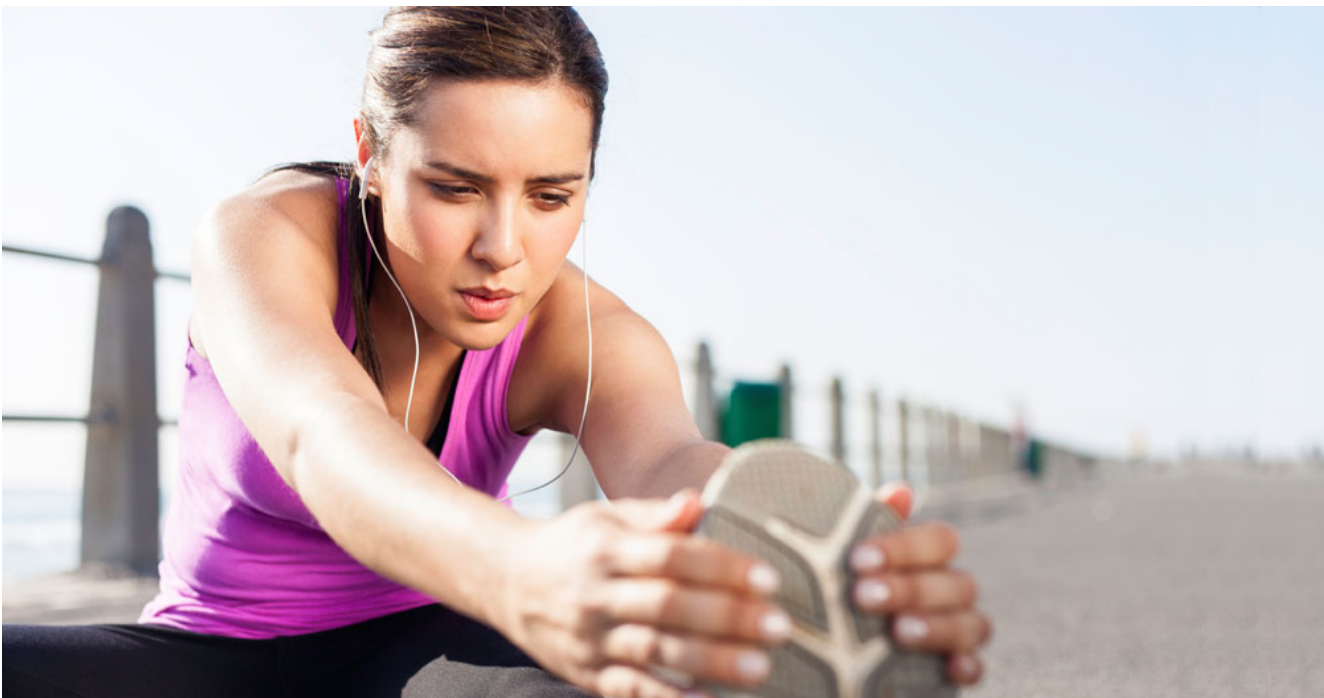


# ARE YOUR CLIENTS DOING ENOUGH FLEXIBILITY TRAINING?



Flexibility—the ability to move joints at their full range of motion (ROM)—is important for several reasons. Without enough flexibility, daily routines become difficult and, over time, the body compensates movement positions because of reduced mobility. Maintaining a flexible body decreases physical pain and prevents injury.

Scientific evidence suggests that the risk of injury is reduced when people follow a proper flexibility-training routine. Regular flexibility training can also help reduce stress in active muscles and relieve tension in overused areas. Plus, flexibility is a form of active recovery that improves mental states and decreases unstable emotions.

