



Detailed Coaching and
Programming for Quad-
Dominant vs. Posterior Chain
Dominant Athletes

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NSCA
COACHES
CONFERENCE 2022

JANUARY 6 – 8, 2022

San Antonio, TX & Online | 2.0 CEUs

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CONFLICT OF INTEREST STATEMENT

I have no actual or potential conflict of interest in relation to this presentation.

Performance Pattern Cycling

Performance Pattern Cycling

Disclosure – I Didn't invent this, I realized what's going on and making coaches aware of this issues with old methods of workout Structure.

Performance Pattern Cycling Conundrum

History – We got the Structure of workouts from?

The Wrong patterns are not Created for athlete - Bodybuilding
???

Bodybuilding - Powerlifting are still correct

Levels of fatigue inhibits motor learning in typical 3 or 4 sets
training

Awareness - Moment

The French Contrast Effect on Quad Dominance

Squat – 1 to 5 Reps

Hurdle Hops – 4 reps

Loaded SQ Jumps - 3-5 Reps

Accelerated Jumps - 5 Reps

The Fix - Performance Pattern Cycling

Squat – 1 to 5 Reps

Hurdle Hops – 4 Reps

Reverse Hyper-6 Reps

Straight Leg Run

Load SQ Jumps - 3-5 Reps

Accelerated Jumps - 5 Reps

Performance Pattern Cycling

Typical Structure of Workout

Back Squat - 3x6
Pw Hurdle hops 3x6

Glute Ham 3x6
Straight Leg Run x 6

Reverse hyper 3 x 6
1 arm Lat pull 3 x 8

Performance Pattern Cycling x 3

Complete all lifts one set then repeat

Back Squat - x 6
Hurdle hops x 6
Glute Ham x 6 - FTC
Straight Leg Run x 6
Reverse hyper x 6
1 arm Lat pull x 8

Performance Pattern Cycling Benefits

Don't do Performance Pattern Cycling if you Specific weakness that needs worked.

Work Capacity – Hypertrophy – Specific Lift

Performance Pattern Cycling - Workout

Structure of workout:

Performance Cycling

Back Squat - x 6

Hurdle hops x 6

Glute Ham x 6

Ext Rotation Band x 12

Reverse hyper x 6

1 arm Lat pull x 8

Structure of workout:

Assistants Cycling

Spring ankle 1

Neck 4 way

Grip Training

Spring ankle 2

Core Training

Performance Pattern Cycling Special Considerations

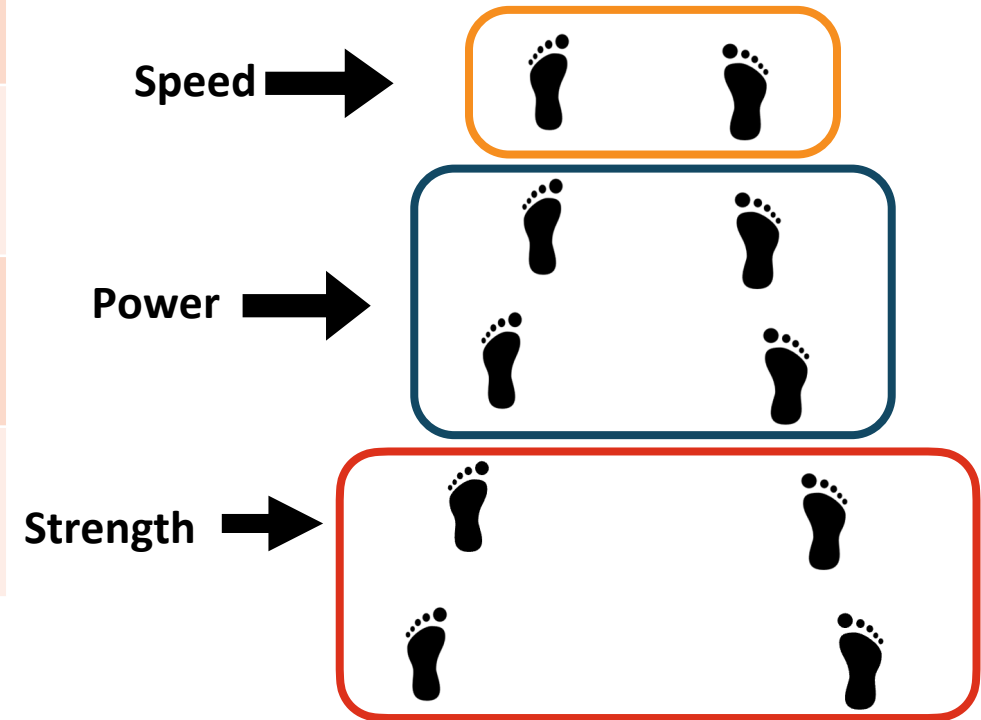
Where to Start Performance Pattern Cycle - Quad- QL - Hamstring

