

A CORE rehab and preventative program should concentrate on **proprioception** (balance and muscle memory).

The program should be **functional** (in the same movements that the athlete can expect to be doing during their sport)- it's better to prepare the athlete with exercises moving rather than exercises laying down or sitting (unless the athlete does their sport sitting)

The program should be in **multiple planes** (going different directions- not just front and back) because in the event of an injury- it typically doesn't occur with an expected landing. Practicing the uncommon situation will "prepare" the body to handle the unexpected without resulting in an injury.

Back Exercises

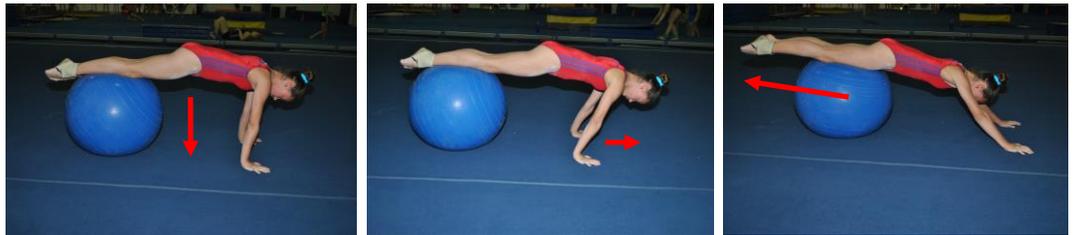
CORE and Back exercises are useful for all athletes. Adding some of these for specific athletes may prevent problems in the future. Look at your athlete standing- is their posture "perfect"?

If athlete has a Sway Back / "Spondy" / Too much extension in low back when standing then do these:

Ball Exercises (make sure ball is fully blown up- it shouldn't be "easy" to do these exercises)

Roll forward/back (5x)

1. Start in prone
2. Lean forward a bit
3. Back to neutral
4. Push Backwards as much as you can



Keep body position FLAT, DO NOT arch

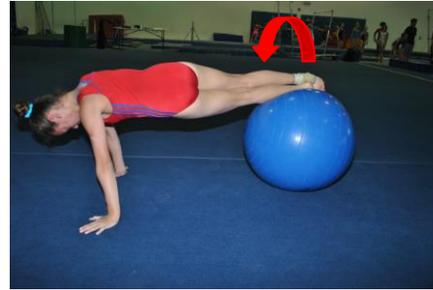
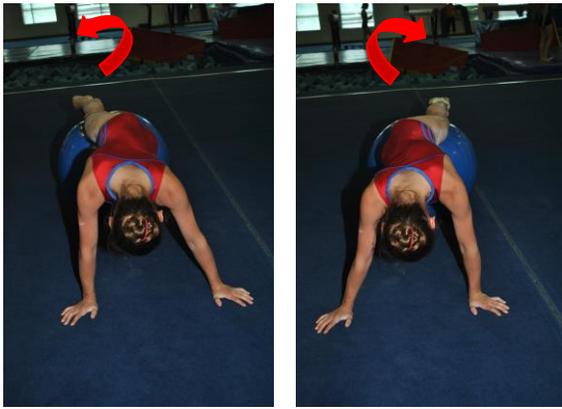


Feet sideways back and forth (5x each side)

1. Start in prone
2. Twist feet to the right- ankles "tied together"
3. Back to neutral
4. Twist feet to the left- ankles "tied together"

DO NOT ARCH BACK, do not roll off of ball



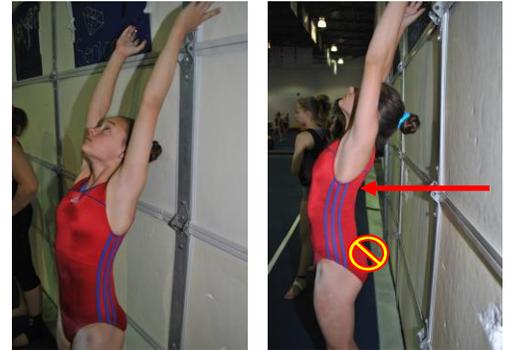


Wall

Hinge back- mid back extension (5x)

1. Touch wall with hands, look at hands
2. Return to standing position
3. Repeat

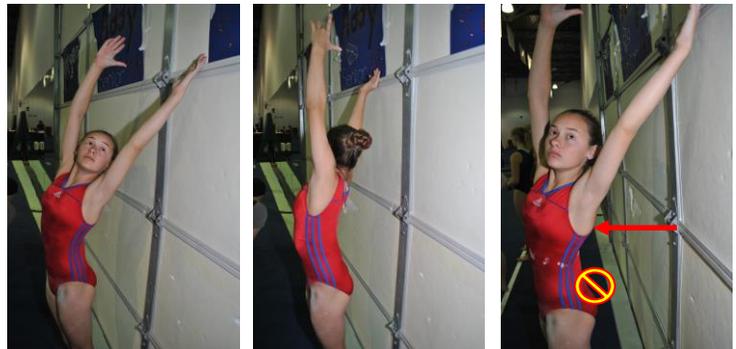
Feel “hinge” extension at thoracic (upper spine)
 Avoid hinging (bending back) at lumbar spine (lower back)



Rotate- mid back rotation (5x each direction)

1. Touch wall with hands, look at hands while Rotating to right
2. Return to standing position
3. Touch wall with hands, look at hands while Rotating to left

Feel “hinge” extension at thoracic upper spine
 Avoid hinging (bending back) at lumbar (lower back)



Hamstrings (this is more important than you think!)

