Everything a Rower Needs to Know About Stretching

By Dr. Tim Hosea

What is it good for?
1. Keeps muscles supple
2. Prepares you for movement
3. Helps to reduce strain when you are active
4. Helps to maintain your range of motion
5. Reduces your chance of injury – A strong pre-stretched muscle resists stress better than a strong, unstretched muscle.
6. Reduces tension
7. Develops body awareness
8. Promotes circulation
9. Feels good

A Few Points
1. Stretching should never “hurt” or be “painful.”
2. It should feel good.
3. Do not push the limits.
4. Always think of your underlying condition or injury.
5. Consistency if the key.
6. It is very individualized and specific; therefore, you are able to modify.
7. Warmed up muscles respond more favorably than cold ones.

Objectives
Reduce muscular tension therefore improving flexibility and range of motion and eventually promoting freer movement.

Not…Attain extreme flexibility, which may lead to injury or overstretching.

When to stretch
1. In the morning before you start your day
2. Before and after exercise
3. After prolonged static positions
4. If you feel stiff
5. At work to release tension

The stretch reflex
Stretching too far or bouncing causes the muscle and its unit fibers to contract and tighten. This will result in damage to the muscle causing tearing of the fibers eventually leading to pain, soreness, tightness and potential dysfunction.

**Stretching Techniques**

**Types**
1. Ballistic
2. Static
3. PNF

**Agonist vs. Antagonist**
Synergistic muscle groups balance in strength and flexibility needs to be there for normal, smooth, coordinated movements as well as for reducing the possibility of muscle strain caused by muscular imbalance.

**Ballistic**
- The oldest form of stretching
- “Bouncing” technique
- Repetitive contractions of the agonist muscle are used to produce quick stretches of the antagonistic muscle.
- Safety factor – Uncontrolled forces within the muscle may cause micro tears.
- If used, it should come after static stretching and more closely resemble dynamic (sport specific) activity.
- Never used in rehabilitation

**Static**
- More popular and safer, less danger of injury, no partner needed
- Passive stretching a specific antagonistic muscle by placing it in a maximal position and holding it for an extended amount of time, 30-60 seconds
- Time varies in literature 3-60 seconds
- Optimal 15-30 seconds initially and 30-60 seconds eventually as long as there is no pain or soreness.
- Optimal number of reps is three to five
- One to three times a day depending on the severity of restriction or dysfunction.

**PNF (Proprioceptive Neuromuscular Facilitation)**
- Based on neurophysiological principles
- Contract-Relax and Hold-Relax (slow reversal-hold-relax)
• Involve a combination of alternating isometric or isotonic contraction and relaxation of both the agonist and antagonist muscles.
• Requires a partner
• 7-10 second contraction followed by a 10-12 second relaxing phase
• Capable of producing greater gains in flexibility when compared with other techniques over an extended training period.

**Principles of Stretching**
1. All stretches should be held for three seconds and done twice to each extremity or side.
2. Alternate the stretches to allow for proper rest periods.
3. Never bounce while stretching.
4. Proper form is essential for effective stretching.

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