

# **TPI/FMS Functional Golf Training Information**

## **Course 1 - Torso and Legs**

**Jordan McWhirter**

Bachelor of Kinesiology (BKin)

# Why Golf-Specific Functional Training?

## Standard Strength Training

- “If muscle, work out”
  - Hard to achieve balance
  - Little focus on form, posture, correct movements
  - Trendy/fads
- 

- Strength
- Increased lean body mass
- Decreased body fat mass
- Additional health benefits

## Golf-Specific Functional Training

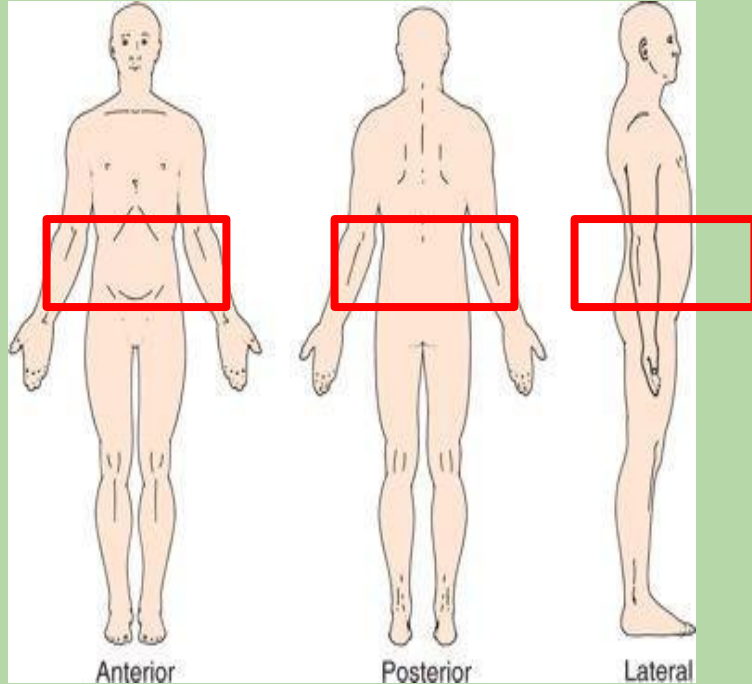
- Overall body benefits (muscular, cardiovascular, etc.)
  - Focus, drive, positive goals
  - Test, re-test
  - Decrease imbalances
- 

- Less focus on muscle gain
- Subtle gains
- No Mr. Olympia body

# **Torso and Legs**

How They Apply To Golf Training

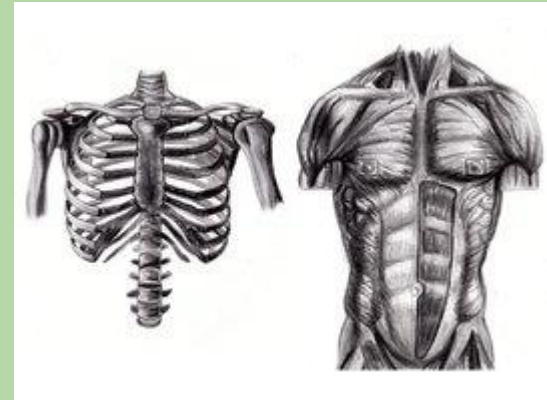
# What Is The Torso?



The area between the top of the hips and the bottom of the rib cage.

Includes the stomach/abdominals as well as the lower back.

**NOT JUST ABS!**



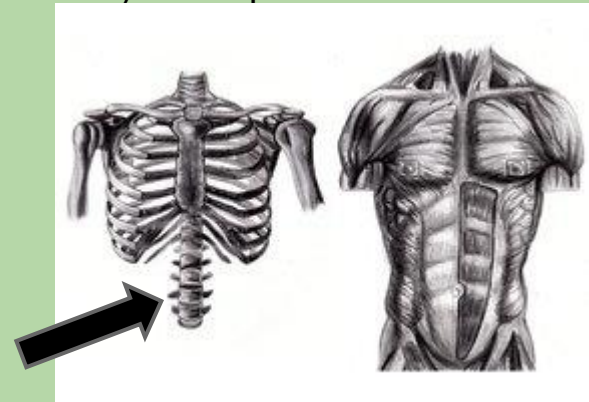
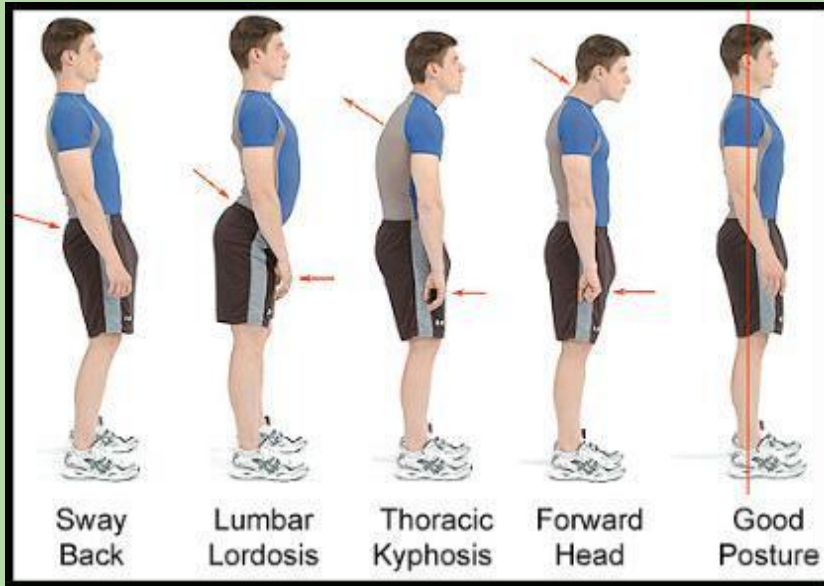
# Function of The Torso - 1

