

Session #406

Boost Your VO2 Max: Take Your Training Sessions and Fitness Classes to the Next Level

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Introduction: Take your personal training clients and fitness classes to the next level by focusing on improving VO2 max. With all the hype around VO2 max and its connection to longevity, developing aerobic capacity is a priority for anyone aiming to improve their overall fitness and health. In this handout, you'll discover the why, what, and how of VO2 max training, along with practical exercise ideas that use small equipment and body weight.

What is VO2 Max?

VO2 max, or maximal oxygen consumption, is the greatest amount of oxygen your body can use during intense exercise. It reflects the efficiency of your cardiovascular and respiratory systems and is a strong predictor of endurance and overall fitness. Improving VO2 max isn't just about excelling in athletic performance—it's also tied to health and longevity, making it a key focus in fitness training.

Take-Aways:

- VO2 is measured in millilitres of oxygen per kg of body weight per minute (ml/kg/min.)
- Higher VO2 = Better CV fitness
- VO2 tends to decrease with age
- Men in 20/30's good VO2 = >40 ml/kg/min 50/60's >30 ml/kg/min; Women would be slightly lower 20/30's 33-37 ml/kg/min
- Genetics, training and age can influence VO2 max

Why Does VO2 Max Matter?

- Improved Performance: A higher VO2 max allows your clients to sustain higher intensities for longer durations, leading to better results in their workouts and overall fitness goals.
- Enhanced Recovery: Optimizing VO2 max helps the body recover faster between exertions, reducing fatigue.
- Longevity and Health: Studies show a direct correlation between high VO2 max levels and lower risks of disease, improved heart health, and increased life expectancy.

How to Improve VO2 Max

The following strategies will provide actionable methods to enhance VO2 max for your personal training clients:

High-Intensity Interval Training (HIIT)

- Alternating between short bursts of high-intensity effort and recovery periods.
- HIIT challenges the cardiovascular system, pushing it to adapt and improve oxygen consumption.
Implementation Examples:
Warm-up for 5 minutes at moderate intensity. Perform 30 seconds of all-out effort (e.g., sprinting, cycling, rowing). Follow with 1 minute of low-intensity recovery.
Repeat for 6–10 intervals, increasing number over time as fitness improves.
- Try: EMOM (every minute on the minute); AMRAP (as many rounds as possible); Superset (Strength+CV)

Power-Based Training

- Incorporating exercises that maximize explosive output, such as plyometrics and resistance training.
- Builds the muscles' ability to use oxygen efficiently, translating to improved endurance.
Implementation Examples:

Include power exercises such as box jumps, kettlebell swings, or Olympic lifts.
Maintain proper form and progressive overload to avoid injury while maximizing gains.

Progressive Aerobic Training

- Gradual increases in aerobic exercise intensity and duration.
- Gently builds the cardiovascular system's capacity over time.

Implementation Examples:

Start with steady-state cardio sessions (e.g., running, cycling) 3 times per week for 20–30 minutes.

Gradually increase intensity or duration weekly.

Practical Tips for Success

- *Educate Clients:* Explain the benefits of VO2 max and how the training aligns with their goals.
- *Track Progress:* Use tools like heart rate monitors or fitness apps to measure VO2 max improvements over time.
- *Prioritize Recovery:* Emphasize proper rest and nutrition to allow the body to adapt and grow stronger.
- *Customize Plans:* Tailor exercises to suit individual client fitness levels and preferences.

Key Takeaways

- Improving VO2 max is a game-changer for performance, recovery, and overall health.
- HIIT, power-based exercises, and progressive aerobic training are effective methods to elevate VO2 max.
- Educating clients and tracking progress ensure long-term success.

Conclusion

By integrating these strategies into your fitness sessions, you can help your clients push their limits, recover effectively, and maximize every workout. Enhancing VO2 max isn't just about improving physical performance—it's about fostering a healthier, more vibrant life for your clients. Let's take fitness to the next level, together.

Resources

Recommended Reading: "The Oxygen Advantage" by Patrick McKeown

Tracking Tools: VO2 max calculators, heart rate monitors (i.e. Garmin, Apple) and fitness apps

Today's morning workout based on the study results of:

VO2 max Trainability and High Intensity Interval Training in Humans: A Meta-Analysis By: Andrew P. Bacon, Rickey E Carter, Eric A Ogle, Michale J Joyner

- 10 week training program, 6x workout per week, combining both continuous and interval training
- Intervals – 5 minutes work (close to VO2 max), with 2 minutes recovery
- Continuous – run as far as possible for 30 minutes; increase to 35 and 40 minutes

Interval Training: 5:2 (5 minutes work interval style, 2 minutes recovery)

Warm up and mobility 5-7 minutes; Sets 5 minutes; 3-5 IT reps/5 min: Recovery 2 minutes

1. Set A: Run on the spot = 15 secs; Jumping Jacks = 16x's (variation with jax hold), Power skate forward 4x's with a Jog back 4x's; Repeat.
2. Set B: Lateral Step 2x's R/L into 15 secs: Power shuffles R/L into squat jumps; increasing jumps per round
3. Set C: Agility move 1, 2 & hold - increase tempo = 30 secs; Power Leaps (10-15x) = 15 sec's; mini ski jumps
4. Set D: Jax out in with a touch down 8-12x's + Repeater knee 15-30 secs; Chair pose, fast feet = 15 sec's
5. Set E: Partner lunges into scissor jax's; partner plank to mtns climbers; partner long jump to high jumps

Thank you!