

## YOUR BACK

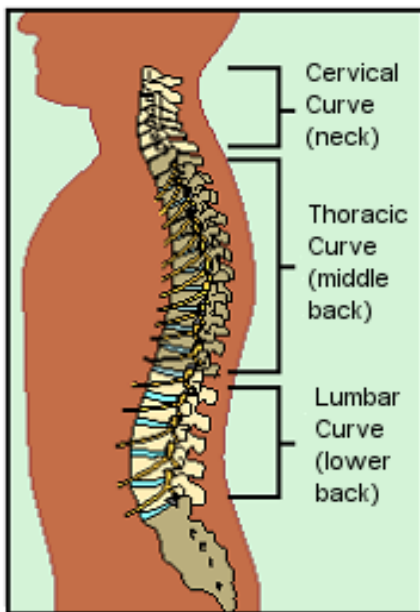
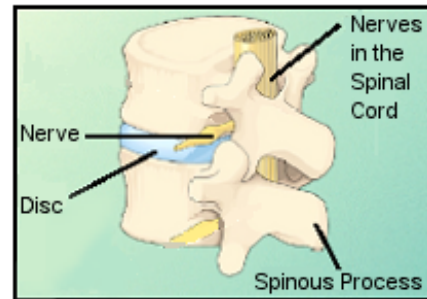
Your back is made up of vertebrae, discs, ligaments and muscles. The spine, or the vertebral column, connects the skull to the pelvis and has three natural curves, which keep the body balanced. The **vertebrae** have two major functions - to bear the weight of the body and to protect the spinal cord and nerves that run down the length of the spine. Muscles and ligaments act as a support system for the spine. Discs are like soft cushions separating the hard bones of the spine. A healthy back allows you to bend and stretch without pain.

### The Parts of the Spine

The spinal or **vertebral column** is made up of 24 block-shaped bones called vertebrae.

Each vertebrae has protruding bony areas where supporting muscles attach to allow movement.

The part of each vertebrae that you can feel through your skin is called the **spinous process**.



At the center of each vertebrae is a hole, protected by the surrounding bone. Placed together the central opening in each vertebrae form a tunnel called the **spinal canal**, through which the spinal cord passes. The **spinal cord** is the mass of nerves that connects the brain to the rest of the body.

Between each vertebrae are **discs**, which serve as cushions. Discs have a soft jelly-like center that absorbs shock during movement. Initially each disc consists of 85-90% water, which allows it to be elastic and springy. Often with age, the amount of water in a disc's composition decreases to about 65%, resulting in disc degeneration.

The spine is arranged in three natural curves. The neck region or **cervical spine** is made up of 7 vertebrae that curve forward. The trunk region or **thoracic spine** is made up of 12 vertebrae that curve backward and this is where the ribs are attached. The low back region or **lumbar spine** is made up of 5 vertebrae that curve forward in the same direction as the cervical spine. When these curves are in a normal alignment, weight is distributed evenly throughout the vertebrae and the body is in a balanced position.

### The Supporting Muscles

Strong and flexible muscles help maintain the natural curves of the spine. This holds the back in the proper alignment and helps support the upper body. Strong stomach, buttock and thigh muscles ease the strain on the back.