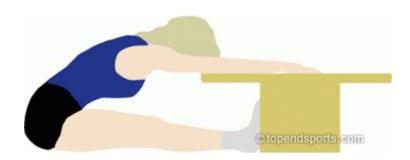
Flexibility



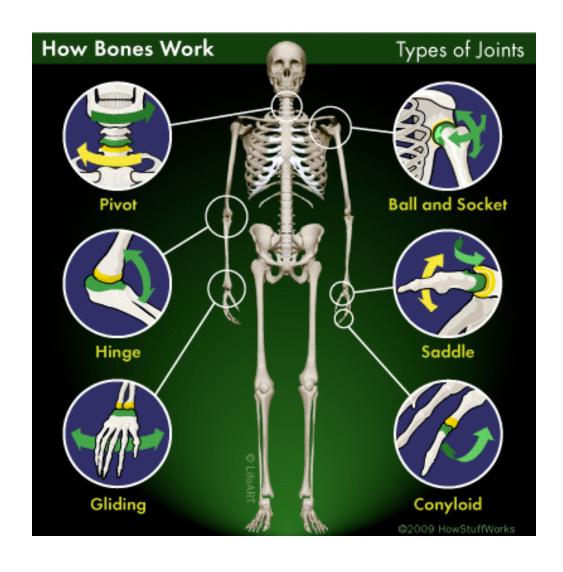


The ability to move a joint through it's full range of motion.

Joint

A joint is the point at which 2 bones come together.

Joints



Types and Examples of Joints

Types of Joints

- Pivot
- Gliding
- Hinge
- Ball and Socket

Examples

- Neck
- Wrist and Ankle
- Knee and Elbow
- Hip and Shoulder
- https://www.youtube. com/watch?v=Z5QUX NBakvM

Ligament

- A ligament is a strong, fibrous tissue that attaches one bone to another.
- Bone to bone

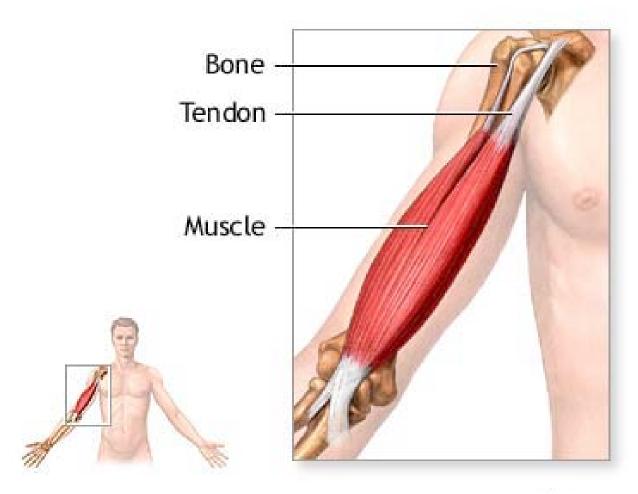
Muscle

A muscle is meaty tissue that surrounds the bone.



Tendon

- A tendon is connective tissue that anchors the muscle to bone.
- Muscle to bone





Flexibility is important!

a) Reduces injury.



b) Prevents postexercise pain.



c) Reduces chance of low back pain.



d) Helps relieve emotional tension.



e) Increases joint stability.



Static Stretching

Is slowly moving a muscle to its stretching point, and holding for 20 – 30 seconds.

Static Stretching

The Sit and Reach test is an example of a static stretch that test the Hamstrings and Lower Back.

Static Stretching

is recommended after muscles are warm.

Ballistic Stretching

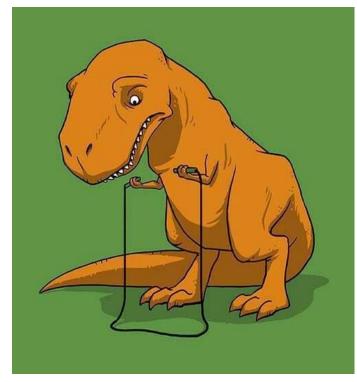
Involves bobbing, bouncing, or jerky movements that use the body's momentum.

Dynamic Stretching

Involves moving the muscle from static to active stretching using momentum.

Active Warm-up

Raise the muscle temperature before stretching.



This may be done by brisk walking, jogging, or other mild exercise.

5-10 minutes.

Specific Warm up is...

Always warm up prior to stretching

Stretch in a controlled manner

Hold Stretch for 20-30 sec.

Stretch to the point of discomfort not pain

Don't compare your flexibility to others

Cool Down

Is the time after a workout in which activity tapers off and HR and body temperature return to normal.

Applying the Training Principles

Principle of Overload

To Improve Flexibility

you must stretch the soft tissue in a joint farther than it is accustomed to.

Overload can be achieved using the **F.I.T.** factors

Frequency

Stretching should be done a minimum of 3 times a week.

Daily is best!

Intensity

a) The muscle is stretched beyond it's normal length to reach the stretching point.

b) To reach the stretching point, slowly stretch until mild tension is felt.

Time

The <u>time</u> a stretch position is <u>held</u> could be increased gradually from 20-30 seconds.

The number of <u>repetitions</u> may also be increased.

Principle of Progression

Gradually increase the overload by increasing...

a) Frequency

The number of sessions per day or week.

b) Intensity

The distance a muscle / joint is stretched.

c) <u>Time</u>

The amount of time the position is held, OR the number of repetitions and sets.

Principle Of Specificity

Stretching exercises will only improve flexibility in joints you exercise.

Your joints may have differing degrees of flexibility.

Flexibly requirements vary widely depending on the activity you are training for.

Do a variety of stretches for total body improvement.

Work the two opposing muscle groups around the joint for balance.