



Strength/Power Training for Mid-Distance and Distance

Looking Back to Move Forward

Herb Elliot & Percy Cerutty



The Goal

At the end of the journey all physical limitations are eradicated and the athlete is ready technically, tactically, physically and psychologically to run fast & compete to win

Everything is Driven by Demands of the Race Distance & Physical Qualities of the Runner



Beware



GS

Garbage Strength

Now I have your attention

Why?

Lack of Progression

Too Many Exercises

Exercise Selection

Exercise Order



Are you afraid
your runners will
look like this?

Strength/Power = Speed

A comprehensive strength training program offers huge potential for improvement!

Comprehensive strength training offers more return for what you are doing in the running training

Comprehensive strength training is the foundation for speed

Strength Before Strength Endurance

CANNOT

endure a quality you have not developed!

Train for endurance with running & strength/
power in preparation for running fast

Potential Benefits

Efficiency

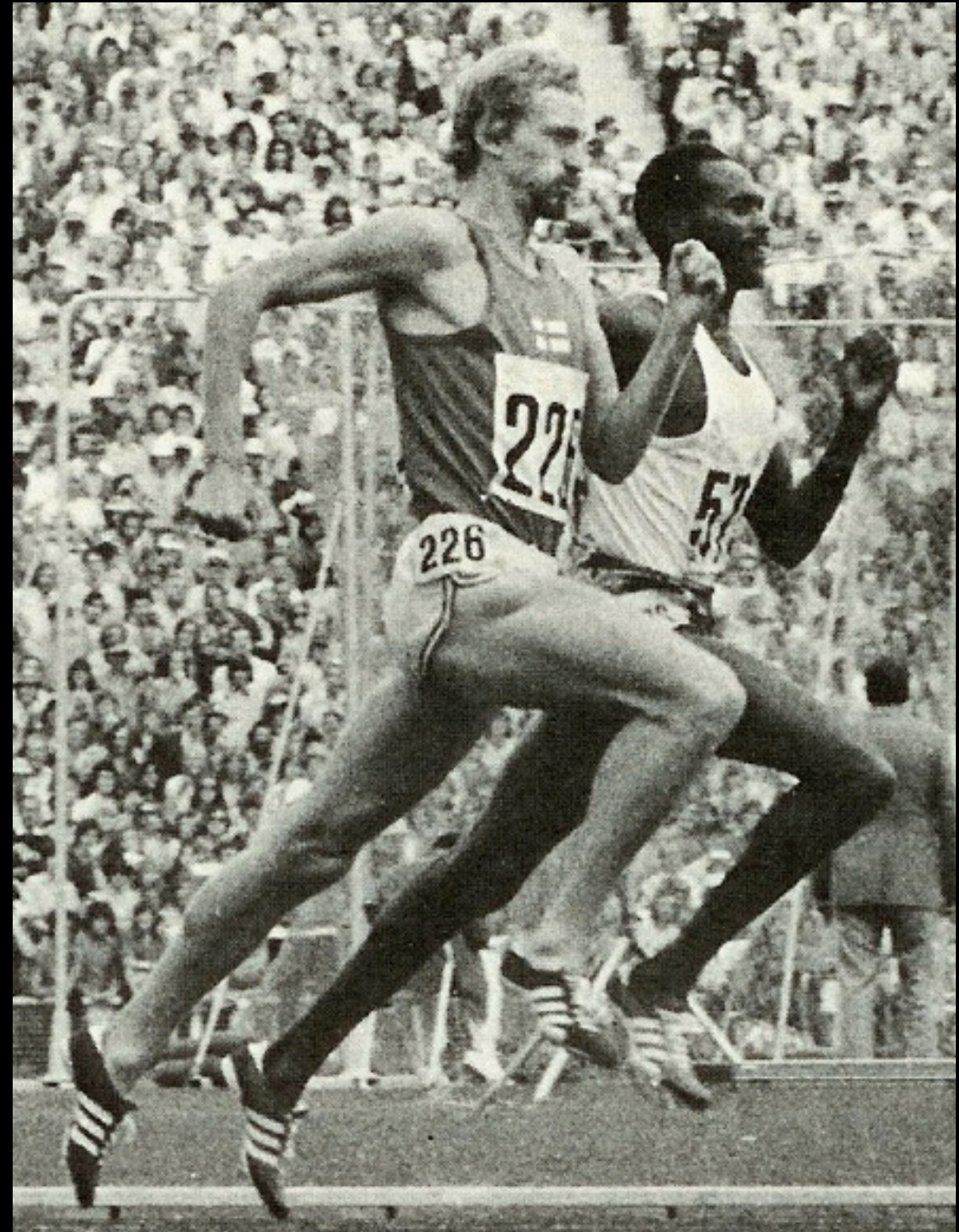
Biomechanical

Physiological

Dynamic Posture

Nervous System
Excitation & Tuning

Injury Prevention



Strength Training



Coordination training with appropriate resistance to handle bodyweight, resist gravity and optimize ground reaction forces



Linkage & Connection

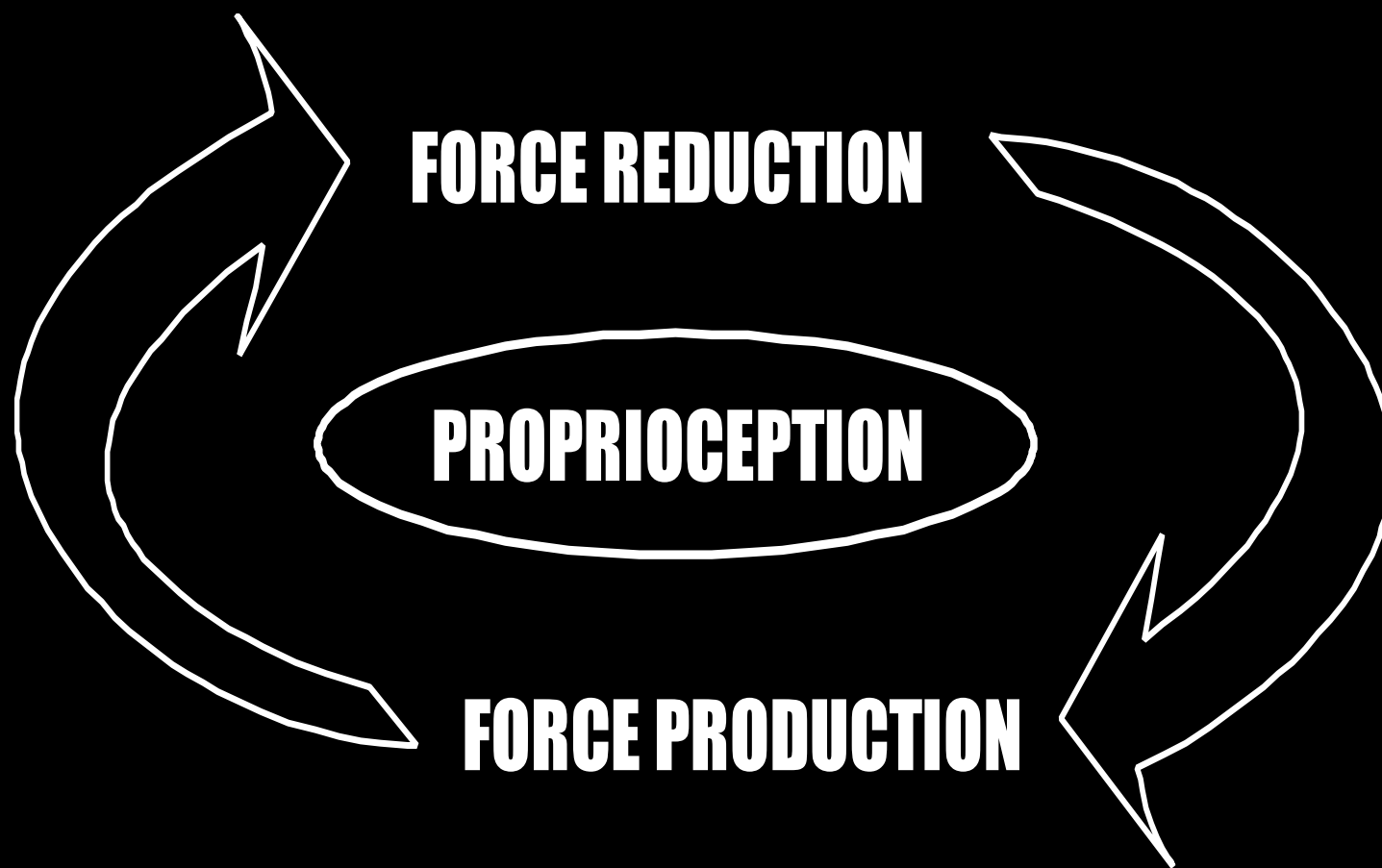
Must Reconcile:

Want to do

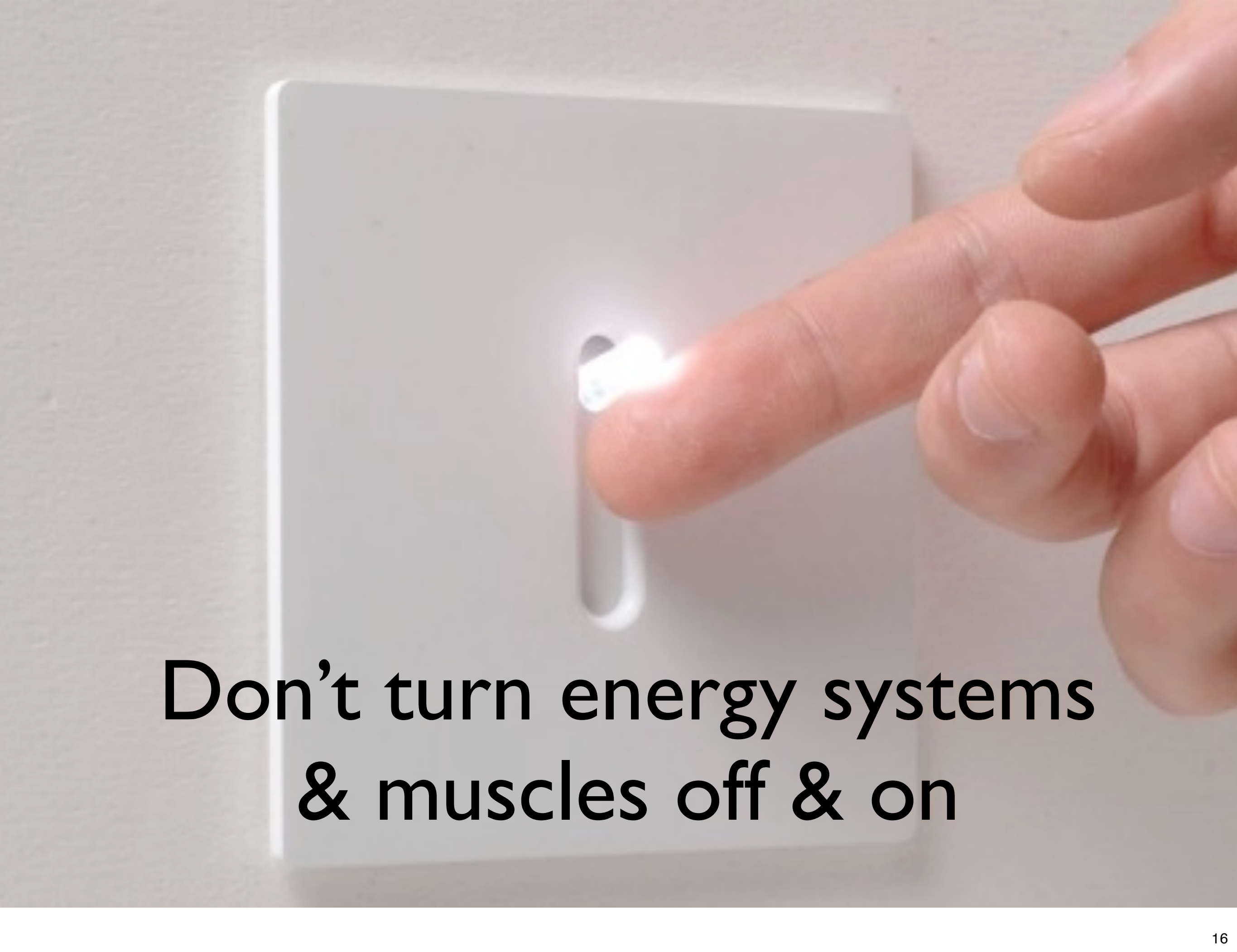
Nice to Do

Need to Do

Performance Paradigm



This is your
guide, the context
for exercise
selection &
prescription


A close-up photograph of a person's finger pressing a small, circular button on a white, rectangular device. The device has a vertical slot below the button. The background is a plain, light-colored surface.

**Don't turn energy systems
& muscles off & on**

The Running Athlete's Body



“... the function of a muscle depends critically on the context in which it is activated.” Roger Enoka



Anatomical Structure determines
function, this determines exercise selection
and prescription

Big for a Reason!

The Starting Point

A Thorough & Complete PCA



Baseline Measures
on Functional Movements

Training Tools



Pull

Push

Squat

Rotate

Brace

DB One Arm Snatch

“Toe Nails to Fingernails”

