

#ideaworld

LIMITLESS

Session 441:
Shouldering The Load From The Ground Up
Thank you for coming!!!

PRESENTED BY
Chuck Wolf, MS, FAFS

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HUMAN MOTION ASSOCIATES
By Chuck Wolf

Shoulder Function, Assessment, & Reaction

Thank you for coming!!!

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Shoulder Stability Depends Upon Fluidity of Motion

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HUMAN MOTION ASSOCIATES
By Chuck Wolf

Orchestrated Movement

"The spinal cord is the keyboard on which the brain plays when it calls for activity. But each key in the console sounds not an individual 'tone', such as the contraction of a particular group of muscle fibers, but a whole 'symphony' of motion....."

The brain thinks in terms of whole motions, not individual muscles."

—Irwin M. Korr

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Movement Big Rocks

Thoracic Spine

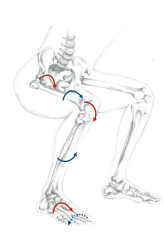
Hip Complex

Great Toe & Foot/Ankle Complex

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Principles & Concepts

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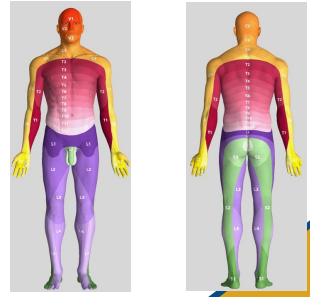
	Sagittal	Frontal	Transverse
Scapula	elevation	ABD-ADD	Int/Ext Rotation
Spine	flex/ext	ABD-ADD	Int/Ext Rotation
Hip	flex	adduction	int. rotation
Knee	flex	abduction	int. rotation
Ankle	DF		ADD-ABD
Subtalar		eversion	abduction
Midtarsal	DF	inversion	abduction

grid Use by permission from Gary Gray

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Dermatome Map

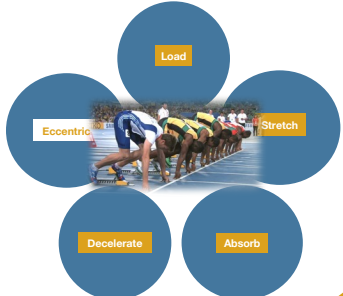
Dermatomes is a sensory mapping of nerve fibers from a specific spinal cord segment to specific myofascial regions and skin of the body providing sensory information.



- V1: Ophthalmic N
- V2: Maxillary N
- V3: Mandibular N

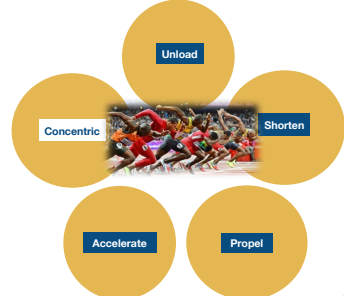
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Tri-Plane Loading



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Tri-Plane Unloading



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Shoulder Principles & Concepts

Full Body Integration



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Sagittal Plane


Same side hip flexion will enhance same side shoulder extension

Same side hip extension will enhance same side shoulder flexion



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Anterior Flexibility Highway



Key Intersections
 Anterior: Tibialis to distal Quads
 Proximal Quads to distal HF
 Proximal HF to distal ABS
 Proximal ABS to distal PECS
 Proximal PECS to distal DELTS




PHOTO 5.1 ANTERIOR FLEXIBILITY HIGHWAY DIRECT, LATERAL, END, SIDE VIEW

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Frontal Plane

Same side hip adducts will enhance same side shoulder abduction

Opposite hip abduction will enhance opposite shoulder abduction



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Lateral Flexibility Highway



Key Intersections
 PERONEALS to ITB, TFL
 ITB, TFL to LATERAL GLUTEALS
 LATERAL GLUTEALS to QL, OBLIQUES
 OBLIQUES to OPPOSITE PECS & SHOULDER



PHOTO 5.2 THE LATERAL FLEXIBILITY HIGHWAY

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Transverse Plane

Same side hip internal rotation will enhance same side shoulder external rotation

Same side hip external rotation will enhance same side shoulder internal rotation

Opposite hip external rotation will enhance opposite shoulder external rotation

Opposite hip internal rotation will enhance opposite shoulder internal rotation



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Anterior X-Factor Flexibility Highway



Hip Flexors – Opposite Shoulder (Anterior X-Factor)



PHOTO 5.3 THE ANTERIOR X-FACTOR WITH ADDUCTOR EMPHASIS

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Posterior X-Factor Flexibility Highway

