



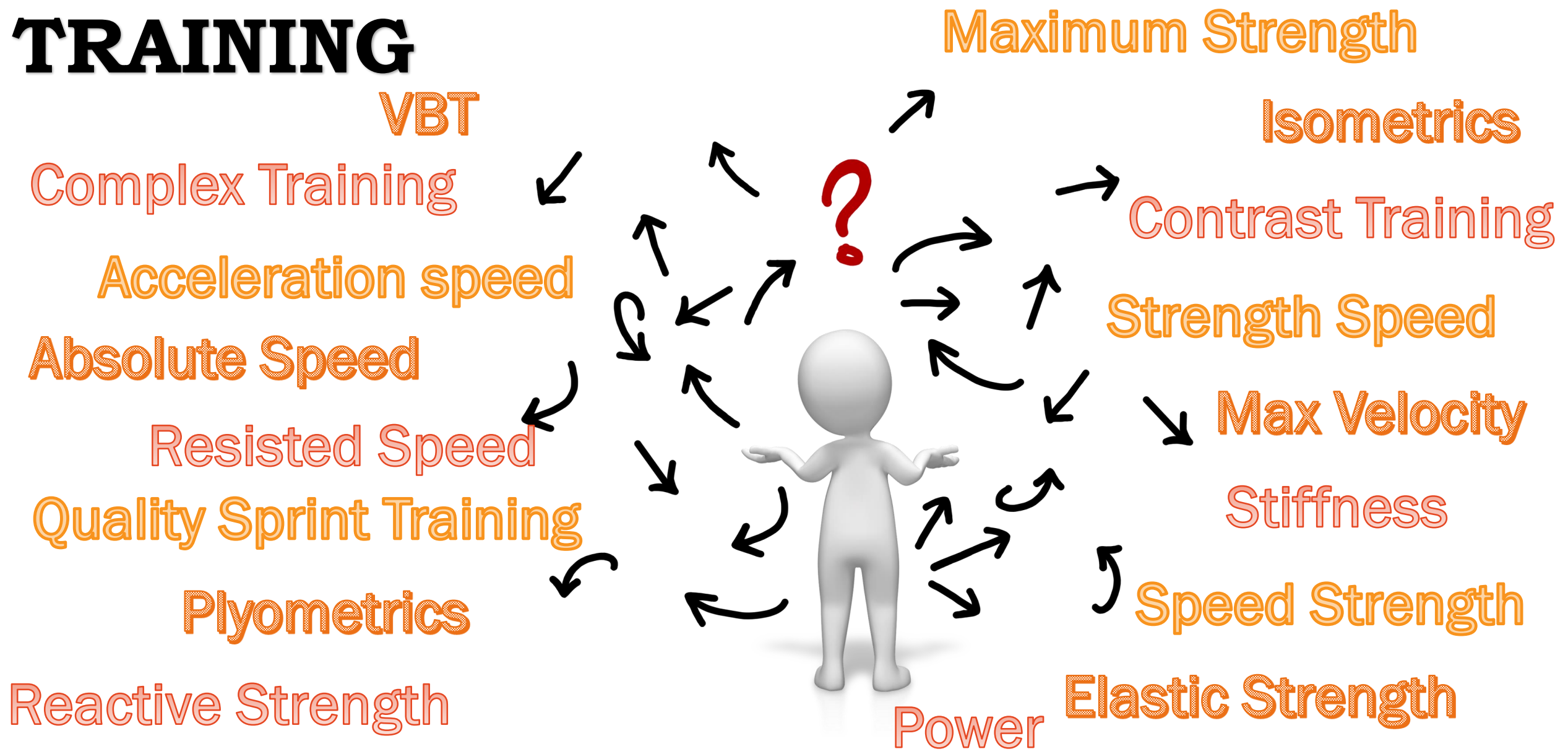
GAME SPEED IN NETBALL

RANEL HOBSON

What will be covered

- ✓ The difference between Speed, COD, Agility and Manoeuvring
- ✓ Court specific speed competencies
- ✓ Physical competencies required for explosive speed
- ✓ Influencing programming by understanding speed qualities
- ✓ Every day assessment
- ✓ Speed Mechanics
- ✓ Understanding Agility
- ✓ Training by Speed Type