- Rest per exercise is more optimal
- You will see more positive effects and transfer to athletic movements
- Less fatigue is created from other exercises to transfer benefits to athlete
- Works better for flow of the room weight room

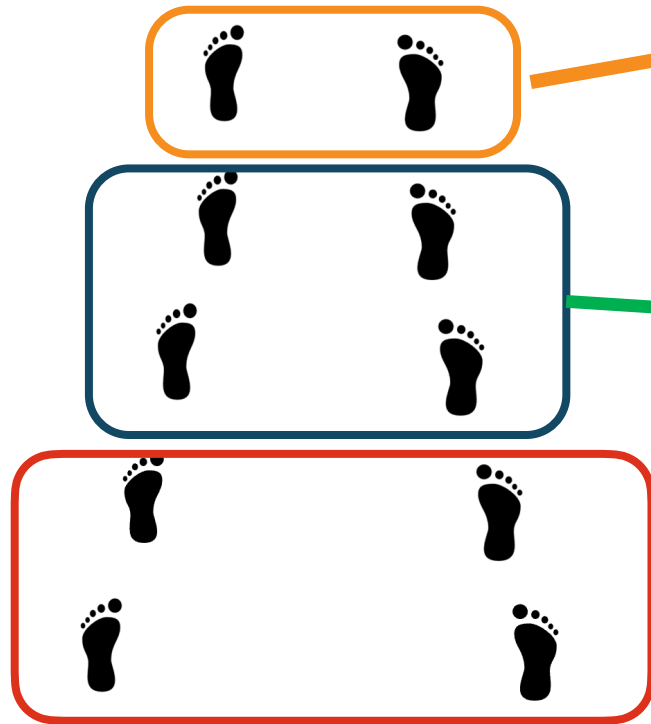
Angular Shank Loading Model

Foot Placement Relative to Sprint Phase

Sprint:	Training Zone:	Stance During Sprint:
10-20 Meters	Speed	Narrow
5-15 Meters	Power	In-Line
0-5 Meters	Strength	Wide



Training Zones:

