



## **Spinal Decompression different from traction?**

Traction is a simple static force that is put on the patients body with the intent of unloading the body's joints, muscles and other structures. For example, hanging upside-down is a common method to put the spine into traction. Rather than one's body weight putting stress on the spine, which is what happens when standing erect, the body weight is working to unload the spine.

Various forms of traction have been around for over 1000 years; however, pain relief has been inconsistent and short-lived. In fact, several clinical studies have shown traction to be an ineffective form of back and neck pain relief. The reason is unexpected, but pretty simple. Our bodies react to the static unloading of the spine by contracting, or squeezing, the muscles surrounding the spine. Rather than achieving the desired effect of unloading the spine, the pressure on the spine is actually increased, thus increasing intradiscal pressure. This does NOT allow the discs to rehydrate and heal, which is what ultimately yields pain relief.

Spinal Decompression, on the other hand, is a modified, updated form of traction. Computer technology is used to control variations in the unloading of the spine, effectively avoiding the body's muscle contraction response. Notice in the figure above that the traction tension is varied over time according to the graph. The doctor can control how many progressive tension steps are experienced by the patient before reaching the maximum tension. The doctor also has complete control over how long the tensions are held steady and how often they are repeated.

Spinal Decompression avoids the muscle contraction response. The intradiscal pressure is actually lowered to the point of being a vacuum, negative pressure. This vacuum is what allows herniated material to be drawn back into place and permits rehydration of the disc. Once the herniated material is not in contact with the nerves and the disc is in good health, pain is relieved. Spinal decompression is different from traction because it works.