

The Cardio Debate for Fat Loss: High Intensity versus Low Intensity

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18 August 2010

Introduction

It is a mistaken belief that long and slow, low intensity cardio is best for fat loss because it utilizes the aerobic system and burns fat during exercise. *High* intensity cardio is actually far superior and more effective for fat loss than low intensity cardio for several reasons. This article will briefly discuss the differences in high intensity and low intensity cardio, outlining the reasons why high intensity cardio is more efficient and effective for fat loss.

Time Efficiency

High intensity cardio requires less time to perform an effective session than low intensity cardio, which makes it a much more convenient mode of cardio for those with limited time in which to train.

Substrates Used

Although high intensity cardio primarily uses carbohydrates for fuel, the higher oxygen deficit post-training causes the body to use fat for energy. High intensity cardio elicits a higher work response from the body than low intensity cardio, thus burning more overall calories throughout the day, even if not *during* the training session. Training the body to perform at a high intensity will also increase your body's tolerance for work, and therefore the body will burn fat at a higher level, sparing muscle glycogen.

Because of the higher force of muscle contraction during high intensity cardio, there is a greater rate of GLUT-4 translocation within the muscles, creating a stronger nutrient repartitioning effect, which in turn enables the body more efficient and effective used of substrates.

Oxygen Utilization

High intensity cardio has a higher oxygen deficit than low intensity cardio. Training with a higher oxygen deficit actually increases the body's maximum oxygen capacity more than low intensity cardio. The higher the body's maximum oxygen capacity, the more efficient the body is at oxygen transportation, and thus more efficient the body is at burning fat, since fat requires oxygen to be oxidized.

Hormonal Responses

High intensity cardio elicits a similar hormonal response from the body as resistance training does, but without the stress and strain on the body and the nervous system that resistance training has. Higher insulin sensitivity, more Growth Hormone and IGF-1 release makes the body more effective at burning fat.

Muscle Mass

Burning fewer calories *during* the training session makes high intensity cardio more muscle sparing and less catabolic than low intensity cardio.

High intensity cardio uses fast oxidative (i.e. Type IIa) and fast glycolytic (i.e. Type IIb) muscle fibres. Muscle hypertrophy occurs primarily through chronic anaerobic, high-intensity exercise. The more muscle mass an individual has, the greater the ability of their body to burn fat.

Conclusion

If you want to lose fat quickly and efficiently, high intensity cardio is the best mode of cardio to incorporate into your training programme. Not only does it require less time to complete, but it burns more overall calories throughout the day. High intensity cardio makes the body more efficient at using oxygen and elicits the same hormonal response as resistance training - without the stress on the body - allowing for the same fat burning ability. High intensity exercise is also muscle sparing,

due to the shorter exercise period performed and less calories burned during the session, allowing the body to be a more effective fat burning machine, since more muscle mass means a greater ability for the body to lose fat.

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