Efficient and Effective Workouts

Matt Hank, MS, CSCS, USAW

If someone told you there was a way to be more efficient and effective with your procedures at work where you would see better results if you applied this new method, what would you do? No-brainer, you would begin to use this new methodology to achieve success.

What if I told you it is more efficient and effective to do intervals for your cardio (instead of continuous moderate intensity cardio) and circuit your strength training exercises (instead of doing a set of exercise A, resting and then doing another set of exercise A again, etc….) – would you do it?

Efficiency – "performing or functioning in the best possible manner with the least waste of time and effort"

Cardio

- Only have 15 minutes to do cardio – no problem. Set yourself up on the treadmill and alternate speeds of 4.0 and 7.0 mph every minute (on the minute). Many individuals I talk to at the gym feel they need to do cardio for a minimum of 30 minutes because they read that in a magazine/on the internet or heard that on the news. I recommend less time on the treadmill, but at higher intensity – Get the same amount of work done in less time.

Strength Training

- Set up three exercises (squats, pull ups, and push ups). Perform your squats, then head to pull ups, and finish with push ups. Repeat this circuit 3 times. Your only rest between exercises is walking to the next exercise. You can rest 1 minute between sets.
    - Let's do the math: For simplicity, we will say each exercise takes 30 seconds to execute and 30 seconds transitioning between exercises. This circuit would take you **8 minutes and 30 seconds** to complete.
    - If you were to do all 3 exercises independently and rest for 1 minute between sets (which is typical for an average gym rat) it would take you **12 minutes and 30 seconds** to complete.
    - This circuit is 47% more time efficient than the typical strength training method. You can perform all the same exercises (same repetitions and sets) in 4 minutes less time. If you are on a time constraint, it only makes sense to circuit your routine.

Effectiveness – "adequate to accomplish a purpose; producing the intended or expected result"

Cardio

- You will burn more calories with 15 minutes of intervals that we mentioned above as opposed to 30 minutes on the treadmill at 4.5 mph.
    - Example: A 120 pound female alternates 1 minute of running at 7.0 mph and 4.0 mph. In 15 minutes this female will burn 123 calories. The same individual will burn 186 calories if she jogs at 4.5 mph for 30 minutes. This appears to indicate that continuous low intensity running is more effective, but let me explain this situation further.
    - There is greater amount of time to full recovery after high intensity exercise due to an elevated heart rate and clearance of substrates (lactic acid, hormones, and metabolites) formed during exercise. During this recovery time, your body is still burning fuel (calories). Even though you may have burned more calories while on the treadmill for 30 minutes as apposed to 15 minutes, the amount of calories burned will be similar (or even higher from interval training) after full recovery. Full recovery will take longer after during high intensity interval training.

Strength Training

- Circuit training is extremely effective for achieving most fitness/health goals such as weight loss, increasing relative strength/power, gaining muscle, and even improves your conditioning due to the short rest periods. It may have limitations for individuals who are looking to improve maximal strength or power (powerlifters or weightlifters), but for most individuals high intensity circuit training is the way to go to achieve results.

Resource used to calculate calorie expenditure: http://www.exrx.net/Calculators/Calories.html