EVIDENCE BASED TRAINING



SPEED, COD & AGILITY

SPEED

Acceleration, capacity
to create force
Distance / Time



COD

Physical capacity to
decelerate brake, CD and
accelerate again



AGILITY

Perceptual cognitive
ability to read a
situation, make a
decision and react



COURT SPECIFIC

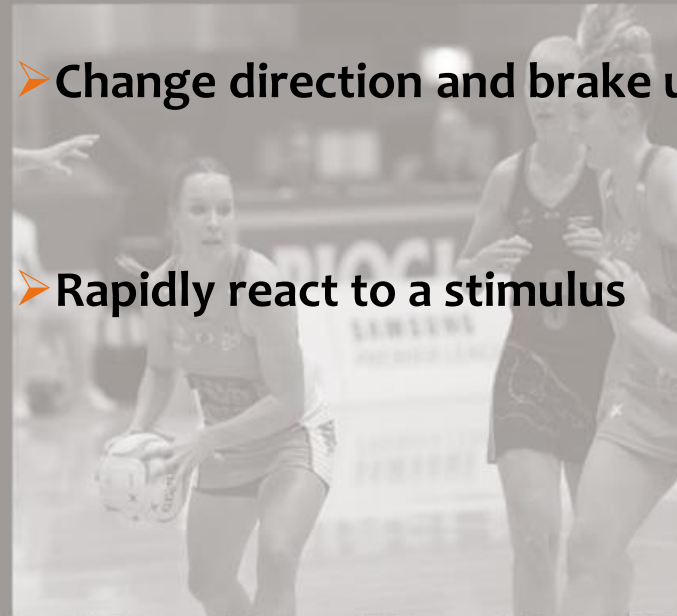


➤ The ability to start quickly from different positions

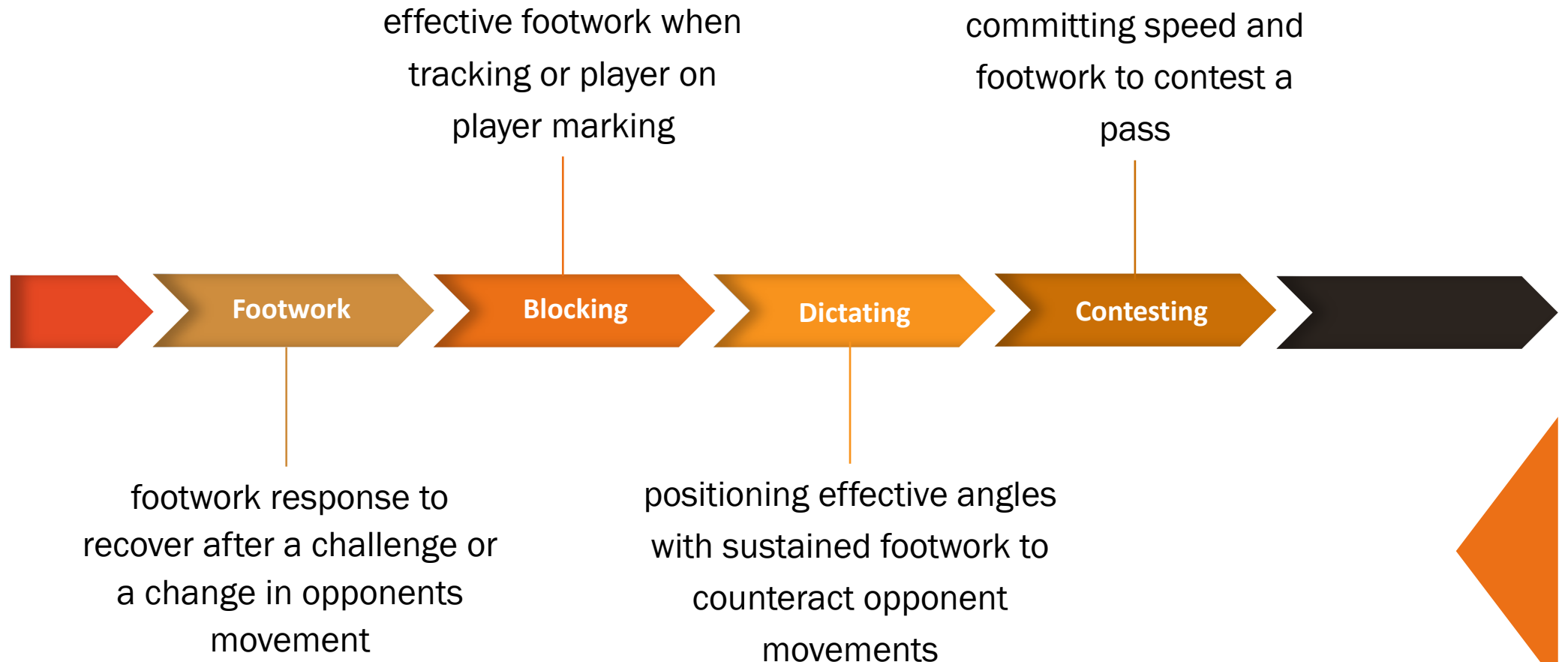
➤ Get away from opposition and create space on the court

