

FAST FACTS

Burst exercise

High Intensity Interval Training

What is it?

High-Intensity Interval Training (HIIT) is a form of cardiovascular exercise that involves short bursts of intense activity followed by brief periods of rest or lower-intensity activity. The aim of burst exercise is power and speed.

The core of a HIIT workout involves short bursts of high-intensity exercise at maximum effort - near max heart rate. This could include activities like:

- Sprinting
- Jumping
- Cycling
- Burpees
- Ropes
- Squat jumps

The intervals typically last anywhere from 20 seconds to 2 minutes, depending on your fitness level and the specific workout where you will likely feel out of breath and fatigued.

Muscles fibres used

A dynamic mix of muscle fibre recruitment contributes to the effectiveness of HIIT in improving strength, endurance, muscle composition and overall fitness.

Fast-Twitch Muscle :

- Type IIa (Fast Oxidative-Glycolytic): Recruited during the high-intensity intervals and capable of generating a lot of force quickly. are essential for explosive movements like sprinting, jumping, or lifting heavy weights.
- Type IIx (Fast Glycolytic): The fastest-contracting fibres and are also recruited during the high-intensity intervals. They rely primarily on anaerobic metabolism and are involved in activities requiring maximum power and speed.

Slow-Twitch Muscle (Type I):

- Active in recovery or low-intensity intervals of HIIT where the body relies more on aerobic metabolism. They're designed for endurance and are used in activities such as jogging, cycling at a steady pace, or walking during the recovery phases of HIIT.



Benefits

- Strengthens the heart & improves efficiency
- Calorie burn and excess post-exercise oxygen consumption (EPOC)
- Fat Burning by promoting fatty acid oxidation
- Muscle endurance and strength
- Improved VO2 max
- Improved anaerobic fitness
- Activation of AMPK
- Time efficient to do

Considerations

Any time you step into a gym, or begin a training session, it is important to first assess your current state of readiness. Have you recovered well, i.e. optimal sleep, low stress, low inflammation? If you can't perform at least as well as your previous workout, it might be time to opt for flow, flexibility and balance instead.

As with any training, consult with a healthcare provider or fitness professional before starting a HIIT program, especially if you have any underlying conditions or are new to exercise. Additionally, proper form and technique are crucial to avoid injury during HIIT workouts.

For recovery, now that you've 'taxed' your body, you might choose cold water therapy, body work like massage, a clean diet and plenty of sleep.