

Stretching and Flexibility



Contrary to popular belief, stretching before a workout does not appear to decrease the occurrence of injury. The risk of injury seems to be about equal for those who stretch and those who do not stretch before exercise. The warm-up, not stretching, seems to be the important deterrent for injury, performed before an exercise bout. Stretching seems to offer more long term benefit such as maintaining functional flexibility and correcting particular muscular imbalances.

Benefits of stretching

Most aerobic and strength training programs inherently cause your muscles to contract and flex. That's why regular stretching is a powerful part of any exercise program. Consider this:

- **Stretching increases flexibility.** Flexible muscles can improve your daily performance. Tasks such as lifting packages, bending to tie your shoes or hurrying to catch a bus become easier and less tiring.
- **Stretching improves range of motion of your joints.** Good range of motion keeps you in better balance, which will help keep you mobile and less prone to falls — and the related injuries — especially as you age.
- **Stretching improves circulation.** Stretching increases blood flow to your muscles. Improved circulation can speed recovery after muscle injuries.
- **Stretching can relieve stress.** Stretching relaxes the tense muscles that often accompany stress.

Greater flexibility may impair performance in sports that that do not require a high degree of flexibility such as running. Runners with less flexibility are actually more efficient at running. Intense static stretching may also reduce maximum force production. The loss of voluntary strength and muscular power may last up to one hour after the static stretch. People who participate in activities that require more than average flexibility (e.g.: gymnasts, dancers, figure skaters) may still find stretching beneficial to their performance.

The ACSM recommends flexibility training a minimum 2 to 3 days per week holding each stretch for 10 to 30 seconds to mild discomfort; 3 to 4 repetitions per stretch. On a PNF stretches ACSM suggests a contract 6 seconds followed by a 10 to 30 second assisted stretch.