

## **Are You Sore? (Part 2)**

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Due to the number of responses I have received regarding part 1 of this article series, I have decided to write a follow-up article, which further defends my reasoning and viewpoint. Let me start by saying that if you really do not care about muscle function or rather only care about pushing yourself as hard as you can while you train, what I am about to present will more than likely go in one ear and out the other. I am not trying to change your viewpoint or how you think; I am just trying to present information that may or may not challenge your belief system, but will hopefully spur a thought process and discussion.

So the argument that has been presented to me since the first post is that in order for the muscle fibers to grow, they must first be damaged. I, and all of the published texts I have found, agree with this statement, but there is ambiguity concerning how much damage must first be done in order for soreness to occur. In other words, it is not particularly clear as to whether damaging a muscle fiber automatically causes soreness or if there is a certain damage threshold that must first be exceeded in order for muscle soreness to be experienced.

Based on my experience with training myself and others, my hypothesis is that the latter holds true. What I mean is, I am almost certain that some level of muscle fiber damage occurs while I train due to my inability to perform an identical training session to the one I just completed immediately after finishing. In fact, it is often very apparent to me that I would not be able to hit the same weights at the same levels of intensity or volume that I just did. However, this damage is not indicative that I will be experiencing muscle soreness in the following days, which tells me that I am recovering fairly well from my training.

My recommendation is that if you are still experiencing muscle soreness after having been 24 hours removed from the stimulus, you overdid it with your training and exceeded the threshold of the tissue(s) in question. I am basing this recommendation off of the assumption that you will be able to get an appropriate night's sleep within the 24-hour window, which will allow your body the best opportunity to recover from the stresses of the day. If you are unable to relieve yourself of the muscle soreness after the 24 hours, then the amount of stress in your life during that time was too great for your body to handle appropriately. The tricky part about training recovery is that there are so many variables to consider, but generally speaking if you are unable to recover from one day's training by the time it is time to begin the next day's training, you exceeded your body's threshold of what it could recover from.

I could see an argument for a 48-hour window being in place instead of a 24-hour window due to people generally taking a day off between training days, and maybe this would be a more appropriate guideline. The problem I am running into with this, though, is that if it is taking people 48-hours to only relieve muscle soreness then they are only a fraction of the way through the recovery process after two days and they are about to stress their system again on the new training day

that has arrived. Because the magnitude of muscle soreness is only one of many variables in the recovery process—how many of us could perform identical, intense training sessions day after day whether we woke up sore or not?—its absence does not necessarily indicate full recovery.

There will often times be damage to the muscle fibers that occurs during training. Whether or not this damage will always lead to muscle soreness is up for debate, but it appears that the former can be present without the latter. However, should muscle soreness be felt for more than 24 hours post-training, it can be assumed that the threshold of the tissue was exceeded and the contractile capabilities of said tissue have been compromised.

Get big or die tryin’.

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