

PEAK CALORIE BURN: THE VERTICAL ADVANTAGE

Burn more calories per minute with Versaclimber – a breakdown and comparison of vertical climbing against other workout methods.

All about Versaclimbing

Originally developed for rehabilitation purposes back in the eighties, the Versaclimber (the machine on which people 'vertical climb', or as we like to call it 'Versaclimb') has evolved into a dynamic workout option in fitness facilities and in homes worldwide. Versaclimbing provides all the benefits of a full body workout worthy of any elite athlete as well as providing the foundation of high-cardio, high-volume classes attended by professional athletes, fitness enthusiasts and celebrities across the globe.

The natural climbing motion supports functional fitness, making daily activities and sports movements more efficient. With controlled, non-traumatic movements, versaclimbing helps to prevent injuries commonly associated with high-impact activities like running. This makes it an excellent long-term fitness solution, particularly for those prone to joint wear and tear or recovering from injury.

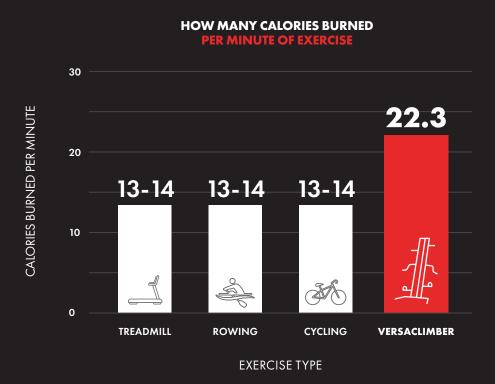
One of the biggest advantages of the Versaclimber is its efficiency. The machine allows users to achieve a high-calorie burn in a short space of time while remaining gentle on the joints. While many users enjoy fast-paced, high-intensity workouts with the Versaclimber, it can also be adjusted for slower, endurance-building workouts, catering to different fitness levels and goals.

"Vertical climbing tones your arms, shoulders, back, abs, glutes, and legs while also providing a calorie-blasting cardio workout."

Alex, Trainer

Calorie burn: Maximising workout efficiency

One of the standout features of the Versaclimber is its ability to burn more calories per minute than other common forms of cardio. Studies show¹ that it can burn up to **22.3 calories per minute**, outperforming running, swimming, and cycling.



Calorie comparison:

- Versaclimber: 22.3 calories per minute
- Treadmill running: **13–14** calories per minute
- Cycling: 13–14 calories per minute
- Rowing: 13–14 calories per minute

These figures highlight why vertical climbing and moreover the Versaclimber is such an effective tool for those looking to maximise calorie burn in a time-efficient manner. And, even at lower speeds, using the Versaclimber still results in significant caloric expenditure, making it effective for both high-intensity and steady-state workouts².

Behind the science

Vertical climbing combines cardiovascular exercise with resistance training, delivering a comprehensive workout that enhances both aerobic and muscular endurance. The full-body engagement that activates both the upper and lower body simultaneously, increasing the overall energy expenditure.

Scientific studies⁴ have found that vertical climbing leads to **higher VO₂ max levels** – a key measure of the body's ability to use oxygen during exercise – when compared to treadmill running and rowing. VO₂ max (maximal oxygen uptake) is a measure of the maximum amount of oxygen your body can utilise during intense exercise. It reflects cardiovascular fitness and endurance capacity, indicating how efficiently your heart, lungs, and muscles work together. A higher VO₂ max suggests better aerobic fitness and improved athletic performance. Moreover, a high VO₂ translates to greater caloric expenditure – as laid out in one study⁵ based on the following formula:

kcal/min caloric expenditure =
$$VO_2$$
 (L/min) x 5 $\frac{\text{kcal}}{\text{litre}}$

Total calories per workout =
$$VO_2$$
 (L/min) x 5 $\frac{kcal}{liter}$ x minutes exercised

In the same report, ten subjects were studied before and after an eight-week training programme to determine if continuous climbing exercise on the Versaclimber would improve their cardiovascular capacity, relative perceived exertion, muscular strength, and movement kinetics. Each subject exercised three times weekly for 20-30 minutes at 60-85% of their maximal heart rate. It was concluded that participation in the programme facilitates improvements in all areas.

"The combination of cardio and strength training that climbing provides allows the body to achieve higher output in less time."

Keegan Ross⁶, physiotherapist and performance specialist

Fitness goals: Behind the sport

Versaclimbing supports a range of fitness goals, whether you're looking to improve stamina, build strength, or enhance functional fitness. It offers the flexibility to focus on:

Full-body conditioning

Engages all major muscle groups, including arms, core, glutes, and legs, in a natural climbing motion.

Posterior chain development

Targets the muscles running along the back of the body, including the shoulders, back, hamstrings, and calves, which are key for strength and posture.

Performance tracking

The Versaclimber is often used as a testing tool for monitoring and improving anaerobic threshold and VO₂ max, crucial for endurance-based sports.

To maximise calorie burn on the Versaclimber, high-intensity interval training (HIIT) is the most effective approach. Your workout should combine short bursts of intense effort with brief recovery periods, keeping your heart rate elevated and engaging multiple muscle groups for maximum energy expenditure.

The ultimate calorie burning machine

Versaclimbing provides a highly effective workout that combines cardiovascular training and strength-building in one motion. With its evidence-based benefits, including high-calorie expenditure and improved VO₂ max, it's an excellent option for those looking to elevate their fitness and burn calories – fast.

Whether your goal is to quickly burn calories, enhance endurance, or build strength, the Versaclimber is the best solution for long-term fitness success.



- ¹ Brahler CJ, Blank SE. Vertical Climbing Elicits Higher Vo2max Than Does Treadmill Running Or Rowing Ergometry. Med Sci Sports Exerc. 1995 Feb;27(2):249-54. PMID: 7723649.
- ² Ballor, D. L., Becque, M. D., & Katch, V. L. (1988). Metabolic Responses during Hydraulic Resistive Simulated Climbing. Research Quarterly for Exercise and Sport, 59(2), 165–168. https://doi.org/10.1080/02701367.1988.10605495
- ³ Sean Hyson and Men's Fitness EditorsMay 30, 2020 6:32 PM EDT https://www.mensjournal.com/health-fitness/versaclimber-workouts-for-weight-loss
- ⁴ Brahler CJ, Blank SE. Vertical Climbing Elicits Higher Vo2max Than Does Treadmill Running Or Rowing Ergometry. Med Sci Sports Exerc. 1995 Feb;27(2):249-54. PMID: 7723649.
- ⁵ Ballor, D. L., Becque, M. D., & Katch, V. L. (1988). Metabolic Responses during Hydraulic Resistive Simulated Climbing. Research Quarterly for Exercise and Sport, 59(2), 165–168. https://doi.org/10.1080/02701367.1988.10605495
- ⁶ Keegan Ross, PT, DPT, SCS, CSCS, a performance specialist and physical therapist at EXOS, an athletic facility that trains the likes of NFL draft picks, attests to the benefits vertical climbing gives his rehab patients.