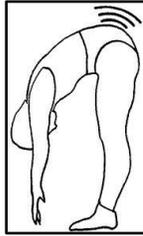


## Bad Stretching?

Are you kidding me? Some stretches we learned in high school are just wrong!  
Here are two:



Toe Touches



Windmills

Let's see why

### Toe Touches

**First Point:** The soft tissue (muscles, ligaments, fascia and tendons) simply are NOT designed to support the load of the torso. In this position you have TWO [lever and fulcrum](#) systems at work. The 1<sup>st</sup> system is the pelvis acting as the fulcrum and the torso acting as a long and heavy lever. The 2<sup>nd</sup> system is the [shoulder girdle](#) acting as the fulcrum and your arms acting as another long lever. Combining these two puts tremendous stress and strain on your low back.

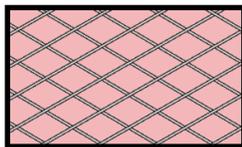
**Second Point:** This position allows no isolation of the muscle group that you are trying to stretch. In this case you are stretching four muscle groups at once: [calves](#), [hamstrings](#), low back and upper back. The problem with that is the tightest muscle group will stretch the least and the most flexible muscle will stretch the most.

**Try This:** Take two rubber bands one thick and one thin. Tie them together and then pull them apart. You will notice the thick rubber band (analogous to the tight muscle) barely stretches and that the thin rubber band (analogous to the more flexible muscle) stretches far more.

**Solution:** Always isolate a muscle when you stretch so it is the only one being worked.

### Windmills

Flat out horrible for your low back and discs! The fibers of your [low back discs](#) are at a 30° angle, half going from the lower right to the upper left and the other half going from the lower left to the upper right. As you lean forward and rotate only half the fibers hold, making the discs susceptible to injury.



[Annular Fibers](#): Relaxed



Annular Fibers: Under Stress

**Solution:** All [rotational stretches](#) should be done in a chair sitting up straight and then twisting or lying on your side and hanging your leg over the edge of a bench, bed or couch.