



Injury Prevention + At-home Strength Program for Runners

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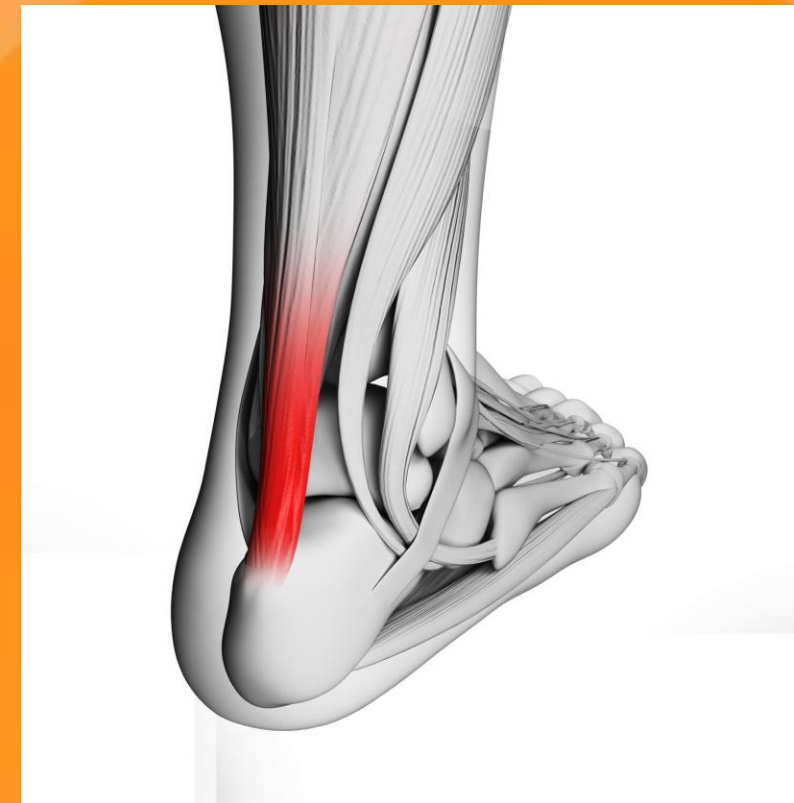
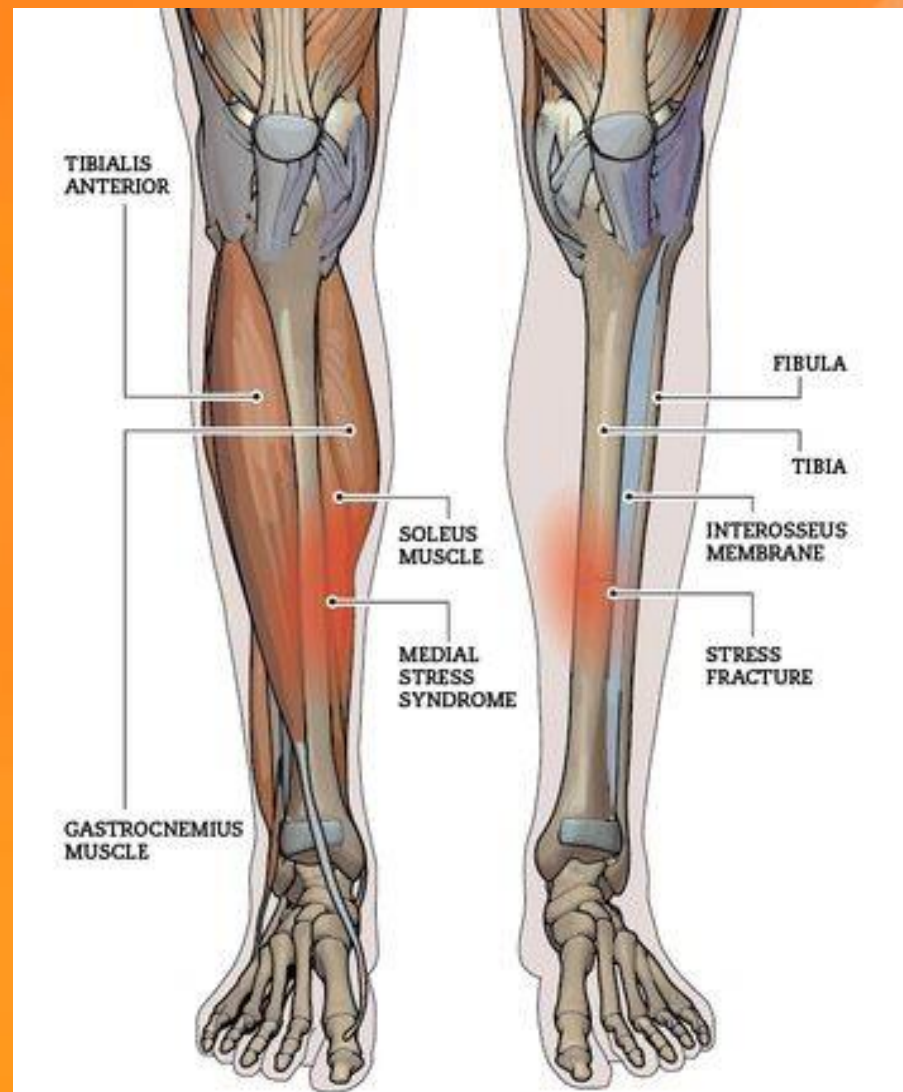
Today's Agenda