➤ Change direction and brake under control

➤ Rapidly react to a stimulus



Maneuverability



Maneuverability drill example



**“Participation alone in
Training and Games WILL NOT
result in maximal improvement in
speed, nor will it build strength,
power or injury resilience.”**

**You must make time for specific training
in athletic components.**

What you need for SPEED

- Efficient mechanics
- Speed Strength
- Mobility & Flexibility (ROM)
- Lean Body Composition



A QUICK ANALYSIS CAN SAVE TIME?

Understanding players Speed Qualities
can inform programming

- Technical proficiency
- Joint mobility and muscle extensibility
- Speed strength
- Elasticity / Stiffness
- Quickness and reactivity



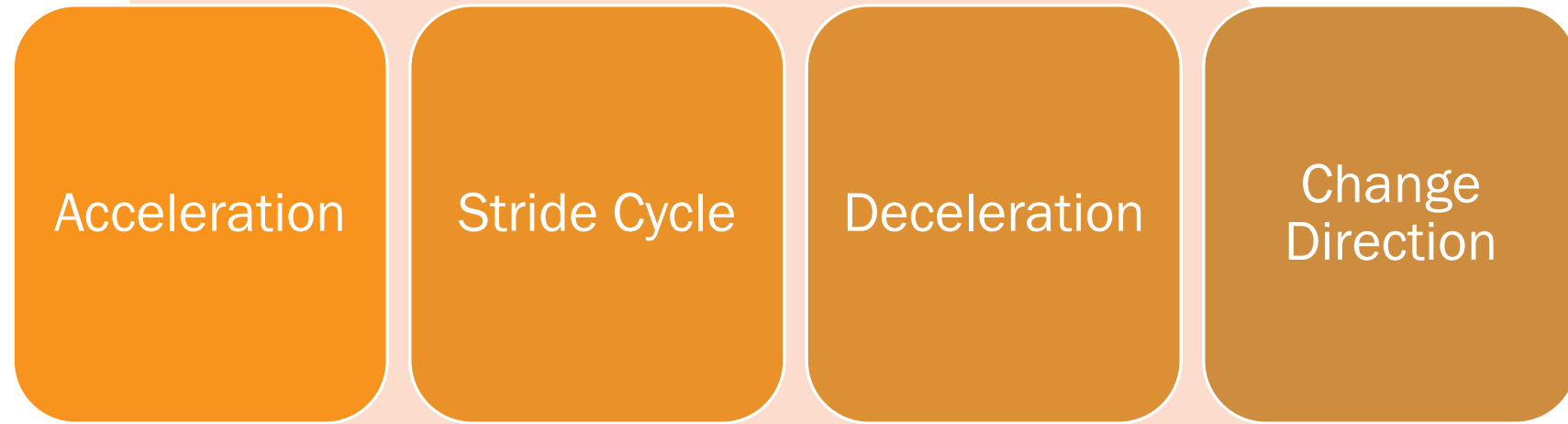
IT STARTS WITH THE WARM UP



Add in drills that inform functional capacity and dysfunction. Comparing from session to session is a daily assessment tool that is vital to season long performance maintenance.

