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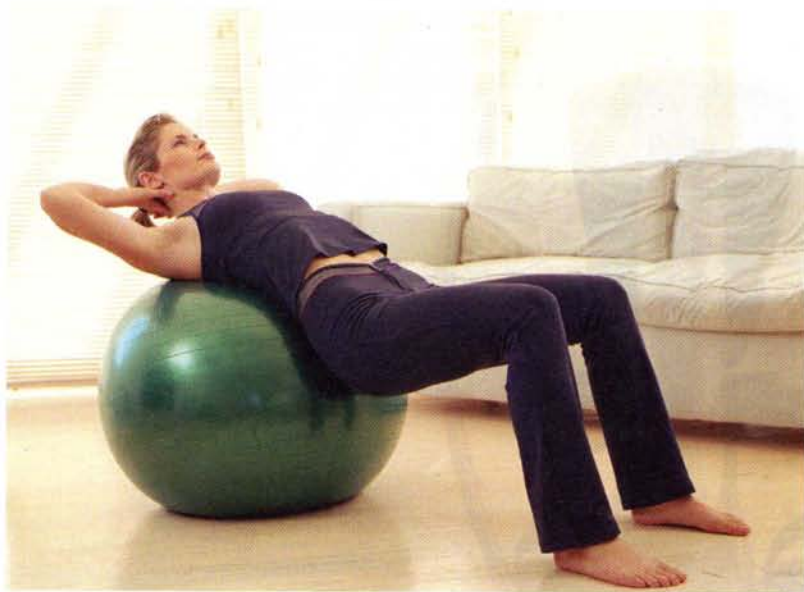
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Q&A

[BY MATT BRZYCKI]



Do stability ball exercises improve core stability and sports performance?

Many anecdotal reports claim that performing exercises on a stability ball or other unstable equipment will increase the stability of the core (essentially, the muscles that affect the mid-section). It has also been claimed that increasing core stability improves athletic performance. But is there scientific support for any of these beliefs?

In a study that involved collegiate swimmers, researchers found that training on a stability ball improved performance in tests of core stability, but not performance in swimming. In a study that involved high school athletes, researchers found that training on a stability ball improved performance in tests of core stability, but not maximum oxygen intake, running economy or running posture. So, the use of stability balls has been shown to improve performance in tests of core stability, but not athletic performance.

With the relatively recent emphasis on core training, you'd think people had never trained their cores. Of course, this simply isn't true. The fact is that, prior to the current core-training craze, people had trained their cores for years. Done safely, exercising on a stability ball can add variety to workouts. But when outlandish claims are made or unsafe activities are advocated — such as squatting while balancing on a stability ball or jumping from one stability ball to another — isn't the use of stability balls getting just a bit unstable? **FM**

Is it okay to exercise every day?

While exercising every day may sound admirable, it doesn't allow for an adequate amount of recovery. In one study, subjects were divided into two groups that performed the same 14 sessions of activity. The only difference was that one group trained every day for two weeks, and the other group trained every third day for

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six weeks. Each session consisted of a series of 15-second and 30-second all-out sprints on a stationary cycle. The subjects who trained every day improved their maximum peak power by 3 percent and mean power by 3 percent; the subjects who trained every third day improved those measures by 20 percent and 14 percent, respectively.

An appropriate frequency (and volume) of exercise can be likened to a dose of medication. In order for medicine to improve a condition, it must be taken at specific intervals and in certain amounts. Taking medicine at a greater frequency (or in a larger quantity) than what's needed can be harmful. Similarly, an “overdose” of exercise — in which workouts are performed too often (or have too much volume) — can also be harmful. Remember, exercise is effective if it provides an overload, not an overdose. **FM**

Does dehydroepiandrosterone increase strength?

Dehydroepiandrosterone (DHEA) is a precursor to steroids and, therefore, is believed to increase the production of testosterone. This hasn't been proven by research, however. In one study, subjects who received a 50 milligram dose of DHEA didn't increase their levels of testosterone. In another study, subjects who received 150 milligrams of DHEA per day didn't improve their body composition or muscular strength.

Since DHEA is a precursor to steroids, it's no surprise that it has the potential for similar adverse effects. There are reports of hair loss, growth of facial hair and voice deepening in women, as well as the appearance of female-like breasts in men (which isn't reversible). DHEA may also increase the risk of uterine and prostate cancer. Also, this or any other steroid precursor, could cause someone to fail a test for steroids.

DHEA is available over the counter; it's not subject to government regulation. Therefore, there is the potential for inaccurate dosage and impurities. Independent testing of 16 DHEA products found that only eight (50 percent) contained the exact amount of DHEA that was stated on the labels, and the actual levels varied as much as 150 percent. Amazingly, three (18.75 percent) of the 16 products didn't contain any DHEA whatsoever. **FM**

Matt Brzycki is coordinator of recreational fitness and wellness programs at Princeton University, Princeton, N.J. He has more than 22 years of experience at the collegiate level and has authored, co-authored or edited 14 books.