- ∞ Short presentation
 - ∞ Risk factors for running injuries
 - ∞ How we can protect from injury
 - ∞ Training principles
 - ∞ The glutes!
- ∞ Demo/workout

Running Injuries: Why?

- **Repetitive Overuse**
 - Excessive increase in volume
 - Excessive increase in intensity
- Inadequate recovery/nutrition
- Mobility, flexibility, strength, other deficits

Running Injuries



- ∞ Most common lower body injuries: medial tibial stress, Achilles tendinopathy, plantar fasciitis

Other Injuries

- Hip or sacral stress reactions/fractures, muscle strains, IT band syndrome, labral tears or hip impingement, patellofemoral pain



How can we protect from injury?

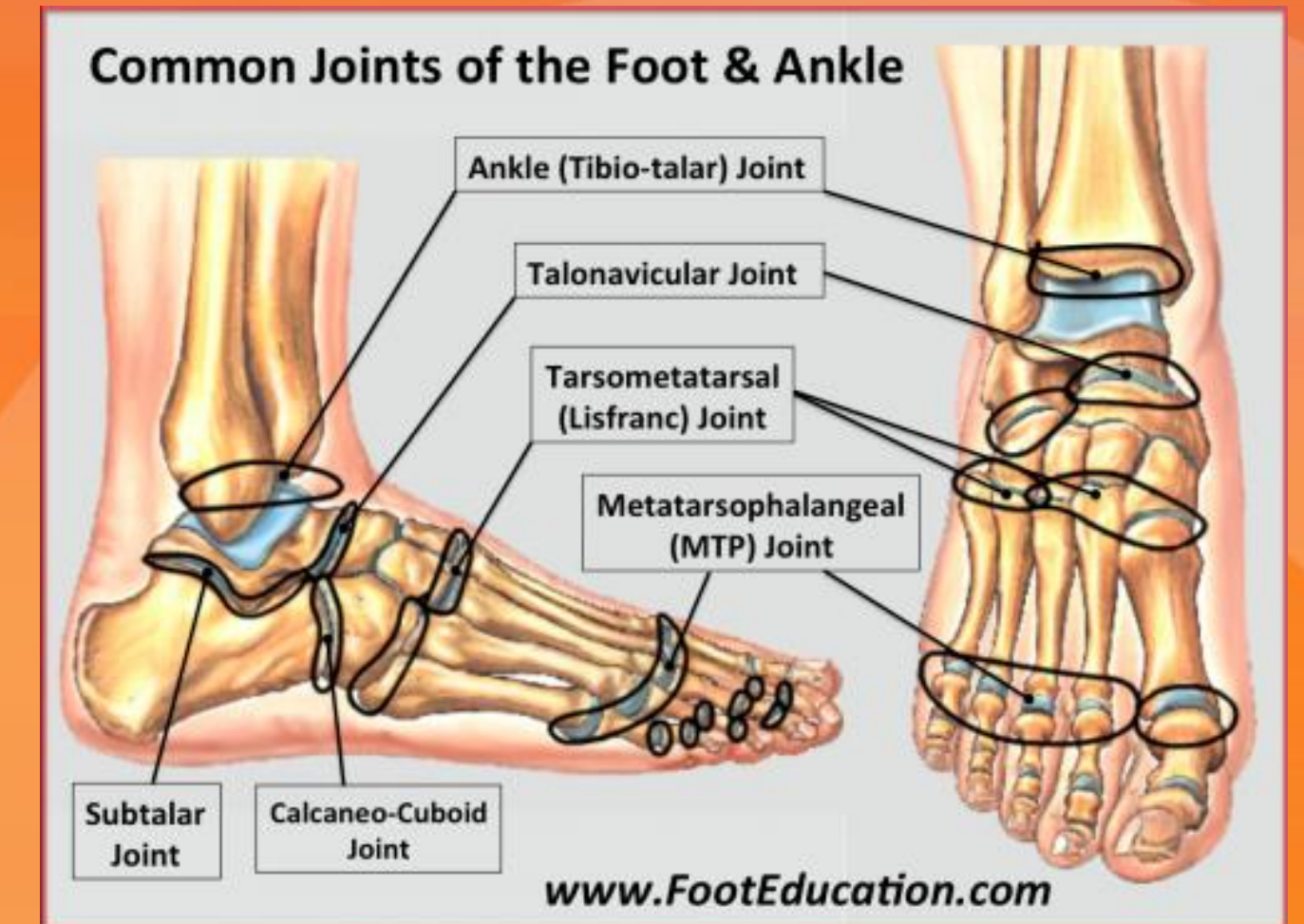
- ∞ **Smart training**
- ∞ **Mobility** (hips, spine, feet/ankles)
- ∞ **Stability:** Gluteus medius, core
- ∞ **Strength:** Gluteus maximus

Training Principles

- Mileage
 - 10-20% per week
 - Beginners: start with 1-4 miles, 2-4 days/week, run-walk, progress more slowly
- Intensity
 - Gradual

Mobility

- Foot and ankle joints
 - for pronation/supination
- Hip joint
 - for adequate hip flexion/extension, rotation
- Thoracic, lumbar spine
 - breathing, upper body mobility

