

# INJURY PREVENTION CONCEPTS

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# My specialty = YOU!



- ✓ Competitive athlete for 20 years
- ✓ Coach for > a decade
- ✓ Physical therapist in a sports performance facility for > 6 years
- ✓ Orthopedic specialist
- ✓ Continue to practice what I preach through weight lifting, yoga, dance, and acrobatics



**SST Rehabilitation**

# Why are these injuries occurring?



- Overtraining
  - Volume
  - Intensity
  - Duration of practice
- Poor hydration and nutrition
- Poor warm up
- Lack of optimal cool down/recovery

# Why are these injuries occurring?

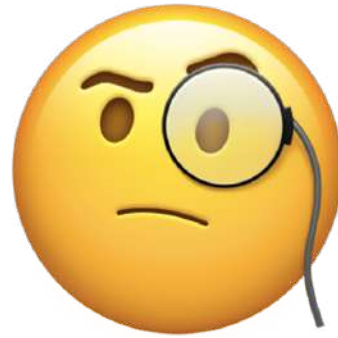


- Improper strength and conditioning
  - Form
  - Prescription
- Ignoring pain
- Early specialization in sport
- Same sport all year
- Ignoring fatigue
- Poor skill technique

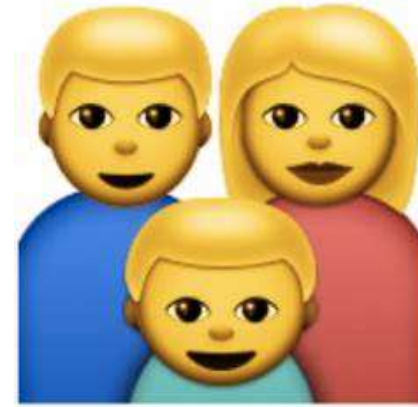
# The injured athlete conundrum



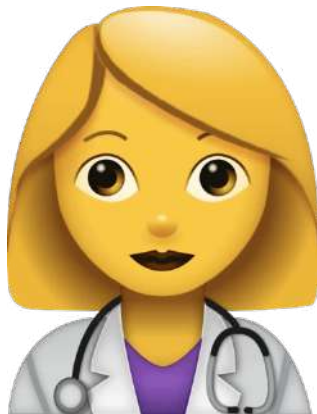
COACH



ATHLETIC  
TRAINER



PARENTS



DOCTOR



YOU

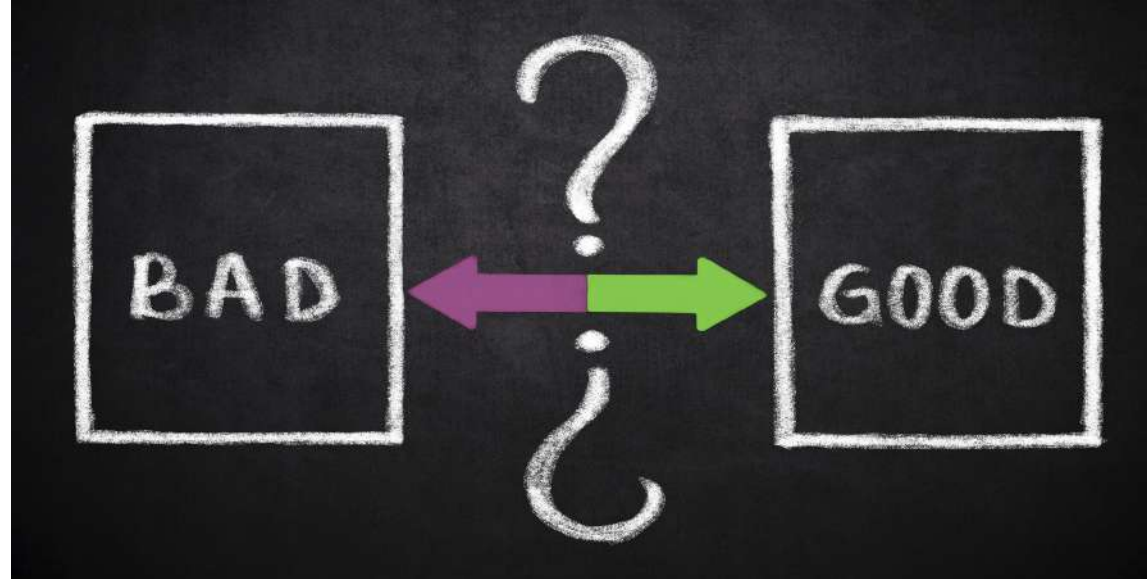


# INJURY VS SORENESS



Is the “pain”  
that you are  
experiencing

...



