Three Dimensional Flexibility

3 Dimensions

- Movement occurs in 3 planes and often multiple planes.
- Functional exercise MUST use all three in balance.
- Not only must we strengthen in all three but flexibility should address all three.

The Need For 3D Stretching

- Understanding of the Kinetic Chain
- Optimal movement not possible without 3D mobility.
- Addresses multiple soft tissue structures and joints that work together.
- Functional movement requires motion and control of all joints.

Improving Movement

- Better understanding of “new” anatomy.
- Focusing on individual muscles may lead to no improvements or even cause more damage.
- Find the link that is holding back the chain.

Modalities

- Self Myofascial Release Techniques
- 3D Stretching w/ Arm, Hip, and Leg Driving
- Myofascial Lines

Myofascial Release Techniques

- Use a multidimensional approach to improve release during foam rolling.
  - With The Line Of Pull
  - Cross fiber friction
  - “Pumping” or “Flossing”
  - Cross fiber rolling
Calf Release Techniques

Soleus Release

Quad Release Techniques

Flossing The Quads

Hip Rotator Release Techniques

Hip Rotator Progression
Outer Hip Release Techniques

Lat Release Techniques

Lat Release Techniques

Lat Release Techniques

T-spine Release Techniques

T-spine Release Techniques

Sagittal Plane  Frontal Plane

Transverse Plane  Transverse & Frontal
Myofascial Lines

- Muscle operate in an integrated framework with fascial system.
- Understanding these paths help restore optimal movement
  - Superficial Back Line
  - Superficial Front Line
  - Lateral Line
  - Spiral Line
  - Arm Lines
  - Functional Lines
  - Deep Front Line

Bretzel Stretches

Lateral Line Stretch

Backline Stretches

Front Line Stretches

Joint By Joint Approach

- Joints alter in role of stability and mobility.
- Lack of mobility leads to loss of stability at adjacent joints.
- In order to improve mobility, stability is needed at joints above and below
3 Dimensional Mobility Exercises

• 3 Dimensional Stretching:
  – The Ankle
  – The Hip
  – The Thoracic Spine

Ankle Mobility - Sagittal

Ankle Mobility - Frontal

Ankle Mobility - Transverse

Hip Mobility

Shin Box
• Inadequate thoracic spine mobility leads to dysfunction in the neck, shoulder and lower back.
• To make stretches 3D add progressions
  – Fixed Arms Hip Drives
  – Single Fixed Arm
  – Double Arm Drives
Now What?

- Focus on improving mobility ONLY when a mobility issue is present.
- Once mobility is restored strengthen the newly found movement.
- Mobility and Stability must go hand in hand.