Stretching

Principals of stretching

Stretching is one of the most important things to do before, during and after practice. It is good to start with a light jog just to warm up the muscles (one or two laps around the field). Warming up before you start stretching is important because it's hard to fully stretch a cold muscle. Doing some sort of a warm up before stretch can prevent stiffness and make you more flexible.

Stretching will help prevent injuries during practice. (shin splints, leg cramps, etc.) Continuous stretching during practice will promote muscle growth which also reduces the risk of injury. Stretching after exercise ensures muscle relaxation, reducing muscle soreness and stiffness.

Static stretching

Static stretching requires that the muscle be stretched to a point of resistance and held for about 15-30-seconds for each muscle group.

*It is very important to use the proper diaphragm breathing technique (*see Diaphragm. Breathing below*) when stretching. When you stretch you can severely hurt yourself if you don't breath because muscles need oxygen when stretched.*

Dynamic stretching

Dynamic or ballistic stretching involves bouncing motions and is generally thought to be more dangerous and less effective than static stretching. This is why we don't use this method of stretching.

Examples

Illustrated below are some examples and instructions for some basic stretches (mainly lower body). We will go into further detail and learn many more types and ways to stretch as the season progresses. There are also many upper body stretches we will learn during stretch.

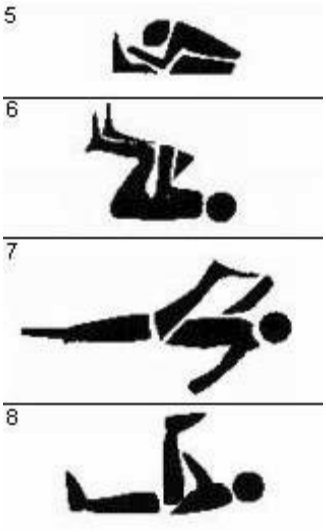
Seated leg stretches

1) "The butterfly" – place soles of feet together, grab ankles and use elbows to push knees toward the ground. Bring chin to feet keeping a straight back.

2) Legs spread, place both hands on the same ankle. Bring chin to knee keeping leg straight.

3) Legs spread, place one hand on each ankle. Lean forward leading with the chest.

4) Legs together, feet flexed, hands on ankles.



5) (Bring chin to knees.

6) Lie on back bring both knees in toward chest, grab and hold tops of shins

7) Lie flat, arms in a "T" position, bring left leg towards the right hand keeping leg straight. Repeat bringing right leg to left hand

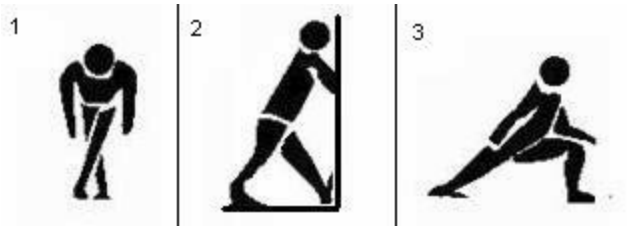
8) Lie with one leg flat and one leg perpendicular grabbing behind the calf point and flex the toe.

Standing leg stretches

1) Stand with legs crossed, keep feet close together and legs straight. Repeat with opposite leg.

2) Calf stretch – (can be done with a partner instead of wall) Stand with one foot flat on the ground and one foot propped up on the wall. Keeping back leg straight, lean forward.