## SIGNS AND INDICATORS FOR A NEED

# TO ADOPT FLEXIBILITY TRAINING

If your clients exhibit any of the following, chances are they need to be performing more flexibility-training exercises:

- Joint stiffness
- Muscle or joint pain
- Back pain
- Unsteady emotions or chronic stress
- Poor posture
- Injury prevention or recovery
- Movement compensations
- Discomfort while moving or sitting
- Scar tissue that limits range of motion

## FLEXIBILITY MOVEMENT SCREENS

You can identify your clients' inflexible zones through initial posture, movement and flexibility assessments. Functional movement screens (FMS) help identify inflexible areas, such as lumbar extension, lumbar and hip flexion, shoulder mobility, active straight leg raise, and deep squat (which looks at upper-body flexibility.)

If you are not versed in FMS, refer to your *ACE Personal Training Manual* for information on how to perform specific movement screens and how to identify muscular imbalances. However, you can also use simple movements to determine if a client needs more flexibility training (see example below).

Most people experience immobile hips and shoulders, because gravity affects posture, particularly for those who sit for long periods of time. Also, the shoulder and the hip are the links to the torso and the "transition" zones between the limb and the torso. Shoulder raises are a simple screen that can be used to determine a person's current shoulder mobility. This screen is simple, safe and usable in any environment.

## SHOULDER RAISES

### PURPOSE

This screen can help determine whether a client has shoulder mobility or compensates with the spine.

### HOW TO PERFORM

Place a foam roller against a wall. Position the client so the roller touches

the back of the head down through the lower spine. The client should be upright and not “leaning” into the foam roller. Cue the client to exhale and lift the arms (positioned in front of the body) overhead. Watch several repetitions. Note the range of motion. If the client lifted his or her hands over the shoulders, did he do this with just his arms? Or did the rib cage pop off the roller, using spinal extension to compensate?

If compensation exists, this indicates corrective exercise and flexibility training is warranted for the shoulder and chest musculature and core stability.

## FITT OF FLEXIBILITY TRAINING

### FREQUENCY

Flexibility training is ideal after every workout. However, clients can perform stretching routines four to seven days per week.

### INTENSITY

Flexibility develops over time and with practice. Stretching should never be painful—stretches should be held to a point of slight tension. A deep breath relaxes the stretch, especially a “breathing into” the focused areas. Encourage clients to exhale when “going into” the stretch.

### TIME

How long a stretch should be held depends on the type of stretch and the client’s time. In general, a flexibility routine should last a minimum of five to 10 minutes and should target the major muscle groups. Ideally, basic static stretches should be held for 30 seconds.

### TYPE

Here are the three main types of stretching techniques to incorporate into your clients’ routines:

**Static stretching** involves taking a joint, or set of joints, through its ROM and holding at an end point. This is passive and uses gravity to enhance tissue extensibility.

**Dynamic stretching** uses dynamic movements through the full ROM of a joint. This is an active form of stretching and incorporates reciprocal inhibition, where the agonist muscle contracts and the antagonist or opposite muscle lengthens. Many group classes such as water therapy/aerobics, yoga, tai chi and Pilates are classified as forms of dynamic stretching.

**Proprioceptive Neuromuscular Facilitation (PNF)** promotes the response

of neuromuscular mechanisms through the stimulation of proprioceptors to gain a better stretch. It's a contract/relax method of stretching. For example, a passive 10-second stretch requires the individual to push against a force that is applied (concentric muscles will contract) followed by either a deepening or relaxing of the stretch. Three PNF styles include the "Hold-Relax," "Contract-Relax," and "Hold and with Agonist Contraction."

*Active Isolated Stretching (AIS)* follows surgical rehabilitation techniques, where a stretch is never held for more than two seconds. The body is moved into the stretch for two seconds, released to the starting position and repeated for several repetitions. The goal is to gain more ROM (or go "deeper") into the stretch with each repetition.

## WHAT'S THE BEST TECHNIQUE?

What style of stretching serves your client best? This depends upon the client's ability, fitness goals and current state of wellbeing.

Athletes and corrective exercise clients benefit from any of the four main stretching methods. Clients new to stretching, however, should "ease" into flexibility training with traditional static and dynamic techniques. Many novice exercisers find traditional stretches hard enough because of the tension and connecting with the breath. Once they adopt better range of motion, more advanced techniques are applicable.