



CORE PRACTICAL FOR SWIMMERS

SCOTT ROLPH
PHYSIOTHERAPIST
WILLIAMSTOWN, MT WAVERLY



physiohealth



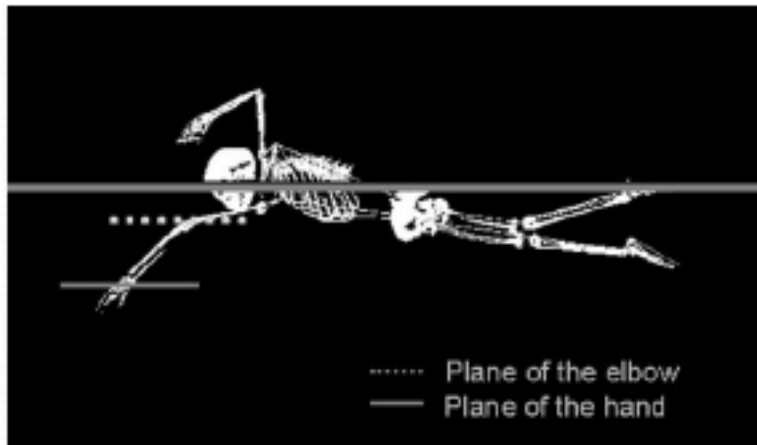
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WHAT IS THE CORE

- A group of muscles that act around the trunk and pelvic girdle
- Can act as:
 - A PRIME MOVER (FLEX AND EXTEND THE SPINE)
 - ISOMETRIC AND DYNAMIC STABILISER (CONTROL DURING MOVEMENT)
 - TRANSFER FORCE FROM ONE LIMB TO ANOTHER



Latissimus dorsi

Gluteus maximus



Oblique abdominals

Hip adductors



Hip abductors

Hip adductors

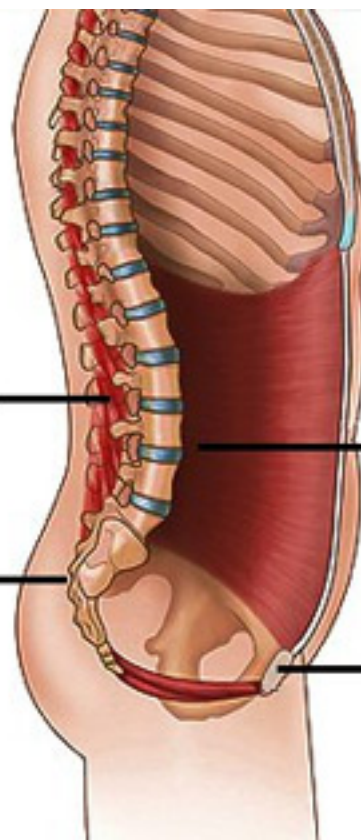


Multifidus

Sacrum

Transversus abdominis

Pubic symphysis



WHYS IT IMPORTANT

- Swimming

- HORIZONTAL**

- NOT PLANTED ON THE GROUND- BASE OF SUPPORT IS THE CORE**

- TRANSFER OF FORCE: ARMS - LEGS**

AIMS TO:

- Prevent Injury

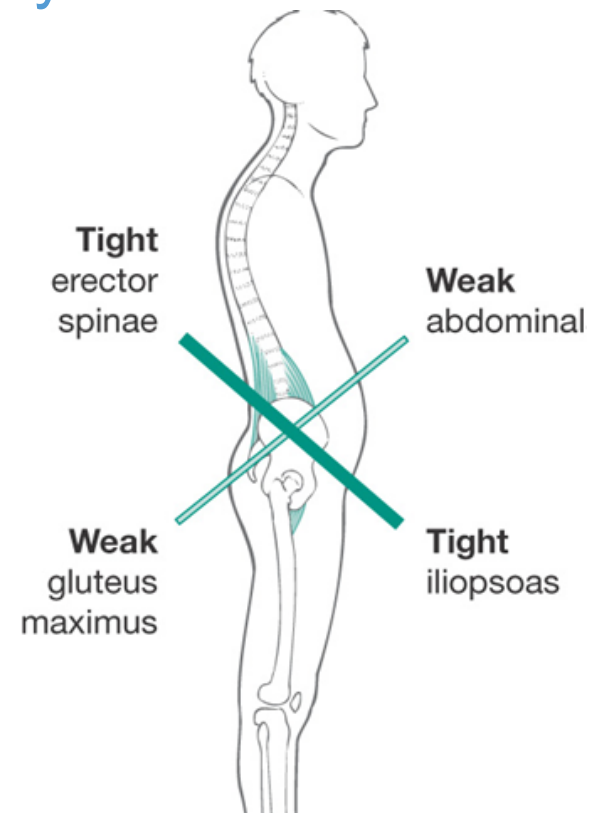
- Improved performance

- **Improved body position/ stronger base**
 - **Improved stroke efficiency**
 - **Decreased fatigue**
 - **Decreased injury time**



BUTTERFLY

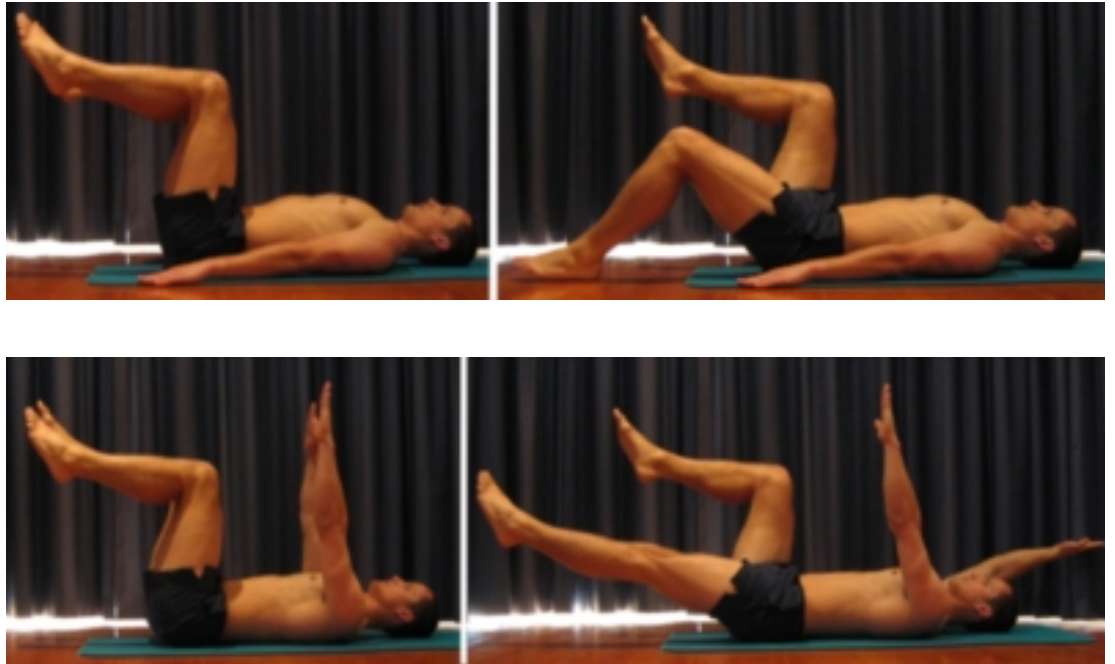
- 16yo swimmer presents with stress injury in lower back
- Excessive lordosis in lumbar spine
- Flexible but poor core control



EXERCISE EXAMPLES TO PREVENT EXCESSIVE LORDOSIS

- **Always assess thoracic spine and hip flexors***
- **Encourage posterior pelvic tilt**