Pulling





Pulling


DB High Pull



Leg Train & Strength

Balance Single Leg Squat with Mini Band

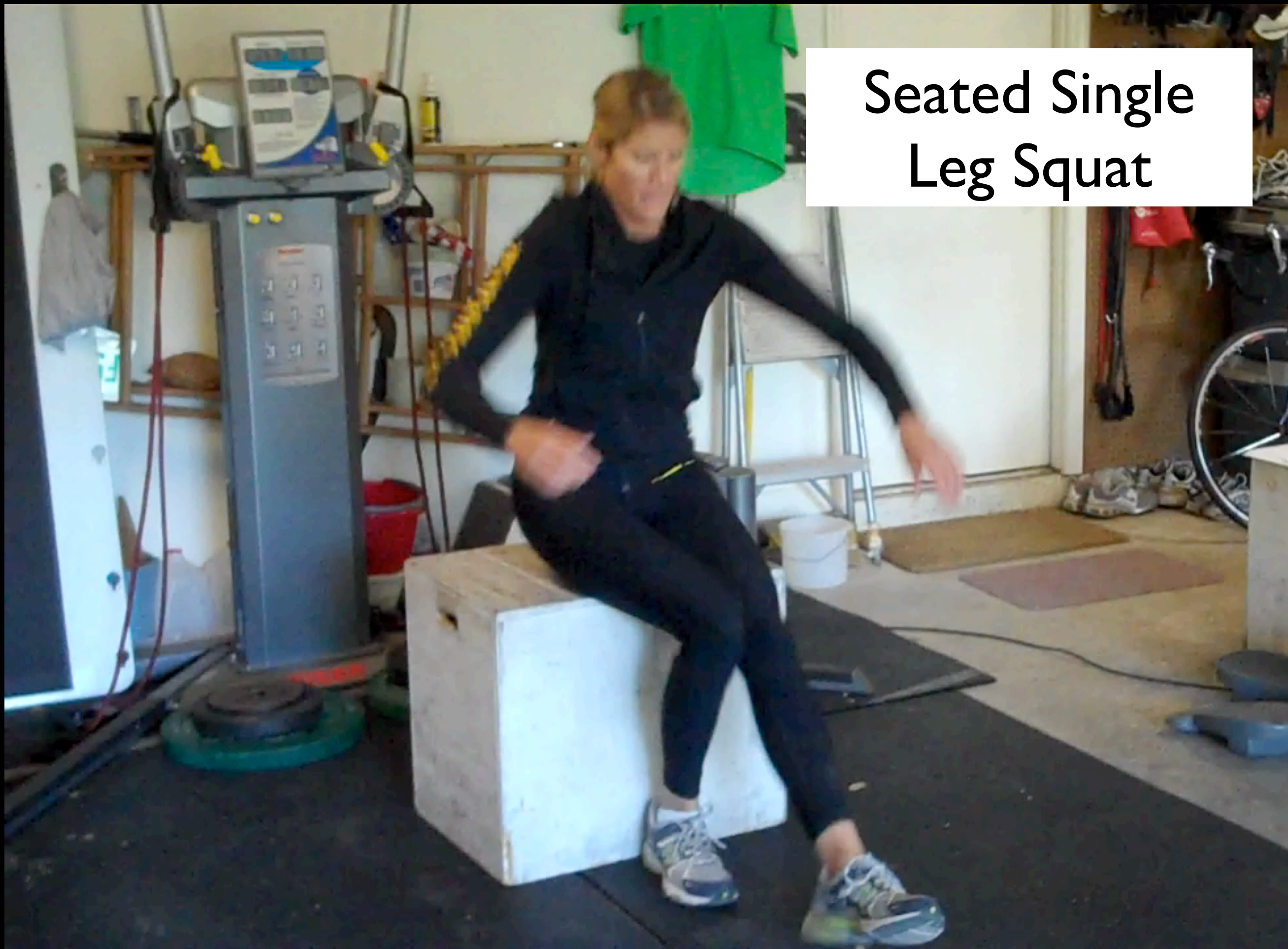


A photograph of three female athletes in a gym setting, performing a single-leg squat exercise. They are standing on a platform with a barbell across their thighs, supported by a rack. The athlete in the foreground is wearing a dark blue t-shirt and black shorts, while the others are in light blue and yellow shirts. The gym has green walls and various equipment in the background.

SLS

Training = Testing
Testing = Training

Seated Single Leg Squat



Squat with Mini Band



Body Weight Squat

1 Rep/Sec





Lunge & Reach (Anterior)

