## CrossFit Training for Athletes: Rationale and Value

ALEX MÉNDEZ, PT

#### What is CrossFit?

- ▶ Greg Glassman
- ▶ More than 15,000 gyms nationwide
- ▶ Closet competitor, Planet Fitness, has 1,100 gyms
- ▶ Biggest fitness trend in the world?

#### What is CrossFit?

- ▶ Google describes CrossFit as a high-intensity fitness program incorporating elements from several sports and types of exercise.
- ► Training philosophy that coaches people of all shapes and sizes to improve their physical well-being and cardiovascular fitness in a hardcore yet accepting and encouraging environment.
- Cultural phenomenon as well breeding community with its own language.

#### The Case of CrossFit

- Sports science history
  - Focus on L-MICT (low to moderate intensity continuous training)
  - Popularity of L-MICT propagated by running craze in the 70s, developing sports science discipline, and lack of specialized equipment
- Current trends
  - Obesity continues to rise
  - Obesity linked to most prevalent and costly medical problems in US
  - HIIT (high intensity interval training)

#### The Benefits of CrossFit

- Improved body composition
- ► Improved VO2 max
- Improved work capacity
- ▶ Improved BDNF (brain-derived neurotrophic factor)

#### The Benefits of CrossFit

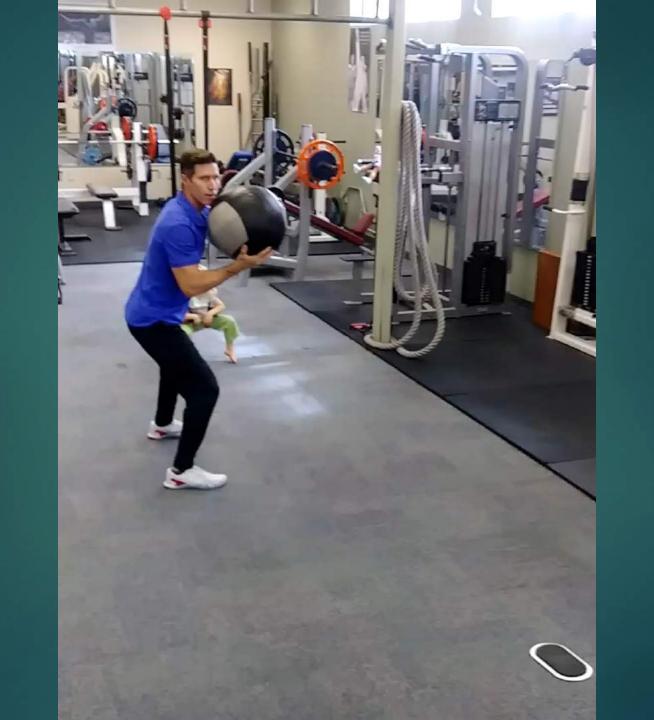
- In the military
  - ▶ 25 million limited duty days each year across the services
  - ▶ Stress fractures alone result in \$100 million in medical expenses
  - Personnel expected to regularly engage in fitness training activities
  - ▶ HIIT improves fitness while reducing volumes, especially running

# The Deficits of CrossFit-Only Training for the Athlete

- Name has connotation of non-specificity of training
  - "Jack of all trades; master of none"
  - Each sport has unique energy systems requirements and positionspecific demands
  - ► Rotational athlete requires aggressive hip-shoulder separation, appreciable single-leg work, and end-range shoulder external rotation

