Mechanics

ACCELERATION / STRIDE CYCLE / DECELERATION / COD



SPEED MECHANICS

ACCELERATION

Technique:

Positive shin - Dorsiflexed foot

Postural Integrity

Ankle Stiffness - Magnitude of Force

Cue: Knee drives toward target

Cue: Push down and back



ACCELERATION SWITCHES



SHORT ACCELERATION





STRIDE CYCLE



Technique:

Positive shin, Dorsiflexed foot

Higher knee drive, More Upright,

Postural Integrity

Ankle stiffness - Magnitude of Force

Cue: Knee drives toward target

Cue: Vigorous switch & arm drive





DECELERATION

LOOK FOR:

COM low

Shorter steps

Shoulders behind hips

Postural control

Common faults

Lack of Eccentric Control

Lack of Postural Integrity





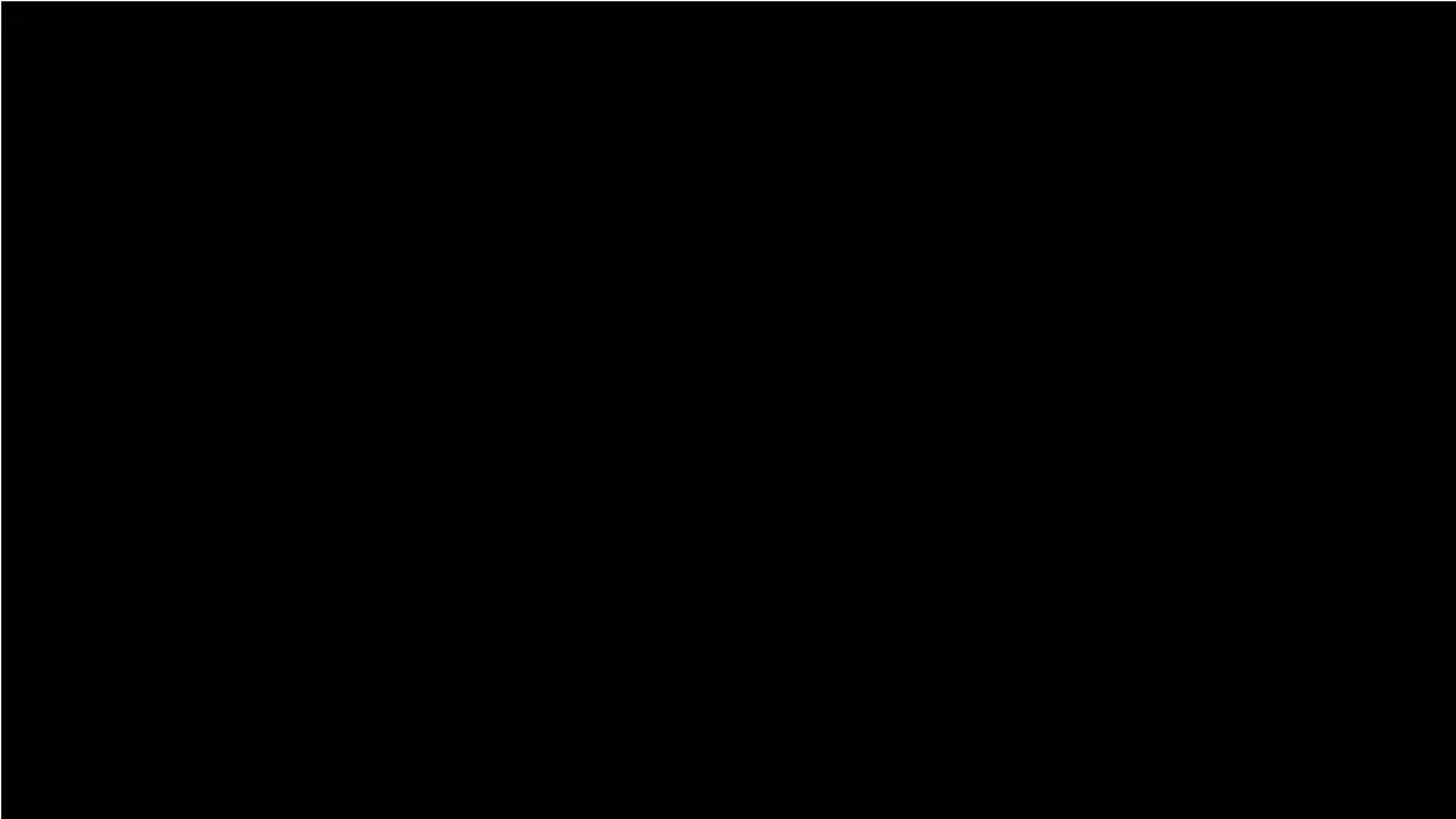
CHANGE OF DIRECTION

Technique:

Decelerate, Low COM & Wide BOS, Transition step, Re-accelerate









Progressions

Regressions

Adapt for Athlete



	Lateral Drive without ball	
	Increase Speed of lateral drives and return	
	Add ball	
	Increase Speed of Passes	
	Vary type of passes	
	Add longer drives out of circle and return sprint into drill	
	Add Bungee resistance from side	



Technique:

Decelerate

Low COM & Wide BOS

Transition step

Re-accelerate



QUICK LOOK AT AGILITY

Rapid whole body movement with change of velocity or direction in response to a stimulus.

Includes sub-components: reaction time; acceleration; deceleration & COD".
(Sheppard et al, 2014).



