

Chapter Six

Flexibility

A thick, horizontal yellow brushstroke with a textured, painterly appearance, spanning across the width of the slide below the title.

The rubber band theory applies to each of us; we will be no good until stretched.

Objectives



- z How is joint movement limited?
- z Why is flexibility important?
- z What is the difference between static stretching and dynamic stretching?
- z How may the training principles be applied to improve flexibility?

Objectives



- z What safety precautions should be taken when you are engaging in flexibility exercises?
- z How is flexibility evaluated?

Vocabulary



joint--

point at which 2 bones come together



ligament--

strong, fibrous tissue which attaches one bone to another



muscle--

meaty tissue surrounding bones



tendon--

soft tissues that anchor muscles to bones



static stretching--


slowly moving a muscle to its stretching point and holding the position for 15 seconds



dynamic stretching--

stretching done in continuous, slow, and controlled manner

Vocabulary

 **Ballistic stretching--** stretching that involves bobbing, bouncing or jerky movements which use the body's momentum

 **Assisted static stretching--** form of stretching in which a partner pushes the body beyond the initial limit

Evaluate Goals



What Is Flexibility?



z The ability to move body
_____ through a full
_____ of
_____.

Joints Of The Human Body

z Point at which 2 bones come together

z Types

y P_____

y Gliding

y H_____

y _____ and _____

Vocabulary



Joints Of The Human Body



Joint Movement

- z Direction is limited by _____ structure & can't be _____
- z Range of motion is limited by _____ tissue & is _____ through flexibility _____

Objective



What Limits Flexibility?

z _____ "strong fibrous tissue that attaches one bone to another"

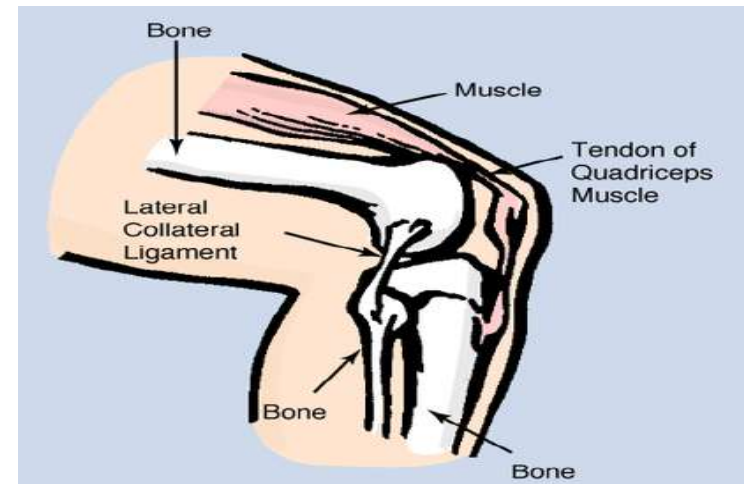
z *Muscle*: _____

z *Tendon*: anchors _____ to _____

Vocabulary



Objective



Why Is Flexibility Important?

- z Needed in daily living
- z Reduces chance of _____
- z Increases capacity of _____ to move
- z Prevents muscles from shortening
- z Helps relieve muscle _____

Objective



Why Is Flexibility Important?

- z Helps _____ chance of developing _____ back pain
- z Helps relax muscle tightness from injury, fatigue, and _____ tension



Objective



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Types of Stretching

z *Ballistic* - bouncing, jerky movement using body's momentum

z _____ - slowly move muscle to stretching point

z *Dynamic* - _____, _____, and _____

z _____ - use a partner to stretch beyond your limit

F.I.T. Applied to Flexibility

z Increase overload by increasing:

y **F** _____ - number of sessions per day or week

y **I** _____ - distance the muscle is stretched

y **T** _____ - length of time the position is held, or number of repetitions and sets

Objective



Principle of Progression

z Gradually increase _____ by increasing _____, _____ or _____ of the exercise.

z Principle of Specificity

z Stretching exercises will _____ flexibility _____ in joints exercised

z Flexibility is specific to each:

1. I _____

2. J _____

3. S _____

Flexibility Safety Precautions

- 3 Unsafe flexibility exercises
- 3 Avoid ballistic stretching
- 3 Don't use a partner to stretch
- 3 Start at your appropriate level & progress slowly
- 3 Stretch by what feels comfortable to you - don't follow others

Objective



- 3 Combine cardiovascular, muscular strength & endurance exercises to prevent imbalance.

Flexibility Assessment

z Tests

y _____-and-_____

y _____ lift

y _____ dynamic flexibility

Vocabulary



Objective



Study Question

- z Stretching exercises will help
- A. Avoid injuries
 - B. Build strength
 - C. Develop cardiovascular endurance
 - D. None of the above

Answer



Study Question

- z Joints can be prepared for vigorous physical activity by doing
- A. Push-ups
 - B. Sit-ups
 - C. Stretching
 - D. Weight training

Answer



Study Question

- z Muscles and other connective tissues should be stretched
 - A. 3 times per week
 - B. Only before jogging
 - C. Once a week
 - D. When it is cold

Answer



Study Question

- z To increase flexibility, you must overload the muscle by:
- A. Increasing you running distance
 - B. Lifting heavy weights
 - C. Performing isometric exercises
 - D. Stretching farther than normal

Answer



Study Question

- z Which exercise below is a safe exercise for developing flexibility?
- A. Achilles tendon stretch
 - B. Deep knee bends
 - C. Four-count toe touch
 - D. Hurdle stretch

Answer

