

# An Overview on The Concept of Weight Training, Circuit Weight Training, And Combined Training

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*Abstract— This article presents an all-inclusive discussion on weight training, circuit weight training, and combined training with such characteristics as they result in benefits and applications. Weight training emphasizes the use of weights or machines for developing muscles and strengthening in terms of advantages, such as increased strength, muscle increase, better posture, and improved balance. This article also refers to its benefits concerning weight loss and anxiety reduction. Circuit weight training is defined as a high-intensity alternating exercise between several exercises that work different muscle groups at once. This type of training is effective because it enables an individual to burn cardiovascular fat without needing long periods in the gym; adaptations of circuit training enable clients to personalize their fitness objectives. Last but not the least, combined training will be considered-it again is through the functional technique by building multiple muscle groups at once. This system, as described in the article, is termed an effective method of engaging different body parts concurrently, in a natural, coordinated way, but also continuing to improve general fitness and to reduce injury risk. The article goes on to discuss the versatility of such exercises and how each should be adapted to suit one's needs and how that can allow one to maintain and keep the workout challenging and interesting with time. Through the review conducted in this article, research will be done to contribute towards the understanding of how training regimes can differ in promoting fitness and well-being.*

*Index Terms- Weight Training, Circuit Weight Training, Combined Training, Muscle Strength, Cardiovascular Fitness, Functional Fitness.*

## I. INTRODUCTION

Weight training and circuit weight training have been acknowledged for a long time as integral parts of fitness programs aimed at enhancing muscular strength as well as endurance. The two training modalities will differ in some ways; weight training is a training modality mainly emphasized for the development of muscular strength and hypertrophy,

whereas circuit weight training incorporates cardiovascular exercises through continuous movement over multiple exercises. This new interest in integrated training approaches seeks to synchronize the strength gains of traditional weight training with the cardiovascular and endurance benefits of CWT. Relative effectiveness then emerges as an important factor for trainers and fitness enthusiasts alike, as individuals look to attain holistic fitness solutions.

The aim of this study was to compare effects of weight training, CWT and combined training on key fitness parameters to such functions as muscle strength, cardiovascular endurance, and total functional fitness. By comparing the benefits and limitations of each of these methods, this study seeks to provide insight into which methodology best optimizes balanced improvement across the multi-domain measurements of fitness. This comparative analysis comes at a time when, arguably more than ever before, there is a proliferation of individuals seeking different fitness benefits: strength, endurance, and health.

## II. WEIGHT TRAINING

Weight training is a kind of physical exercise that use weighted implements, such as dumbbells and barbells, or resistance devices, such as plate-loaded equipment, to mainly enhance muscular development or increase strength. It may enhance strength, physical endurance, and general health. Weight training induces minute rips in muscle fibres, which are subsequently mended, resulting in the development of stronger, leaner muscular tissue. Continue reading to discover several forms of weight training and its advantages.

Benefits:

There's a huge variety of advantages to weight training, and many individuals find it benefits them in

unique ways. These are just a few of our favourite reasons why you should include weight training in your workout plans:

- **Support everyday activities:** Weight training at the gym can enhance your daily life outside of it, facilitating the ability to carry heavy objects (beneficial for grocery shopping and moving), ascending stairs, and improving performance in various sports and activities, including running, football, rowing, and tennis.
- **Improved strength:** Through constant exercise, significant enhancements in your lifting, pushing, or raising capacity should be evident. "The enhancements experienced at the gym are not just gratifying but also translate into advantages in everyday activities, alongside an increase in self-assurance regarding one's capabilities and power." To enhance strength, strive to do fewer repetitions with more weight.
- **Strengthen bones:** After around the age of 30, you start to lose bone density. Putting force on your bones helps them stay strong and can help to reduce the chance of injuries.
- **Build muscle:** Consistent and prolonged weightlifting may augment muscular hypertrophy, hence enhancing strength and altering physical appearance, which is why bodybuilders choose this workout regimen. Weight training enables the precise targeting of certain muscle groups via the selection of specific exercises. While we acknowledge that not everyone is pursuing alterations to their looks or body composition, weight training is essential if your objective is to increase muscle mass or enhance certain regions of your physique.
- **Aid weight loss:** Weight loss may result in a reduction in muscular mass. Since muscle aids in supporting and fortifying your body, it is advisable to preserve as much muscle mass as possible throughout weight loss; hence, including weight training into your fitness regimen is beneficial. Additionally, your muscle mass might affect your basal metabolic rate, which determines the number of calories you normally expend at rest.
- **Better posture:** Regular weight training targeting the full body can help to strengthen areas such as the back, shoulders and core, which can help you

to sit and stand more upright, improving your posture and stance.

