

Injury Prevention



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Berkeley High School

Goals

- General injury prevention and recovery strategies
 - Preseason
 - During Season
 - Postseason
- Injuries typical of specific sports / genders and how to prevent them
 - Soccer/Lacrosse/Other: ACL Prevention
 - Baseball/Softball: Pitch Counts
 - Overhead Athletes: Rotator Cuff Strengthening
- Conditioning, intake, and mindset for long term health
 - Input/Output
 - Strength
 - Gradual Changes

Background

- High School Soccer and Track Athlete
- Division I College Soccer Athlete
- Semi-Pro Soccer Athlete
- Family Medicine Trained
- Sports Medicine Trained
- High School Head Team Physician
- Inducted into High School Hall of Fame
- US Soccer Volunteer Physician
- Currently, Cal Associate Team Physician
- I am lucky enough to have worked with all levels including pro teams, college teams, national teams and youth teams



General Injury Prevention & Recovery Strategy



Preseason

- Defining your goals
- Preparing your body physically for season
- Increasing conditioning (gradually)
- Increasing strength (gradually)
- Preparing skillswise for the season
- Solidifying fundamentals
- Learning new skills that may be needed in season
- Academically strengthening grades so that your foundation is strong for season
- Understanding new plays or other game management ideas
- Preparing mentally for season with opponents and schedule



Season

- Play
- Have fun
- Enjoy all your preseason hard work
- Take each game/event as the next goal
- Maintain - Strength/Conditioning
- Small adjustments
- No large adjustments
- Leave it all on the field

GAME DAY

WARM UP!

COOL
DOWN



Postseason

- REST!
- REST!
- REST!
- Recover
- Look back and celebrate wins
- Look back and analyze defeats
- Look ahead to what is next
- When you are ready.....it's preseason again



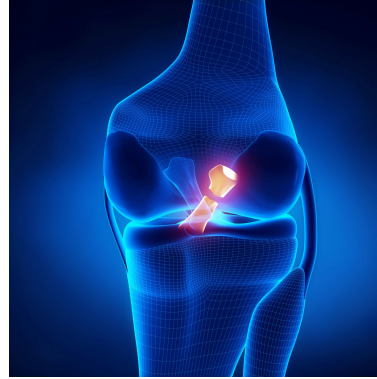
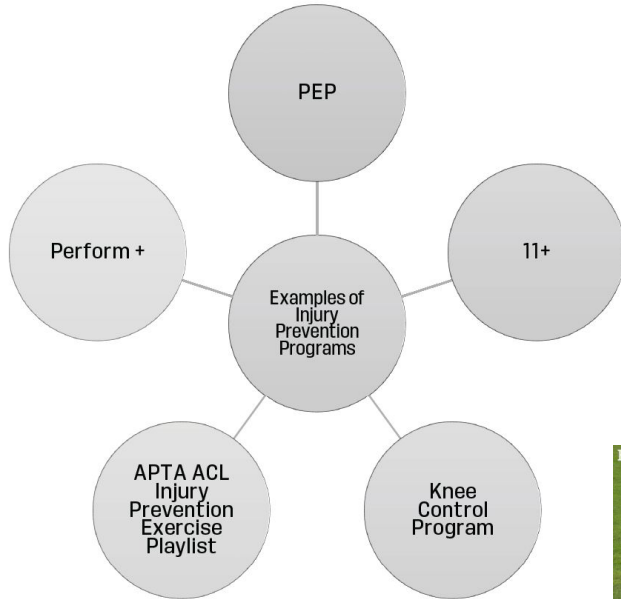
**REST.
RECOVERY.
RESULTS.**

Injuries typical of specific sports / gender and prevention

- Soccer/Lacrosse/Other: ACL Prevention
 - FIFA 11
 - PEP
 - LaxPrep
- Baseball/Softball: Pitch Counts
- Overhead Athletes: Rotator Cuff Strengthening