- A. Stretch hamstrings
- B. Pretzel stretch (2 sets of one minute hold each leg)
 - a. Dr. Goldstein will need to teach coach how to do this

C. Windshield wipers – leg on a mat (2 sets of 10x each leg)
Feel stretch in hamstring

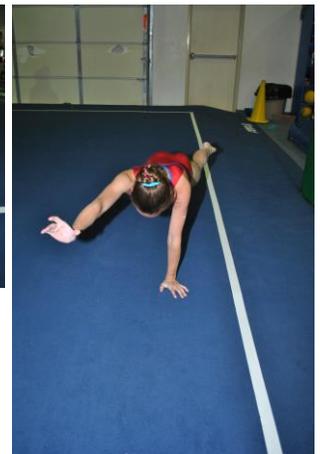


Planks

“Peeing dog” (5x each leg/opposite arm)

1. Lift left arm and right leg, hold for 2 sec.
2. Back to prone
3. Lift right arm and left leg, hold for 2 sec.
4. Back to prone

DO NOT ARCH BACK



Pushups (15x perfect posture, stop at top for 1 second, and stop at bottom position for 1 second each)

DO NOT ARCH BACK



Sideways roll through (5x each side)

1. Sideways prone, arm raised, hold 1 second
2. Reach arm under body, hold ½ second
3. Back to sideways prone

Repeat with other arm 5x

DO NOT ARCH BACK, DO NOT FALL



**If your athlete has Hips flexed/ Pelvis rotated forward/Neck forward/
Posture “tight” when standing then do these:**

Thoracic Back Movement “The Arrow”

1. Stand on left leg
2. Left arm to side, right arm over head
3. Oscillate (TINY FAST MOVEMENTS backwards) with left arm 5x
4. Stop. Same position then:
5. Oscillate right arm over head as if to scratch your back 5x
6. Stop.

Repeat with stand on right leg
Right arm to side, left arm over head
Oscillate with right arm back 5x

Oscillate left arm over head as if to scratch
Your back 5x



Hinge Thoracic Spine

1. Stand on left leg with one arm to the side and one arm overhead
2. Oscillate the back 5x (backwards) concentrating on the “hinging” motion being at the thoracic spine (upper back) and not at the lumbar spine (low back)

Repeat while standing on right leg 5x

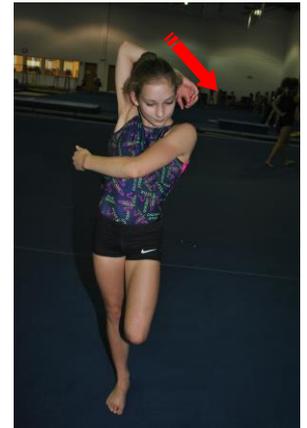


Thoracic Back Movement “Cross body”

1. Stand on right leg
Left arm crosses over body and right arm above head
2. Oscillate left arm reaching under right arm towards back 5x
3. Stop, same position then:
Right arm oscillate as if to scratch your back 5x

Repeat with standing on left leg

- Right arm crosses over body and left arm above head
- Oscillate right arm reaching under left arm towards back 5x
- Stop, same position then:
Left arm oscillate as if to scratch your back 5x



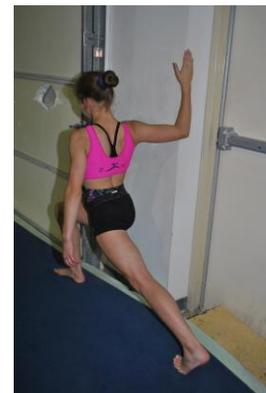
Hip flexor stretch/ Scapula Stretch

1. Stand in doorway with right forearm pressing against door frame
2. Lean forward in lunge position with right foot forward

Feel stretch in right arm pit and shoulder
Feel stretch in left hip flexor (back leg)

3. Hold for 5 seconds then
4. Oscillate (TINY FAST MOVEMENTS) forwards 5x

Switch sides



Lawn Mowers (should be easy to accomplish 10 repetitions- lower weight if struggling or “poor technique”)

Might start with 5-8 pounds and increase to 10-15 pounds for most girls, concentrate on using back muscles, not just arm muscles to do the work

Lawn-mowers (10x each arm)

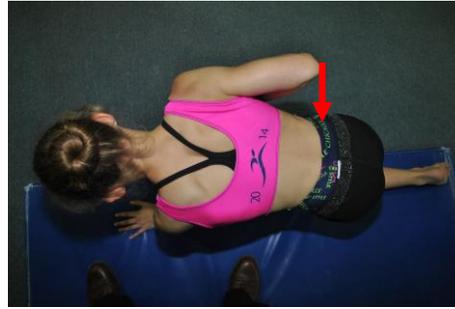
1. Start with arm straight
2. Lift weight until arm bent 90 degrees
3. Lower arm again

Keep back straight

Use Back muscles, not just arm to lift weight



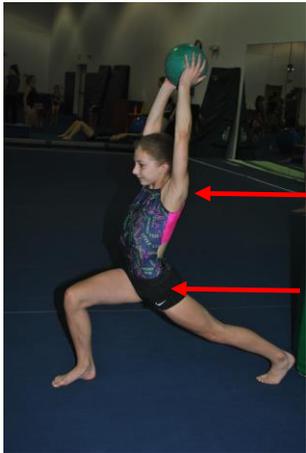
Keep elbow close to body during lift



“Hot Salsa” (No idea where this name came from)

Use light weight medicine ball- 6 pounds for smallest athletes, 8-12 pounds for older teenage athletes

1. Arms raised in lunge position, feel stretch in left hip flexor and arm pits/shoulders (squeeze scapula (upper back) together)



Hold for one second

2. Lunge forward with ball leading you forward, kicking left leg backwards



Hold this position for one second

3. Bring ball to chest, right knee bent



Hold one second

4. Left leg lunge, feel stretch in right hip flexor and arm pits/shoulders (squeeze scapula together)



Hold one second

Repeat down the floor- should get 5x each leg lunging forward