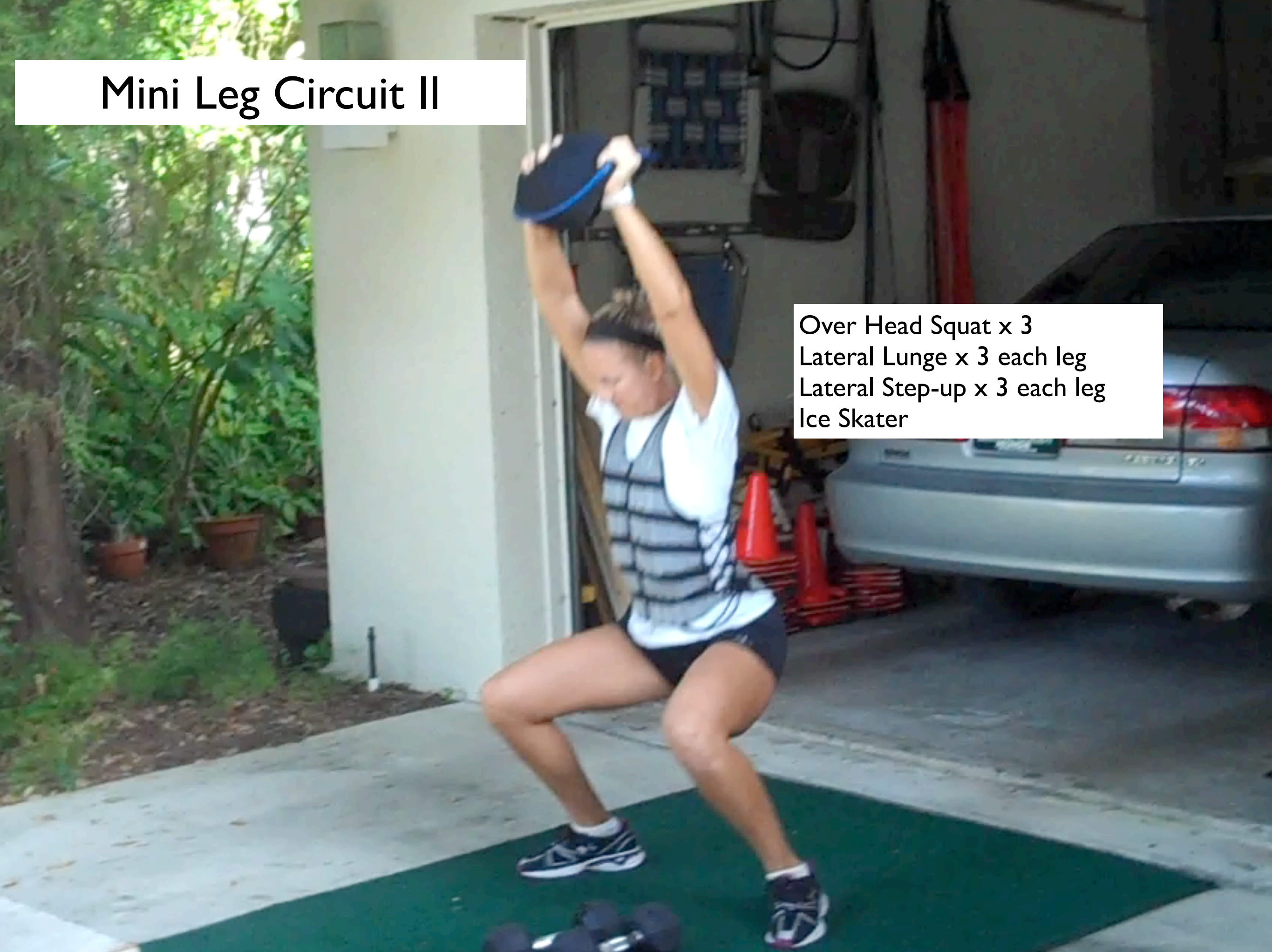


High Step-up



Mini Leg Circuit II

Over Head Squat x 3
Lateral Lunge x 3 each leg
Lateral Step-up x 3 each leg
Ice Skater



Hurdles

When

How

Where



Plyo's



Plyo's

Rope Skip Run

Core

Core before
Extremity Strength



Always

Fundamental Movement Skills
Before Specific Sport Skills

Core Training Postures



90% on Your Feet

Get out of the Sagittal Plane!

Rotation is just as important
for the runner as the thrower

Rotate

Upper Body



High/Y/Fly

Reminder
All Training is Core
Training





Pullover

Constructing an Effective Strength Workout

Train for Strength/Power

Be focused & intense

Use fewer exercises & choose the exercises carefully based on event demands & individual needs

Have a clearly defined criteria based progression

Strength Training Distribution

(No Competition - Summer or Winter)

	DAY ONE	DAY TWO	DAY THREE	DAY FOUR	DAY FIVE	DAY SIX	DAY SEVEN
