Triple Jump Development from the ground Up

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Demands of the Triple Jump

- Speed
- Technique
- Power
- Coordination, Dynamic Flexibility
- Rhythm, Kinesthetic Awareness
- Absolute Strength
- Elastic Strength
- Conservation of Horizontal Momentum
- Posture
- Durability
- Work Capacity
Where the rubber meets the Road...

- **Speed & Conservation of Momentum**
- **Elastic Strength**
  The ability to overcome a resistance with fast contractions.
- **Postural Integrity.**
  Stability & Position of head, spine, pelvis under resistance.
Speed Considerations for the Approach
(Speed in Context)

VELOCITY: Amplitude of Movement, Full Approach Velocity, Velocity of last 5-10m of Approach Run.

DISTANCE: Length of Approach 16-24 Strides, Athlete’s Mark First 3 steps & Mid Mark 4 Strides from Board.

POSITION: Tall Bouncy, Rythmic, Complete Strides, Upright Posture
SPEED DEVELOPMENT TOOL BOX

{Train to be Fast but carry it to the runway over time}

- ACCELERATION DEV. RESISTANCE RUNS, SLEDS, SHORT HILLS
- SPEED DEVELOPMENT
- VARIABLE SPEED RUNS
- SPEED ENDURANCE
- OVER SPEED: Down Hill, Assisted Runs
- STRENGTH ENDURANCE: Long Hills, Extended Bounds
- WIKET RUNS
- SPECIAL ENDURANCE
SPEED SPECIFIC
Pre-Competition Sample Week

MONDAY
Multi Jumps/Weights (AM Session)
Multi Throws
6-9x Full Approach Runs
2-3x 60M In & Out

TUESDAY
Part Skill Drills into Pit
Remedial Hops LLRR Series
8-10x Short Run Jump
Wikit Runs @20- 80m w/ Short Rest (Weighted/ Contrast)
Circuit (Medball/GS)

WEDNESDAY
Multi Throw
3-6x Full Approach
2-3x 150
Weights (PM Session)
SPRINT SPECIFIC
Pre-Competition Sample Week

**THURSDAY**
Recovery/ Treatment/ Massage

**FRIDAY**
Multi Jumps/Weights (AM Session)
Multi Throws
6-9x Wikit Runs@ 10-20m, 2min rest
5x60m HOT! w/Rolling Starts, 3-5min rest

**SATURDAY**
Part Skill Drills into Pit
8-10x Short Run Jumps
Longer Tempo (9-12 x100m) .90 rest
Circuit (Medball/GS)
The Quality of the initial isometric preparation determines to a great degree the quality of the succeeding eccentric and concentric phases.

Track & Field Academy, Physiology of the Jumps
Pre-Recruitment
Quadriceps Stiff!
Ankle Dorsiflexed!
LEG FUNCTION

Spring model

Creating leg & joint stiffness

Spring function

In support phase energy is stored and then released by muscle, tendons & ligaments
Foot Function

12 bones, 14 phalanges, 108 ligaments, 20 muscles

Very little movement outside of the ankle

Receptors in sole of foot similar in function to that in the hand; provide essential information

“Plantar feedback contributes to the regulation of leg stiffness”
Fiolkowski et. al., 2005.
FIRING ORDER
Keys to Conserving Momentum

- **HIP, KNEE AND ANKLE JOINT.**
  Triple Extension, Complete Movement

- **INSIDE OUT**
  Leg and Ankle Joints are wired to bounce. Keep close to body.

- **FOOT, ANKLE, SOLEUS**
  Last in the Chain but not least. Critical in Finishing Jumps.
LOWER LEG COMPLEX
(foot, ankle, soleus)
Critical Levers

Tip Toes forward
Walking Tip Toes backward
Walking Tip toes pigeon toed
Walking Forward on heels
Walking Backward on heels

Bunny Hops Forward
Bunny Hops Backwards
Stair Hops– low stair
Square Hops
Side to Side Hops

Jump Rope
(skipping, straight leg, ankle hop...)

Straight Leg/BF Walks/ Sand, Grass, w/MB
ELASTIC STRENGTH TOOL BOX

- Short Bounds/Hops
- Hurdle Hops
- Sprinting
- In place Jumps, Low Amplitude/Remedial Hops/Bounds - LLD, Technique
- Standing TJ, Standing LJ, Single Leg Standing LJ
- Short Run Jumps- (6-12 steps)
- Extended Bounds (SLB)
- Depth Jump
- Speed Bounds
- Olympic Lifts
ELASTIC STRENGTH
Pre-Competition Sample Week

MONDAY
Weights: Essential Lifts (Hang Clean, Power Clean, Hang Clan Variation, Squat, Step-up, Deadlift)

Multi Throws: 6-8x HH-Front Shot, HH-Overhead back, Rocket Toss...

Multi Jumps (Mostly Bilateral): Hurdles Hops from varied Box Sizes and various hurdle heights (40-50 Contacts)

TUESDAY
Low Amplitude, Unilateral Drills & Bounds (RRJ, LLR, RRL, LLRR, etc.)

8-12x Short Run Jumps (Varied Objectives)

WEDNESDAY
No Jumps!
Multi Throws: 6-8x Front Shot, HH-Overhead back, Hi- Lunge Toss...
Weights: Step-ups, Hang Clean Variation, Combo Lifts
ELASTIC STRENGTH
Pre-Competition Sample Week

THURSDAY
NO JUMPS! Recovery/ Rehab/ Prehab

FRIDAY
Weights: Olympic Lifts, Posterior Chain, etc.

Multi Throws: 6-8x HH-Front Shot, HH-Overhead back, Rocket Toss...

Multi Jumps: Hurdles Hops from varied Box Sizes (20-30 Contacts)

SATURDAY
Low Amplitude, Unilateral Drills & Bounds (RRJ, LLR, RRL, LLRR, etc.,)

12-15x Short Run Jumps (Varied Objectives, Varied Lengths)
POSTURAL INTEGRITY
LORDOSIS INTOLERANT

- Head Pelvis Spine (One Line)
- Neutral Hip Position
- Sprint Mechanics, Swing Mechanics and Firing Order all affected
- Poor posture affects Elastic energy production.
- Aid in Impact Absorption
- Affects Take-Off accuracy
Posture Tool Box

- Strength Training
- Hip Mobility (Hurdle Mobility)
- General Strength Routines & Warm-up Routines
- Core Strength (Not just abs)
- Multi-Throw Routines w/ rotational movements
- Glute Activation, Psoas and Hip Flexor Work
- ART, Chiropractic, Sports Medicine (Posture restoration Plan)
- Bring up Posture EVERY SINGLE PRACTICE!
- Train Posture nearly every day, All season.
KEEP THE MAIN THINGS, THE MAIN THINGS

- **Speed**
  Train be fast. Tailor the Approach Speed. Time it.

- **Push it up** - It about the ups.
  Develop Elastic qualities that will create vertical qualities in the Approach Run, produce verticality on the Step and Jump Phases and Conserve Momentum through out the Jump.

- **Line it up** - Head-Pelvis-Spine
  Put your body in position to do the work.
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