

The Most Important Factors in Strength Training

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You're ready to pump iron, right?

If so, that's great. But before you get started, there's a very important concept that you need to understand. In fact, if you understand nothing else about strength training, then this is the guideline to master and apply in all your exercise sessions—for the rest of your life. That concept deals with the form that you use to lift and lower a weight.

In my 12 years of working in the Health & Fitness industry and being associated with strength training, I've visited dozens of gyms and fitness centers throughout the world. With maybe two exceptions, 99% of the members of those training facilities were exhibiting poor form.

The easily observed form violation across the board was movement that was too fast. If these exerciser participants did only one thing, their strength-training results would significantly improve. That one thing is to slow down their lifting and lowering speed. Whatever the speed of movement is, make it twice as long. Simple, yes. But very effective.

What's a more specific guideline to follow concerning speed of movement?

Especially for beginners, as well as for exercisers whose form needs attention, I recommend a 10-second lifting (positive) speed and a 5-second lowering (negative) speed as a guide.

Yes, you heard me right—that's 15 seconds per repetition—and it doesn't matter if you're doing a bench press with a barbell, a curl with dumbbells, or a leg extension on a machine. Try the 10-up and 5-down style, and you'll suddenly feel muscle fibers working that you didn't know you had!

Why should you spend a longer time on the positive phase (10 seconds) than the negative phase (5 seconds) of each repetition?

Research shows that most of the cheating actions—such as twists, back arches, and slight knee bends that lead to excessive momentum & dash, originate during the positive stroke. Drastically slowing the lifting reduces these cheating actions. Or if they do occur, they are self-evident and instantly correctable. The concept behind moving slowly is to remove as much of the momentum as you can from the exercise. Naturally, you have to accelerate to start the movement and decelerate to stop. Doing so requires a change in velocity and thus involves momentum. The idea is to keep the movements and the turnarounds at both ends smooth and not jerky. This keeps the momentum at a bare minimum.

What's the problem behind having excessive momentum in a strength-training exercise?

Momentum usually takes some of the resistance off the working muscles and transfers it elsewhere: like to your joints, bones, and other muscles. It actually makes an exercise easier, which is what you're trying to do in a weightlifting contest. But in a weightlifting contest, you're demonstrating strength. In a strength-training workout, you're building strength. Building strength efficiently requires stricter, harder exercise—not looser, easier exercise.

Excessive momentum can also precipitate injuries. Instead of having only the weight of the implement, say 25kgs on the barbell, the momentum involved in fast lifting and lowering can increase the weight of the barbell by three, four, or more times. Instead of having 25kgs, you temporarily may have 75kgs to 100kgs, or more at some phases of the range of movement. Force causes injury, and it's to your advantage to keep the force low—and most importantly—under control.

Furthermore, excessive momentum contributes to mid-range strength development. Only the middle part of the exercise gets close to the appropriate resistance. The ends of the exercise, the bottom and the top positions, receive either too little or too much resistance. Reducing the momentum by slowing down the movement applies more full-range resistance to the involved muscles and thus elicits more thorough fiber stimulation.

At 15 seconds per repetition, your ideal repetition range is now from 4 to 6. Four to 6 repetitions require from 60 to 90 seconds, which appears to be a most appropriate guideline for maximum muscular stimulation. Furthermore, if you are already involved in a strength-training program, then you'll have to reduce the weight on your exercises by approximately 30% to master the 15-second protocol.

Give the 10-5 slow repetition guideline a fair trial, and you'll reap the reward of fast results!