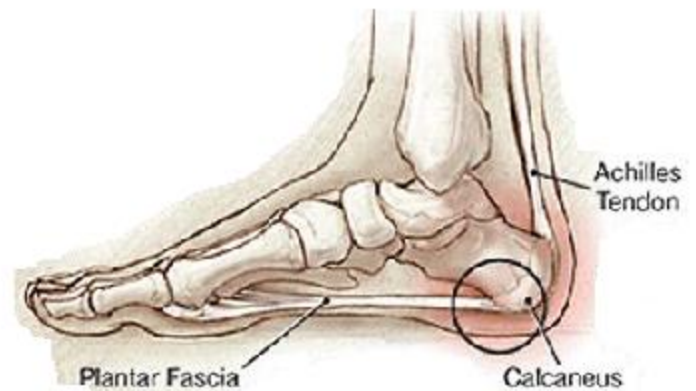


Heel Pain

Dr. Dennis M. Timko
Des Peres, MO
Union, MO

Heel Pain

- Plantar Fasciitis (PF)
- Heel Spur syndrome
 - Heel Spur not same as PF
- Ligament injury or Tendon or Muscle injury?



Anatomy of the Heel

Plantar Fascia

-Medial Band

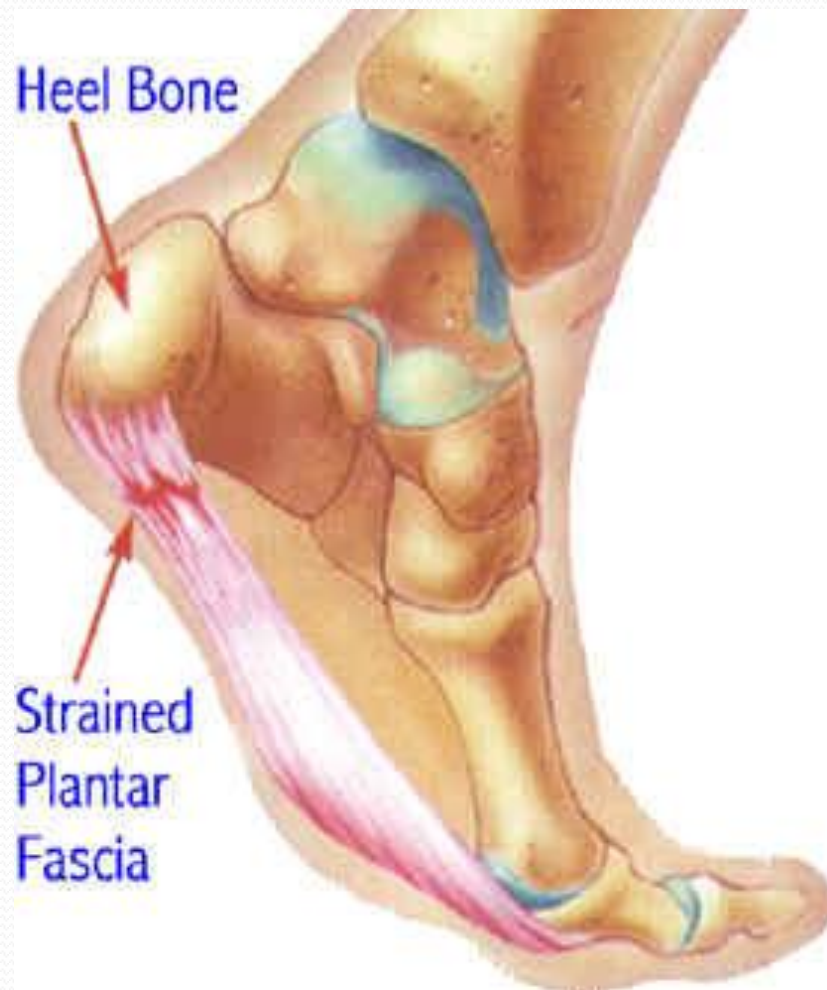
-Lateral Band

-Central Band

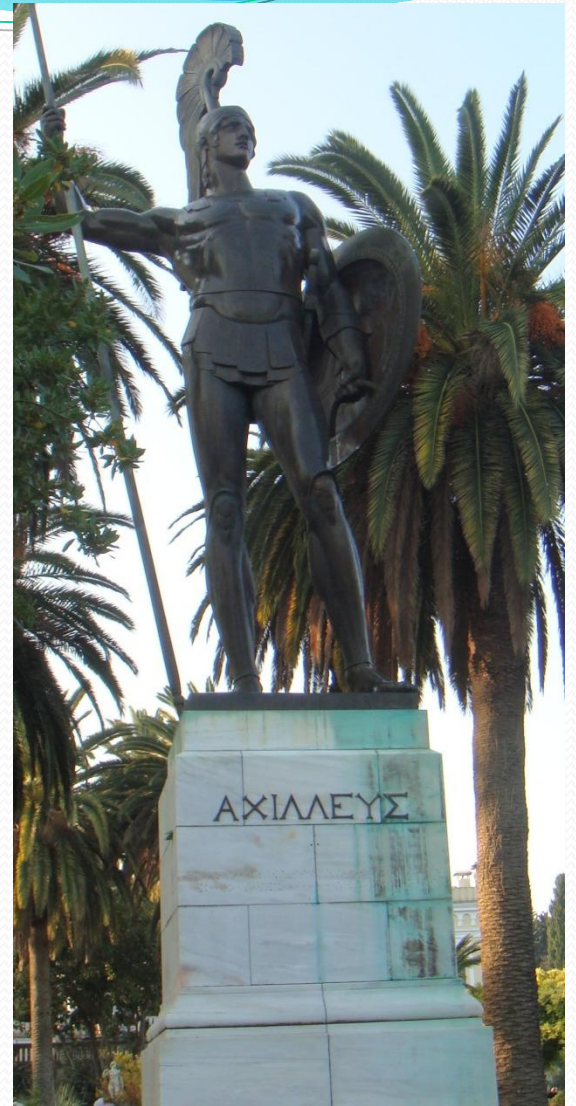
Calcaneous bone

Achilles tendon

Nerves



ἈΧΙΛΛΕΥΣ "Achilles"



Symptoms of Plantar Fasciitis

- Sharp or dull pain at first step from rest or sleep
- Gets better after walking on it
- Pain returns after prolonged standing or walking



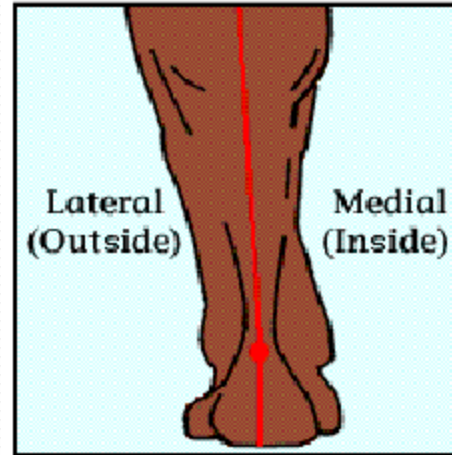
Causes of Heel Pain

- Injury
- Stress fracture
- Tight Achilles tendon
- Arthritic diseases
- Tarsal Tunnel (Nerve problem)
- Fat Pad Necrosis (losing cushion on heel)
- Poor biomechanics
 - Over Pronation (most common)



