

The Throws: Balance and Rhythm

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DISCUS THROW



SHOT PUT



DISCUS THROW



HAMMER THROW



HAMMER THROW



In any throwing action the body has to:

- Produce Force
- Reduce Force
- Stabilize Force

Force must be produced at the right time in the right direction in the right amount.

In any throwing event the body must be:

- under control out of the back
 - on balance in the center
 - have stability at the front

WHOLE MOVEMENTS

- Body and Implement as ONE (not separate or one or other)
- Whole movements NOT just the movements of the body parts.
- **BIG GENERAL CUES!** (not Isolation or segmentations)

Limb Movement*

- “The feet don’t work independent of the rest of the body!”
- “There is no question that the feet are extremely important in sport because it is the feet that are in contact with the ground in movement. All movement is initiated off the ground. Ultimately it is the feet that must absorb shock on ground contact and then use those forces to propel the body or the ball in the desired direction.”
- “The feet need to have help! They get their help farther up the kinetic chain in the hips.”
- “Control of and positioning the center of gravity is the major objective of proper footwork. This consists of keeping the hips over the base of support if stability is desired or shifting the C of G outside the base of support to initiate movement and change direction.”

* See Vern Gambetta article on Footwork at <http://www.gambetta.com/blog.html> on 12/8/11

BIG GENERAL CUES!

- LONG AND LEVEL
- BIG CIRCLE – BIG RADIUS
- HIPS UNDER SHOULDERS
- WHOLE RIGHT SIDE MOVES AS A UNIT
- WHOLE LEFT SIDE MOVES AS A UNIT

Body will correct itself!

SHOT PUT



HAMMER THROW



DISCUS THROW



DISCUS THROW



BALANCE:

A direct relationship with rhythm.

Thrower must have balance for good rhythm.

Triple Flexion (ankle-knee-hip) with stiffness:

- is extremely important to control and position the center of mass.
- is extremely important to obtain optimum balance and rhythm to produce, reduce and stabilize forces.

Triple Flexion?

What?

“Athletic Position”

When and where?

**Must maintain flexion through out the
throw.**

Triple Flexion – Shot Put



Triple Flexion - Discus



Triple Flexion - Hammer



Triple Flexion - Hammer

Y. Moreno 70.65m (AR) WC 01

O. Kuzenkova 69.94m



turn

1st



2nd



3rd



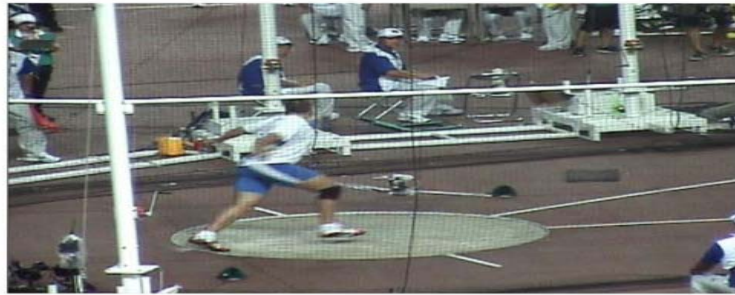
4th



Triple Flexion - Discus



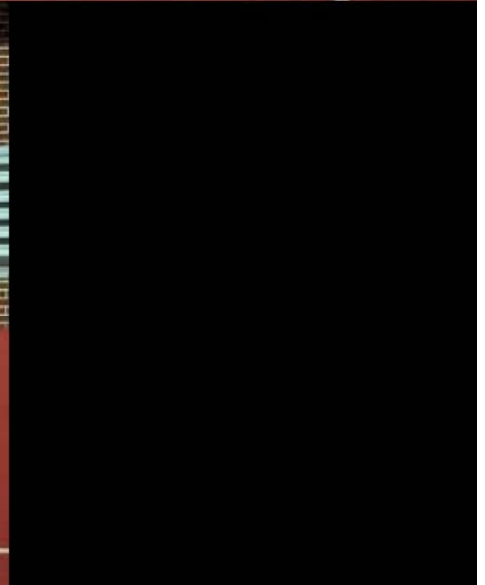
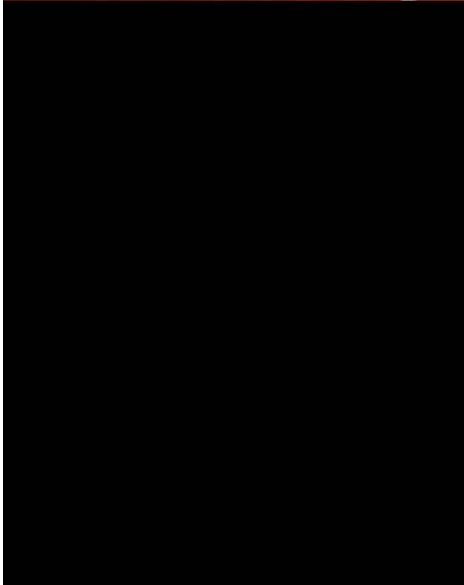
Triple Flexion - Discus



Triple Flexion How?

Balance Exercises
Balance Beam Exercises
Jump Exercises
BOSU Exercises

Balance Exercises



Balance Exercises



Single Leg Squats



Balance Beam



JUMP EXERCISES (with Box)



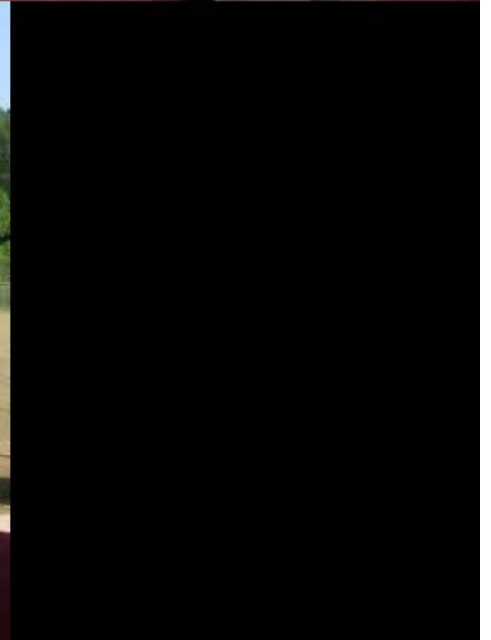
JUMPS EXERCISES (with Hurdles)



BOSU EXERCISES



BOSU EXERCISES



Acknowledgements:

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[The GAIN Network.com](http://TheGAINNetwork.com)
(Apprentorship Program)

Acknowledgements:

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