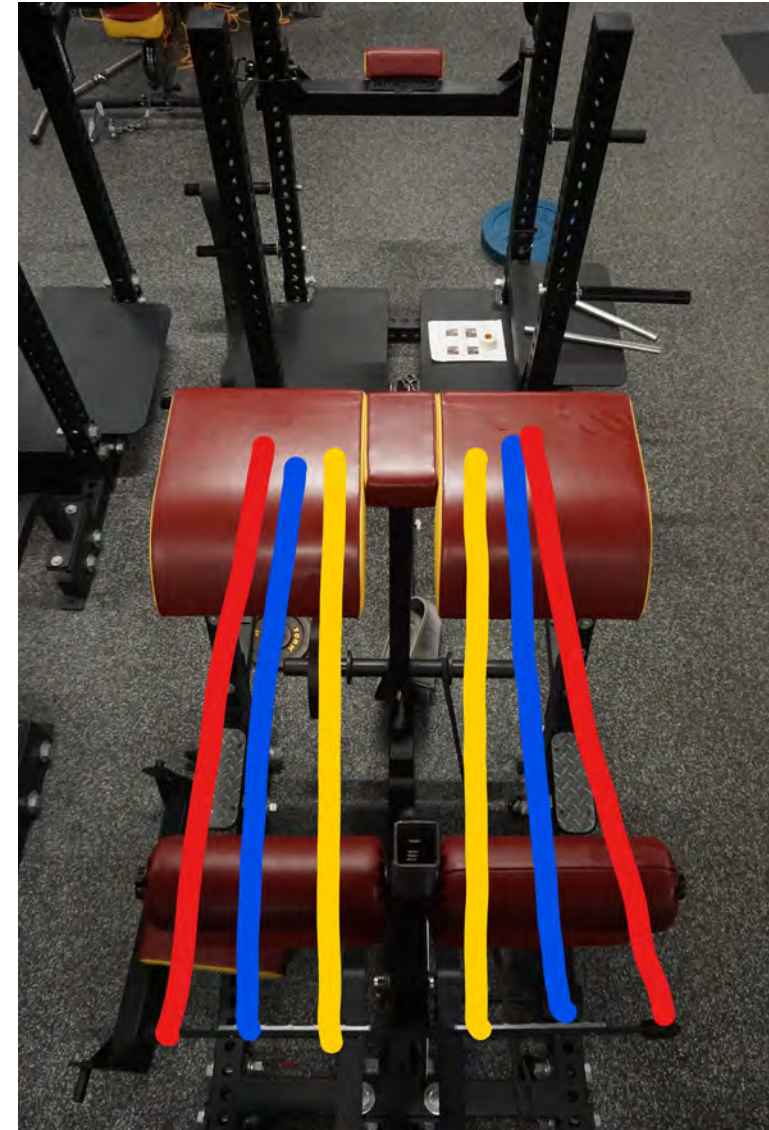


- **Speed Loading Zone**
 - Percentage = 55-25% of 1RM
 - Top speed during sprint
- **Power Loading Zone**
 - Percentage = 80-55% of 1RM
 - Acceleration phase during sprint
- **Strength Loading Zone**
 - Percentage = 80%+ of 1RM
 - Start phase during sprint

Foot Positions Throughout Sprint

Dynamic Correspondence

- Sprinting stance
 - Start -> Acceleration -> Top Speed
 - Wide -> In-line -> Narrow
 - 0-5, 5-10, 10-20