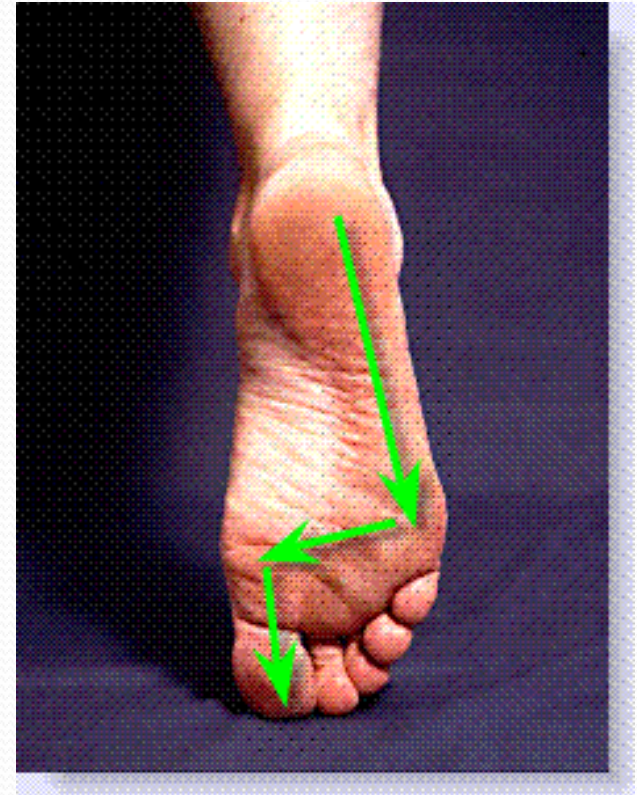
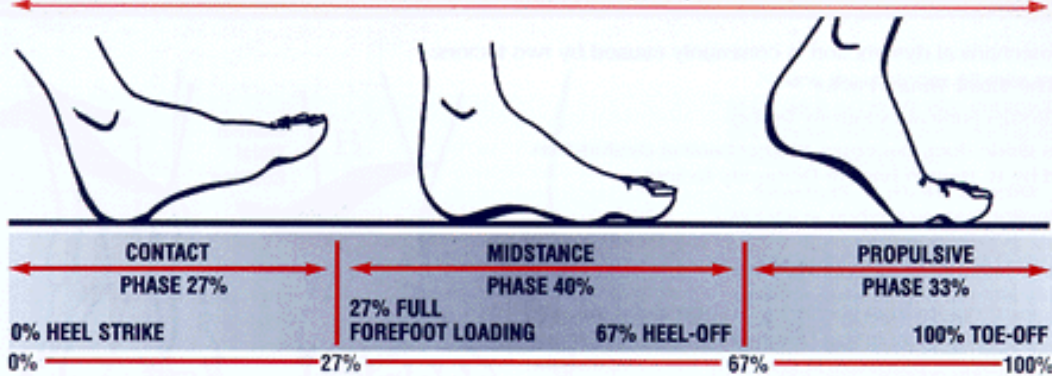
Pronation

- **Eversion**
 - (turning the sole outwards)
- **Abduction**
 - (pointing the toes out to the side)
- **Dorsiflexion**
 - (pointing the toes upwards) and