- **Reduce anxiety:** Research indicates that weight training specifically helps alleviate symptoms of sadness. In addition to the confidence-enhancing effects of observable advancements in your skills and physique, weight training also facilitates the release of mood-enhancing endorphins that may alleviate anxiety and enhance mental well-being.
- **Improve balance:** Maintaining robust leg and core muscles aids in preventing weakness and instability in the limbs. Weight training may enhance our stability and reduce the likelihood of falls as we age. It may also assist in rectifying muscle imbalances; for instance, if one arm exhibits more strength than the other, exercises can be performed on the weaker limb to enhance its strength.

These are some of our favourite weights bearing exercises to give you some inspiration:

- **Lying dumbbell chest press:** This is an excellent alternate workout for targeting the chest and shoulders in the absence of a home exercise bench. Recline with your back flat on the floor or on a mat, if preferred, with your knees bent and feet firmly positioned on the floor. With a dumbbell in each hand positioned behind your chest and elbows resting on the floor, elevate your arms towards the ceiling until the dumbbells almost converge, then gradually return to the initial position.
- **Dumbbell squats:** If you had to do just one bodyweight exercise, squats would be the optimal choice for comprehensive strength and conditioning. Position your feet slightly wider than hip-width apart and angle them outward slightly. Grasping a dumbbell in each hand, with palms orientated laterally beside each leg. Engage the floor with your toes for stability, maintain a forward gaze, keep your back straight, and flex your knees as if about to sit, while thrusting your hips backward. Pause momentarily before exerting force via your legs and feet to resume an upright position. The exercises may be intensified by executing them at a slower pace, using a resistance band, integrating leaps, or carrying weights in your hands. This is a multifaceted and potent weight

training exercise—discover more in our squats tutorial.

- **Dumbbell reverse lunges:** One of the best ways to improve your balance and leg strength is to do lunges. If your home gym is on the cramped side, this lunge variant is a great alternative that you can use in a smaller area. Position yourself with your feet hip-width apart and grasp a dumbbell with both hands. After that, bring your front knee to a right angle by stepping backwards with one foot and lowering your hips. Keep your heel off the floor and your rear leg parallel to the ground. Stand up straight again, this time pulling your rear leg forward. Switch legs and do the same.
- **Dumbbell bent over rows:** Lunges are a great exercise for building leg strength and stability. You can use this variation of the lunge in a smaller space, which is ideal if your home gym is on the smaller side. Hold a dumbbell in both hands while standing with your feet hip-width apart. The next step is to drop your hips and stride backwards with one foot to make a straight angle with your front knee. Never put your heel down and always keep your back leg in a parallel position to the floor. Once again, stand tall by bringing your back leg forward. Change legs and repeat.

Even if you don't have equipment, you can still get in a great workout using your own bodyweight. Or you can get creative by using items you have at home as weights, like filling a backpack with books!

### III. CIRCUIT WEIGHT TRAINING

Circuit training is when you combine and alternate between six to ten exercises to target different muscle groups. You can alternate between upper body muscles to lower body exercise and your cores. The combination of these exercises is carried out within short rest periods in between different reps. One circuit means that the specific exercises (about 6-10) are already completed. You can do more than one circuit in a particular training session. The point of circuit training is to enable you to train different muscle groups in a short period with the least amount of rest. Because you are switching between different muscle groups in your circuit training, you will be able to work some muscle groups while letting others rest.

For instance, while performing lower body exercises, you work your upper body muscles while your lower body muscles get to rest.

#### Types of Circuit Training

Four main types of circuit training workouts are:

- **Timed circuit:** Each exercise in the circuit is performed for a certain amount of time (typically 30–90 seconds) before moving on to the next exercise
- **Repetition circuit:** Each exercise in the circuit is performed for a certain number of repetitions (typically 10–15) before moving on to the next exercise
- **Sport-specific circuit:** Each exercise is a drill used to improve certain movements involved in a specific sport, such as practicing jumps, kicks, turns, and tumbling skills for gymnastics
- **Competition circuit:** Similar to a timed circuit, but each exercise is completed for as many repetitions as possible within the given amount of time

#### Benefits:

Here are some advantages of doing a circuit training workout:

- **Improves Cardiovascular Health:** Circuit training helps to improve cardiovascular fitness. By performing exercises with little to no rest between them, you are keeping your heart rate elevated, which can improve your heart and lung function over time. This can help to reduce the risk of heart disease, stroke, and other cardiovascular diseases.
- **Saves Time:** One of the biggest advantages of circuit training is that it is a time-efficient way to exercise. With this type of training, you can target multiple muscle groups in a single workout session. This means you can achieve a full-body workout in a shorter period compared to traditional weightlifting or cardio exercises.
- **Builds Muscle:** Circuit training can be an effective way to build muscle mass. This type of training puts your muscles under tension for a longer period, which can help to promote muscle growth. This can be particularly beneficial for those striving to lose weight and improve their body composition.
- **Increases Muscle Endurance:** Circuit training can help to increase muscular endurance. By

performing high repetitions of exercises, your muscles are forced to work harder for longer periods. This can help to improve your muscle endurance, allowing you to perform better in other activities such as running or cycling.