Four Day Split Early	TB - S LE & HU Core	UB Core Flex	CORE FLEX & HO	TB - HP LE & HU Core	UB Core Flex	CORE FLEX & HO	Rest Flex
Four Day Split Late	TB - DBC LE & HU Core	UB Core Flex	CORE FLEX & HO	TB - DBC LE & HU Core	UB Core Flex	TB - DBC CORE FLEX & HO or CIR	Rest Flex

Remedial Work Daily (Preferably in AM - Determined by individual needs based on PCA & Injury History)

TB = Total Body DBC = Dumbbell Complex S = Snatch HP = High Pull

LE = Lower Extremity

UB = Upper Body

CIR = Circuit

P = Plyo's

HU = Hurdle Under HO = Hurdle Over

CORE (All Caps) = Major Emphasis CORE (Lower Case) = Minor Emphasis

FLEX (All Caps = Major Emphasis) Flex (Lower Case = Minor Emphasis)

Total Body/Lower Extremity

Warm-up

- Mini Band

- Med Ball – Walking Rotations

- Lunge & Reach

Core

- Basic Core

Strength Training

- Single Leg Squat

 - 2 x 6 each leg (Regular) Seated 1 x 6

- KB Swing

 - 1 x 6 Two Arm, 1 x 6 One Arm

- High Pull 3 x 6

- Squat 3 to 5 x 20

- Lunge 3 to 5 x 20 (10 each leg)