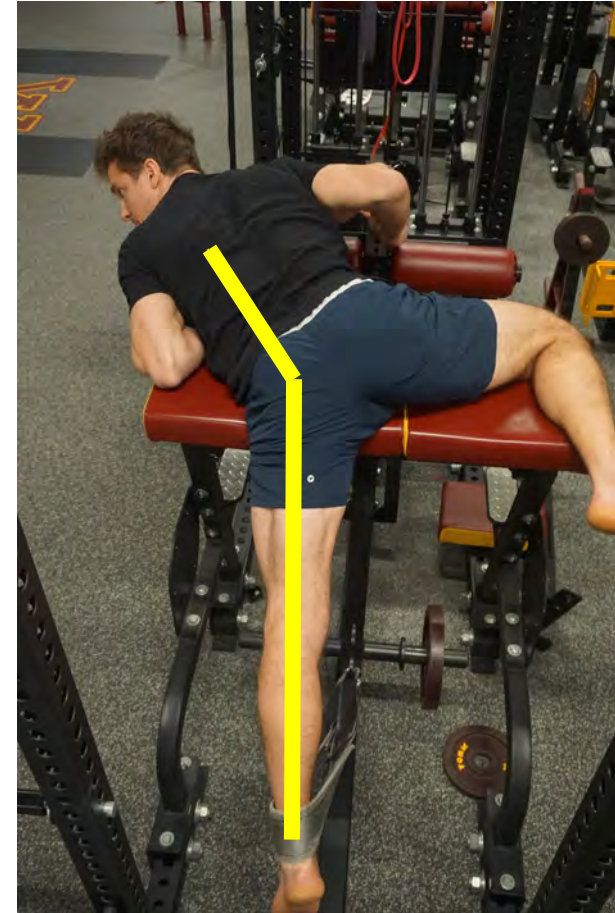


Strength: Glute Ham & Reverse Hyper

Wide Stance

Loading is
Above 80% to
120%

Triphasic
Loading Zones
10 to 13



Power: Glute Ham & Reverse Hyper

Neutral Stance

Loading is Between
80% - 55%

Triphasic Loading
Zones
9 to 5

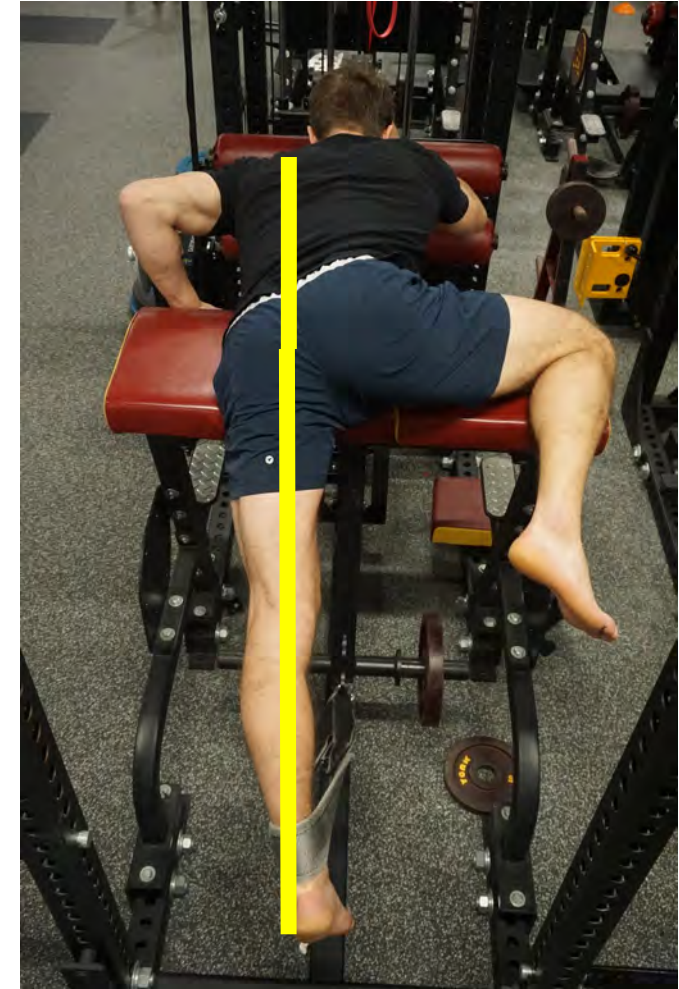
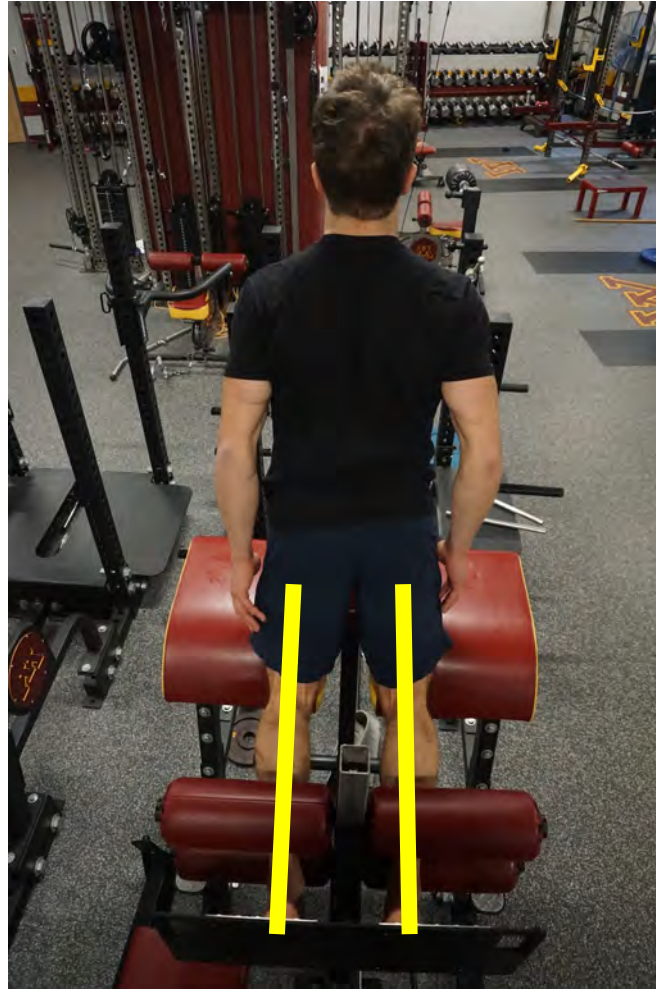