Connection between lower and upper body.

Aids in posture

No movement from spine alone.

No stability from spine alone.



# Function of The Torso - 2

Transfers energy from the ground (force generation) upward.



Ground/contact point



Legs



Torso



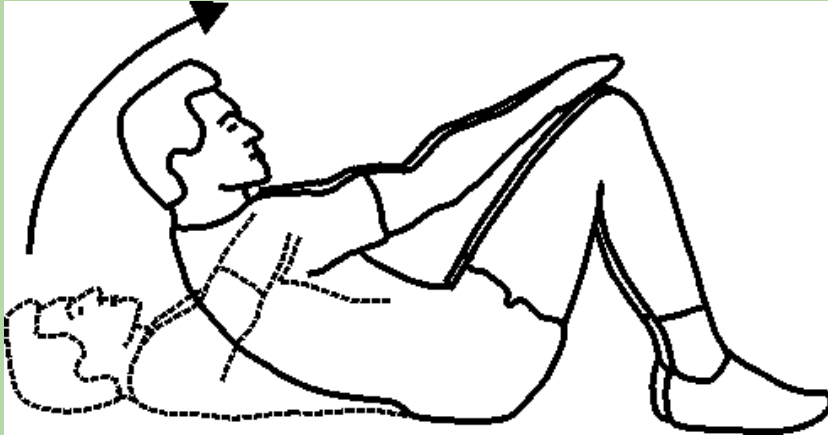
Upper Limbs

# Stability Between the Hips and Ribs

- Not responsible for rotation
- Keeping tight for anti-rotation or stability
- Shirt creases/abdominal stretch
- Stretch = Potential Energy
- Downswing transfers from potential energy to kinetic energy
- Big backswing = SNAP!
- Other similar sporting actions?

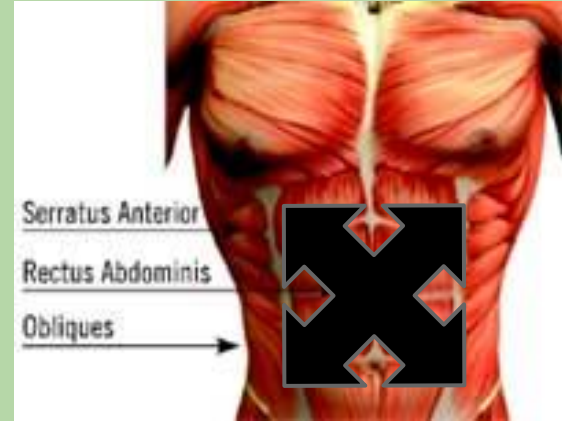


# To Crunch or Not To Crunch?



## Abdominal contraction

- Posture?
- Benefit?
- Hardcore Abs!



## Cross-Stability

- Posture!
- Benefit!
- Hardcore Abs!



# Screens for Torso

- FMS Rotary Stability
- FMS Trunk Stability Push Up
- TPI Golf Posture Shoulder Rotation
- TPI Golf Posture Hip Rotation
- TPI Golf Posture Hip Tilt

# FMS Rotary Stability

- Begin on all 4's
  - Raise right hand and right leg off of the ground and extend
  - Tuck elbow-to-knee
  - Extend
  - Replace
  - Repeat with left
- Begin on all 4's
  - Raise right hand and left leg off of the ground and extend
  - Tuck elbow-to-knee under abdomen
  - Extend
  - Replace
  - Repeat with opposites

# FMS Trunk Stability Push Up (Men)

- Begin on stomach
  - Thumbs at crown of forehead height and shoulder width
  - Tuck toes under, raise elbows and knees off of ground
  - Press body up in one straight line and motion
- Begin on stomach
  - Thumbs at chin height and shoulder width
  - Tuck toes under, raise elbows and knees off of ground
  - Press body up in one straight line and motion

# FMS Trunk Stability Push Up (Women)

- Begin on stomach
- Thumbs at chin height and shoulder width
- Tuck toes under, raise elbows and knees off of ground
- Press body up in one straight line and motion

- Begin on stomach
- Thumbs at collar bone height and shoulder width
- Tuck toes under, raise elbows and knees off of ground
- Press body up in one straight line and motion

# TPI Golf Posture Shoulder Rotation

- Assume normal golf posture
- Cross hands in front of chest
- Rotate shoulders (chest) left and right without moving the hips
  
- Tester holds hips still if they begin to move or if the shoulders sway side-to-side
- Improvement?