Cognitive

Reactive ability
Decision making

Physical

Strength
Stability, Mobility

Biomechanical
Technique

AGILITY

- Mirror
- Chase
- Evade









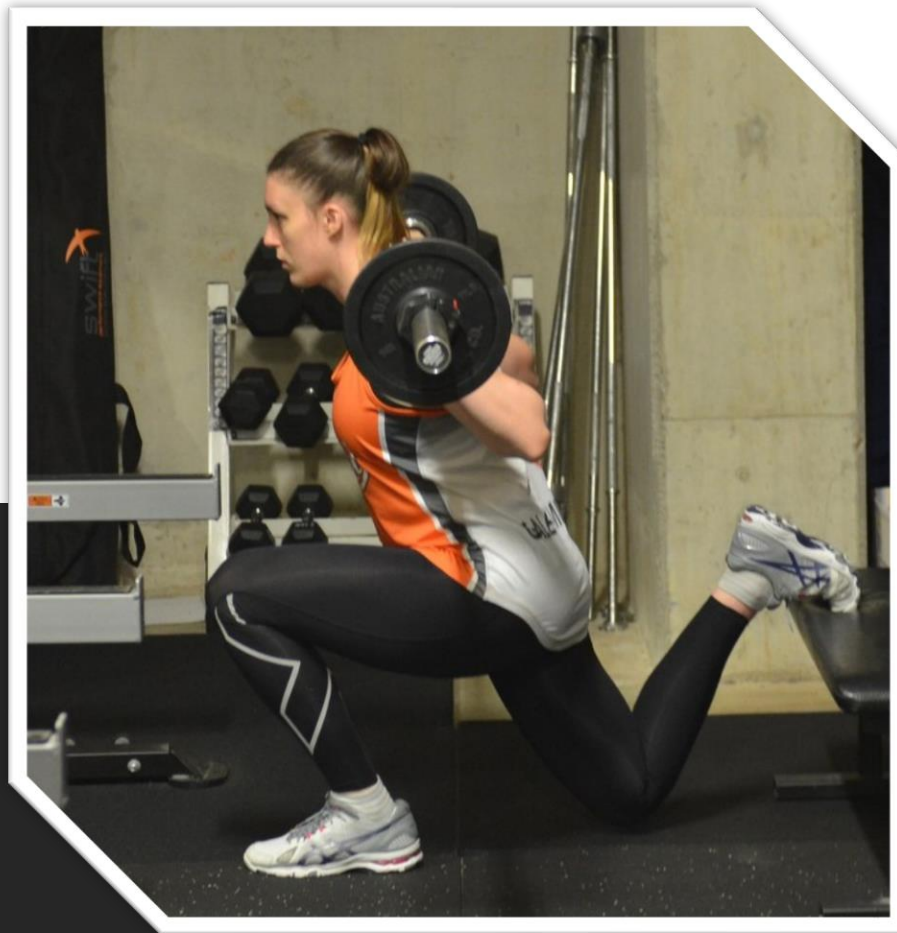