- Front Pulldown 3 x 6

Hurdles

- Hurdle Unders x 6 each direction

Core

- Total Body Throws

 - Over the Back x 6, Forward x 6, Squat Throw x 10

Upper Body

Warm-up

Bubble – Runner, Over the Top, Rotation

Core

Stretch Cord Core

Landmine Core

Strength Training

JG Assisted Pull-up 5 x 4

High, Y, Fly (= One Rep) 3 x 3

Incline Push-ups 4 x 8

Arm Step-ups 2 x 20

Pullovers 3 x 6

Core

Ring Core

Wall Throws

Over Head x 20

Soccer Throws x 20

Chest Pass x 20

Cross in Front x 20

Down the Side x 20

Around the Back x 20

DB Complex (DBC)

DB High Pull x 6

Alt DB Press x 6

DB SquaT x 6

DB Row x 6

1/2 Leg Circuit

Squat x 10

Lunge x 5 each Leg

Step-up x 5 each Leg

Jump Squat x 5

Core Modules

Basic Rotations

Walking Wide Twist x 20
Walking Tight Twist x 20
Walking Over the Top x 20
Walking Figure Eight x 20

Basic Core

Big Circle x 5 each Direction
Bouncing Rotations x 10 each side
Over The Top x 10 each side
Alternate One Arm Slams x 10 each arm

Cable Core

Flexion/Extension x 10
Twisting (Waist Height) x 10 each side
Chops x 10 each side
Big Circles x 10 Clockwise & 10 Counterclockwise

Medicine Ball Rotations

Standing Full Twist X 10 Each Direction
Standing Half Twist. X 10 Each Direction
Half Chop X 10 Each Way
Solo Med Ball Sit Up (Two position right & left) X 5 Reps

Medicine Ball Wall Throws

Overhead Throw x 20
Soccer Throw x 20
Chest Pass x 20
Standing Side to Side x 10 Each Side (Cross in front)
Standing Cross in Front x 10 Each Side
Around the Back x 10 Each Side

Medicine Ball Power Throws

Single Leg Squat & Throw x 6 each leg
Single Leg Squat & Scoop Throw x 6 each leg
Over The back Throw x 6
Forward Through The legs x 6
Squat & Throw x 10

Strength Training Distribution

(Competition)

	DAY ONE	DAY TWO	DAY THREE	DAY FOUR	DAY FIVE	DAY SIX	DAY SEVEN
Four Day Split Routine Early Comp	TB - DBC LE & HU Core	UB Core Flex	TB - DBC LE - MLC HO Core	UB Core Flex	Core Flex	COMP	Rest Flex
Three Day Routine Late Comp	TB - DBC LE & HO UB	CORE FLEX	TB - DBC LE - MLC HO	Core UB	Core Flex	COMP	Rest Flex

Remedial Work Daily (Preferably in AM - Determined by individual needs based on PCA & Injury History)

TB = Total Body DBC = Dumbbell Complex S = Snatch HP = High Pull

LE = Lower Extremity LC = Leg Circuit MLC = Mini Leg Circuit

UB = Upper Body

P = Plyo's

HU = Hurdle Under HO = Hurdle Over

CORE (All Caps) = Major Emphasis CORE (Lower Case) = Minor Emphasis

FLEX (All Caps = Major Emphasis) Flex (Lower Case = Minor Emphasis)

Strength Training Distribution

(Peak Competition)

	DAY ONE	DAY TWO	DAY THREE	DAY FOUR	DAY FIVE	DAY SIX	DAY SEVEN
Three Day Routine	TB - DBC LE & HO UB	CORE FLEX	TB UB HU	CORE FLEX	Flex	COMP	Rest Flex
Remedial Work Daily (Preferably in AM - Determined by individual needs based on PCA & Injury History) TB = Total Body DBC = Dumbbell Complex LE = Lower Extremity MLC = Mini Leg Circuit UB = Upper Body P = Plyo's HU = Hurdle Under HO = Hurdle Over CORE (All Caps) = Major Emphasis CORE (Lower Case) = Minor Emphasis FLEX (All Caps = Major Emphasis) Flex (Lower Case = Minor Emphasis)							

Remediate/Re-abilitate Daily

FUNdamental Work
Posture (Dynamic)

Balance

Coordination

Hip Series

Hip Series One – Standing

Standing #1



Lift one leg in front and move up and down. Repeat with the other leg.

