

Caring for your Spine

Walking and the Back

Walking and the Back

Walking and the Back (Spine)

Less than half of Americans exercise on a regular basis. A simple activity such as walking 30 minutes a day can help improve general health and spine health. Regular exercise does not have to be intense to afford significant spine-health benefits. Most chronic back pain is related to some form of structural weakness or failure. A broad spectrum of health benefits has been assigned to walking. These benefits include increased bone density, weight control, reduced stress levels, increased sensitivity to insulin, diminished body fat and improved cardiovascular health. Walking to improve stamina also helps improve the endurance of spine muscles, thus providing for better spinal stability during physical activities throughout the day. Walking is also one of the best exercises for reducing the risk for falls.

Numerous studies have shown that regular walking may help you live longer. If you wish to lose weight to reduce stress on the spine, burning 250 calories a day without changing your caloric intake will help you lose about _ pound per week. For the average person walking two miles will burn approximately 150 calories. When developing a walking program always set realistic goals.

It is important to wear good shoes with proper arch supports.

If you are a women age 50 or man age 40 or older and have not been exercising on a regular basis, always talk to your doctor before engaging in an exercise program. Discuss your exercise intentions and goals with your doctor.

Walking promotes spinal movement of spinal joints contributing to improved health of the disks and spinal joints (facets). Studies have shown that dynamic loading of tissues is critical to musculoskeletal health. Walking also promotes rhythmic segment movement of the arms and legs.

The Foot

More than one quarter of the bones in the human body can be found in the feet and ankles. Each foot alone contains 30 joints. The structures of each foot structures help to support body weight, propel the body forward and provide foundational support to the spine. There are many disorders of the feet that can contribute to abnormal walking (gait) and subsequent stress upon the low back. For example, arthritis can develop in any one the 30 joints of each foot resulting in pain and shifting posture. During walking the force transmitted to the feet and ankles is approximately three times your body weight. This is one of the reasons it is so important to maintain a healthy body weight.

The Foot and the Spine

The feet are structurally complex comprising approximately one-quarter of the body's bones. They are the foundation of the

body. A foot condition can contribute to the development of problems that afflict the back. By 40 years of age most individuals have acquired a foot condition of some type. Foot problems eventually contribute to biomechanical problems involving joints and muscles of the upper leg and back. Foot problems often contribute to chronic walking (gait) abnormalities that can exacerbate back pain.

The average person takes between 5,000 and 10,000 individual steps during the course of a day. Approximately 3.5 times our body weight passes through the foot 10,000 times per day. This translates to about 25 tons per foot mile. The average person takes about 90-120 steps per minute with the average step length being about 15 inches. The foot absorbs shock and provides postural stability. The foot and toes have numerous specialized nerve endings to provide the brain with feedback that improves the coordination and efficiency of walking. The foot has three arches which provide support.

Lower Extremity Conditions which may Contribute to Back Pain

There are a number of conditions involving the feet that can have considerable impact on spine health. The more common conditions include leg length inequality (LLI), painful heel spurs, heel pad atrophy, a high arched foot, the numb foot, arch collapse, excessive pronation, forefoot pain (metatarsalgia) and weakness.

Leg Length Inequality: The majority of individuals do not have equal leg length but it does not always lead to orthopedic problems. Leg length inequality (LLI) refers to a difference in the length of the legs that may occur secondary to structural or functional differences. Structural LLI is often due to anatomical causes such as unequal bone growth rates, fractures, deformities and degeneration. For example, severe degeneration of the hip and/or knee can contribute to a loss of limb length and result in LLI. LLI does lead to a difference in the stress placed on bones and joint tissues which in some cases can lead to painful conditions.