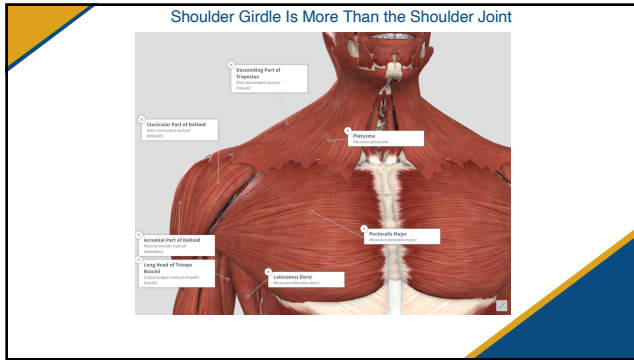


Gluteals – Opposite Shoulder (Posterior X-Factor)



PHOTO 5.4 THE POSTERIOR X-FACTOR

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Health Risks

- ☐ Cervical Spine degeneration
- ☐ TMJ
- ☐ Respiratory difficulties
- ☐ Low back pain
- ☐ Headaches
- ☐ Shoulder girdle dysfunction
- ☐ Shoulder pain

What is the pelvis doing??

Labels in diagram:
 - Deep neck flexors
 - Trapezius and levator scapulae
 - Type I pectorals
 - Neck, Hamstrings and sacrotuberous anterior

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- Find Inferior Border
- Place hand on bony margins
- Client move into shoulder flexion
- Is there tightness, slowing, discomfort, limitations?

Sagittal Plane

Scapula should abduct with slight depression

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- Find Inferior Border
- Place hand on bony margins
- Client move into shoulder flexion
- Is there tightness, slowing, discomfort, limitations?

Frontal Plane

Scapula should abduct

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- Find Inferior Border
- Place hand on bony margins
- Client move into shoulder flexion
- Is there tightness, slowing, discomfort, limitations?

Transverse Plane


Scapula should abduct/IR, adduct/ER

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Don't Forget the S-C Joint

Scapula should abduct/IR, adduct/ER

- Clavicle should abduct during humeral abduction
- Is there tightness/tenderness along the subclavius?




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Program Considerations

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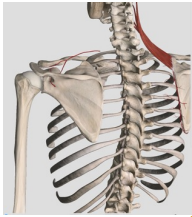
Rump
Duce
Caboose
BIG HOUSE



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Where the Scapula Goes, the Humerus Will Follow

When performing shoulder work and the client is moving through the transverse plane, they should not reach with the arm. Tell them to move the scapula...where the scapula goes, the humerus will follow. Likewise, where the humerus goes, the scapula will follow. This will not only train the shoulder girdle, but will allow motion through the thoracic spine.



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Shoulder Girdle Mobility

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Relative Shoulder Girdle Motion - Sagittal Plane

Scapular Movement During Shoulder Extension
Depression & Adduction with Hip Extension



Scapular Movement During Shoulder Flexion
Elevation & Abduction with Hip Flexion

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Relative Shoulder Motion - Frontal Plane

Scapular Movement During Shoulder Abduction
Abduction with Opposite Hip Abduction or same side Hip Abduction

Scapular Movement During Shoulder Abduction
Abduction with Opposite Hip Abduction or same side Hip Abduction

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Relative Shoulder Motion - Transverse Plane

Scapular Movement During Shoulder IR
Scapular IR with Opposite Hip IR (scap abducts & medial "lifting" off ribs)

Scapular Movement During Shoulder ER
Scapular ER with Opposite Hip ER (scap retracts)

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Program Design

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Program Design

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Shoulder Stability: T's & Y's

Notice the scapular retraction prior to & after the arm action.

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Prone Pole Stabilization

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Isolated to Integrated Internal Rotation
associates opposite hip to opposite shoulder



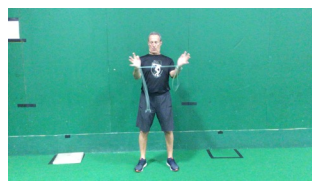
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Isolated to Integrated External Rotation
associates opposite hip to opposite shoulder



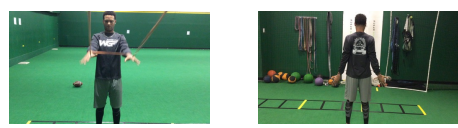
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Banded Wall Climbers



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Shoulder Extension w/ Shoulder External Rotation



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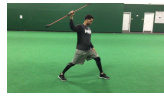
Shoulder Stability Progression



Box Stability



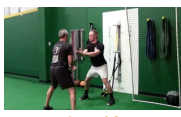
Stability Ball Stability w/vibration



Flex Bar

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Warding Patterns



Level 1



Level 2




Level 3

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Tri-Plane Integrated Rotator Cuff

Sagittal




Sagittal Plane:
Same side shoulder ext./hip flex.
Shoulder flex./hip ext.

Frontal



Frontal Plane: Same side
shoulder abd./opposite hip add.

Transverse



Transverse Plane: Shoulder ext. rot./
Opposite hip ext. rot.

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Tri-Plane Integrated Movement Patterns



MB Games




Triangulated Shoulder Press



ViPR Ball





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**HUMAN
MOTION
ASSOCIATES**
By Chuck Wolf

Thank You For Attending!!!

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