- Plank
- Plank variations
- Bug legs
- Dead bugs
- Toe taps
- V sits



FREESTYLE

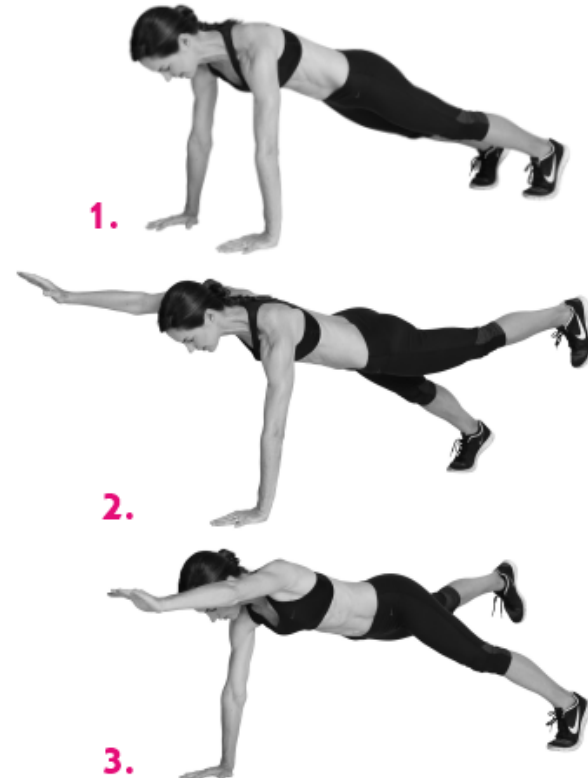
GOAL:

- To improve connection across the body- transfer of force
- Prevent excessive lordosis/ dipping in spine



EXERCISE EXAMPLES TO IMPROVE X CONNECTION

- SAPP (Single Arm Push up Position)
- SAPP with opposite leg lift
- SAPP with band catch
- Planks with rotation
- Rotation on swiss ball



BACKSTROKE

PROBLEM: Last 15m of race hips drop causing drag

ASSESSMENT: Hip flexor tightness, lack of glut strength

GOAL: hip elevation



EXERCISE EXAMPLES TO IMPROVE HIP ELEVATION

- Bridges
- Bridges with resistance band/ barbell
- Bridges on single leg
- Bridges on single leg with resistance band/ barbell
- Swiss ball bridges in streamline
- Swiss ball bridges in streamline with leg lifts



BREASTSTROKE

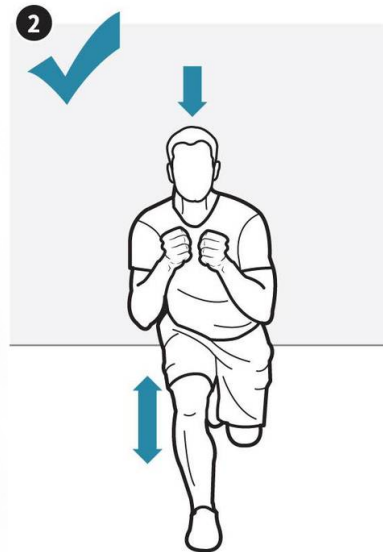
- 15yo swimmer presents with medial knee pain
- Found to have adequate flexibility in hips but poor hip control

GOAL: build hip control



EXERCISE EXAMPLES TO IMPROVE HIP CONTROL

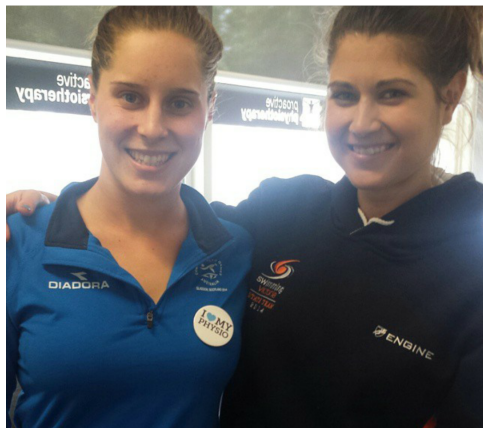
- Clams
- Bridge variations
- Single leg squats
- Resistance band work with squats and rotations





bindyhocking

28w



QUESTIONS



scott.rolph@physiohealth.com.au

