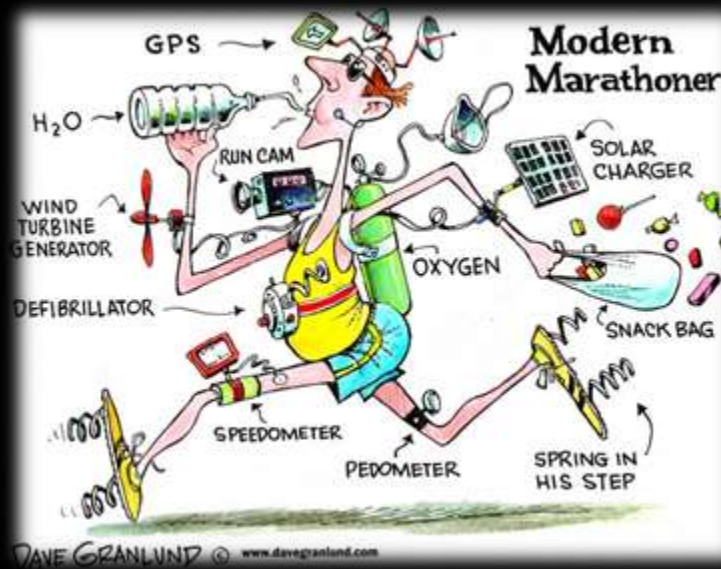


Top Running Injuries



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#1 Patellofemoral Pain

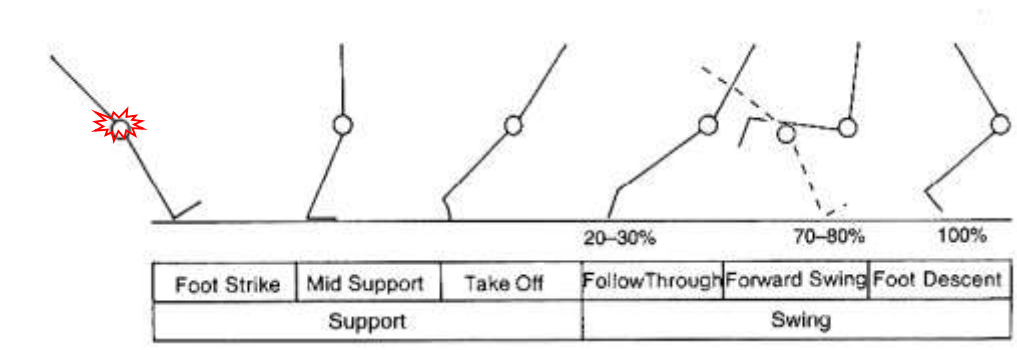
- The patella (knee cap) does not glide over the femur (thigh bone) in the proper pattern during flexion and extension of the knee
- Can be caused by:
 - Pronation of the foot
 - Weakness in hips and quads



Patellofemoral Pain

- Symptoms

- Pain behind patella at foot strike
- Pain while ascending or descending stairs
- Pain after prolonged sitting



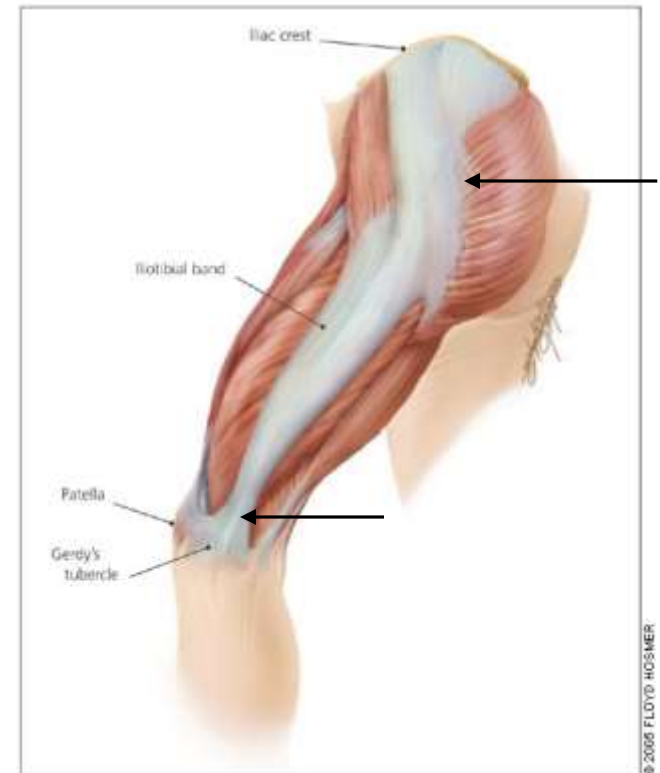
Patellofemoral Pain

- Treatment
 - Taping
 - Strengthening quads in midrange
 - Hip strengthening
 - Squats (NOT FULL)
 - Single leg squats (NOT FULL)
 - Monster Walks
 - Controlled landings



#2 IT Band Syndrome

- Irritation and inflammation of the IT band, usually over the lateral epicondyle (outside of the knee)
- Causes
 - Sudden increase in mileage
 - Tightness of IT band
 - Weakness at hip
 - Overpronation of the foot



IT Band Syndrome

- Symptoms
 - Pain on outside of the leg at the knee or hip
 - Pain increases with activity and decreases with rest
- Treatment
 - Reduce activity
 - Strengthen hip
 - Lamppost stretch
 - Seated stretch



