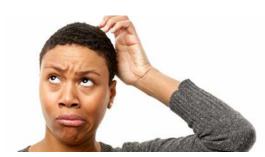
What's the Best Way to Improve Cardiovascular Function – Removing the Confusion

In September we introduced our Exercise is Science theme and kicked it off with a simple self-assessment you can do on your own to determine where you are at right now. Over the next

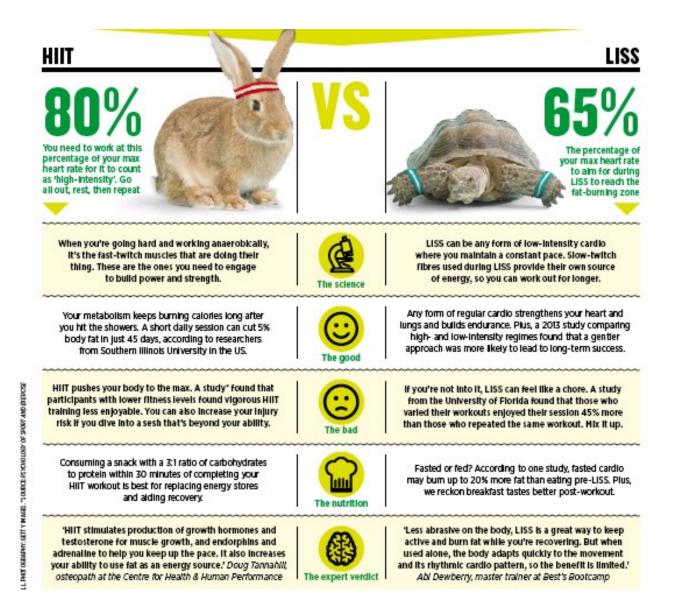


several months we'll be providing some programs you may choose to follow with the goal being an improvement in your results during a reassessment. This month we are focusing on the cardiovascular portion of the assessment. Based on your results you may decide cardiovascular function is an area to focus on, but what is the best way to improve it? Should you do HIIT (High Intensity Interval Workouts) or a moderate intensity workout? You can find information in support of each approach, which can be confusing, so we took a look at the latest research and here's what we found.

A <u>meta analysis study</u> of healthy young to middle aged adults found both HIIT workouts and traditional endurance training elicited improvements in VO2Max, with HIIT showing possible greater gains. Another <u>study</u> involving patients with coronary artery disease showed similar improvements in exercise capacity regardless of method. Yet another <u>study</u> compared Sprint Interval Training with Moderate Intensity Continuous Training and the results showed similar improvement in insulin sensitivity with both methods. However SIT required only a 30 minute commitment per week vs MICT which required a 150 minute per week commitment.

However, when it comes to exercise adherence, personal preference cannot be underestimated. A <u>study</u> of low active, obese women found that although HIIT may be promoted as a time saving solution, this group had a lower enjoyment level associated with HIIT which can lead to a reduced likelihood for adherence. An additional <u>study</u> found that during a 5 week study comparing High Intensity Training to Moderate to Vigorous Training with obese young women, both forms of exercise improved cardiovascular fitness, but this group rated the HIIT higher on a Physical Activity Enjoyment Scale.

For a further comparison, here is an infographic that summarizes the difference between HIIT (High Intensity Internal Training) and LISS (Low Intensity Steady State), which although a lower intensity than moderate exercise, still provides a good overview of the differences.



So what does all of this mean? Both HIIT and Moderate Intensity provide cardiovascular benefit, so unless you have very specific goals where one training method may give you an advantage, choose to do the one you have time for and enjoy! The key to getting results is consistency, so when you are deciding what approach is right for you, consider what you are willing to make time for and how much time you are will to make. Then just go do it!

With that in mind, here are two different plans you can follow to test it out and see what is right for you!

HIIT

A high intensity interval workout means you are performing short intervals of work at a high intensity with a recovery period in between. The key is working at an intensity high enough to significantly increase heart rate. Using the methodology in one of the studies, you can follow this plan 3 times per week for 12 weeks; choose your method of activity and perform it at a light intensity for 5 minutes as your warm up. Then increase the intensity so you are going all out for 20 seconds,

then reduce your intensity for 2 minutes to recover. Repeat 2 more times and then cool down for 5 minutes. Your time commitment per workout is 15 minutes.

Moderate Intensity Training

A moderate intensity continuous training plan can also be done 3 times per week with a longer working time. Again, perform 5 minutes at a light intensity as your warm up. Then increase your effort so that you are working at moderate intensity. This means you are working hard enough that you can't sing but you can talk and carry on a conversation. Continue working for 30 minutes at this level and then cool down for 5 minutes at a light intensity. Your time commitment per workout is 50 minutes.