

Tabata: An Innovative And Instant Tool For Physical Fitness

Dr. Madhu Gaur,

Assistant Professor,

Shri J.N.M. P.G. College, Lucknow, India.

Abstract:

There are countless styles of workout that you've probably heard of over the years, and all of them are meant to help you achieve your fitness goals. You may want to increase your strength, lose weight, improve your flexibility, or build muscle. Over the past few years, Tabata has become a household name in the fitness industry. Whether you enjoy CrossFit, Spinning, running, cycling, home workouts, or other fitness bootcamps, you've probably heard of High Intensity Interval Training (H.I.I.T.). Certainly, the most famous HIIT protocol is none other than TABATA. Dr. Izumi Tabata published a study in 1996 showing the effectiveness of this approach in exercise bike training. Tabata training is high intensity interval training (HIIT), consisting of exercises lasting four minutes. His name stuck and now we call a variety of HIIT workouts Tabata. Tabata is a unique form of cardiovascular exercise that offers more health benefits than virtually any traditional exercise. Tabata training is a form of high intensity training, which consists of eight rounds. Each round consists of 20 seconds of vigorous activity followed by 10 seconds of rest, for a total of eight laps.

Keywords: Tabata, High-Intensity Interval Training, Cardiovascular exercise, Fitness.

History:

Tabata training was discovered by Japanese scientist Dr. Izumi Tabata and a team of researchers from the Tokyo National Institute of Fitness and Sports. Tabata and his team conducted research on two groups of athletes. The first group trained at a moderate intensity level while the second group trained at a high intensity level. The moderate intensity group worked five days a week for a total of six weeks; each training lasted an hour. The high intensity group worked four days a week for six weeks; each workout lasted four minutes and 20 seconds (with 10 seconds of rest between each set). The results; Group 1 had increased their aerobic (cardiovascular) system, but showed little or no results for their anaerobic (muscle) system. Group 2 showed a much greater increase in their aerobic system than group 1 and increased their anaerobic system by 28%. In conclusion, high intensity interval training has more impact on the aerobic and anaerobic systems.

The Program:

Each exercise in a given Tabata workout only lasts four minutes, but it's probably one of the longest four minutes you've ever endured. The structure of the program is as follows:

- Work out for 20 seconds
- Rest for 10 seconds
- Complete 8 rounds

You push yourself as hard as you can for 20 seconds and rest for 10 seconds. This is a set. You will perform eight sets of each exercise. You can do just about any exercise you want. You can do squats, push-ups, burpees, or any other exercise that works for your large muscle groups.

Tabata is a form of high intensity interval training, but what sets it apart from other forms of HIIT exercise is the strict timing mechanism. A circuit in Tabata consists of a continuous flow of movement (no stopping to rest or drink here people) operating under the 20/10 rule. So, a circuit goes as follows:

- Exercise 20 secs
- Rest 10 secs
- Exercise 20 secs
- Rest 10 secs
- Exercise 20 secs
- Rest 10 secs
- Exercise 20 secs
- Rest 10 secs
- Exercise 20 secs
- Rest 10 secs
- Exercise 20 secs
- Rest 10 secs

- Exercise 20 secs
- Rest 10 secs
- Exercise 20 secs
- Rest 10 secs

Benefits:

Tabata workout has a wide range of fitness and health benefits that make it a great form of exercise. Below are the main benefits of Tabata Training.

1) Time Savings:

The dramatically shortened and condensed durations of Tabata workouts increase an individual's will to exercise regularly. It would be hard to say that you cannot achieve success in just 4 to minutes of Tabata Training a day, which is a key factor that makes Tabata Training such a motivating form of exercise to perform regularly - regardless of your level of fitness. fitness, activity, could be.

2) Fat Burning:

First, because of the intensity, Tabata will continue to work on the metabolism after the workout is finished. Your heart rate will no doubt skyrocket, which will increase metabolism. To work at this level, the body has to work. The Tabata workout puts your body in the fat-burning zone from the first round and continues to burn for hours afterward. There is some evidence that Tabata training is up to five times more effective at burning calories than traditional four-minute cardio. In a study by Michele Olson, professor at Auburn Montgomery University, Ph.D., a small amount of interval training was found to be significantly more effective than cardio training over the same period.