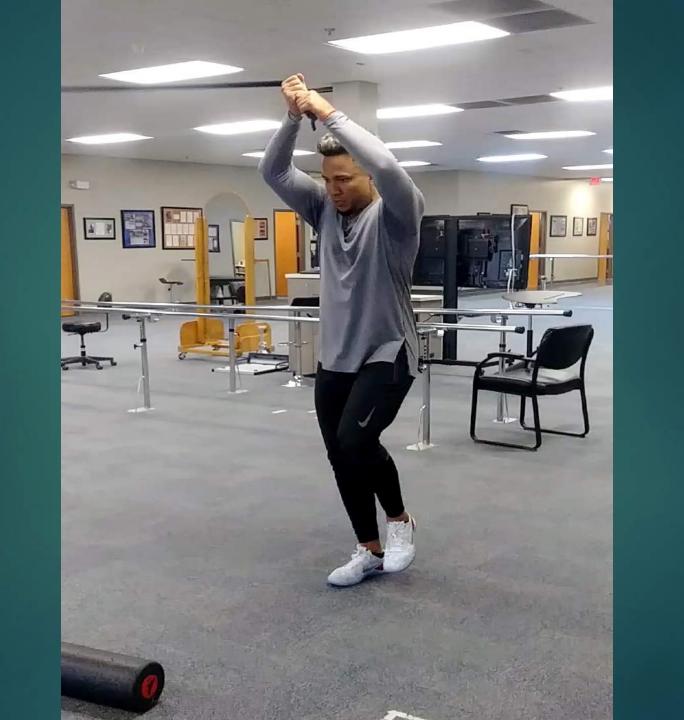




























### Movement Competency and CrossFit

- ► Functional screen
  - ▶ Gary Cook's FMS
  - ► Kelly Starrett's archetypes
- Olympic weight lifting technique and programming



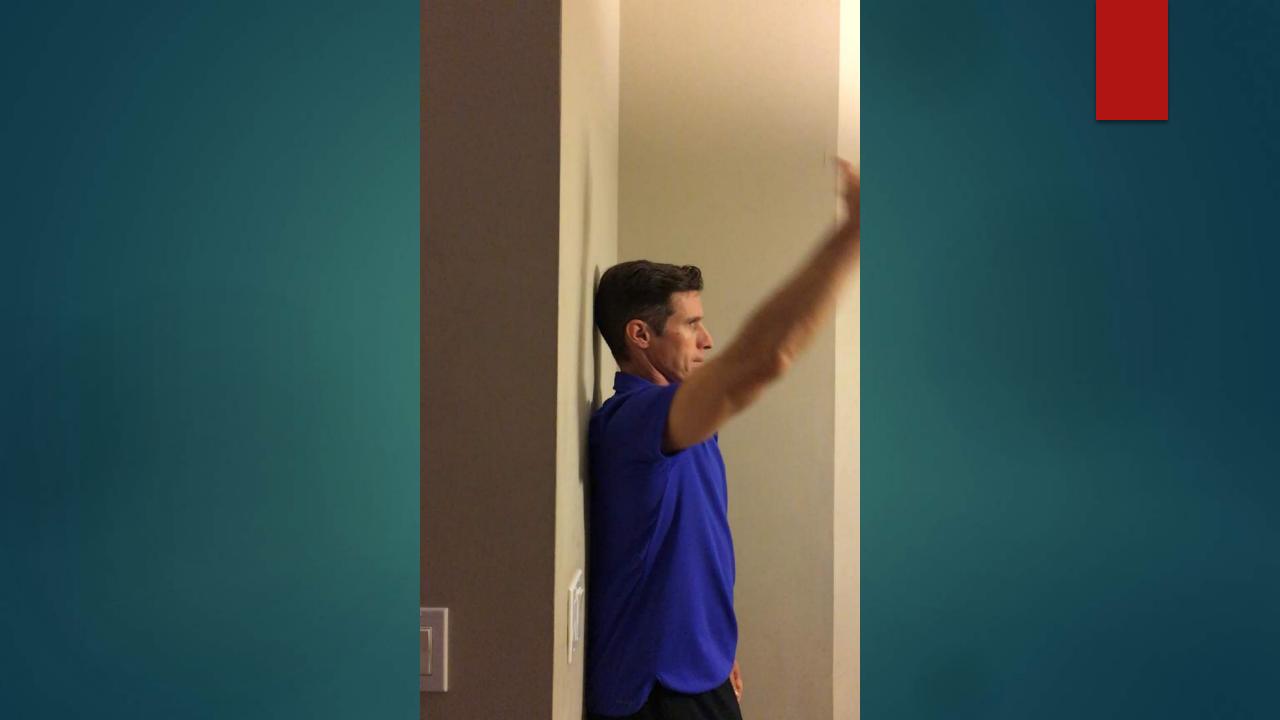


















# Summation

- ► FMS
  - ▶ First move well, then move often

Is High-Intensity Functional Training (HIFT)/CrossFit Safe for Military Fitness

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