

Newsletter

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Before or after workout, stretching is a must.

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Wait long enough-and read widely-and you'll be sure to find a study that finds in favour of something you've always felt a bit guilty about: red wine at dinner, a little TV at night, even the occasional martini (shaken, not stirred).

The current issue of the journal of the *American College of Sports Medicine* features just such a report, one that might confirm what you have long suspected: stretching before exercise is a waste of time.

"Many athletes stretch their muscles before exercise because they believe this reduces the risk of injury," says the article written by a team of Australians. "However, there is no evidence that pre-exercise stretching does, in fact, reduce injury risk."

Led by army physiotherapist Rod Pope, researchers monitored 1,538 male army recruits for 12 weeks. Half of the men performed a series of six leg stretches prior to basic training; the other half did not. The study found no significant difference in the injury rate between the two groups.

"We were able to rule out even a quite small effect of stretching," says Pope, who all but ordered the army to stop bothering with the routine activity.

Although it has not been fully studied, stretching tight muscles, or stretching after exercise, could be of some benefit, he allows.

Debate about stretching is not new, although the point of contention has not been if but rather when, which is to say before or after workout.

"This is one of the most controversial subjects," says Ottawa fitness trainer Liz Lesh. "Ask 10 fitness experts and you'll get 10 different opinions."

In her opinion, serious stretching should be saved for after a workout, when it's much more satisfying. "Your muscles are warmed up, you are more fluid."

As for before, Lesh recommends going through the motions during your warm-up, performing the exercise you are about to do, but at a much lower intensity. "If you are about to squat with weight," for example, "do a set without a weight," If you're going out for a run, start with a brisk walk.

Lisa Refausse, fitness director at the Ottawa Athletic Club, agrees that the post-exercise stretch is crucial, but adds that some people really do need to stretch before exercise.

Any flexibility exercises before a workout should be preceded by a good warm-up, she cautions. Then, as you stretch, "slowly recruit and stretch the muscle or mimic the upcoming workload."

No matter what, or when, the experts agree on one thing: you must listen to your body.

"A good stretch is performed with no pain," says trainer Duane Jones. "The stretch reflex is a nerve reflex mechanism that signals the muscle to contract if you stretch too hard. Most people do not heed the protective contraction and go beyond the stretch limit and get injured."

Jones recalls a time in the 1970s when coaches required elite athletes to stretch up to 60 minutes a day. "Since that we have learned that an easy five to 10 minutes stretching properly, before and after exercise, helps reduce injury."

No matter when you decide to stretch, you should heed the Six Rules of Stretching as put forward by Toronto chiropractors Drs. Christopher Oswald and Stanley Basco in their comprehensive guide on the hows and whys of the matter.

"Stretching is a tremendously cost-effective method of preventing injuries, maintaining mobility, reducing stress and enhancing performance and the quality of life," they write in *Stretching: For Fitness, Health & Performance* (Sterling Publishing).

Here, then are the six rules:

- **Warm up:** Before you stretch, your muscles should be warm. An efficient warm-up can include marching, walking in place while swinging your arms, taking a warm shower or mimicking the sport you are about to do." The warm-up will increase muscle temperature, which increases blood flow to the tissue, allowing the muscle fibres to respond more quickly and efficiently to the stretch, the guide explains.
- **Be Gentle:** "Do not force a muscle to stretch. All you should feel is a gentle pull in the muscle. It should take approximately six to 10 seconds for the internal muscle-protective mechanism to adapt to the new position." Once the muscle fibres relax and change their length, you should notice a gradual decrease in the pulling, say the chiropractors. "At the end of 30 seconds, you should feel almost no pulling sensation. If you still feel something, you are stretching too far, which can result in a sore and stiff muscle."
- **Hold for 30 seconds:** Anything less than 30 seconds will not give the nerves enough time to adapt to the new length and alter the muscle tone. Oswald and Basco write. "If you cannot hold the stretch comfortably for this long, then ease back." Only one repetition per muscle is required when done daily.
- **Breathe:** "Deep, rhythmic, abdominal breathing helps to improve circulation to muscle tissues."
- **Do not bounce:** "Always stretch slowly and gently."
- **Stretch both sides:** Always stretch the right and left sides, or the front and back. "This will enhance flexibility and performance while reducing the risk of injury."