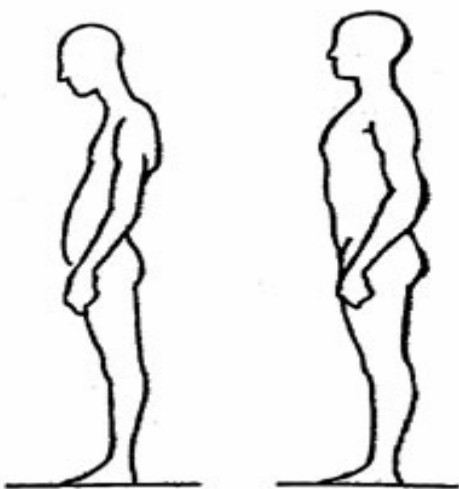


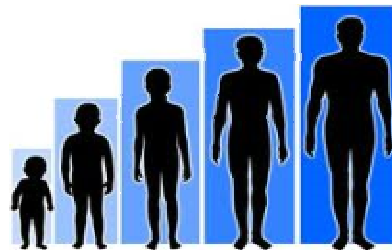
## Postural Restoration Technique **PRT**

**PRT** is based on the concept of eliminating unwanted muscle tension as it develops in the body. This muscle tension may be a result of many things, including but not limited to: trauma, habitual movement patterns, respiratory patterns, right or left handed patterns, as a response to pain, and as a result of stress. When excessive muscle tension is present, there is a contraction or shortening of the muscle. This places abnormal forces on the joints and the soft tissue that supports them (muscle, tendon, cartilage, ligaments, etc.). This is observed during examination as a reduction in flexibility, ROM(range of motion), strength, and poor posture. The result is pain that may develop at the site of the muscle tension or at some distant location as the body compensates.



Relaxation of the muscle tension is necessary to achieve neutral posture, full ROM, strength, and flexibility, and ultimately to reduce the abnormal forces in the area of pain, so that tissue healing and subsequent pain reduction can occur. There are a number of ways that this can be achieved. Treatment of the muscle tension requires an approach that activates the muscles in the body that opposes the muscles that are contracting unnecessarily. Activating the antagonistic muscle will shut down the unwanted muscle contraction through reciprocal inhibition. For example, if the quadriceps are over contracting, the hamstrings can be used to help them relax because they work in opposition.

There are three main categories of treatment that are generally used to achieve Postural Restoration. The first intervention, and the most important for success, is the home exercise program. Many of these exercises are done on the floor with your feet on the wall in what is termed the 90/90 position because both the hips and knees are at a right angles. Then functional and integrative exercises are progressed to sitting and standing as neutral posture is achieved and maintained. There are also exercises that will achieve neutral posture in the frontal and transverse planes. These exercises **MUST** be done frequently in the beginning (2-4 times per day) as it is necessary for motor re-education to take place. As the pattern of muscle tension is eliminated, the frequency of exercise can diminish.



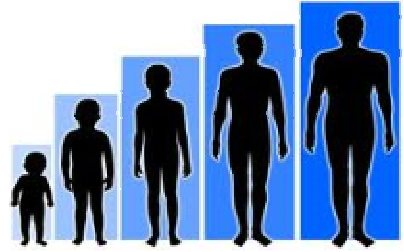
The second method of intervention to achieve Postural Restoration is a device called the Protonics®. The device looks like a brace, but it is actually a resistive therapeutic exercise tool that is worn on one leg. There is usually one side of the body that presents with more tension, and the device is used on that side to restore postural balance. The device is designed to activate the hamstrings. Frequently, the muscles on the anterior pelvis are in a state of hypertonicity. By activating the hamstrings, the hip flexors have to relax (because of opposition), and an immediate reversal of the anteriorly rotated pelvis and its subsequent postural pattern can be observed. The Protonics® is used to do specific repositioning exercises, and it can also be worn during functional activities such as walking and negotiating stairs. Because some postural patterns are tougher to reverse than others, there are times when a Protonics® is ordered for a patient to use at home. It can be worn for up to six hours for a constant retraining of the muscles involved.

The last treatment approach that is commonly used in Postural Restoration is manual therapy. This approach requires the therapist to guide the body into the new positions as you engage the muscles to hold those positions. Most of these techniques work the ribcage/torso to help with realignment. The muscles that are often found to be in a state of tension are accessory muscles of inhalation (breathing in), and the diaphragm. Most of the home exercises and manual therapy techniques incorporate breathing, and specifically exhalation (breathing out) because they work in opposition.

There are generally five common goals with the Postural Restoration approach:

1. Achieve full flexibility and range of motion indicating full muscle length after treatment in the clinic.
2. Return to the clinic with full flexibility and range of motion.
3. Relief of symptoms/pain, promote healing.
4. Increase strength of postural stabilization muscles.
5. A return to all functional activities without symptoms.

Postural discrepancies will lead to muscle and joint stress and ultimately to pain. These pain syndromes can involve the entire body (neck and shoulder pain, low back pain, hip and lower extremity pain, etc.). Faulty posture is often the origin of insidious pain and overuse injury, and it can delay healing when there is a traumatic onset of pain. Postural Restoration can help alleviate common pain syndromes and restore function in individuals of all ages.



For more information or to set an appointment please call the office at 303-652-6475 or email [Postmaster@IntegratedHealthCareClinic.com](mailto:Postmaster@IntegratedHealthCareClinic.com)