- **Versatile Form of Exercise:** Circuit training can be performed using a variety of equipment or no equipment at all. This makes it a versatile form of exercise that can be adapted to suit different fitness levels and goals. Whether you prefer doing bodyweight exercises like jumping jacks or push-ups, free weights, or upper body exercises such as bicep curls or shoulder presses, there is a circuit training routine that can be tailored to meet your specific needs.

While circuit training is a great method to maintain a healthy lifestyle, it is essential to go slowly so as not to injure yourself. The good news is that a lot of fitness centres include beginner-friendly circuit courses. Participating in these programs will allow you to learn the ropes, get pointers from experts, and build up your exercise intensity slowly but surely. You may get in shape in a safe and effective way by signing up for a circuit class.

Consider using Acupoint massage balls into your circuit training regimen to elevate it to the next level and improve your recovery after each exercise. With the use of these massage balls, you may alleviate stress and improve blood flow by focussing on certain pressure spots. Regular use of our massage balls may help you avoid muscular fatigue and increase flexibility, letting you train harder and smarter.

#### IV. COMBINED TRAINING

You can get three times as much done in the same amount of time with Combination Training, an integrated method of training that incorporates lower body, upper body, trunk musculature, and balance training all into one exercise. Another more practical and organic kind of training is combination training. "Think about a frequent activity in your life that uses only one joint or set of muscles." There is no way for our bodies to operate independently. Getting out of a chair, bending down to pick something up, or lifting something to place it on a shelf all need your whole body to work together.

Muscle coordination is essential in every sport. Still, most of us tend to work out our muscles alone, concentrating on a single area of our bodies at a time, when we go the gym. This is analogous to a football coach preparing for a game by giving individual instruction to each player on the starting line. The first game won't matter how well-conditioned the players are if the coach hasn't gathered them for a scrimmage to teach them how to collaborate. For instance, just because you work your quadriceps out in isolation by extending your legs doesn't imply they'll be able to collaborate well with your hamstrings and trunk. Muscles learn to coordinate their actions in a coordinated fashion via combination training, much as they do in the real world. Whether you're playing a sport or just enjoying some leisure time, your muscles will need to learn to work together in harmony.

When considering training methods, combination training is the most efficient in terms of both time and functionality. A word of caution, though: you could need some time to build up to combo training activities. Before you can start mixing, you need to master each movement individually.

#### Benefits:

Here are 3 reasons why a combination training program will benefit you long term:

- **It keeps the body guessing:** We tend to gravitate towards one type of training. This could be either cardio or resistance. Initially, our body will adjust to the type of training we choose, and we will see progress. But over time our body becomes used to that same type of training. You can switch this up by adding in new types of resistance training (or vice versa). This will stimulate new responses, gives you a new challenge, and will maintain progress in your training.
- **It can keep you motivated:** By changing the way, you are training frequently, you will stay excited about exercising. You will also be less likely to reach a plateau in your workout performance and results. Adding new exercises into your training routine can make the workouts exciting and different.
- **Mixed training will help you achieve your goals:** You can achieve great benefits from both cardiovascular and resistance training. Cardio

training will increase cardiovascular endurance and efficiency, while resistance training will increase muscle strength. Over time this combination will reduce your risk of injury, keeping you healthier for longer. A mixture of both will propel you to achieving success.

Some examples of combination training exercises would be to combine lunges with an overhead press or squats with rows. What about performing bench step-ups with bicep curls? Try balancing on one leg when performing any upper body movement or lying over a stability ball when performing chest presses. When designing your program, analyze how you can take any exercise skill to the next level by combining two or three movements into one complex, compound movement. Not only will you be more efficient with your time but also you will be training your body in a way that mimics real-life movements.

#### CONCLUSION

In conclusion, the comparison among weight training, circuit weight training, and combined training shows that each program offers different benefits relevant to the goal of the person to achieve fitness. Weight training was very effective in strengthening muscles while it increased the hypertrophy of muscles, making it optimal for any power work and bulk accumulation. On the other hand, CWT entails both cardio and strength training, making it a more comprehensive exercise for endurance and fat loss. The combined training approach, which combines elements from both weight training and CWT, has great promise as a balanced solution through the simultaneous gains of strength, cardiovascular fitness, and endurance. It may well be the best form of training for those who want all-inclusive gains on all dimensions of fitness. After all, the choice of training method should be taken according to the goals and preferences of the individual, but results of this study would suggest that combined training offers a more versatile and efficient way toward well-rounded fitness outcomes.

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