Standing #2



Lift one leg to the side and move up and down. Repeat with the other leg.

Standing #3



Lift one leg behind and move up and down. Repeat with the other leg.

Standing #4



Move the leg up and down. Repeat with the other leg.

Hip Series Two – Kneeling

Kneeling #1



Extend the opposite leg to the front and move it up and down.

Kneeling #2



Extend the opposite leg to the side and move up and down, repeat with the other leg.

Kneeling #3

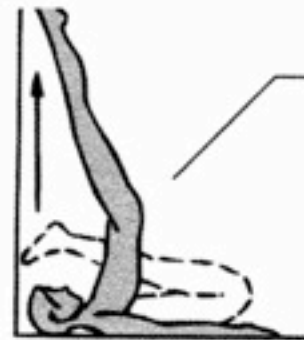


Extend the opposite leg behind the body and move it up and down, repeat with the other leg.

Hip Series

Hip Series Three – Supine

Supine #1



While lying on the floor, fold legs over the body and raise the hips up and down

Supine #2



Raise one leg with the knee bent

While lying face up on the floor, bring the body up in the arch position

Move hips up and down while holding the leg in position. Repeat with the other leg up.

Supine #3



Supine 3A&B

One leg against the wall and the other leg raised with the knee bent

Move the hips up and down while holding the leg in position. Repeat with the other leg



Supine #4



While lying face up on the floor, move the hips up and down

Support on the shoulders, arms and heels

Hip Drop Series



Forward

Step Down



Back

Across

Stepping Stones



Warm-up

Might be the most important component of
the training session

Warm-up to run do not run to warm-up

Multi Stage Warm-up

1) Mini Band Routine (Band above ankles)

Sidestep Walk - Forward/Back Carioca Monster Walk

2) Balance & Stability

Single Leg Squat (Hold each position five counts)

Straight Ahead Side Rotation

3) Basic Core – Walking Forward & Back (3 Kg Med Ball)

Wide Rotation x 20 Tight Rotation x 20 Side to Side x 20

Chop to Knee x 20 Figure 8 x 20

4) Lunge & Reach Series(2 reps in each plane – Forward/Side/Rotational)

Reach Up Reach Out & Down Reach Across

5) Crawls

Jack Knife Crawl x 5 Creepy Crawl x 5

5) Active Stretch (No more than two minutes)

Calf Hamstrings Psoas/Lats Pecs

6) Coordination (All @ 30 meters x 2)

Skip

Crossover Skip

Side Step

Carioca

Backward Run

High Skip

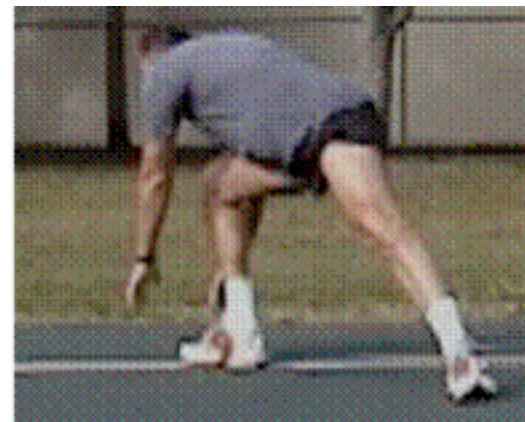
High Skip with Rotation

7) Accelerations

4 - 6 x 40 to 60 meters



Lunge & Reach Series



Tapering



Slow Leak



Time - How Long ?

All Long As You Need!

Timing - More Important
Than Time

Get it right the first time!

What you
see or think
you see
sometimes
is only the
tip of the
iceberg



Where will you stand?



Your Choice!

Gambetta

Sports Training Systems

P.O. Box 50143

Sarasota, FL 34232

Phone: 941-957-1418

E Mail: gstscoach@gmail.com

Blog: functionalpathtraining.typepad.com

Twitter: @coachgambetta

www.gambetta.com