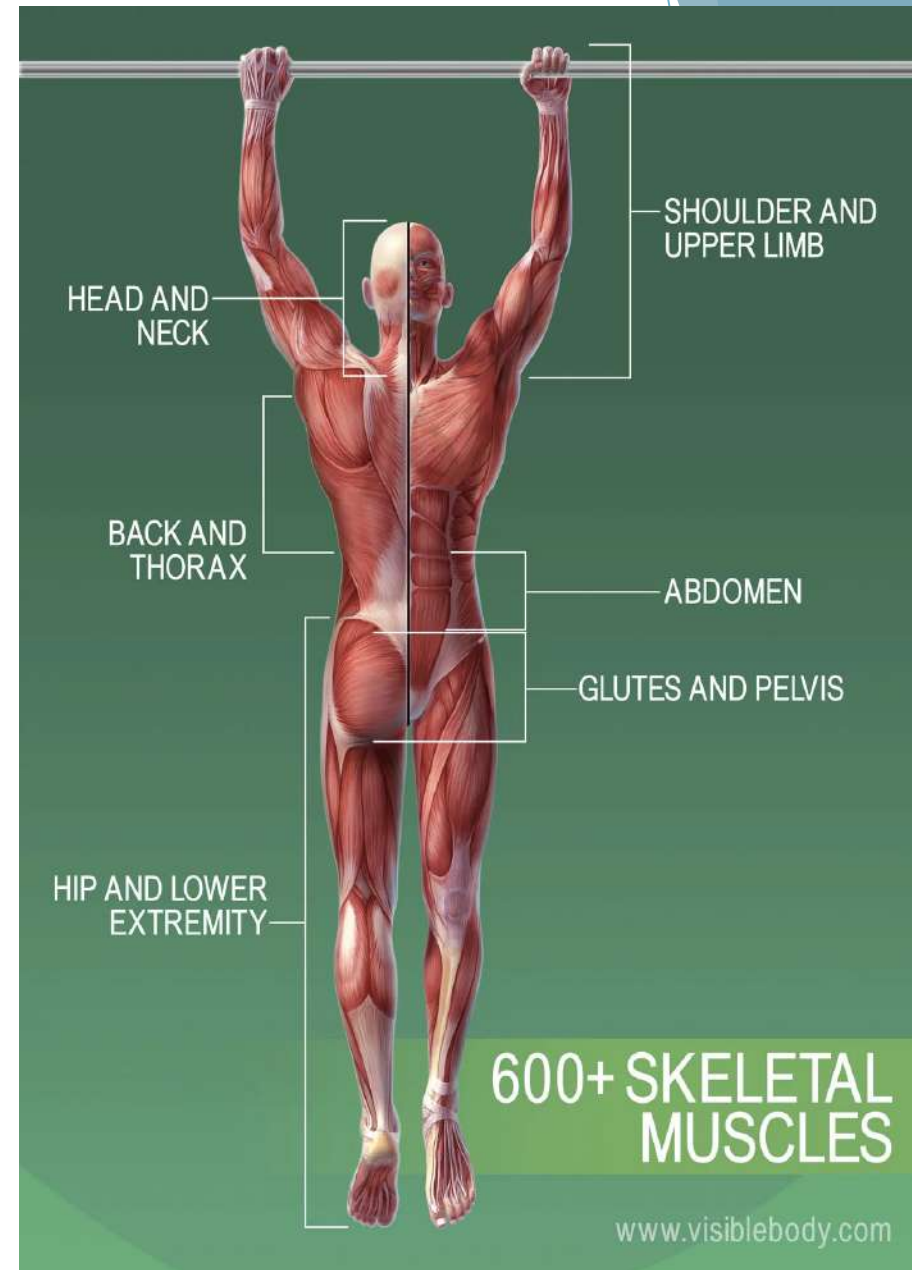
- Results from specific insult/trauma
- Unilateral
- Point-specific
- Sharp
- Does not improve with warm up or stretching
- Located in the joints
- Duration: lingers if not addressed

- No specific mechanism of injury
- Bilateral
- Diffuse
- Dull/achey
- Improves with warm up or stretching
- More commonly located in muscles
- Duration: 2-3 days



# GROSS ANATOMY REVIEW

- ✓ Rectus abdominis
- ✓ Paraspinals
- ✓ Transverse abdominis
- ✓ Psoas
- ✓ Iliopsoas
- ✓ Glutes
  - Max/Med/Min
- ✓ Tensor fascia latae
- ✓ Quadriceps
- ✓ Hamstrings
- ✓ Gastrocnemius / soleus



# Mindfulness & Intention

- ✓ MINDFULNESS is the psychological process of bringing one's attention to experiences occurring in the present moment
- ✓ INTENTION is a mental state that represents a commitment to carrying out an action or actions in the future; purpose / design / aim / end / objective / goal; what one intends to accomplish or attain





# Purpose & Benefits of a Proper Warm up

- ▶ ↑ Blood flow
- ▶ ↑ Core & muscle temperature
  - ▶ ↑ Force of muscle contraction
- ▶ ↑ Oxygen to tissues
- ▶ ↑ Coordination
- ▶ ↑ Skill accuracy
- ▶ ↑ Reaction time
- ▶ ↑ Extensibility of tissues
- ▶ ↑ Body awareness
- ▶ ↑ Balance
- ▶ ↑ Power
- ▶ ↑ ATHLETIC PERFORMANCE



# Purpose & Benefits of Proper Cool Down

- ▶ Restores heart rate, body temp, and respiration rate
- ▶ Prevents immediate post-workout cramping/spasms
- ▶ ↑ Range of motion
- ▶ ↑ Flexibility
- ▶ Improve recovery
  - ▶ ↓ Post-training soreness and stiffness
- ▶ Prevent injuries



# Dynamic warm up example

- Are these movements recognizable?
- Pay attention to the cues that are given
- Pay attention to form

# Conclusion

- ▶ No Pain, No Gain is not really a thing in the context of injuries
- ▶ If pain persists, need to **COMMUNICATE EFFECTIVELY**
- ▶ Take warm ups and cool downs seriously
- ▶ Every rep counts.
- ▶ Form matters. It really, really matters
- ▶ Core, Core, Core = center of your body! Learn to control it.

# Contact information

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