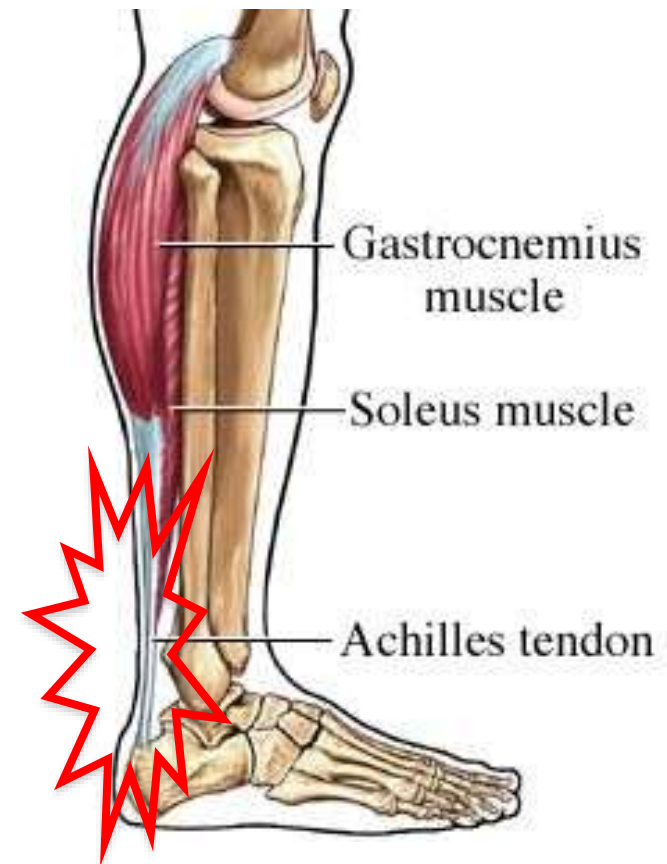
#3 Achilles Tendonopathy

- The Achilles tendon attaches the calf muscles to the foot
- These muscles allow for push off (propulsion) during running
- Tendonitis is an inflammation of the tendon and can be caused by overuse and rapid increases in training, as well as weakness in the calf muscles



Achilles Tendonopathy

- Symptoms
 - Pain in lower 1/3 of posterior calf or on the heel
 - Pain while walking, running and jumping
 - Pain after periods of prolonged rest



Achilles Tendonopathy

- Treatment
 - Stretch hamstrings (WHY?)
 - Stretch calf muscles
 - Strengthen calf and hamstrings
 - May use heel lift during initial flare up



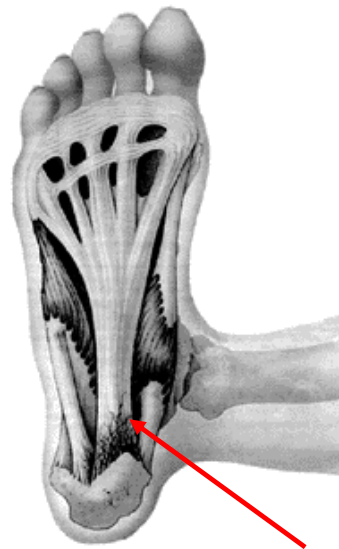
Gastroc



Soleus

#4 Plantar Fasciitis

- Plantar Fasciitis is an inflammation of the plantar fascia, a connective tissue that supports the arch of the foot



Plantar Fasciitis

- Causes
 - Tight achilles
 - Leg length discrepancy
 - Poor footwear on hard floors
 - Think about your feet when you are NOT running
 - Pes Planus (flat feet)
 - Stretch plantar fascia at end range
 - Pes Cavus (high arched feet)
 - Tight and can't stretch
 - Heel spur?



Plantar Fasciitis

- Symptoms
 - Pain in the morning
 - Pain after inactivity
 - Pain is initially reduced with activity
 - Pain usually lasts 8-10 months regardless of treatment

Plantar Fasciitis

- Treatment
 - Rest
 - Use a heel lift ONLY in acute stage then wean off
 - Stretching IF NEEDED
 - Plantar fascia
 - Achilles
 - Heat
 - Deep friction massage
 - Ice massage
 - Taping
 - Foot orthoses
 - Shoes
 - Balance training



#5 Posterior Tibialis Tendonopathy

- Posterior Tibialis is a muscle in the lower leg that helps to stabilize the inside of the ankle
- The tendon of the posterior tibialis runs under some of the ligaments in the ankle and can get irritated with repetitive motions and poor mechanics



Posterior Tibialis Tendonopathy

- It is commonly caused by excessive pronation
- Symptoms
 - Pain behind medial malleolus (inside of ankle)



Pronation



Neutral



Posterior Tibialis Tendonopathy

- Treatment
 - Rest and ice (initially)
 - Strengthen posterior tibialis muscle
 - Single leg standing
 - Strengthen hip abductors and external rotators
 - Orthotics



Final Thoughts

- Strong core and hips
- Cross Train
- Nutrition
- Large majority of injuries are due to improper training
 - Too much
 - Too quick
 - Too fast

THANK YOU!



I plan to be running as long as I
can and have no plans to stop.

-Frank Shorter

QUESTIONS?

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