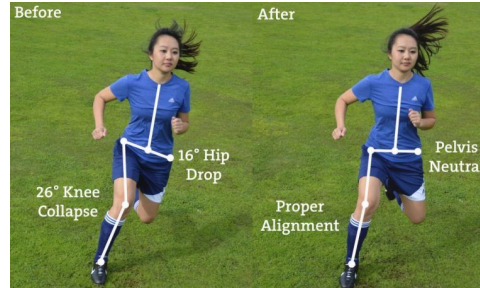
ACL Prevention



[PEP](#)



[FIFA 11](#)



[LaxPrep](#)



Baseball/Softball: Pitch Counts



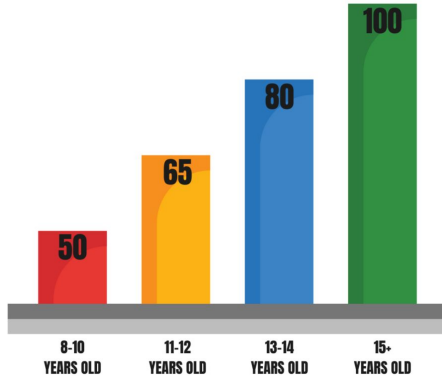
Age	Daily Max (Pitches in Game)
7-8	50
9-10	75
11-12	85
13-14	95
15-16	95
17-18	105
19-22	120

[MLB](#)



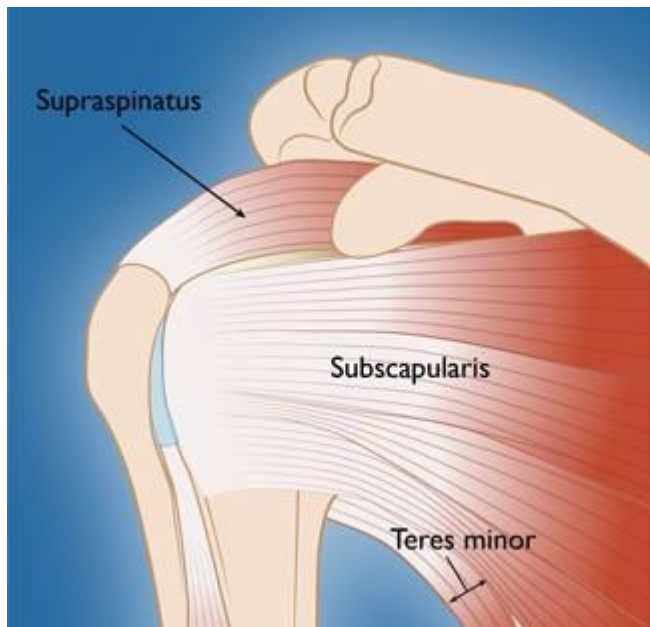
GIRL'S FASTPITCH SOFTBALL PITCH COUNT PER GAME

Recommended Pitch Count by Dale J. Buchberger, PT, DC, CSCS, DACSBP



No Official Guidelines for Softball

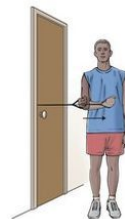
Overhead Athletes: Rotator Cuff Strengthening



