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The Science Behind Interval Training

Andy Gallardo
CPT-NASM, CFSC

HIIT IT UP!

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Current State of KP/SCPMG

Less than 50% of physicians exercise 150 minutes per week



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Why don't we Exercise?



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Not enough time!!!
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Roger Bannister - 1954
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Definition of HIIT



High Intensity Interval Training

Alternating periods of short anaerobic exercise with less intense recovery (aerobic) periods

HIIT essentially means "speed play"



Seven horizontal lines for notes

What is HIIT



New name old concept

- Suicide drills
- Stairs
- Intervals
- supersets



Seven horizontal lines for notes

get fit Kaiser Permanente logo



Seven horizontal lines for notes

What is HIIT



Can be applied to countless forms of exercise

- Running
- Biking
- Functional movements



Myths vs reality



Myth - Steady state cardio is best for maintaining muscle

Reality – cardio done at a higher intensity for a shorter period can actually build muscle



Slow twitch vs fast twitch



Slow twitch muscles adapt by becoming smaller and weaker so that nutrients can travel within the muscle fiber in less time



HIIT



- Versatile
- Effective
- Efficient
- Taxing aerobic (requires oxygen, walking , jogging) and anaerobic (quick bursts, sprints)

EPOC



- Excess Post Oxygen Consumption (aka the afterburn)
- Metabolic boost for the next 48 hours



HIIT vs. steady state cardio



- 27 minutes of HIIT 3 times per week = same benefits of as 5 weekly one hour runs

*2012 Journal of Obesity

Even better...



15 week study HIIT vs. Steady State cardio
(40 min sessions 3 days per week)

HIIT decreased total body fat by 11% and abdominal fat by 10% vs. no change in the steady state

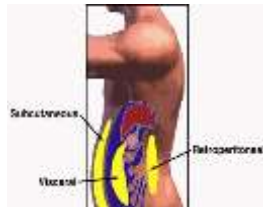


E. Gail Trapp – University of South Wales
Angelo Tremblay – Laval University, 1994

Other Benefits of HIIT



- Increases fat oxidation
- Increases energy (HGH)
- Suppresses appetite
- Quick (but not easy)
- Improves insulin sensitivity
- Great for your heart
- No equipment



Have Fun!





Even a Kid Can Do It!