Speed: Glute Ham & Reverse Hyper

Narrow Stance

**Loading is Between
50% to 25%**

**Triphasic Loading
Zones
9 – 5**



Other Exercises: Romanian Deadlifts



Strength Zones
10 – 13
80% to 120% Load



Power Zones
5 – 9
55% to 80% Load



Speed Zones
1 – 4
25% to 50% Load

Other Exercises: Hip Thrust



Strength Zones

10 – 13

80% to 120% Load



Power Zones

5 – 9

55% to 80% Load



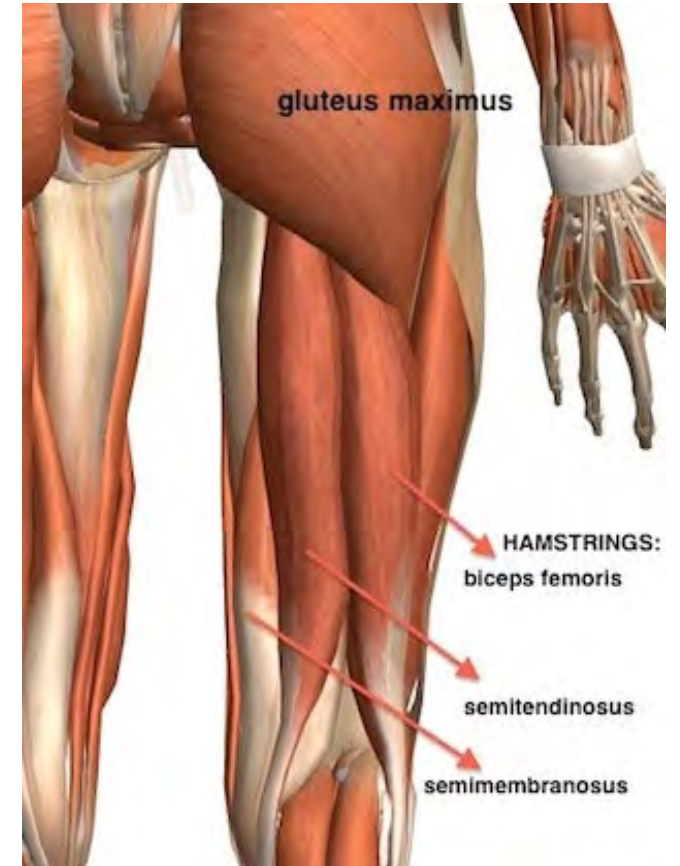
Speed Zones

1 – 4

25% to 50% Load

Individualize Posterior Chain Training

- Modulate foot angle depending on hamstring test results



Davies, Rohan. "Understanding Hamstring Strains." *Northside Sports Medicine*, Northside Sports Medicine, 11 May 2019, <https://www.northsidesportsmed.com.au/articles/2019/5/10/understanding-hamstring-strains>.

Foot Angle Relative to Hamstring Test

- Muscle Test the Hamstring to address weakness then use
- the foot position to strengthen them accordingly.

Video of hamstring test:

Internal

If the medial hamstring tests weak:

Rotate foot 15 Degree inwards

(internal) during posterior chain

exercises

Ex: Glute ham, reverse hyper, RDL,
Leg Curl



External

If the lateral hamstring

tests weak:

Rotate foot 15 Degree

outwards (external) during

posterior chain exercises



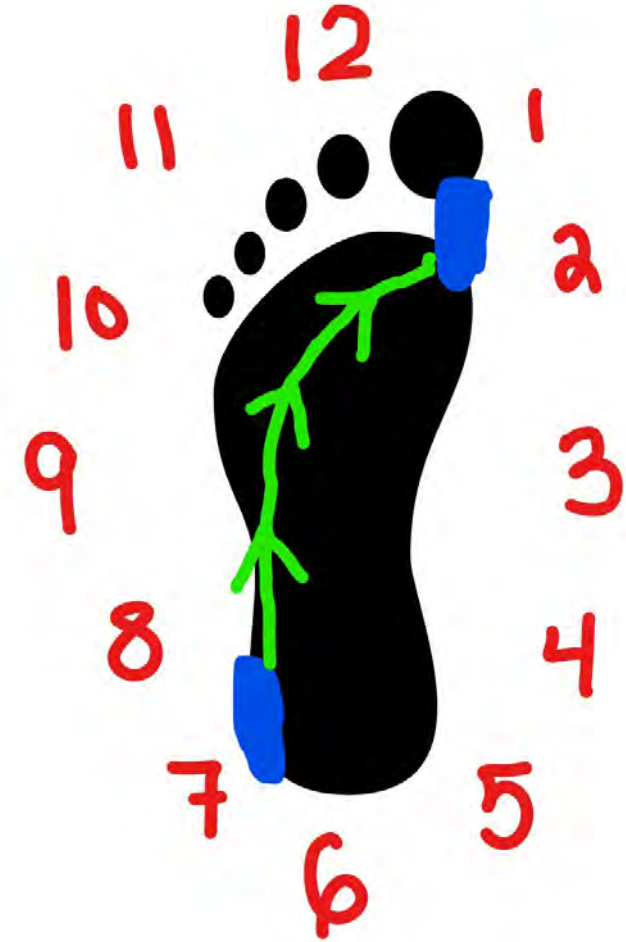
Neutral

If neither or both test weak,
maintain neutral position



Integrated Foot Shift

- Mimic running and walking pattern
- Use to address all parts of the hamstring
- Transfer of pressure through the foot in acceleration

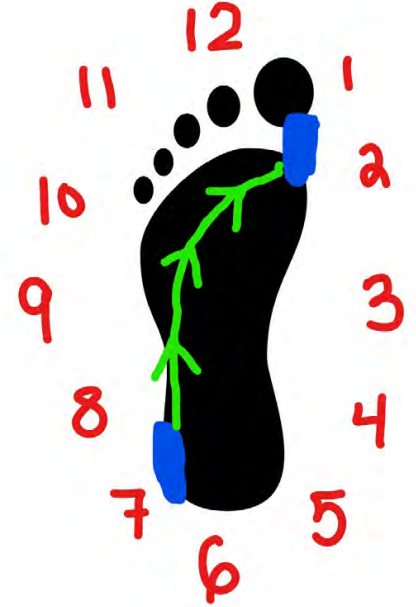


Implementing the Integrated Foot Shift

Foot Clock Continued

Integrated Foot Shift should and can me short

- Power Phases Example with athlete



Functional Transfer Complex

This is the first method I have found by not making mistake.

Just a combination of exercises to get faster results.