Rotator Cuff Strain Rehabilitation Exercises



Resisted shoulder external rotation



Resisted shoulder internal rotation



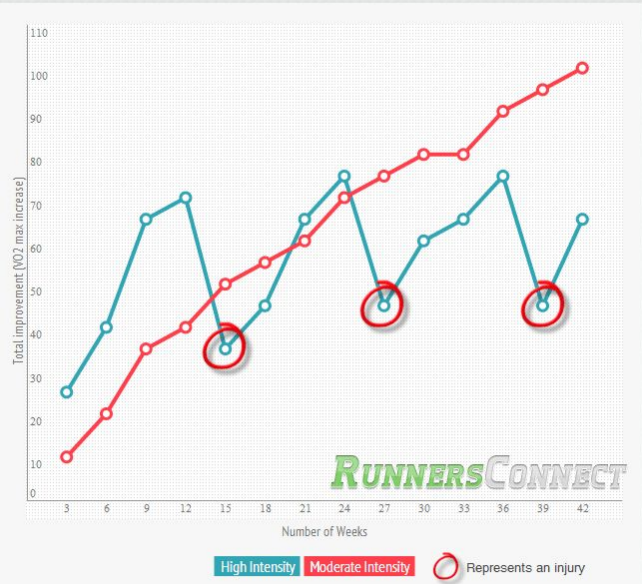
Scaption



Side-lying external rotation

Conditioning, Exercise and Mindset

WHY MODERATE WORKOUTS ARE BETTER THAN HARD WORKOUTS

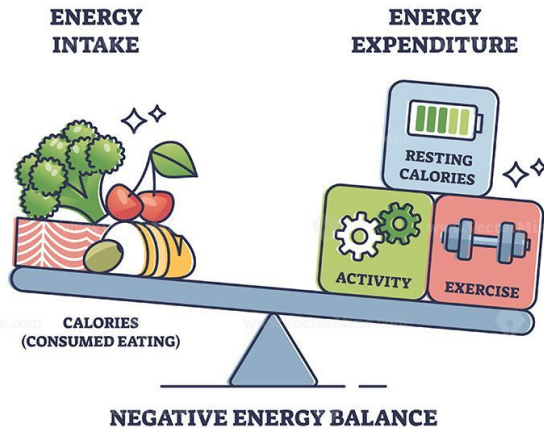


This chart is based off the data from study on the aerobic benefits of interval training, published in the European Journal of Applied Physiology. While the data is not factual, it represents my experience with runner progression as a coach



Conditioning, Intake and Mindset

ENERGY BALANCE



HYDRATION CHEAT SHEET

1. Athletes should drink $\frac{1}{2}$ to 1 ounce of water per pound of body weight before and after strenuous exercise, especially if they are playing in the sun, humidity or in a multi game environment
2. Eat your hydration!
3. Refer to urine chart to check hydration status
4. Electrolyte replacements are key in high heat and/or multi-game day/ weekends
 - a. Liquid IV (best), Nuun, SaltStick
 - b. 1 pack per water bottle before game and 1 pack after game in whole water bottle

EAFC Performance Specialist Gina Woodward Irwin, CSCS, XPS, CPSS*

Conditioning, Exercise and Mindset

EVERY
SINGLE
DAY

LONG-TERM STRENGTH PROGRESSION

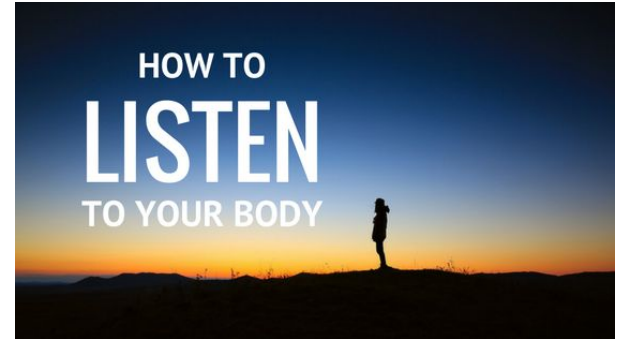
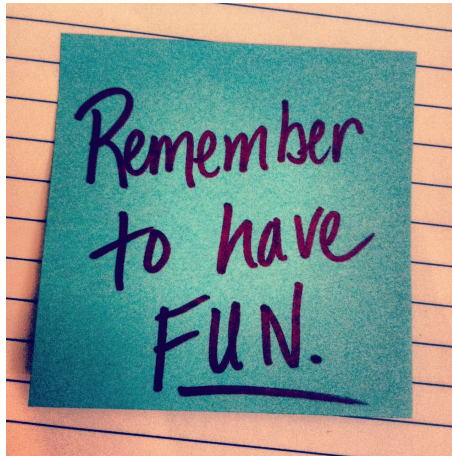


**GRADUAL
PROGRESS
FOR
LASTING
IMPROVEMENT**



Take Home Points

- Prevention is year round but distinct in each phase
- Sport Specific Prevention - Consistency is key
- Overall Prevention - Takes time and determination
- Input/Output
- Listen to your body
- Be smart
- Have fun



Questions?

Go Jackets!

