COMPNENTS AND FUNCTIONS OF THE SPINE

The Spine Has Three Functions

*supports body weight as we sit, stand, walk and move.

*gives flexibility to lift and carry objects

*acts as an armor to protect the spinal cord

COMPONETS OF THE SPINE

- 24 small movable bones called vertebrae's
- Disc which is the shock absorber between each vertebrae. It compresses when bearing wt and expands like a spring when wt is removed
- Discs begin to degenerate between the age of 30 and 55, (loss of height)
- It has a " S " shape curve.

BODY MACHANICS

- Bounds Of Pressure Put On/Through The Lumbar (low back) Vertebra By A 150lb Adult During Different Activities When
  - Sleeping = 66 lbs.
  - Standing = 154 lbs.
  - Sitting = 220 lbs.
  - Lifting to the waist = 748 lbs.

BODY MACHANICS CONT'D

- ## When lifting use the legs
  - Keep objects close
  - Step and turn, no pivoting
  - Avoid twisting
  - Use biceps and not upper shoulders
  - Get help

BODY MACHANICS CONT'D

- Sitting
  - Avoid being sandwiched in.
  - Straight back chairs are the best/ good back support.
  - Limit crossing legs and feet.
  - Shit body weight often

Work Place

- Desk/Office:

- sitting position 90/90, chair your fitted to and gives you the support.

- Feet flat on the floor

- Monitor at face level

- Elbows at side, and 90 degrees with forearms supported and wrists supported on desk top or key board pad.

POOR POSTURE CAUSES AND EFFECTS

- Pain, Back, Legs, Hips, Neck, Shoulders.
- Change in body structures, tightness, limited range of motions, limited mobility/movement
- Decreased circulation, blood flow.
- Head aches.
- Depression, tension, stress.
- Weight gain
- Poor health
- Increased medical expenses
- More susceptible to injury
- Decreased energy levels
- Muscle weakness

Technics and Prevention of injury

Have work station properly set up

      *chairs (home and work), monitor, key board, heights and keep equipment close, avoid twisting to reaching.

Get up and move around if sitting for an hour.

      * Weight shift often.

      * don't cross legs of feet

      *Do some breathing

      *Take wallet out of the back pocket

      *Hydrate self/ WHY