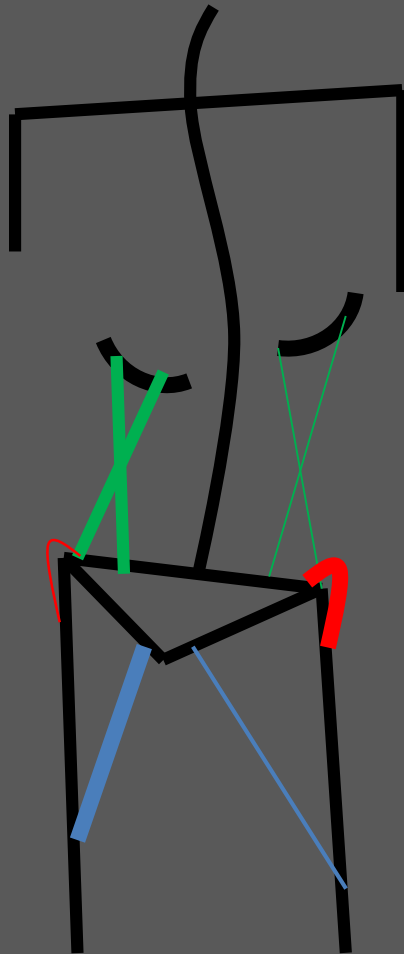
## 5. Don't strengthen hip flexors



**Leg raises = anterior pelvic tilt and back extension**

# Frontal Plane – Shift to Left

R



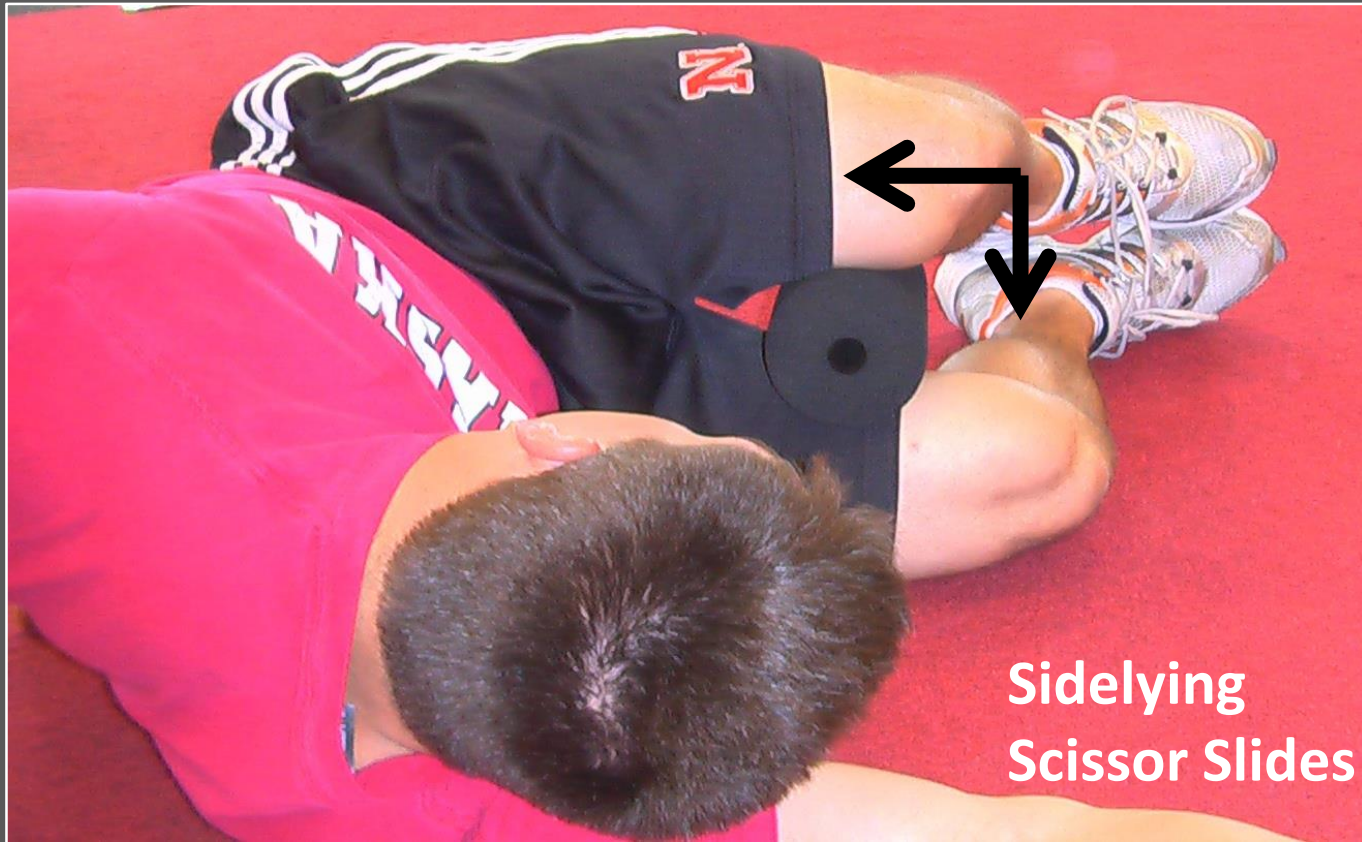
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Left Obliques (weak)  
Strengthen