The Two A'S:

Tabata is a form of aerobic exercise. Your aerobic capacity is the maximum amount of oxygen you use during vigorous exercise. Tabata can dramatically increase this. Anaerobic refers to the maximum amount of energy your body can produce in the absence of oxygen. To obtain this energy, the body burns carbohydrates.

3) Good for Muscle Tissue:

When we use diet to lose weight, we are also running the risk of losing not only fat but muscle tissue. To keep muscles in good condition we need to work them, and the high-intensity interval training method offered by Tabata does just this and helps the body develop muscle tissue rather than damage it. Longer cardio workouts such as endurance running can place strain or damage muscle tissue. With Tabata, participants will find that their lean body mass fast goes up.

4) Short Duration:

Time is not a direct benefit to health, but this can be a driving factor when it comes to exercise routines. Many people do not want to go to the gym for hours, and others simply do not have the time. Because a Tabata session is only 20 minutes long, the motivation to work is higher. Due to nature and intensity, it is also is not something that you would do daily.

5) Convenient and Flexible:

Not having enough time is one of the top excuses not to exercise. But, no matter how busy you are, all it takes is four minutes of this high-intensity workout to get a great workout in. Many people don't want to spend hours at the gym to exercise, whether it's financial or time restraints. You don't need to go to a gym or have any special expensive equipment to reap the benefits of Tabata training. Tabata is short and sweet and due to the high-intensity of the workout, you don't need to do it every day. Training twice a week with this method is enough to get the benefits.

Disadvantages of Tabata:

While the aerobic, fat burning and cardiovascular fitness [benefits of Tabata training](#) are clear, there are also a number of drawbacks which need to be taken into consideration before participating in this style of fitness training. Below are the 4 disadvantages of Tabata training.

1. Increased Injury Risk

Tabata training is performed at an extremely high intensity and this places lots of pressure on your muscles and joints. This means that it has a relatively high injury risk, especially

if you fail to warm up or perform the exercises incorrectly. Individuals suffering from or predisposed to heart disease, high blood pressure, strokes, obesity, pulmonary conditions, metabolic conditions and other critical health problems should avoid this style of training unless they are given the go ahead by their physician.

2. **Limited Muscle Building Benefits:**

Tabata has been proven to stimulate the production of human growth hormone (HGH) which has been known to optimize health, increase strength, augment energy, improve sensitivity to insulin, boost fat burning and increase muscle growth. However, if you are looking to drastically increase your muscle mass, Tabata will not benefit you greatly. This is because longer strength training sessions of between 30 minutes and 1 hour are required to significantly enhance your muscle size and strength.

3. **Longer Recovery Periods:**

A 4-minute workout may not seem like something that requires much recovery. However, the intense reps that are required for each exercise, as well as the 100% commitment and focus needed throughout the workout. The truth is you will probably be unable to move after a 4-minute Tabata workout, due to the fact that your muscles will be completely fatigued. This state of exhaustion takes a long time to recover from, especially if you are not used to undertaking Tabata workouts.

4. **Not for Beginners:**

Tabata was designed with Olympic-level athletes in mind. Not only is it an intense workout that demands extreme commitment and dedication but it also pushes your body to its physical limits. Unfortunately, this means that beginners and unfit individuals are unlikely to be able to complete Tabata workouts effectively and only advanced exercisers will be comfortable taking part in and completing this extreme workout.

Conclusion:

While Tabata isn't perfect and does have its fair share of disadvantages, the benefits far outweigh the drawbacks. Provided that you allow time to build up your fitness levels, warm up and cool down properly and let your body fully recovery, this training can be a highly beneficial addition to your training regime. Just make sure to always bear in mind the disadvantages of Tabata training and take every precaution to be careful. Time is one of the top reasons not to work out, or to be more specific, a lack of time. In today's world of constant connectivity, finding the time to work out can feel impossible at times. But fear not, you can still nail your fitness goals even if you're strapped for time. There's scientific evidence that suggests you can boost your overall fitness levels in just a few minutes a day by doing the Tabata training method.

References:

1. www.today.com
2. www.active.com
3. www.rightpathfitness.co.uk
4. www.102desire.in
5. www.sunwarrior.com
6. www.vcutfitness.com