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THE MANASSAS/BULL RUN AND ARLINGTON NATIONAL CEMETERY LEADERSHIP EXPERIENCE

LAST CHANCE TO REGISTER!



More information on page 9

INSIDE THIS ISSUE:

- From the President's Desk
- Who Can Access Internal Affairs Files?
- Reawakening the Nation
- Policing in America: Protect, Respect, Community

The Right Dose of Strength Training

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For a medicine to improve a condition, it must be taken in the right dose, meaning in certain amounts and at specific intervals. Taking medicine in a volume or at a frequency that's either less than or more than what's needed won't be as effective. And in the case of taking more than what's needed—an overdose—it can be detrimental.

The correct volume and frequency of strength training can be likened to a dose of medicine. With strength training, a muscle must encounter some sort of demand (or stress). If the demand is in the right amount—the right dose—compensatory adaptation occurs. As the name of the process implies, the muscle compensates to an appropriate demand by adapting. The way that a muscle adapts is by getting stronger—and, to a lesser degree, bigger—within the scope of an individual's genetic profile. Look at it like this: In response to what amounts to an assault, a muscle reinforces itself in preparation for another incursion. (This is just one of many types of compensatory adaptation that can take place at the cellular level.)

To reiterate: In order for adaptation to occur, a muscle requires the right dose of strength training. Too little and there's *no need* for a muscle to adapt; too much and there's *no chance* for a muscle to adapt.

It's important to understand that compensatory adaptation to the demands of strength training occurs during the recovery process. Believe it or not, your muscles don't get stronger during your workout ... your muscles get stronger *after* your workout. If the demands are of sufficient magnitude, a muscle is literally torn. Although these "tears" are quite small—microscopic, in fact—the recovery process is essential in that it allows the damaged muscle enough time to repair itself. Think of this as allowing a wound to heal. If you had a scab and picked at it every day, you'd delay the healing process. But if you left it alone, you'd permit the damaged tissue time to heal. In a sense, then, the recovery that follows a workout is a process in which damaged tissue—in this case, muscle tissue—is healed.

There are individual variations in recovery ability; everyone has a different tolerance for exercise. However, a period of at least 48 hours is usually necessary for a muscle to adequately recover from strength training that's done in an intense manner.

As a result, it's suggested that you do strength training two or three times per week on nonconsecutive days (such as Monday, Wednesday and Friday). This dosage is consistent with the most recent position stand by the American College of Sports Medicine. (Note that this assumes total-body workouts.)

All of this begs the question, "How do I know if I'm getting the right dose of strength training?" Well, how do you know if you're getting the right dose of medicine? You see improvement, right? It's the same thing with strength training. If you see an increase in your performance, you're getting the right dose. Specifically, you should see a gradual improvement in the amount of resistance that you use and/or the number of repetitions that you do; not every single workout, of course, but over a period of time. On the other hand, if you see a decrease in your performance, then you're probably getting an overdose. Here, the sum total of your training has compromised your ability to recover. This could be the result of too much volume (doing too many sets, too many repetitions or too many exercises) or too much frequency (doing too many workouts).

Bottom line: Strength training will be productive if it provides an *overload*, not an overdose.

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