# TPI Golf Posture Hip Rotation

- Assume normal golf posture
  - Cross hands in front of chest
  - Rotate hips left and right without moving the shoulders
- 
- Tester holds shoulders still if they begin to move or if the hips sway side-to-side
  - Improvement?

# TPI Golf Posture Hip Tilt

- Assume normal golf posture
- Cross hands in front of chest
- Tilt hips forward and back without moving chest
  
- Limited forward tilt?
- Limited back tilt?
- Movement? Normal or shaky?

# **The Legs**

Much More Complicated Than You Thought!



# The Base For All of It



- Stabilization
- Balance
- Rotation
- Power generation
- Endurance

# Stabilization



- Arches (bony and tissue)
  - Flat
  - High
  - Alignment
  - Orthotics
- Strength
  - Basis for any muscular conditioning
    - Endurance
    - Power
    - Tone
    - Sport Conditioning
- Associated with “Core” as well
- Able to hold still to create movement

# Balance

- Left - to - Right
- Front to - Back
- Rotational
- NOT Stabilization
- Able to not waver more than the desire when acted upon by a force



# Rotation

- Ankles
  - Hips
  - Knees?
  - Feet?
- 
- How much is enough rotation?
  - What happens when the hips don't rotate?
- 
- TPI Lower Quarter Rotation Test

# Power Generation

- Power = Rate of doing work
  - Think: Swing Speed/Clubhead Speed
- All aspects necessary up to this point
- What is the best way to increase swing/ball speed?
- Powerful backswing?
- Powerful downswing?

# Endurance

Can you walk 18 holes for four days in a row?

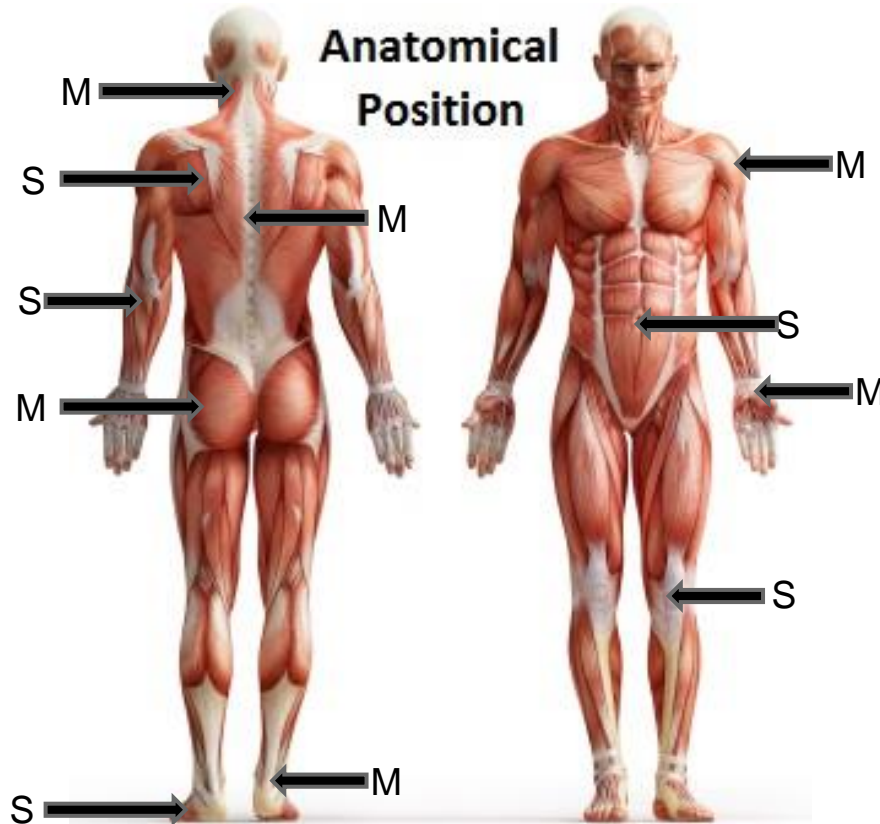
How many shots do you take in a round?

# Torso & Legs Combination

- Creating the X between hips and shoulders
- Transfer of energy
- Alignment chain...

# Alignment Chain

S=Stable  
M=Mobile



Begins at base

- Standing
- Handstand

Alternates joints that must be stable or mobile

Next joints function will “turn off” if the chain is broken

- Knee injuries
- Shoulder injuries

Golf swing “errors”

- Pros demand positions
- Can the body do it?
- Screens for testing
- Golf specific functional training!