U16 AAA PROGRAM OF EXCELLENCE WEBINAR SERIES

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GENERAL MEETING RULES

- If you wish to ask a question, raise your hand virtually and the moderator will connect to your question. You may also ask your question in the chat room.
- Please state your name and then your question.
- Please be brief and to the point to allow the greatest opportunity.
- You will have the opportunity to have one follow up to your original question.
- If someone is belligerent or not respecting the ground rules they may be removed from the meeting.

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Observations of 15 years of coaching

- Most teams warm up pre game
- Few athletes warm up pre practice
- Warm ups are done without deeper understanding of components and greater comprehension of how it aligns with greater development plan
- Warm up periods represent a significant window of opportunity to invest and learn

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Why Warm Up in the First Place

- Performance increased 79% of the time following W/U (Fradkin et al., 2010)

What Components Are Required For a Complete Warm Up Protocol?

R- aise internal body temperature

M- obilize tissues and joints that require mobility

A- ctivate and groove motor units and pathways

P- rime and potentiate

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Raise and Mobilization

Raise

- Low intensity, low impact movement to increase internal body temperature
- Walking, light jogging, light multiplanar movement
- 3-6 minutes in duration

Mobilization

- Joint and plane specific
  - Ankle, Hip (multiplanar), Thoracic Spine, Shoulder
- Holding accessible position where tension develops in ROM for 3-5 sec and repeating for 3-5 repetitions

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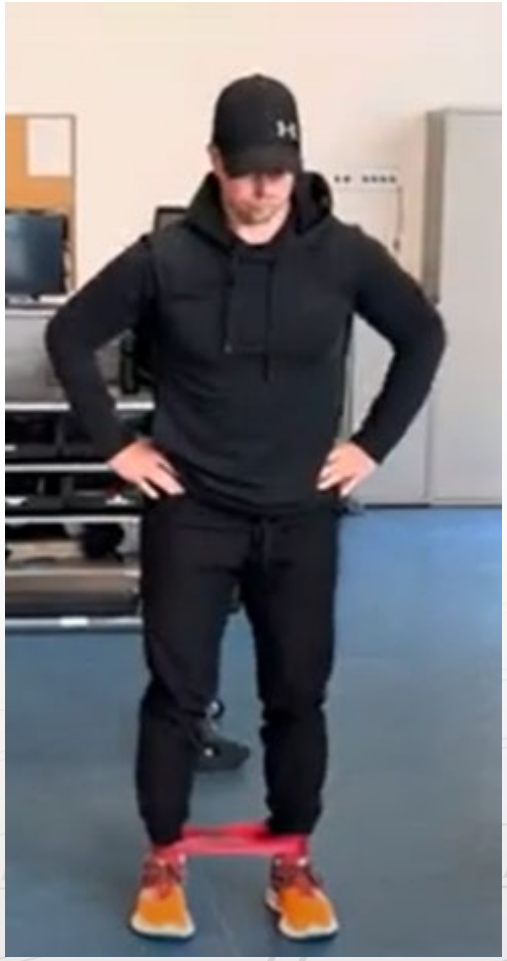
Activation and Potentiation

What are we trying to achieve here

- Turn on motor pathways that are required for locomotion and/or joint stability to make movement more efficient
- Decrease the threshold levels required to require fast twitch motor fibres
- Progressively (and strategically) ramp up bodies for levels of activity and specificity of movement required in sport/training/practice



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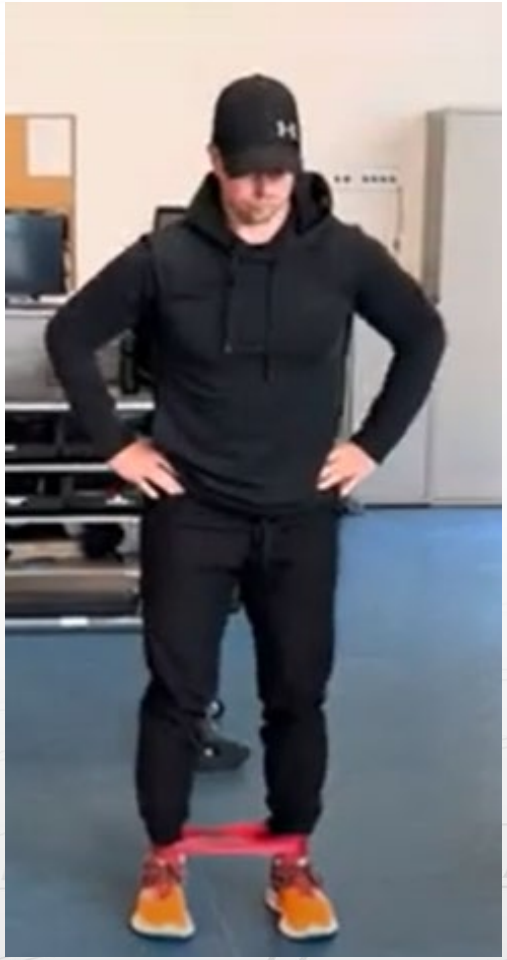
Activation and Potentiation

What are these patterns

- Movements or patterns where force is being generated through a specific motor unit or pathway to create locomotion
- Movements done against resistance (band, wall, partner, ball)
- Movements that are done in multiple planes that are needed to create propulsion.
- Rhythmic patterns that request multi joint coordination to create and control locomotion.
- Movements that are progressively increased in intensity as the training, practice or game session approaches.



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Activation and Potentiation

Changing the narrative on why these matter

- Can we utilize these patterns for more then just “warming up”
- Can we strategically challenge and make these movements more complex to increase our “movement skill tool kit”
- Can these movements, when done over time accumulate to a training effect?

