

Get Off the Ground: Load & Explode

Session #4129

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No Equipment? No problem! Load and explode has you covered. This body weight only workout will give you the high intensity metabolic effect you need to get results anytime and anywhere. Burn calories and increase your strength and power as you move through all planes of motion and learn how to get off the ground more efficiently.

Objectives

- 1) Identify how HIIT is different than traditional interval training
- 2) Outline kickboxing drills and body weight strength/power exercises
- 3) Define different HIIT protocols

What is Metabolic Training?

- Combination of cardiovascular and resistance training that creates a workout routine that is shorter and much more efficient
- Greater circulatory response leads to greater cardiovascular demand
- Total body based (compound) exercises increase demand on the body

Physiological and Program Benefits of HIIT

- The whole premise is to increase the after burn or EPOC (Excessive Post Exercise Oxygen Consumption). It can last for hours!!
- Improved anaerobic and aerobic capacity
- The rate of increase in $VO_2\max$ is one of the highest ever reported
- Fat burn is greater when exercise intensity is high: compare two different exercise plans for the same client – a 30 mins walk on a treadmill for a 30-year-old client.

50% $VO_2\max$ 200 calories (50% fat) 100 fat calories

70% $VO_2\max$ 310 calories (40% fat) 124 fat calories

**these are hypothetical numbers of calories expended, but the percentages are accurate.

- Improve muscular strength and endurance
- It is very challenging and time – efficient
- It is so versatile and can be carried over into most formats
- HIIT defies traditional work: rest ratios in order to force body to recover faster

Planar Training

This is becoming more apparent in programming these days and is moving our programming from being muscle group focused to movement focused.

Remember when trying to identify what plane a movement is in, you must analyze it from anatomical position. Which is??

Planes of Motion

- 1) Sagittal Plane – front and back movements

Examples:

- 2) Frontal Plane – lateral or side to side movements

Examples:

- 3) Transverse Plane – Rotation

Examples:

Load and Explode Principles

- What is the difference between power and plyometrics?
- Strength + Speed = Power

These exercises enable a muscle to reach maximum strength in as short a time as possible. Plyometrics works on developing explosive power and maximally recruiting fast twitch muscle fibres by eccentrically loading a muscle (deceleration) and quickly producing a concentric contraction (exploding).

The goal is to decrease Amortization. This is the time spent on the ground between contraction phases.

These exercises teach people to absorb landing and get off the ground so it is imperative there are cues around how to properly do so i.e. absorb your landing.

As there is speed involved in the movement, it is imperative that a client or participant is strong enough that they can maintain technique throughout. We do not sacrifice technique

HIIT protocols

- 1) **Planar Training Lower Body - 10 reps each**
 - a. Single leg deadlift to drop lunge - Sagittal
 - b. Side lunge drop reach to outside of foot with lateral flexion - Frontal
 - c. Reverse lunge with rotation - Transverse

- 2) **Copenhagen - 30 secs/20 secs/10 secs - Moderate/ Hard/Hardest**
 - a. Squat, pulse low, add jumps low
 - b. Squat press out at knees, squat hold, jump Squat x feet

- 3) **Tabata - 20secs all out/10secs rest x 8 sets = 4 minutes**
 - a. Sets #1,3,5,7 - Air jacks
 - b. Sets #2,4,6,8 - Jab 1-2,3 move 1-2-3

- 4) **AMGRAP - 45 secs on, 15 secs off - 2 Rounds**
 - a. 3 alt jabs, 1 hook
 - b. Side plank with flexion/extension at hip
 - c. Single leg squat, to squat to curtsey - tap to switch sides
 - d. Drop pushups
 - e. Side lunge drop to shift and 1 foot bound
 - f. Crab bridge - Dip and Reach

- 5) **Hard, Harder, Hardest - 20/20/20**
 - a. Knee drive slow, fast, bound
 - b. Lunge deep (knee to floor), pulse, add punch down up with jump

- 6) **Descending timed ladder workout - 60/50/40/30/20/10 - 20 sec rest between each**
 - a. Lunge step through - Quadruped option
 - b. Hook, slip, hook, slip

- 7) **Isotonic/Isometric AMGRAP 30 secs on, 15 secs off**
 - a. 3 Mountain Climbers, hold knee in and rotate to opposite elbow

- 8) **EMOM - Every minute on the minute - 3 rounds**
 - a. Mountain Climber Get up
 - b. Quadruped Walk

c. 4 /8 Alt jabs – down up

9) Rep ladder – Medal round for the win (teams of 4) – BRAGGING RIGHTS

- a. Kneeling to squat to tuck – 5 x
- b. Squat/lunge/squat – 10 x each side
- c. Lateral Shuffle touch floor – 15 x each side
- d.** 3 switch kick – 20 x (10/each)