

Files

Repetitions

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How many reps per set should you do? There are as many different answers to this question as there are trainers and coaches. But there's one thing most trainers do agree on, and that is you must work a muscle to momentary muscular failure if you want to achieve maximum strength. Muscles respond best when they are worked under continuous tension for 30 to 90 seconds. In addition, when you reduce a muscle's starting level of strength (its fresh strength before exercise) a muscle will be stimulated to grow. Therefore, the deeper you can tap into your fresh strength, the better your chances of getting positive results.

Research confirms that most people make a 20 percent inroad into their starting level of strength. Using a slow lifting and lowering form, most people can perform about 5 repetitions in 30 seconds, 10 repetitions in 60 seconds and 15 repetitions in 90 seconds. Thus, the standard 8 to 12 reps prove effective for most people who use it.

It depends on your natural neurological efficiency

If you really want to optimise your workout effectiveness in relation to the number of reps that will best work for you, you must look further into your own genetic makeup, specifically your neurological efficiency and muscular fibre type.

Neurological efficiency is the relationship between your nervous system and muscles. That is, it's your central nervous system's ability to stimulate the needed muscle

fibres for a given workload. Your neurological efficiency is limited to what you are born with, and it varies greatly from one individual to the next. If you're able to recruit a higher percentage of muscle fibres for a given workload, chances are you'll exhaust a larger percentage of your fresh strength, thereby reaching a faster state of fatigue. On the other hand, those who can only recruit a small percentage of their muscle fibres for the same workload tend to be weaker individuals, making less of an impact on their starting level of strength.

It depends on your muscle fibre type

Muscle fibre type also affects how an individual excels in his or her strength training program and is very closely related to neurological efficiency. People who possess a higher percentage of fast-twitch muscle fibres usually demonstrate greater strength. These individuals make deeper inroads into their fresh strength, have a lower tolerance to exercise, and usually fatigue faster. Low repetitions, 4 to 6, seem to work best for these individuals. People who possess slow twitch muscle fibres will usually perform better in endurance types of activities and are found to have a higher tolerance to exercise. These individuals are generally weaker and will perform better with reps in the 15 to 20 range.

Keep going until you reach momentary muscular failure

The goal to remember is to use up approximately 20 percent of your starting level of strength. The average person makes about a 2 percent inroad per repetition and fails at about 10 reps. If you have a very good neurological efficiency and have a higher percentage of fast twitch muscles, it's likely you'll be able to contract a greater percentage of your muscle mass and make deeper inroads in your muscular strength per repetition, resulting in failure sooner. Therefore your reps will need to be adjusted accordingly.

Regardless of what repetition guidelines you use, the most important point to remember is how long a muscle spends under continuous tension and that you reach absolute momentary muscular failure. Just don't stop because you reach a certain number of repetitions; go until you can't perform one more rep!