AGILITY - DUAL STIMULUS

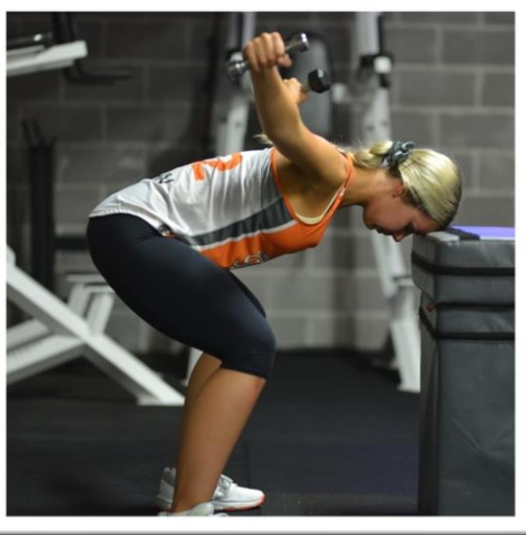
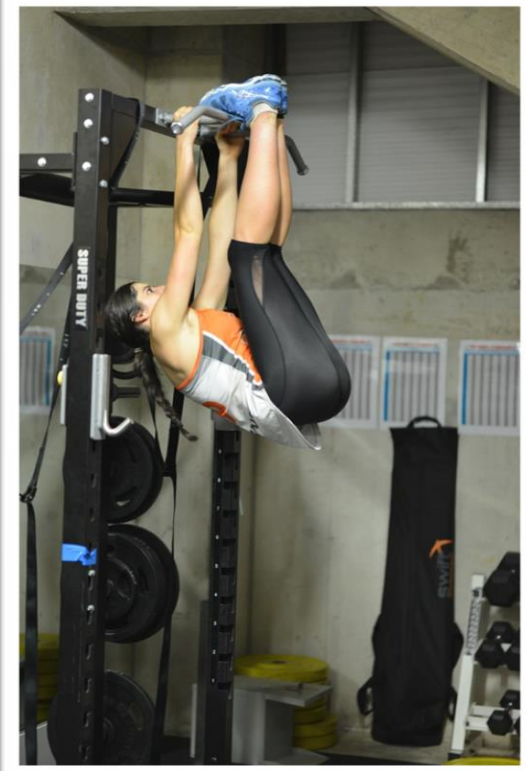
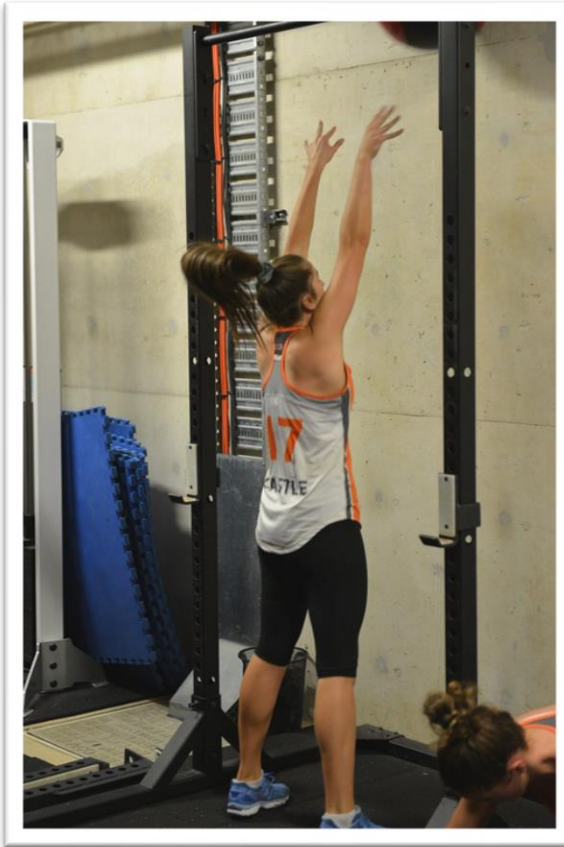
Strength & Power