Key exercises go back to Dean Brittenham NFL Speed coach

Others Phil Frye - UCLA in 90's 13 National Championships

Glute Ham - Reverse Hyper - Improve 6 to 8 weeks - Now 1- 2 weeks

Functional Transfer Complex Pairing Exercises



Reverse Hyper Action



Straight Leg Prime Time

Functional Transfer Complex Pairing Exercises



Glute Ham Hyper
RDL - Leg Curl - Hip Hinge



Bent Leg Prime Time

Performance Pattern Cycling w/ Functional Transfer Complex

- Structure of workout

Performance Cycling

Back Squat - x 6

Hurdle hops x 6

Glute Ham x 6

FTC Exercise Straight Leg Run

Ext Rotation Band x 12

Reverse hyper x 6

FTC Exercise Bent Leg Run

1 arm Lat pull x 8

- Structure of workout

Assistants Cycling

Spring ankle 1

Neck 4 way

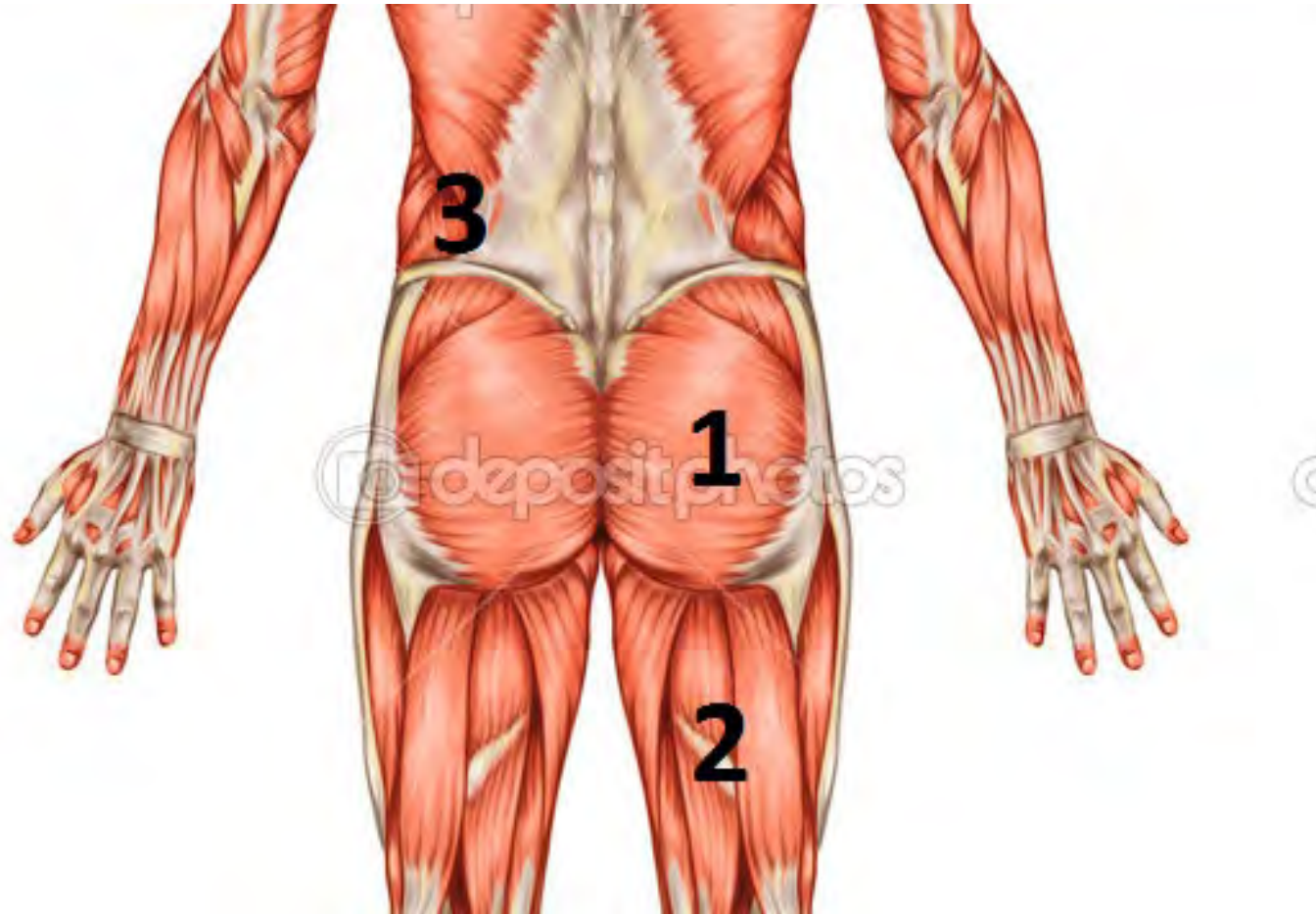
Grip Training

[Spring ankle 2](#)

Core Training

Correct Hip Extension Firing Pattern

Global Neurological Sequencing (GNS)