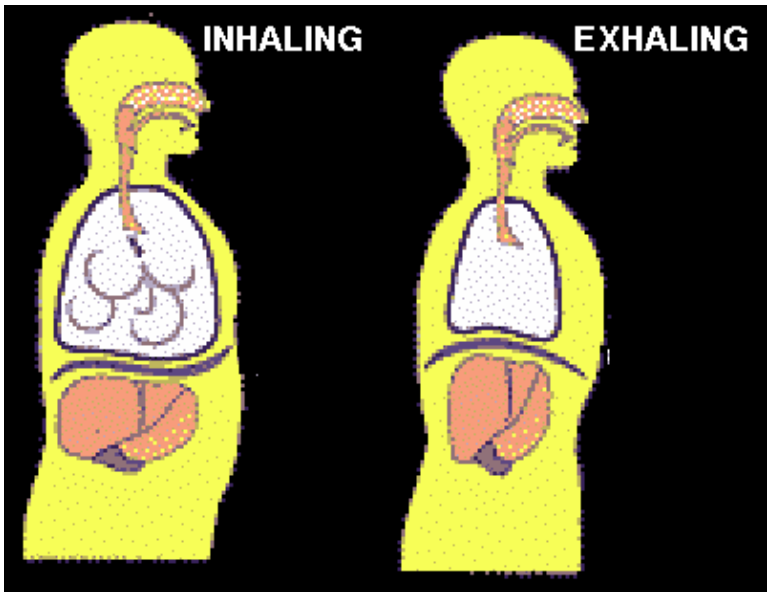
3) Lunge one leg forward one leg back. The front leg should be at a 90 degree angle, back leg should remain straight.



Breathing

The primary muscle of breathing is the diaphragm. Breathing with the diaphragm fills the lower portions of the lung. The diaphragm is a dome shaped sheet of muscles that lies across the bottom of the chest cavity. Because breathing is a function that occurs without conscious thought, most people are not used to using their diaphragm to breath. Our breathing is the key to help us deal with stress and nervousness, and also a way to improve our focus.

Did you know that when you inhale your heart rate increases and when you exhale your heart rate decreases? When you inhale, the diaphragm flattens out (pulls) expanding the lower ribcage and upper abdomen increasing the heart rate. When you exhale, the diaphragm relaxes (pushes) and as it rises, air moves out of the lungs decreasing the heart rate. By breathing slower and deeper we can learn how to slow our heart rate down.



How does this relate to marching?
If you let your mind control your heart rate, you can improve your performance during the show. In other words whenever you are not playing, taking deep breaths can lower your heart rate which gives you a chance to recover and refresh yourself during the show. In order to learn to use your breath, you must strengthen the diaphragm muscles by doing breathing exercises.

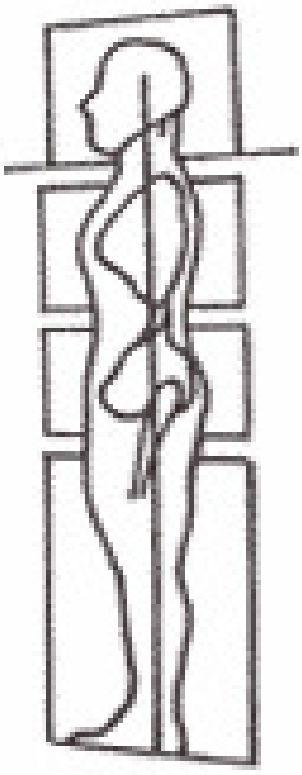
Breathing Exercises
When doing breathing exercises remember to keep the throat as open as possible. You should feel the cold air hit the back of your throat. We sometimes use a breathing tube to facilitate the openness of the mouth.

Remember to take in as much air as possible after expelling all of the air. If you don't empty stale air, there is no room for fresh air. Work to expand the intercostal muscles to allow greater lung capacity.

Breathing
1) Fill from the bottom - up. Starts with the lower lungs (stomach area)
2) Middle rib cage
3) Upper rib cage around your chest - never raise the shoulders

If at anytime you feel faint, STOP, sit down and breath normally.

Posture
To understand posture you must first understand how gravity affects posture. Gravity is a powerful force that is not always thought of as having any affect on the body's posture. It is a force that pulls the body toward the earth. When the body is in the proper alignment it minimizes the work done to hold itself up. This alignment will create less stress on joints and muscles and improve the functioning of breathing.



5 Points of alignment

1) Feet/ ankles – Feet at a 45 degree angle. Weight of the entire body is placed slightly forward. On the platforms of the feet. Feels like you are leaning forward.

2) Hips/ Pelvis – Pulled back and centered over ankles

3) Lower back (center/ "sternum") – Lifted out of hips centered over hips and ankles

4) Upper back/shoulders – Shoulders are flat and pulled back and down centered over all 3 points below

5) Ears (Head – Held 10 degrees above parallel). Centered over all 4 points below