“Benefits Of Flexibility In Sports Training”

Dr. Pankaj Chaudhary
Director of Physical Education
Mohasinbhai Zaweri Arts, Commerce and Science College, Desaiganj (Wadsa) Maharashtra

Abstract

In flexibility in sport training is the most important factors of exertion. Debates are recent and ongoing that is questioning its part in injury forestallment, athletes of all fields will still gain a lot from stretching governance; to the muscles inflexibility and joints are essential part in numerous athletic movements. Inflexibility has been defined as the range of stir around a joint and the girding muscles during a unresisting movement. Environment, unresisting meaning no active muscle involvement being needed in order to hold the stretch as it done naturally, with graveness or the backing of a mate furnishing force. Threat of injury can be reduced and performance might enhanced by simply adding the common range of stir. The sense behind that an extremity can move further before an injury can do. For case, tight neck muscles can circumscribe how far an existent can turn their head. When playing football and being dived and your head gets forced beyond its range of movement, also it's places strain on the neck muscles and tendons.

KEYWORDS: Ligaments, Dynamic Stretching, Ballistic Stretching, Isometric Stretching Range of Motion,

Introduction

Flexibility is the movement available at a joint. For example, the movement available at the hip joint is determined by the leg can be moved in each of the permitted motions e.g. flexion – raising the leg up in front. Term flexibility means the same as suppleness or mobility. Flexibility is needed to perform various activities with relative ease. To get out of bed, lift the children, sweep the floor and we need flexibility. Flexibility tends to deteriorate with age, often due to a involving a lot of sitting down lifestyle. Not having adequate flexibility, daily activities become more difficult to perform. Over time, create body movements and posture habits that can lead to less in size mobility of joints and compromised body positions. Staying active and stretching regularly help prevent this loss of mobility. Being flexible significantly reduces the chance of experiencing occasional and chronic back pain.

Objective of the Study

The objective of flexibility in training is to improve the range of movement of the antagonistic muscles.

Flexibility is determined by a number of factors:

- Time of day: Flexibility is lower first thing in the morning.
- Elasticity of tendons: Tendons should stretch slightly although not to the extent of Muscles.
- Joint movement. Some people are also born with lax ligaments.
The ability of a muscle to relax: Some muscles are unable to fully relax due to increased tone - usually postural.

- Temperature of the joint and associated tissues: Joints and muscles offer better flexibility at body temperatures that are 1 to 2 degrees higher than normal.
- Bony structures which limit movement: Some people develop bony growths known as spurs which may limit joint motion.
- Type of joint: The shoulder - a ball and socket joint, is more flexible (or mobile) than the knee - a hinged joint, for example
- Temperature of the environment: Warmth promotes flexibility.
- Injuries: Muscles often tighten up to protect an injury, resulting in lower flexibility.
- Muscle tissue elasticity: Injured, poorly conditioned, tight muscles are less flexible.
- Age: Flexibility tends to decrease with age.
- Gender: Females are on average more flexible than males.

Flexibility in training is perhaps the most undervalued component of conditioning. While recent and ongoing debate questions its role in injury prevention, athletes can still gain much from a stretching regime. From a volleyball spike to a rugby drop kick, flexibility of the body’s muscles and joints play an integral part in many athletic movements. In general terms, flexibility has been defined as the range of motion about a joint and its surrounding muscles during a passive movement (1, 2). Passive in this context simple means no active muscle involvement is required to hold the stretch. Instead gravity or a partner provides the force for the stretch.

**Importance of Flexibility**

Flexibility in the body helps to reducing the risk of injuries by maintaining the body. Our muscles work in pairs to cause movement on a joint. One muscle shortens to move the joint as the other relaxes to stretch and allow the full movement. If one of these muscles is tight, this affects the balance at the joint as the muscle which is contracting cannot do so through its full range and so becomes weaker. Muscle imbalances such as this result in alterations in posture and compensation through altered biomechanics. A common example of reduces flexibility causing injury is the shoulder joint. If the chest muscles are shortened through frequent slouching at a desk, this pulls the shoulder joint forwards. If the shoulder retractors (i.e. Lower traps and serratus anterior) are not strong. Enough to counteract this force, the joint moves forwards, affecting the mechanics of the Shoulder and reducing the space in the joint, often resulting in an impingement syndrome. Similarly, tight calf muscles can be a problem in runners. If the calf muscles are tight the amount of dorsiflexion at the ankle is reduced. To compensate for this, the foot phonates further which causes excess rotation of the lower leg and can contribute to conditions such as Shin splints and Achilles tendonitis.