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Activation Components

Activation Component 1: Neuromuscular Activation

Rationale: Turning on motor units that are needed to create propulsion and or stability

Mini Band Series

- Bent Knee Lateral Walk (10/side)
- Straight Legged Lateral Walk (10/side)
- Accel Step (6/side)
- Accel Step with Lift off (6/side)
- V Step (fwd/bwd)

Isometrics

- Glute Bridging/Hip Drives
- Hip Abduction wall drives
- Various single leg balance drills

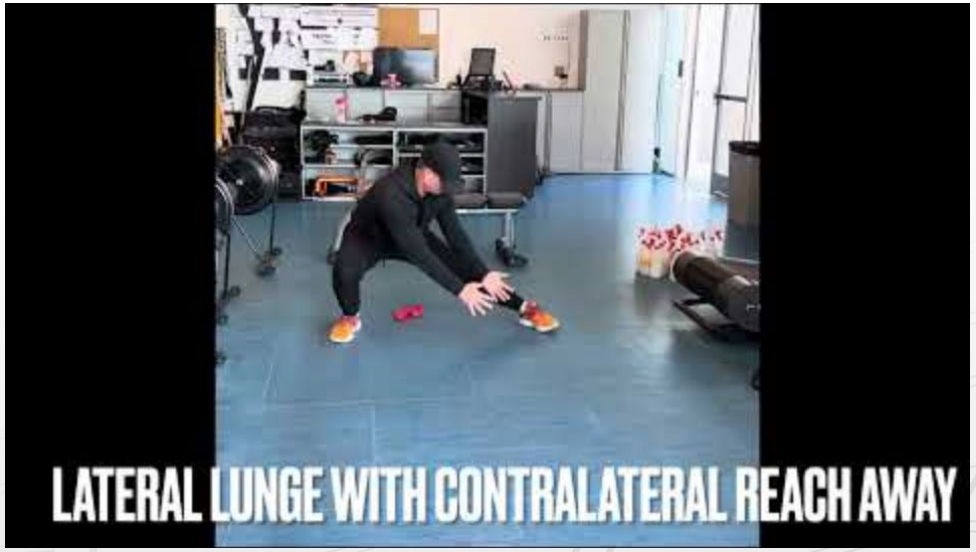
Activation Components

Activation Component 2: Gross Motor Ability

Rationale: Groove full motor patterns that are needed in training/sport

Examples:

- Warrior Rev Lunge (5/side)
- Lateral Lunge (5/side)
- HIP CARs (5/side)
- Single Leg Fwd Reach to Knee Hike
- Hinging Patterns
- Push/Pull Patterns



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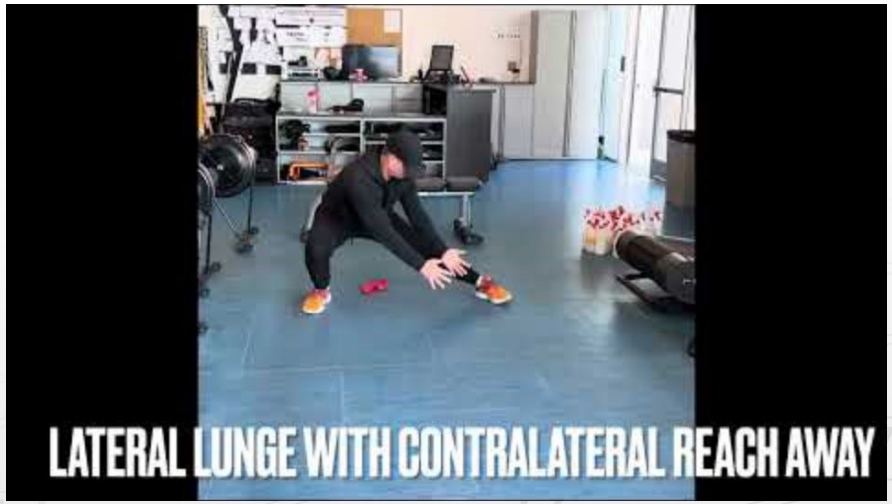
Activation Components

Activation Component 3: Rhythm and Control

Rationale: Groove fluidity in locomotive patterns that require synchronization and control. Opportunity to expand movement complexity here

Examples:

- Skipping Patterning (A, B, C)
- Carioca Patterning
- “Agility” Ladder Patterning
- Crawling
- Shuffling and Cross Over to Base Work
- Somersaults, rolling and get ups



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Potentiation Components

Rationale: Start to approximate intensity and specificity of movement patterning needed in training/sport. Opportunity to make exercise decisions that align with desired adaptation for training block and “mini dose” loads.

Important Components/Cues

- DRIVE the ground
- Control landing on your jumps/hops
- Get off ground fast when being reactive
- Be mindful of space and surface

Accel/Decel, COD and Maneuverability Work	Jumps/Hops/Bounds
Sprinting (various starts)	Countermovement Jumps (Unloaded/Loaded)
Change of Direction (COD) Drills	Hops (Fwd, Lateral, ½ Kneeling, etc)
Maneuverability Work	Reactive Bounding
	Explosive Bounding
	Power Skips

Take Home Messages

1) Warm up periods make up between 75-100 minutes a week
   - Significant time frame to make investments in skill set and performance

2) Activation and Potentiation Protocols should be approached with the same mindset as a training session, albeit not rendering you unavailable for activity ahead

3) Exercises should be progressed (i.e. you shouldn't be just doing the same thing for 8 months)

4) This is your responsibility

THANK YOU

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