

Pilates Central
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Flexibility Report
Movement is Life. Move Well.

Flexibility decreases as we age. Know the Secrets of Flexibility Training to Improve your Life.



To remedy this decrease in flexibility it is necessary to maintain our bodies ability to move freely. So that we can enjoy our daily lives. Most people don't want or need the flexibility of a rhythmic gymnast but pain free movement is key to a happy healthy life. Of course you want to keep moving well in your 20s, 30s, 40, 50s and beyond? Then a little maintenance goes a long way.

Increasing your flexibility is obviously essential to help relieve pain and increase joy, but what is the best way?



Flexibility, definition:

The quality of bending easily without breaking.

Oxford English Dictionary

POINT TO REMEMBER:

There are several different methods to become more flexible/increase your Range of Motion (ROM) and each has it's Pro's and Con's.

All of these methods are utilised at Pilates Central to give you the most benefits according to your unique needs.



An important <u>concept</u> to understand is the **Stretch reflex:**

The stretch reflex (myotatic reflex) is a muscle contraction in response to stretching within the muscle. It is a monosynaptic reflex which provides automatic regulation of skeletal muscle length.

When a muscle lengthens, the muscle spindle is stretched and its nerve activity increases. This increases alpha motor neuron activity, causing the **muscle fibres to contract** and thus resist the stretching. A secondary set of neurones also causes the opposing muscle to relax. The reflex functions to maintain the muscle at a constant length.

Wiki.



There is a significant difference in the *stretch sensation* and pain. The more you stretch the more you will fully appreciate this difference. If you are in **any** doubt about what is pain, then pull back out of the stretch and have a rest.

There are 6 main types of stretching, or ways to increase flexibility.

Passive or Static stretching: This is where a muscle or muscles are lengthened into a

stretch and the position is held without effort (passively). To get the best results from this type of stretching the position needs to be held for 12+ seconds to give the stretch reflex time to play out. One way of knowing that this 'relaxation has occurred is that you will be able to go deeper into the stretch.

This is the the most common way people stretch their muscles and is how almost all of Yoga classes are structured.



Dynamic/Ballistic Stretching: This is where the muscle/s are taken to a stretch (end of ROM) and pulsed dynamically, bouncing in the stretch! This is a very aggressive way to stretch the muscles and the most common way to cause injury. This <u>should not be done</u> unless you have a deep understanding of your body and your athletic activity demands such aggressive preparation. This is the type of stretching that is used by Ballet dancers, Gymnasts and athletes in preparation/warm up for their event, they understand their bodies in ways that most people do not. It is tempting to copy the elite performers in what they do, but it is not always appropriate for everyone. This type of stretching can cause serious injury, don't do it unless you are experienced.

Range of Motion/Mobility Stretching: This seems similar to dynamic stretching but has some very important differences. With this type of stretching one slowly and gently moves into the stretch and then backs out. The movement is slow and rhythmic. Control is emphasised and the slow speed of movement allows the person stretching to gauge that their body is pain free and the stretch is not causing damage. The movement is repeated multiple times.

This can also be described as *flow* stretching.





PNF/Contract Relax Stretching: This is where the muscle/s are taken into a stretch and the stretching muscle is contracted to about 5-10% of you maximum. We want the muscle switching on and being active but this is NOT a strength move. Once the muscle has contracted then we relax the muscle and GENTLY move into a deeper stretch if possible it is best to allow this to happen with just the force of gravity and the weight of the limb being stretched. This can be done in series 2-10 times. This is an incredibly beneficial way to stretch BUT with added force (muscle contraction) greater care must be taken. This can be a very challenging way to stretch.

CRAC (Contract Relax Antagonist Contract) stretching:

This is a more aggressive form of the PNF stretching.

Once your are in the stretching position the STRETCHING muscle is contracted 5-10% for 2-15 seconds. The stretching muscle is relaxed allowing the movement into a deeper stretch. Then the antagonist muscle (opposite to stretching muscle) is contracted to further help you to move into a deeper stretch. Also performed in a series or sequence to progressively get a deeper stretch.

This is a very beneficial way to stretch BUT with added force (muscle contraction) greater care must be taken.

This can be a even more challenging way to stretch than PNF. So extra care MUST be taken

Assisted/Partner Stretching:

This form of stretching incorporated any or all of the above methods but with the addition of a prop or partner to help you into the stretch, through the technique and out of the stretch. If stretching with a partner great care MUST be taken as they can really increase the benefits but you need someone who is sensitive, experienced and will listen to your feedback esspecially as you really get deep into a stretch and the muscle/s are quite vulnerable.

I see plently of people that have been stretching with a friend or in a Yoga class and the instructor has come over to *help* them into a stretch or posture, and then they have been injured! Always

remember to be an advocate for yourself, it is your body and you are in charge of it. Stretching and other conditioning work is about empowering you to have a happier, healthier and pain free body that is a joy to live in, filled with zest and vitality!

These tips and many more are used at Pilates Central to help you be your best self. When you want professional help and guidance we are the ones that bring decades of expertise to every moment of your workout.

Call or email today. Live the life you want.



