

BODY MECHANICS

- efficient use of body as a machine

*force

*object

*fulcrum

- purpose of good mechanics:

*promotes good musculoskeletal function

*reduces required energy

*promotes balance

*promotes safety of patient and healthcare worker

- terms:

**alignment* – having parts in proper relationship to each other

**balance* – steady position

**base of support* – area on which object rests

**gravity* – force pulling object toward the center of the Earth

**center of gravity* – area on which mass of object is centered

**line of gravity* – vertical line that passes through center of gravity

**center of gravity and balance* – stable position, center of gravity must be above the base of support

- posture:

*position of body

*feet parallel, flat on floor, shoulder width apart

*bend knees slightly to avoid strain (act as shock absorbers)

- proper posture:

*pull buttocks in and hold abdomen in (helps keep a straight back)

*hold chest up and slightly forward

*hold head erect with face forward and chin slightly in

- body at work:

*longest and strongest muscles to provide energy

*internal girdle is the long midriff to protect abdominal muscles

*feet apart for a wide base support

*push out or roll objects when possible

REMINERS FOR A GOOD BODY MECHANIC:

*bend at knees and hips

*use leg muscles

*keep back straight when lifting

*avoid twisting and stretching muscles

*rest between periods of exertions

CONCEPTS OF MOVING A PATIENT/CLIENT:

*friction – force that opposes motion

*force – energy required

*inertia – rest at rest, motion in motion

*muscle – produces force that moves lever