

Newsletter

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How To Warm Up Before Exercise

A proper warm up has important exercise benefits

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Most athletes perform some type of regular warm-up and cool down during training and racing. A proper warm up can increase the blood flow to the working muscle which results in decreased muscle stiffness, less risk of injury and improved performance. Additional benefits of warming up include physiological and psychological preparation.

Benefits of a Proper Warm Up:

- **Increased Muscle Temperature** - The temperature increases within muscles that are used during a warm-up routine. A warmed muscle both contracts more forcefully and relaxes more quickly. In this way both speed and strength can be enhanced. Also, the probability of overstretching a muscle and causing injury is far less.
- **Increased Body Temperature** - This improves muscle elasticity, also reducing the risk of strains and pulls.
- **Blood Vessels Dilate** - This reduces the resistance to blood flow and lower stress on the heart.
- **Improve Efficient Cooling** - By activating the heat-dissipation mechanisms in the body (efficient sweating) an athlete can cool efficiently and help prevent overheating early in the event or race.
- **Increased Blood Temperature** - The temperature of blood increases as it travels through the muscles. As blood temperature rises, the binding of oxygen to hemoglobin weakens so oxygen is more readily available to working muscles, which may improve endurance.
- **Improved Range of Motion** - The range of motion around a joint is increased.
- **Hormonal Changes** - Your body increases its production of various hormones responsible for regulating energy production. During warm-up this balance of hormones makes more carbohydrates and fatty acids available for energy production.
- **Mental Preparation** - The warm-up is also a good time to mentally prepare for an event by clearing the mind, increasing focus, reviewing skills and strategy. Positive imagery can also relax the athlete and build concentration.

Typical Warm up exercises include:

- Gradually increasing the intensity of your specific sport. This uses the specific skills of a sport and is sometimes called a related warm-up. For runners, the idea is to jog a while and add a few sprints into the routine to engage all the muscle fibers.
- Adding movements not related to your sport in a slow steady manner: calisthenics or flexibility exercises for example. Ball players often use unrelated exercise for their warm up.
- Which to choose? The best time to stretch a muscle is after it has an increased blood flow and has increased temperature to avoid injury. Stretching a cold muscle can increase the risk of injury from pulls and tears. So you are better off doing gradual aerobic exercise before stretching. Keep in mind that the best time to stretch is after exercise because your muscles are warm and pliable with the increase of blood in them. Make sure your warm up begins gradually, and uses the muscles that will be stressed during exercise.
- Keep in mind that the perfect warm up is a very individual process that can only come with practice, experimentation and experience. Try warming up in various way, at various intensities until you find what works best for you.