

TRAINING FOR FLEXIBILITY

Understanding the mechanisms of stretching is far less critical than understanding when to apply each stretching technique.

As a guideline, static stretching (stretching the muscle and then holding it in its elongated position for a stipulated amount of time) should strictly be done post-exercise. Numerous studies have shown that SS pre-exercise impairs performance and increases the risk of injury. This makes sense because when you stretch a muscle and make it more compliant, it takes less force to rupture. Post-exercise, our muscles are shortened and tense leading to a feeling of tightness, therefore we should apply static stretching techniques as a means to help ease the muscle back to its pre-workout status.

So what then should we do pre-exercise? Before starting a workout, our bodies – particularly our muscles and working tissues, exhibit what is known as the thixotropic effect. Here's an example: Have you ever tried to pour ketchup out of a bottle right after you take it from the fridge? Wasn't it easier after you shook the bottle or waited for it to get to room temperature? That's the thixotropic effect, and in that sense, our bodies are quite similar to ketchup. It's why we should employ DS (or warm up) before a workout. We need to mobilize our joints, use similar movement patterns to what we intend to employ for our workout, but also increase body temperature, improve enzyme activity and get neuromuscularly ready for the workout!

So how then does PNF come into the picture? SS and DS produce acute adaptations, but just for the short duration of the workout. In order to improve flexibility permanently, we need the body to continually adapt. Chronic flexibility issues can lead to poor posture and increased

risk of injury due to inefficient or poor movement patterns. Therefore, it is paramount to have good flexibility, and it needs to be trained just as we train for strength and cardio. Dedicate a weekly 30-minute session to PNF stretching. To retain the improved flexibility, use SS regularly to supplement PNF. Recent research has shown that PNF stretching can improve a joint's range of motion in as little as three weeks.

Research has also proven that flexibility, power and strength share a positive relationship which means the more flexible you are, the stronger and more powerful you will be. These components all work synergistically. Think about a stretched out elastic band; it flies further than one that is stretched less and it's more painful when it hits you too! With the amount of time and effort we spend doing resistance and endurance training to improve our bodies, it only makes sense to spend equal energy on flexibility. Your body will thank you.

Admit it; you think this sounds ridiculous, right? Most gym goers know how to engage in resistance training to improve their strength, and endurance training to improve cardiovascular performance. But who knows how and why to train for flexibility?

You're probably thinking that flexibility just means stretching and you're actually not too far from the truth, but doing your standard pre and post-exercise stretching routine is not exactly training for flexibility. Like strength and conditioning, there is a science behind stretching – appropriate ways and methods of stretching that can either enhance your performance or hinder it.

There are three basic types of stretching:

1. **Static Stretching (SS)**,
2. **Dynamic Stretching (DS** - often known as dynamic warm-up), and
3. **Proprioceptive Neuromuscular Facilitation (PNF)** stretching.



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has many years of experience as a PT with a particular interest in sport specific training and fitness. For further information on this, or to make an appointment with him, contact the Sports Counter at 6739-4312.