Maintaining Posture

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Posture - Definition

• Noun:
  – the way in which your body is positioned when you are sitting or standing

• Verb:
  – to assume a posture; especially: to strike a pose for effect
Ideal Standing Posture

- Head looking straight ahead
- Ear centered over shoulder
- Shoulders open
- Arms relaxed
- Torso balanced over hips
- Knees slightly bent
- Feet shoulder width apart, weight even, over arch of foot
Postural Determinants

- Skeletal anatomy
- Muscle function
- Joint function
- Connective tissue
- Weight distribution
- Genetics
- Habits
- Pain
Posture

• Skeletal Alignment
  – Spine
  – Pelvis
  – Lower extremities
  – Joints
  – Feet
Posture

- **Muscles**
  - Strength
  - Flexibility
  - Coordination
  - Balance

- **Connective Tissue**
  - Strength
  - Flexibility
  - Integrity
Normal Spinal Curves

- A healthy back has three natural curves:
  - An inward or forward curve at the neck (cervical curve)
  - An outward or backward curve at the upper back (thoracic curve)
  - An inward curve at the lower back (lumbar curve)
Spinal Asymmetry

• Abnormal Spinal Curves
  – May be primary or secondary
  – May be flexible or fixed
  – May be due to bone abnormalities
  – May be balanced or unbalanced
  – May or may not cause symptoms
Lower Extremity Asymmetry

• Skeletal Asymmetry
  – Leg length difference
  – Pelvic tilt/rotation
  – Joint problem
  – Muscle weakness

• Causes may include:
  – Genetics
  – Illness (polio)
  – Injury
  – Degeneration
Muscle Imbalance

- Poor or uneven support
- Altered body mechanics
- Changes in joint and/or spine alignment
- Altered growth of bones
- Lax or tight tendons, ligaments and connective tissue
Weight Imbalance

- Increases load on muscles
- Changes center of gravity
- Affects balance
- Alters body mechanics
Postural Factors in a Polio Survivor

• Fixed
  – Genetics
  – Skeletal anatomy
  – Muscle weakness
  – Joint function
  – Body mechanics

• Modifiable
  – Weight distribution
  – Muscle strength
  – Muscle flexibility
  – Connective tissue
  – Joint function
  – Body mechanics
  – Habits
  – Pain
“Good” Posture

• Keeps bones and joints in the correct alignment so that muscles are being used properly.
• Helps decrease the abnormal wearing of joint surfaces that could result in arthritis.
• Decreases the stress on the ligaments holding the joints of the spine together.
• Prevents the spine from becoming fixed in abnormal positions.
• Prevents fatigue because muscles are being used more efficiently, allowing the body to use less energy.
• Prevents strain or overuse problems.
• Prevents backache and muscular pain.
• Contributes to a good appearance