TRAINING YOU TO TRAIN BETTER

Overtraining, Undertraining & How to train when you're injured

OVERTRAINING

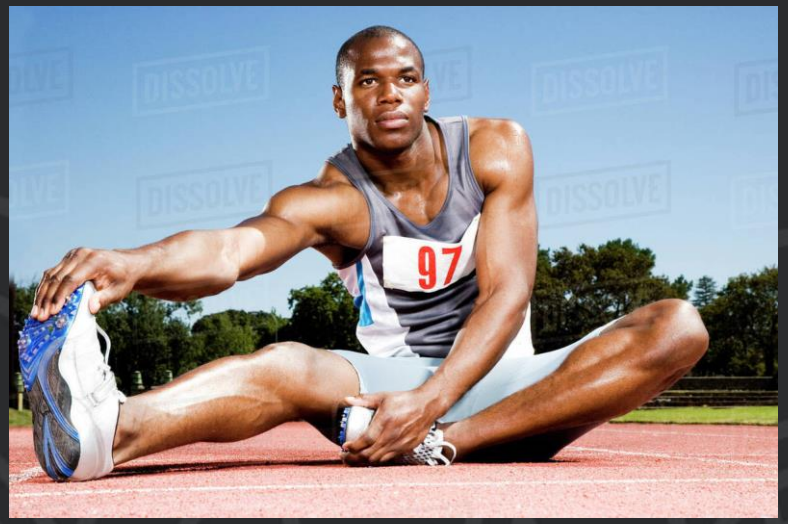
- **What is it?**
  - Overtraining without appropriate rest can cause – central fatigue, depression, neurohormonal changes and systematic inflammation
  - ~ 30% of adolescent athletes
  - Past terminology:
    - Burnout
    - Staleness
    - Underrecovery
    - Training Stress Syndrome
  - More common in distance athletes

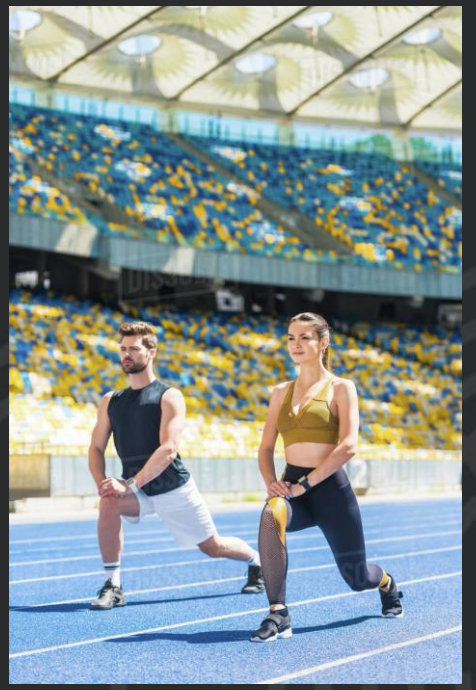
OVERTRAINING PREVENTION

- Be aware of overtraining
- Cross-train
- Take time to rest in off-season
- Check on teammates and training partners
- Make connections between injury & training

UNDERTRAINING

- Returning to high intensity practices and training following several months of rest
- Can lead to illnesses, overuse injuries and acute injuries
- Best way to begin the season is to come in prepared from offseason training – but BEWARE OF OVERTRAINING!





Warming up and Stretching

What does your club do for warm ups?

- What are your goals for pregame warm ups and/or stretching? (Injury prevention? Increased mobility? Preparing muscles for activity?)
- When does warm-ups/stretching start prior to games and/or practices
- Are they done as a team? Individually?
- How long does it last?
- Are there changes you think your team/club could make that would better prepare you for competition/practice?

TYPES OF STRETCHING & WARM UP

- <u>Static Stretching</u>
- Holding a muscle or joint at an uncomfortable fixed position near the end-range of motion for ~ 20-30 seconds
- Stretching prior to activity has been, for years, assumed by coaches, athletes and health officials to aid in preventing muscle injury
- Recent research suggests no injury prevention with possible hindrance of performance when stretching prior to activity

DYNAMIC WARM UP

- Briefly pushing muscles/joints towards their end range-of-motion during a series of movement drills performed from low to moderate intensity
- Enables circulatory system to push extra blood to working muscles for a steadily pace warm-up of soft tissues
- Research suggests this CAN prevent injury AND improvements in performance (agility and strength)

DYNAMIC WARM UP EXAMPLES

- Should generally last at least 7-10 minutes
- Easy low-intensity exercises should lead into moderate-high intensity
- Should be enough to cause athlete to begin to sweat
- Examples: lunges, toe touches, skips, carioca
- Visit: https://recwell.wisc.edu/athletictraining/

RECOMMENDATIONS

Dynamic Warmup

Time – 10-15 minutes

Routine - often sport specific

- Goals
  - Warm-up muscles
  - Improve Mobility
  - Prevent Injury
  - Improve Performance

Static Stretching

Can be beneficial to improve Mobility when performed following practice and competition

Never Stretch Cold Muscles!

Cross-training when injured

GOALS: LOWER EXTREMITY INJURY

- Maintain or improve Cardiovascular fitness
- Maintain or improve strength
- Keep exercises interesting and challenging
- Allow sport specific training as injury tolerates

HIIT TRAINING:
LOWER EXTREMITY INJURY

- Interval training at a high intensity 70-90% maximum heartrate for an extended period of time (45-60 mins) with minimal rest
- Combine 3-5 circuits lasting around 10-20 min with minimal rest. Design with medical advisor to avoid exercises that will exacerbate injury

HIIT TRAINING: LOWER EXTREMITY INJURY

- Push-ups
- Crunches
- Shoulder press
- Bent-over rows
- Planks
- Standing punches w/dumbell

CARDIO: LOWER EXTREMITY INJURY

- **Upper Body Ergometer (UBE)**
- **Swimming – Laps, treading water, underwater running**

The Nick will have a shallow pool that we hope to be using in Fall 2020 for Aquatic therapy

GOALS: UPPER EXTREMITY INJURY

- Maintain or improve Cardiovascular fitness
- Maintain or improve strength
- Keep exercises interesting and challenging
- Allow sport specific training as injury tolerates

HIIT TRAINING:
UPPER EXTREMITY INJURY

- **Squats: variation**
- **Lunge: variations**
- **High knees**
- **RDLs**
- **Band work**
- **Core exercises**

CARDIO: UPPER EXTREMITY INJURY

- **Stair Stepper**
- **Bike circuit**
- **Elliptical**
- **Swimming? Treading water**
- **Running?**

QUESTIONS?

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RECREATION & WELLBEING
UNIVERSITY OF WISCONSIN-MADISON