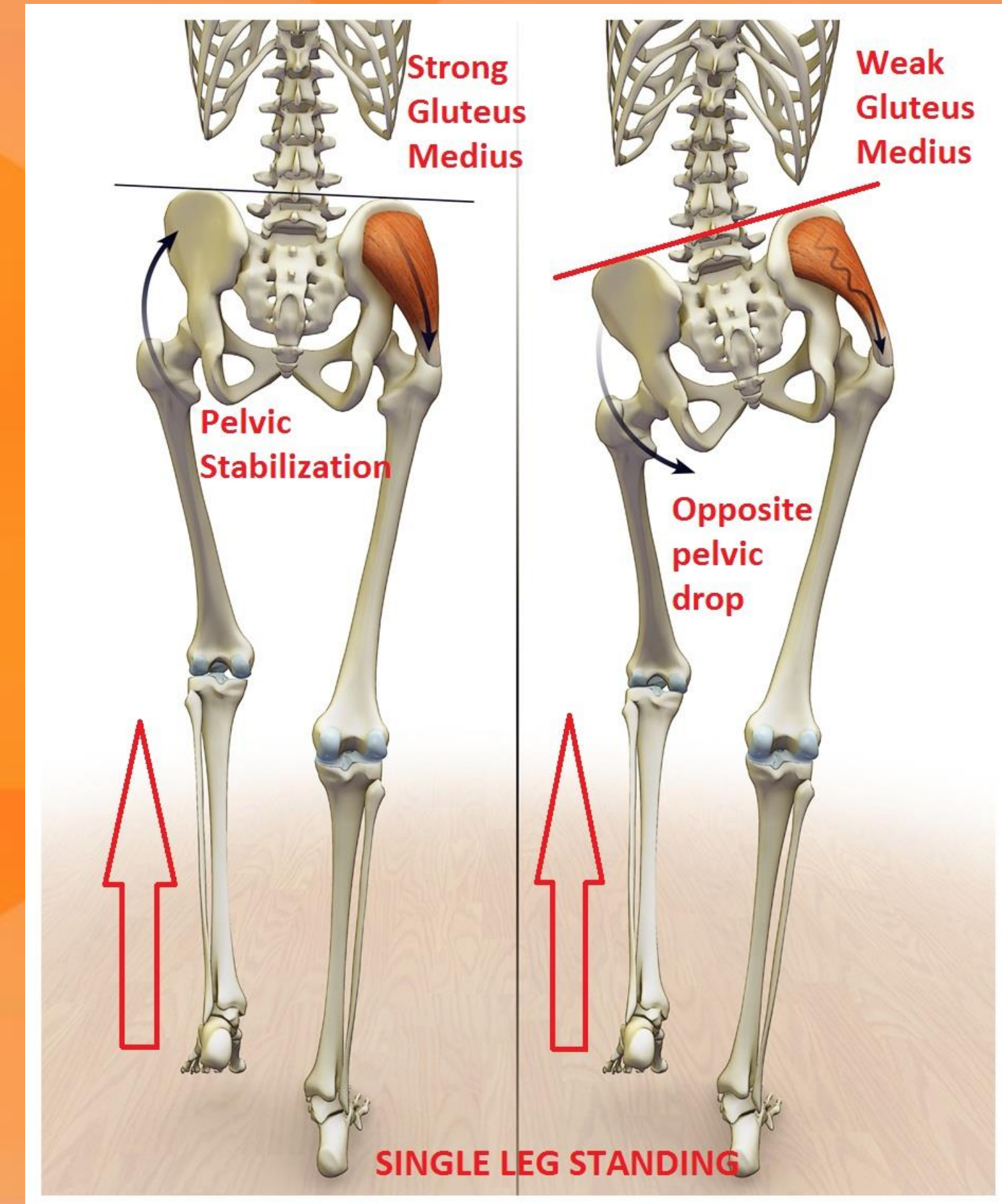


Stability and Strength

- **Core:** internal and external obliques, transverse abdominus, pelvic floor, rectus abdominus
- Stabilizes the trunk/pelvis to give a solid base for our arms and legs to move freely from
- Improves our efficiency of gait = less extra movement and strain on tissues

Stability and Strength

- ∞ **Gluteus medius:** stabilization
- ∞ Abducts and internally or externally rotates the hip
- ∞ Weakness= "hip drop" in *single-leg stance*
- ∞ Affects spine, pelvis, hip, knee, ankle, foot



Stability and Strength

- ∞ **Gluteus maximus:** propulsion
- ∞ Eccentrically slows down the leg from swing
- ∞ Extends the hip and entire leg to propel the body *forward*
- ∞ Glute max weakness can lead to compensation by other muscles (lumbar extensors)
- ∞ Various factors affect the function of the gluteal muscles: mobility, flexibility, motor control





More resources

- Some exercises are available on our YouTube page: React Physical Therapy
- Questions about this webinar, more detail, etc: email me! jdiamond@bereact.com
- Come in for a free injury screen/consultation! *Telehealth* option is currently available also.

The background is a solid orange color with a subtle gradient. Two large, overlapping circles are centered on the page. The circles are a lighter shade of orange than the background, creating a layered effect. The text "WORKOUT TIME!" is centered horizontally and vertically between the two circles.

WORKOUT TIME!



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