

Eccentric Muscle Contractions

Let's start with the basics about two types of muscle contractions: *Concentric and Eccentric*. Most of us are aware of concentric contractions, while many inadvertently neglect the ever-important eccentric contractions.

A concentric muscle contraction is one in which the muscle origin and insertion move closer together, i.e. the muscle shortens during the movement. In a typical bicep curl, the concentric phase is the lifting of the weighted hand up toward the shoulder.

The eccentric phase of the same movement is the lowering of the hand away from the shoulder. Unfortunately, this phase is frequently neglected during exercise. Sometimes this is due to a lack of knowledge. Research states that eccentric muscle contractions have a greater effect of increasing strength and muscle mass than do concentric contractions....so they should not be neglected.

The good news is that it is never too late to change and improve your technique to maximize your benefits. The exercises should be performed at a slow to medium pace. For example, try to make the concentric phase last for a 2-4 second duration, while making the eccentric phase (i.e. the lowering of the weight) last for 3-5 seconds. This may take a little practice to perfect it.

I have seen many people performing the concentric bicep curl movement, while quickly allowing the weight to fall back down to the starting position for the next concentric repetition, completely skipping over the eccentric phase. Those who neglect the eccentric muscle contraction phase are wasting a lot of time and short-changing their potential for optimal fitness results.

Try it out and let us know what you think. Cheers!