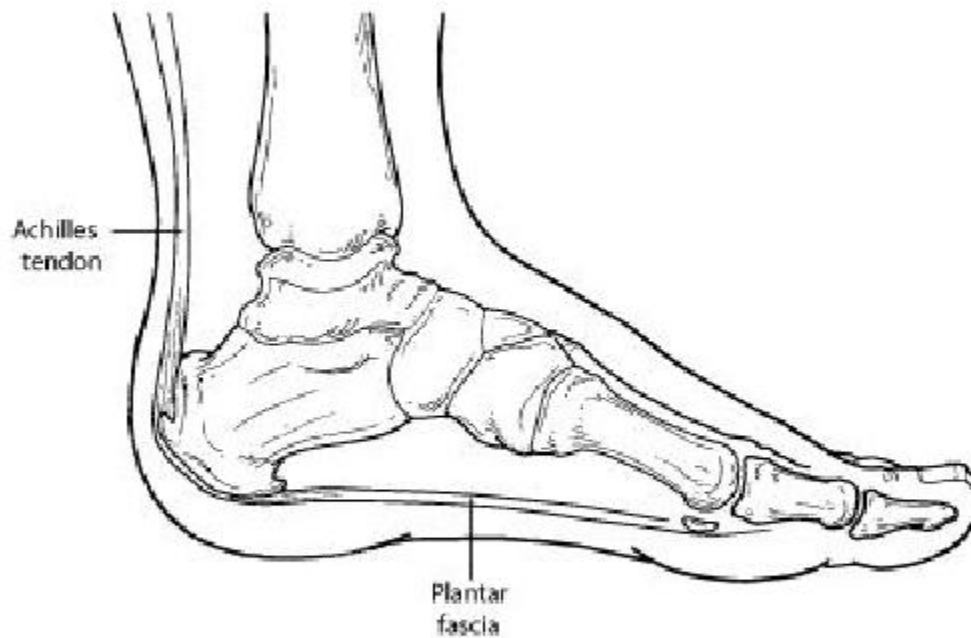


Gait Cycle

THE STANCE PHASE OF GAIT (100%)



Why did I get Heel Pain?



Tug
Of
War!



How do us doctors know?

- Symptoms usually tell us the story
- X-rays
- Diagnostic Ultrasound
- MRI
- Bone scan (for stress fracture)



Treatment of PF

- Proper Shoe gear
- Orthotics
 - Custom or OTC
- Steroid injection
- Physical Therapy
 - Ultrasound
 - Massage/stretching
 - Phonotophoresis/Iontophoresis
- Surgery



Extra-Corporeal Shockwave Therapy

Proper Shoes

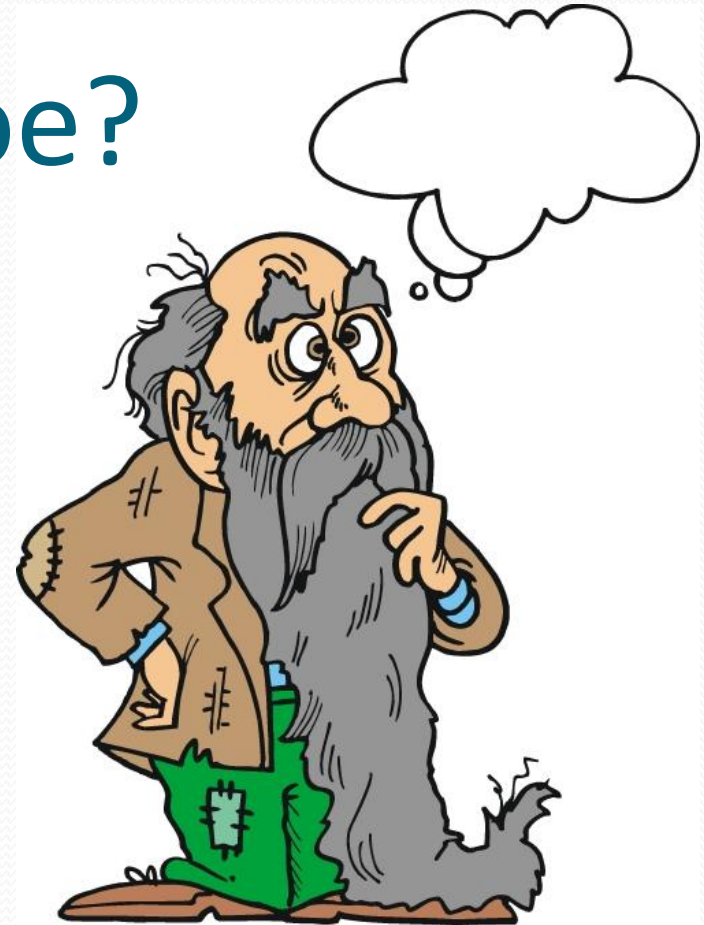


adidas



What is the best shoe?