MAX STRENGTH / SPEED STRENGTH / RFD / SSC

STRENGTH causes motion

Speed is a measurement of Motion





Speed
Strength
Elevation
Injury Resilience

SPEED DEVELOPMENT





HOW STRONG IS STRONG ENOUGH

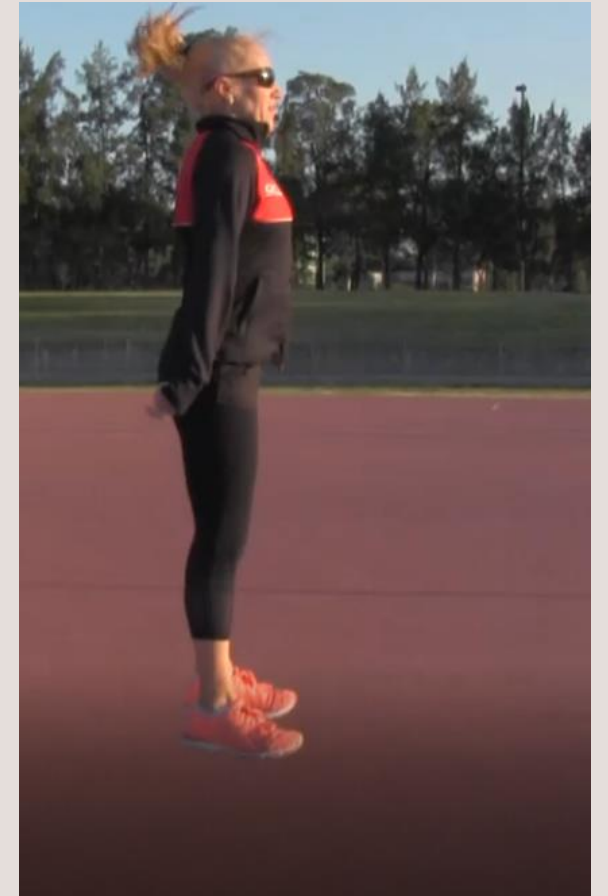
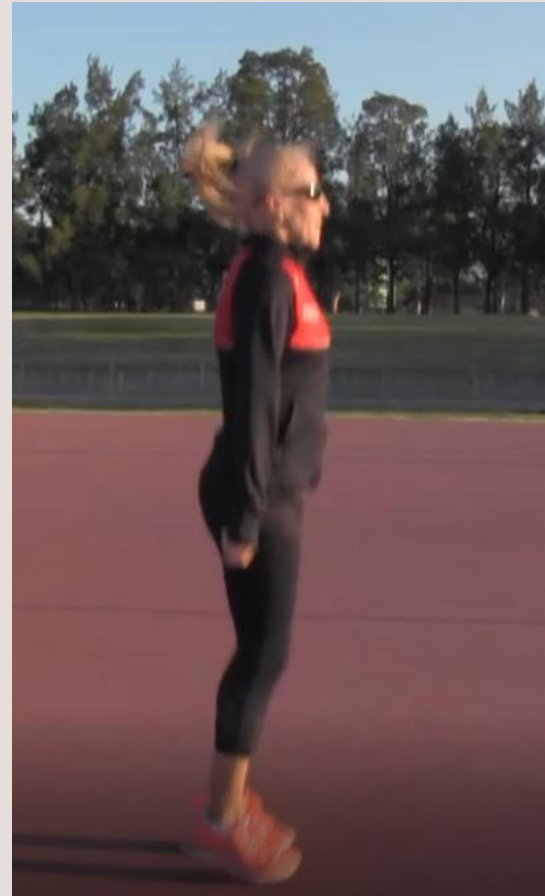
Stiffness & Mobility

