# Ligaments and Tendons Causing Back Pain

Once the fibers, nerves, and muscles are affected, it causes direct actions to the tendons and ligaments. Tendons are tough bands that connect to muscles and bones, which these inelastic cords or bands of tough white fibers connect to tissues that attach to the muscles and to the bones as well as other areas of the body. Sinew or tendons join with ligaments, which the two function from collagen. Tendons connect to the muscles, which initiates movement, or contractions that enforce bone movement. In some areas the tendons will connect to the muscles and then to the bones. In this area, tendons will exert a pulling force that causes the bones to respond, by moving. The bones move, yet the tendons will hold the bones securely in position. Tendons provide a measure of stability. At the back, the tendons provide slight exertion, which promotes bending. Tendons will elongate so that you can bend forward, which promotes the action of muscles known as “eccentric contraction.” Once eccentric contractions start, the muscles and tendons join to allow you to continue what you were doing at the start of bending forward. This promotes what doctors call “Isometric contractions.” Sometimes tendons fail, as we grow older to work with the muscles, which in turn causes nerve compression, breakage, or conflict etc, which causes back pain. Now, if the nerve compression, or tendons fail and they rub alongside the soft pocket that is amid the bone, which overlaps and protect other bones, we have problems. (Bursa) Since the tension applied effects the muscles, and it is too weighty for the muscle nerves to withstand, thus the tendons use its sensory nerves to slow down, or hold back the muscles from moving.

Ligaments are tough tissues that connect to various body parts, which these sheets and/or bands of strong fibrous tissues connect bone to the bone and to the cartilages at the joint and /or supporting organs, such as muscles.

Ligaments keep the distance at bay between the bones. Like tendons, you do not want to tear or strain these connective elements, since it can cause inflammatory. In short, we need to balance tendons and ligaments to avoid back pain that comes from injuries.

Tendons make up the skeletal anatomy in some areas and consist of “206 bones,” which are flat, short, long, and sometimes asymmetrical. These tendons combine with bones store narrow (RBC) red blood cells, calcium, phosphorus, and magnesium. Since experts will recommend Maalox, which has bases of magnesium it can be speculated that this has something to do with pain as well.

Tendons support the muscles, movement, and protect various internal organs. In addition, tendons join with the skeletal muscles, and finally the ligaments. The

skeletal muscles support the bodies movement and posture, which these muscles tighten and shorten movement. (Contracting) The skeletal muscles attach to the bones through the tendons and starts muscle contraction from stimulus of fibers from the muscles and via the motor unit or neurons.

Contractions promote energy from ATP (adenosine Triphosphate) and hydrolysis. The energy derives from these two creations and extends to ADP (Adenosine Diphosphate) and on to phosphate. Once the chemicals and/or substances produce, it moves to retain selective contractions to afford tone of the muscles. In short, balance is achieved, which moves to relax the muscles by breaking down acetylcholine via cholinesterase.

We are now reaching the ligaments. Once we reach the ligament phase, it starts to encircle the joints and adds stability and strength. Now it connects to the tendons, which connect the muscles to the bones. Joints are connected to these elements of the skeletal muscles, which when ROM is interrupted, back pain occurs.