Left Abductors (Tight)  
Stretch

Left Adductors (weak)  
Strengthen

## 6. Strengthen the Adductors



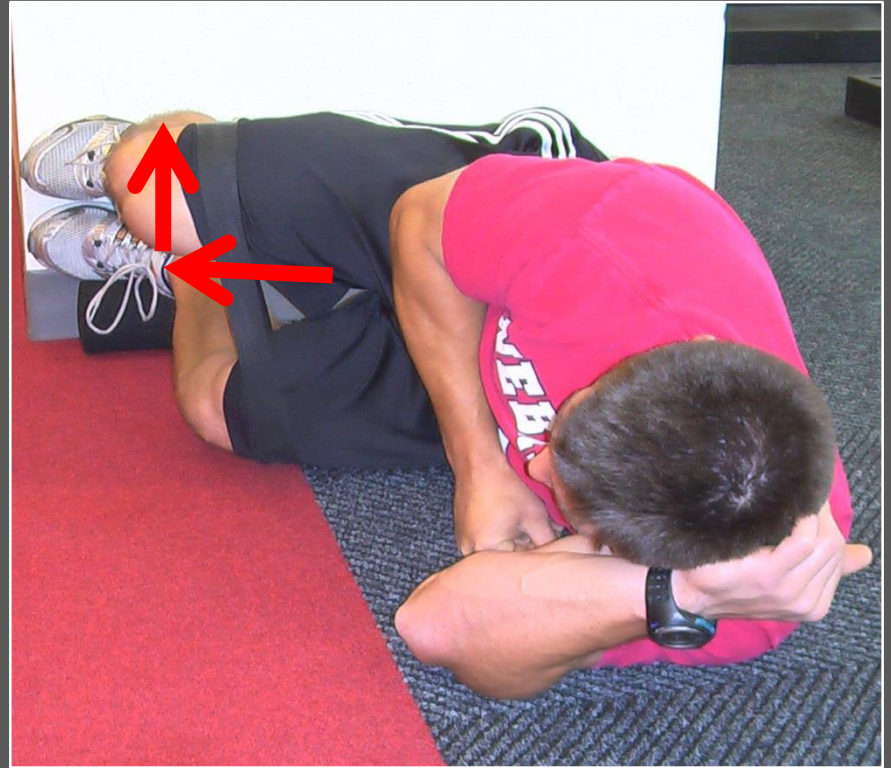
1. Lie on your right side with legs bent ninety degrees and ball place between knees.
2. Inhale through nose as you pull left leg back. No not rotate shoulder back.
3. Exhale through mouth as you squeeze down with left knee. Should feel inside of left leg activate
4. Do ten repetitions breathing in through nose out through mouth.

# 6. Strengthen the Adductors

Left Adductors – Right Glute Max



1. Place band above knees.
2. Lie on side with feet on bolster.
3. Knees and hips bent 90 degrees
4. Shift left leg back, right leg forward.
5. Ankles together, back rounded.
6. Right hand on ground, left hand under head.



1. Keep left leg back and raise right leg.
2. Right hip should be engaged.
3. Breath (long & slow) 4- 5 times in through nose and out through mouth.
4. Relax repeat four more times.

Adapted from the Postural Restoration Institute®

# 6. Strengthen the Adductors



1. Stand with both feet at bottom of steps.
2. Place left foot on the first step.
3. Shift left hip to left and back.
4. Zipper should be lined up over left foot.
5. Both feet should be flat.
6. Toes pointed straight ahead.
7. Place right foot next to left foot and repeat.



