

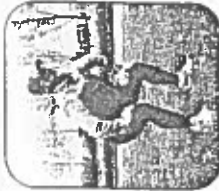



# Flexibility Training

Type	What it involves	Appropriate for	Advantages ✓	Disadvantages X
<b>Static</b> 1) <b>Passive</b>  2) <b>Active</b> 	<p>Static stretching involves slowly stretching a muscle to its limit and then holding the muscle in its stretched position for up to 15 seconds. There are two types of static flexibility training:</p> <p><b>Passive Stretching:</b> This type of static stretching requires the assistance of either another person or an object such as a wall that acts to apply an external force to stretch and lengthen the muscle.</p> <p><b>Active Stretching:</b> This type of static stretching is performed independently through the application of internal force which acts to stretch and lengthen a muscle.</p>	<p>Static stretching would be performed by any athlete trying to improve their flexibility and is also often used during warm-ups to prevent injury.</p>	<p>It can either be performed alone or with a partner</p>	<p>It only allows stretching within a certain range of movement</p>
<b>Ballistic</b> 	<p>Ballistic stretching involves performing fast, jerky movements that stretch a muscle through its full range of movement.</p> <p>Movements can include bobbing or bouncing and can also be sport-specific, further improving the effectiveness of this type of training for athletes.</p> <p>Performing bouncing movements while stretching allows the muscle to stretch further than would otherwise be possible.</p>	<p>Ballistic stretching may be used by any athlete to improve flexibility; however, most athletes will opt for using other forms of stretching such as static or PNF due to the risk of injury associated with ballistic stretching.</p>	<p>There is a high risk of injury if performed incorrectly</p>	<p>Movements can be sport-specific</p>
<b>Proprioceptive Neuromuscular Facilitation (PNF)</b> 	<p>Proprioceptive Neuromuscular Facilitation (PNF) is a form of stretching that can either be performed alone, using an immovable object, or with the help of a partner.</p> <p>Firstly it involves stretching the muscle to its maximum capacity and holding the stretch in position through isometric muscle contraction. This can either be achieved by stretching against an immovable object such as a wall, or with a partner providing resistance to ensure the stretch is held in position. After the stretch has been held for 6–10 seconds the muscle is then pushed further through static (passive) stretching. The muscle is able to be stretched further as the stretch reflex is inhibited when a muscle is stretched to its full capacity.</p>	<p>This type of stretching helps to improve the mobility, strength and flexibility of a muscle and is often used by physiotherapists to aid an athlete's rehabilitation after an injury.</p>	<p>It can be used to improve flexibility and for rehabilitation after injury</p>	<p>Need to be experienced in order to be able to perform it safely</p>

## Applying the Principles of training

- Frequency should be increased gradually to reduce chances of injury
- Intensity can be increased through stretching further each time
- Time can be increased through increasing the time the stretch is held for
- Type of stretching depends on an individual; PNF should be by an experienced athlete, ballistic is useful for specific sports, and static stretching could be done by an elderly person before a gym workout