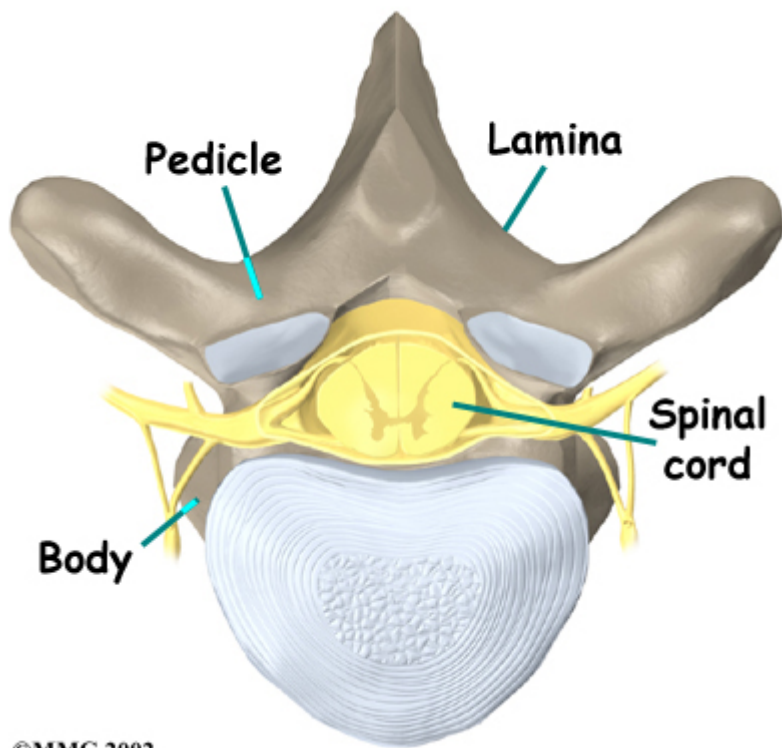


(Fig. 1)



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(Fig.2)

## Westerfield Health Center, INC. Spinal Curves

### Reference Links:

<http://problemswetreat.leadtheway.ca/Injuries-Conditions/Mid-Back/Thoracic-Spine-Anatomy/a~316/article.html>

<http://www.spineuniverse.com/conditions/scoliosis/anatomy-scoliosis>

## **Stand Up Straight**

### **What does that really mean?**

- Squeeze shoulder blades and stand tall????
- That is somewhat correct.

### **Must get a basic concept of why posture is so important:**

- 1 of the top 3 reasons why we have chronic pain and disease.
- Other 2 reason we have little to no control over
  - Genetic factors
  - Environmental factors

### **Big picture why proper posture is so important:**

- Axial ( straight down) compression on discs and nerves, most specifically the lumbar-sacral joint ( lower back )
  - Carrying majority of body weight on lower back instead of using the legs.
  - This causes: Pinching of nerves, increased degeneration, and chronic pain
- Decrease abdominal space not allowing organs to function properly over a life time.
  - Causing systemic disease
- Decrease Thoracic cavity taking away lung space
  - Causing circulatory disease
  - Metabolic disease

**The scary list goes on and on.... But let's talk about what it is and how we can improve it!**

### **Anatomy of the Spine: (Fig. 1&2)**

- **A/P view-** Spine is straight
- **Lateral/ Side view-** spine has 4 curves to the spine.
  - 2 Lordotic curves ( inward)
  - 2 Kyphotic curves (outward)
  - These curves put your body weight on the joints ( posterior) back part of spine ( facet joint )
  - These curves take the pressure of discs and nerves

**Proper posture will never happen NATURALLY!!**

- You will always have to think about it and correct it
- This is **CORE STRENGTH**... maintaining proper posture for the majority of your daily activities

#### 4 Reasons why you will always have to think about your posture:

##### \* 2 correctable reasons

##### 1. Forces of gravity

- \* pulling on our spine with at least your body weight
- \* pulling us back into a C curve (Primary Kyphosis)

##### 2. Spend majority of life in flexed position

- \* Sitting, walking
- \* Computer work, TV watching, driving
- \* Reading, carrying objects

##### • 2 non correctable reasons

- 1. **genetic factors**
- 2. **biomechanical issues due to trauma**

## Review:

### Big picture why proper posture is so important:

- Axial ( straight down) compression on discs and nerves, most specifically the lumbar-sacral joint ( lower back )
  - Carrying majority of body weight on lower back instead of using the legs.
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**Bottom Line!** How can you improve yourself and avoid injury in the gym if you can't your daily activities in **Proper Posture?**

## **Next Talk**

### **Body Awareness**

- How to sit, stand, walk and sleep
- **Anti Gravity Muscles**

### **Body Mechanics**

- Focusing on everyday posture and mechanics
- Exercises to do during your everyday to strengthen your core