ANKLE STIFFNESS / JOINT ROM / FLEXIBILITY / FUNCTION

ANKLE STIFFNESS

- = faster forward propulsion
- = shorter ground contact times
- = more efficient running economy
- = increased max sprint speed

Tissue integrity and Elastic Properties are Integral to Sustained High Performance



WHERE TO START

RUDIMENTARY JUMPS AND HOPS

- Locked and Loaded Ankles -

JUMP AND HOP SERIES

OTS Jumps

OTS Hops

Backward jumps

Forward Jumps

Backward Hops

Forward Hops

Lateral Jumps

Lateral Hops

Pattern Play (L-L-R-R) (L-L-L-R-R-R-L-R-L-R)

Reps: 10 contacts in jumps / 5 contacts per foot in hops
Progressions = volume , intensity or variability



Inside Edge Foot Strength

Train by Type

MUSCLE DOMINANT / ELASTIC DRIVEN / METABOLIC

INDIVIDUAL PRESCRIPTION



MUSCLE



STRENGTH

Complex training

Contrast training

Accommodating Resistance Training

Olympic lifts and derivatives

CMJ

5-0-5

SPEED

5, 10 & 20m sprint efforts

Sleds & Prowlers

Aggressive and Explosive execution

Long Rests (45 – 60 sec per 10m)

ELASTIC



STRENGTH

Build Robustness

Moderate vol.

Eccentric strength

Cluster Sets

French Contrasts

SPEED

Quick Release training

Longer Accelerations

Hurdle runs (*Wickets*)

Repeat Sprint Efforts

Stiffness jumps, Pogos

Hurdle jumps

Depth jumps

METABOLIC



Hypertrophy rep ranges

Strength Endurance

Power Endurance

Circuit style training

Ankle dominant Jumps

Fitness before Speed

High volume of running

Rolling starts

Use small but frequent bouts of ankle jumps

STRENGTH

SPEED



LIFT / JUMP / SPRINT

Joint Mobility and Muscle Flexibility

Decreases energy used in specific sporting actions.

Prevents strain and pain around knees, ankles, shoulders.

Plantar and dorsiflexion should be a major concern for all athletes.

Good flexibility prevents stress injuries.

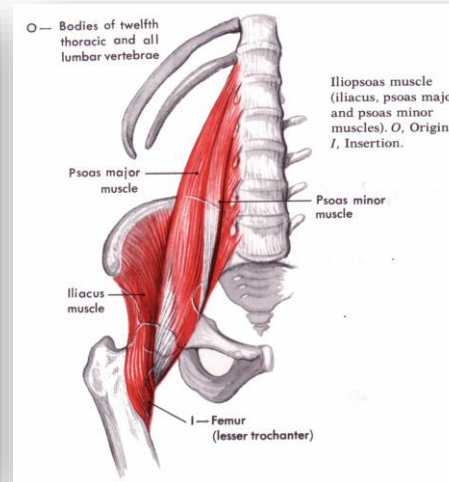
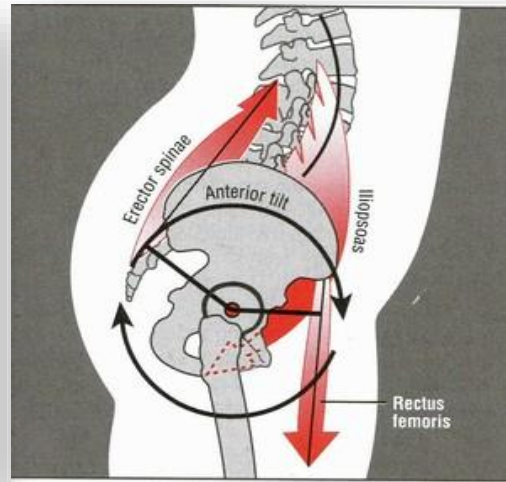


Anterior Pelvic Tilt

Distortion of pelvic mechanics commonly found in athletes that compete in field and court sports.

Shortened hip flexors = diminished acceleration, deceleration & jumping

Lumbo-pelvic instability





THANK YOU

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