

THE 30 - MINUTE WORKOUT: IS IT TIME WELL SPENT?

by Mitchell Yass, PT

As a physical therapist and fitness enthusiast, I am often asked questions regarding the best ways to maintain and achieve proper fitness. Recently, I was queried about the 30 minute workout facilities that have sprung up on every corner of every city boasting that this is the most efficient way to gain strength and lose weight. The target for this claim has been women. To my surprise, some inventive individuals have decided to now target men with locations specially designed for men. The whole catch to these facilities is that you need only 30 minutes to complete a full body workout. The idea is that with people living their fast pace lives, they have little or no time to respond to the needs of their bodies. Somehow, it should be acceptable that fitness and health should take a back seat to the more pressing problems people contend with on a daily basis. If you spend just a couple of days in my shoes, I think you would put your health a little higher on the scale of pressing issues to address. Spend some time at my physical therapy facility and see how neglect of ones body can affect ones capacity to live an even remotely normal life after joints have deteriorated or systems begin to fail due to lack of proper nutrition and exercise. You always hear about the person who suddenly sees the light after he has had a heart attack or some other near death experience. That's not the time to recognize the value of exercise and how it can improve your quality of life. The answer to the question of good health will not come in the form of a pill or some device that performs exercise for you while you relax and watch television. Good health comes the way every other success is created and that is with hard work, discipline and commitment. I myself have been strength training for about 18 years. I put on about 50 lbs of muscle. As a result, my ability to perform any functional activity has been made easier. I never question whether the activity is too much for me to perform or whether I may get injured. Just as you only have one brain to develop and nourish, you only have one body. It is time to recognize this fact and recognize that when you are in pain or unable to perform a function, you are limiting yourself from being the best person you can be.

In regards to the type of exercise performed at these facilities it is important to understand the basic law of strength training and how it differs from developing muscular endurance. Strength training is the science of using progressive resistance or mildly increased levels of resistance when moving a muscle through its full range of motion with a controlled speed. The muscle adapts to the increasing amount of resistance by developing new muscle fiber. As the resistance increases, the amount of muscle mass increases. There is a direct correlation between strength and muscle mass. If you increase your strength by 10%, you will increase your mass by 10%. The main question that arises when discussing strength training is how much is the right amount of weight and how much is the right amount of repetitions. The best repetition count for a set when strength training is between 4 and 8 repetitions. With this repetition count, the muscle will respond with the least amount of lactic acid building up preventing muscle contraction from occurring. This repetition count should only be utilized once an individual has fully understood the techniques used in performing strength training exercises. At my facility, we use sets of 10 repetitions. This is a safe number while still not going into a number where lactic acid will be the cause of limiting the muscle to go through the range of motion. How is this different than the 30 minute workout system. In this system, time is the means of measuring a set of exercise. An exercise is performed for 30 seconds and the individual is told to perform as many repetitions as they can in the 30 seconds. Success is determined by performing more and more repetitions. The problem with this system, is that the repetition counts continuously rise going well above the known repetition count for developing strength. Lactic acid, which is a byproduct of muscular contraction, continues to develop as a muscle contracts. This causes less and less muscle to be available to create force. The difficulty in continuing the exercise is not in being strong enough to lift the weight but in having less muscle to work with. This process actually develops muscular endurance. This is the ability for a muscle to create force over an extended period of time. Muscle strength and increased muscle mass is where the benefits of weight loss and increased functional capacity are derived.

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The next issue to look out is the type of resistance used at these facilities. Strength training uses isotonic resistance. That is a resistance or weight that is uniform through the whole exercise. 30 minute workouts use resistance known as isokinetic. This is resistance where the machine is set to move at a uniform speed. Resistance is developed as the individual tries to move the machine at a speed faster than the set speed. The problem with these types of machines is the speed is typically set at a very fast speed. This means you have to move the machine very fast to get any resistance. So with most individuals, they are getting very little resistance and therefore will not get much in the way of results.

The next thing to look at is the speed the exercise is being performed. Strength training is performed at a slow controlled speed. Momentum is never promoted. It limits the muscle from creating the movement and therefore, limits productivity or achieving strength development. The other type of exercise as noted above, is performed at a fast pace. Momentum is encouraged. This limits muscle function and will limit muscle strengthening. The other significant point about performing these exercises as fast as you can is the chance of injury increases dramatically. In most cases, I have found that injuries are created by poor technique and not increases in resistance.

If time is a factor in your life as is with most people, then the question to be answered is how to get the most effectiveness from a bout of exercise. The answer is absolutely by using strength training. All systems of the body are enhanced by using strength training. Don't let commercials fool you into thinking that treadmills or bicycles are necessary to achieved improved cardiovascular health. Strength training increases the amount of HDLs or good cholesterol more effectively in the body improving cardiovascular health. Strength training increasing the resting metabolism of the body by increasing muscle mass. This means more cells must be kept alive and the body has to work harder to accomplish this goal. Fat is the energy source for this system. Aerobic exercise can not make this claim. Each body part needs only to be worked once a week to achieve increasing strength and muscle mass. This takes no more than about 2 to 3 hours a week. It is imperative that you make the time for this. Most pain people suffer from can be resolved through strength training. Most lack of function can be overcome through strength training. It is never too late to start strength training. There are no short cuts.

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