# 7. Don't do overhead lifts



Don't incorporate lat pull-downs, pull-ups, dips or shoulder presses

## 8. Strengthen Lower Traps and Triceps



**Tripod**

1. Place hands on ground behind hips and feet directly in front of you.
2. Dig heels into ground and lift hips off ground.
3. Tuck hips up and pick right foot off ground (feel back of left hamstring engage).
4. Keep shoulder blades down and together (feel triceps engage).
5. Hold position and take 5 long breathes in through nose and out mouth.

# 8. Strengthen Lower Traps and Triceps



1. Lie on bench with hips and knees bent.
2. Raise hips slightly off bench.
3. Hold dumbbell in right hand with arm straight.
4. Keep palm facing in toward body.
5. Lower dumbbell keeping elbow pointed up.
6. Raise dumbbell to straight arm position.

# 8. Strengthen Lower Traps and Triceps



1. Lie on bench with hips and knees bent.
2. Raise hips slightly off bench.
3. Hold dumbbell in right hand with arm straight.
4. Keep palm facing in toward feet.
5. Lower dumbbell to left shoulder keeping elbow pointed up.
6. Raise dumbbell to straight arm position.

# 8. Strengthen Lower Traps and Triceps



1. Hold pulley handle in right hand.
2. Shift into left hip and side bend trunk to left.
3. Pull shoulder blades down and together.
4. Raise handle to right, up and back. Feel right shoulder blade muscles engage.

# 9. Stretch Pecs and Lats



1. Place hand at shoulder height
2. Rotate to the left
3. Feel stretch across chest
4. Keep abs engaged
5. Breathe in through nose out through mouth
6. Hold for 5 breaths and repeat 2 –3 times

# 9. Stretch Pecs and Lats



Swiss Ball Pec Stretch

1. Shoulders supported on ball.
2. Keep rib cage down.
3. Pull pelvis up by tightening glutes
4. Hang arms out to side
5. Feel stretch across chest.
6. Breath in through nose and out through mouth
7. Hold for 5 breaths and repeat 2 –3 times

## 9. Stretch Pecs and Lats



1. Lie on elevated surface, with light dumbbell in left hand, lower arm over edge.
2. Place pad between bent knees and rotate legs to right.
3. Feel stretch across chest.
4. Breathe in deep breathes through nose out through mouth.
5. Hold for 5 breaths and repeat 2 –3 times



# 9. Stretch Pecs and Lats



1. Place left foot back and shift body to left side
2. Hold pulley handle in right hand and sink back into left hip.
3. Feel stretch through the lats and ribs.
4. Breath in through nose and expand ribs on side you are stretching.
5. Breath out through mouth and feel side stretch.
6. hold for 5 breaths and repeat 2 –3 times

# 9. Stretch Pecs and Lats



1. Align foot, knee, hips against wall
2. Reach as high as possible
3. Feel stretch thru the rib cage
4. Stretch right side more than the left
5. Breathe feel rib cage expand when breathing in through nose.
6. Feel reach increase as you blow air out through mouth.

# Walking Lunges



1. Step forward with left foot and lower dumbbells until they barely touch the ground.
2. You do not need to take a long step.
3. Lower right knee until it almost touches the ground.
4. Extend with the left leg and step all the way through into the next step with the right leg.
5. Take ten steps and then turn around. Take tens steps back to where you started.
6. Ten steps each direction constitutes one set of ten repetitions.

# 10. Include single leg exercises



1. Step forward with left foot and simultaneously rotate plate left.
2. You do not need to take a long step.
3. Lower right knee until it almost touches the ground.
4. Extend with the left leg and step all the way through into the next step with the right leg and simultaneously rotate plate to right side.
5. Take ten steps and then turn around. Take tens steps back to where you started.
6. Ten steps each direction constitutes one set of ten repetitions.

# 10. Include single leg exercises



Single leg squat



1. Swing left leg thru as right leg is extended.
2. Place left back on box and repeat.

1. Place right feet forward and left foot elevated on box.
2. Lower hips until right knee almost touches ground.
3. Keep lower back rounded.

# 10. Include single leg exercises



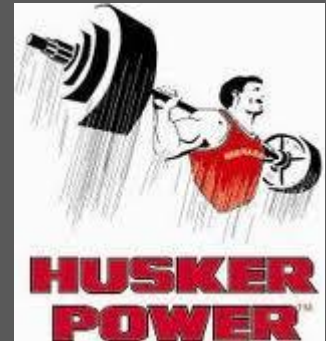
1. Place dumbbells on box at knee height.
2. Round lower back.



1. Step up onto box (dumbbells and hips move together).

# Thank You for Attending!

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