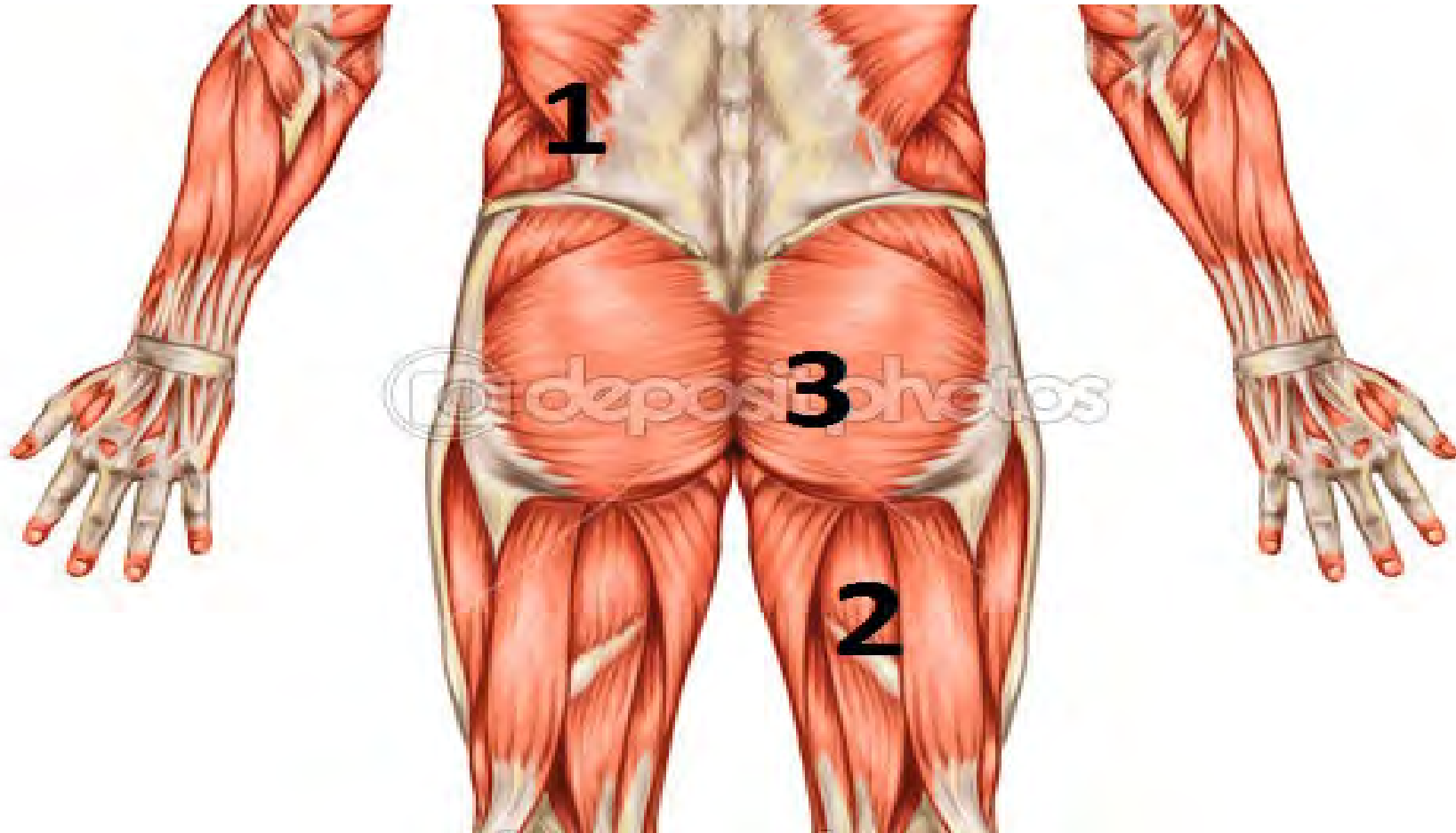
Wrong Hip Extension Firing Pattern

Primary Neurological Compensation Pattern(PNCP)



Wrong Hip Extension Firing Pattern

Primary Neurological Compensation Pattern(PNCP)



What I Saw

Natural Pattern return after after real backs appeared after covid Break

Running Smoother

Search “A New Glute Pattern Field Test Method”

The Foot and Hamstring Work Together

Address the foot exercise on the internet

Not enough Strengthening

Specific Stress

The Thoracic Tuck Method