

Flexibility

Use the following words and complete the passage.

structure/ held/ elbow/ curls/ joint/ slowly/ flexed/ position/ may/ ease/ reduce/ precision/ warm-up/ resistance/ factors/ twisting/ tissue/ soreness/ range/ sessions/ toes/ move.

A gymnast is expected to be able to demonstrate flexibility during a routine. Flexibility is normally perceived as an extreme ----- position. However, there is at least one other aspect of flexibility that is relevant but difficult to see or measure directly. This is dynamic flexibility, or the ----- with which a joint is moved through its ----- of motion. Thus, flexibility may be defined in terms of two components: static flexibility and dynamic flexibility.

Static flexibility is the range of motion about a joint. Thus, if the ----- joint is fully extended and then fully -----, a reading of the two extreme positions can be recorded by a flexometer, a commercially available instrument for measuring the range of motion of a joint. The range of motion is then described in degrees of movement. A representative reading in elbow flexibility for a gymnast would be approximately 160.

Dynamic flexibility is the ----- of a joint to movement through the range of motion. Measurement of dynamic flexibility has not yet reached a point of simple and practical application in the athletic setting. We can only generalize that as a gymnast practices movement patterns requiring speed, ----- and control she improves dynamic flexibility.

DETERMINATIONS OF FLEXIBILITY

Several factors limit flexibility. These are: (1) the bony ----- of joints, (2) muscle and its facial sheaths; (3) connective ----- including tendons, ligaments, and joint capsules; and (4) skin.

The properties of these various tissues include elasticity, plasticity, viscosity, inertia, and friction. The most significant ----- are elasticity and plasticity.

Flexibility is specific to a particular joint. Each joint must be individually stretched or moved on a repeated basis to improve flexibility. Simply doing hip flexing exercise, such as toe touches, does not enhance ankle flexibility or shoulder flexibility. Therefore it is important to include a full set of exercises for all the joints that might be involved in the actual performance.

TYPES OF FLEXIBILITY EXERCISES

There are three recognized types of flexibility exercises: passive stretching, static stretching, and ballistic stretching. All these types have been found to be effective in improving flexibility.

Passive stretching involves having another person ----- the joint through the range of motion. The major advantage of this type of stretching to the athlete is that the joint can be ----- pushed to an extreme position and ----- in that position (the stretch should not be extended to the point of pain).

Static stretching is slow, active stretching with a held position at the joint extremes. For example, the athlete sits on the floor and reaches slowly for the ----- . The athlete then grabs the toes and holds the ----- for several seconds.