**The Benefits of Flexibility Training**

By increasing this joint range of motion, performance may be enhanced and the risk of injury reduced (3, 4). The rationale for this is that a limb can move further before an injury occurs. Tight neck muscles for example, may restrict how far you can turn your head. If, during a tackle, your head is forced beyond this range of movement it places strain on the neck muscles and tendons. Ironically, static stretching just prior an event may actually be detrimental to performance and offer no protection from injury (5, 6). The emphasis is on "May" however, as a closer examination of the scientific literature shows that effects are often minimal and by no means conclusive. Muscle tightness, which has been associated with an increased risk of muscle tears (7, 8), can be reduced before training or competing with dynamic stretching. For this reason many coaches now favor dynamic stretches over static stretches as part of the warm up. Competitive sport can have quite an unbalancing effect on the body (9, 10). Take racket sports for example. The same arm is used to hit thousands of shots over and over again. One side of the body is placed under different types and levels of stress compared to the other. The same is true for sports like soccer and Australian Rules football where one kicking foot usually predominates.
Types of Flexibility and Stretching

1. **Static Active flexibility** -- Static-active flexibility (also called active flexibility) is the ability to assume and maintain extended positions using only the tension of the agonists and synergists while the antagonists are being stretched (see section Cooperating Muscle Groups).

2. **Static Passive flexibility** -- static-passive flexibility. Static-passive flexibility (also called passive flexibility) is the ability to assume extended positions and then maintain them using only your weight, the support of your limbs, or some other apparatus (such as a chair or a barre).

3. **Dynamic flexibility** -- Dynamic flexibility is the ability to move muscles and joints through their full range of motion during active movement. Such flexibility helps your body reach its full movement potential during daily activities, sports, and exercise.

In training program Inflexibility can be made up of different types of stretching
1. Dynamic stretching
2. Ballistic stretching
3. Stationary Active stretching
4. Stationary unresistant stretching
5. Isometric stretching
6. PNF stretching It depends on the sport and the athlete's

Issues- commodity which will be examined more nearly in the papers below. As a general rule, dynamic stretches are used as part of a warm up and static stretches or PNF inflexibility is used for adding range of stir.

**Guidelines for Inflexibility in Training**

- Strive for harmony.
- Focus on major muscle groups.
- Do not bounce.
- Hold your stretch.
- Do not aim for pain.
- Make stretches sport specific.
- Keep up with your stretching.

Choose conditioning that serves two functions relaxation and inflexibility. This doesn't mean that the entire time has to be spent stretching. There are numerous styles of inflexibility training that promote relaxation, similar as yoga, contemplation, Pilates, tai chi, visualization, and breathing. Try these druthers to help players in relaxing and encourage them tode-stress from their busy lives.

**Summary**

Some other benefits of flexibility training include an increase in body response and muscle relaxation, both of which may have positive implications on one’s skills and performance. Another benefit of static stretching is that it helps reduce muscle soreness after exercise. This is because it involves a slow, gradual and controlled elongation of the muscle through the full range motion. The basic rule of thumb is to hold the stretch for 15 to 30 seconds in the furthest comfortable position. It also improves posture and muscular balance. One of the benefits that flexibility training offers is that it may restrict how far one can turn the head. If, during a tackle, one’s head is forced beyond its normal range of movement, it stretches and puts stress on the neck muscles and tendon. Ironically, static stretch just prior to an event may be detrimental to performance and offer protection from injury. Muscle tightness can be reduced before training or competing by utilizing dynamic stretching. For these reasons, a coaches’ advice to athletes is to do a few dynamic stretches instead of static stretches during warm ups. Competitive sports may demand quick actions which may lead to unbalanced responses.
References