

Sports Med Minute



Proper Stretching After Practice or Competition

What is stretching? Stretching is a physical activity that extends or lengthens muscles to improve flexibility, increase range of motion, and prevent injury. Typically, it is done before and after exercise. Stretching can be done to target specific muscle groups or the entire body. There are various ways it can be performed including: static (holding a stretch with no movement), dynamic (moving through a range of motion), ballistic (bouncing movement) and proprioceptive neuromuscular facilitation (PNF) stretching. PNF stretching involves stretching and contracting the muscles. Stretching can improve blood circulation, reduction in muscle tension, and enhance overall performance.

DYNAMIC STRETCHING



...HAS BEEN SHOWN TO
IMPROVE **FLEXIBILITY**,
INCREASE **POWER OUTPUT**,
INCREASE **NEUROMUSCULAR**
ACTIVATION
...CAN INCREASE PERFORMANCE

BEST BEFORE TRAINING

STATIC STRETCHING



...HAS BEEN SHOWN TO
IMPROVE **R.O.M.**,
IMPROVE **FLEXIBILITY**,
HELP WITH **MUSCLE RECOVERY**

...MAY AFFECT PERFORMANCE

BEST AFTER TRAINING

PreHab Exercises Examples of PNF STRETCHING

CONTRACT
3-5 Seconds
2-3 Seconds
3-5 Seconds
RELAX
5-10 Seconds
5-10 Seconds
10-20+ Seconds



PNF Autogenic Inhibition

Contract/Activate
Reciprocal
Muscle Group
To
Lengthen/Release
Targeted
Muscle Groups



PNF Reciprocal Inhibition

Examples

Lower Back / Hamstrings	Hamstrings	Chest
-------------------------	------------	-------

Stand upright with legs straight. Bend over and repeatedly reach down and relax.

Stand upright and put either leg on elevation to front. Keep legs straight. With back straight bend over and repeatedly reach forward and relax.

Stand upright and to sides. Let palm: elbows slightly flexed, repeatedly flex back and rear shoulders to move arms behind.



Reasons Stretching is Crucial:

- Muscle Recovery:** After intense physical activity, muscles will become tight and fatigued. Stretching helps

Sports Med Minute

to relax the muscles, thus promoting blood flow and nutrient delivery to aid in recovery.

2. **Flexibility:** Stretching on a regular basis aid in maintaining and improving flexibility, which is essential for injury prevention. It allows joints and muscles to move through the full range of motion more effectively, thus reducing the risk for strains, sprains, and other injury.
3. **Muscle Relaxation:** Stretching helps release tension that might have become tight during practice. By stretching, it will alleviate soreness and stiffness, which promotes overall relaxation and reduces any possibility of muscle imbalances.
4. **Improved Performance:** Muscles that are flexible are more efficient and can generate greater force. By stretching after practice, it will help maintain optimal muscle function, which leads to improved performance in future practices and competitions.
5. **Injury Prevention:** Tight muscles are more disposed to injury, since they are less able to absorb impacts and are more likely to tear or strain. Stretching regularly after practice helps prevent injury by keeping them supple and resilient.
6. **Mental Relaxation:** Stretching can provide some mental benefits as well; encouraging mindfulness and relaxation. Taking the time after practice to stretch lets the athlete unwind and decompress, which reduces stress and promotes mental welfare.
7. **Improved Posture:** Tight muscles contribute to poor posture, which leads to discomfort and increases the risk of injury overtime. Regular stretching can counteract this by promoting proper alignment and muscle balance.

How to Prevent Injury and stretch more:

- **Set aside time about 30-40 minutes after practice to allow for static stretching. Set a timer upon getting home for this time frame.**
- **See your athletic trainer to get guidance on the best stretches.**
- **Listen to your body when it needs rest as well.**