1. Whatever feels good
2. Size: length & width
3. Foot type: high arch or flat foot
4. Fit foot mechanics
 1. Neutral (underpronator)
 2. Stability (mild pronator)
 3. Motion control (over pronator)



Motion control shoe

- For over pronators
- Will have an external heel counter or roll-bar
- Usually most expensive shoe on rack



Stability shoe

- The average runner and walker
- Most people need this type of shoe
- Dual Density midsole is key



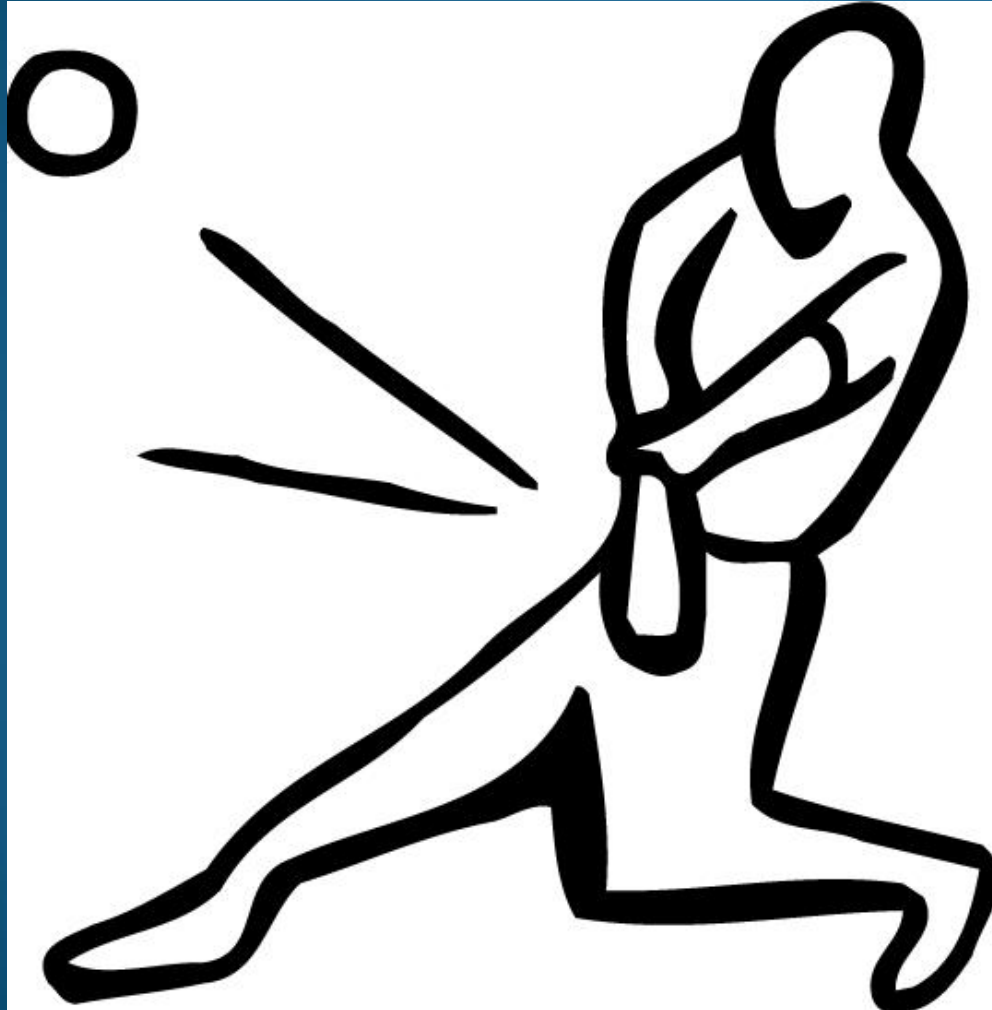
Neutral shoe

- For the supinator or underpronator
- Needs the extra cushion



How much should I pay?





Thank You

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