

Physical Conditioning for Winter Alpine Mountaineering

The Alpine Mountaineering programs demand that the participant hike or ski with a full pack for several hours per day for a number of days. The program is much more enjoyable for the participant with strong and flexible knees and ankles.

The optimum conditioning program for each individual will depend on present physical condition, time, and facilities available, and the level of commitment to improving their physical condition. The best way to arrive at your personal program is to listen to what your body tells you. It's easy to be overly enthusiastic in the beginning and get discouraged or injured during your first or second work-out. Start at an easy pace. As you become better conditioned and more experienced, you'll be able to sense when your body can take more stress without injury. This process of finding out what your body is capable of handling and of improving your endurance will take time. Start your conditioning program at least three weeks in advance of your trip. Be sure to stretch your legs, back, neck, shoulders, arms, and fingers before and after each workout.

Suggested stretches include:

1. Stand with your feet together, arms stretched above your head, and slowly stretch from the waist forward and down to your feet, stretching both back and leg muscles. It's important not to bounce, but instead try to hold your lowest stretch as long as you can. You'll find that in three weeks you'll see an amazing difference in your ability to stretch out.

2. Stand with feet about shoulder width apart and hands on hips. Bend sideways at the waist first in one direction, then in the other. Repeat this exercise, but with your left hand on your hip and your right arm extended above and over your head as you bend toward your left side. Repeat for the right side.

3. Sitting or standing, clasp your hands behind your back, left hand reaching over your left shoulder and right hand reaching up from your lower back; repeat using opposite hands.

4. To stretch calf muscles, stand at least arm's length from a wall, extend one leg out behind you and drop your heel slowly as far as possible. Repeat for the other leg.

5. To stretch out fingers, gently pull back fingers one at a time with your other hand.

In addition to the stretches listed above, there is a need for activities which will help strengthen your heart and lungs (cardio-pulmonary system). This can be achieved through a number of activities. The following criterion should be used to evaluate the activity chosen and whether it is improving your cardio-pulmonary system.

1. Heart rate must be held at approximately 160 beats/minute for 20 minutes. This is necessary to achieve a "training effect" where the heart actually becomes stronger.

2. The chosen activity should be done about every other day. Programs which require a lot of travel time or preparation time may be difficult to fit into a busy schedule.

3. The activity should not be one that could injure the participant. People often have body areas that are prone to injury more than others. Be aware if the activity is injuring or over-stressing you. If you find that it is, change your equipment, technique, or activity.

4. Choose an activity that will include the same muscles as used in climbing and hiking.

Suggested activities include:

1. **Bicycling:** This involves the thigh muscles in a short, downward stroke similar to the short steps taken when climbing slopes. Using the downward curving handlebars on your bike will encourage the use of back and shoulder muscles. You may find that your calf muscles are somewhat overlooked in this activity. Working with weights in this area will help you develop strength here. Cycling is a good activity for people who want to avoid the jarring associated with running. Be sure to keep a fast cadence, approximately 90 revolutions/minute. To avoid placing undue stress on your knees, gear down. To measure your cadence, take a watch with you and time yourself. Before beginning a cycling program, be sure to consult your local bike shop to make sure that your bike fits you properly and is in safe working order.
2. **Running:** This activity is great for strengthening both heart and lungs. It requires very little equipment and can be done almost anywhere in any weather condition. The stride used in running is normally a bit longer than the one used for climbing. Running hills is good and will improve all of the thigh and leg muscles used in climbing. Take care to avoid jarring injuries. Investing in the best possible pair of running shoes and avoiding running down steep hillsides and on pavement and other hard surfaces will help you minimize possible injuries. A program that includes moderate paced runs interspersed with sprints and uphill sections will put you in excellent condition. The muscles in your back and shoulders will be neglected with a running program, so you may want to supplement this with another exercise program or weight training.
3. **Swimming:** This exercise is very good for the heart and lungs when done with vigor. There are almost no stress-related injuries with swimming, so it's well suited to people with sensitive joints. Swimming strengthens primarily the shoulders and back, so combining it with a program that works on developing leg muscles is recommended.
4. **Racquet sports:** These are especially good during spells of bad weather. Played rigorously, they strengthen the heart and lungs and are good for toning and strengthening the shoulder, back, and leg muscles.
5. The **best** way to get in shape for hiking and climbing is to do exactly that. Throw on a pack and take a quick-paced hike. Include hills in your program whenever possible.

If you haven't been involved in physical activities for a while, consult your physician prior to any physically demanding conditioning program.

Remember, it's important to set a realistic goal for yourself. A number of moderate workouts give superior results to several extreme workouts that result in injury. If you're not having fun or getting satisfaction from your workout, then scrutinize your activities and attitude toward your training program. Perhaps changing your activity would better suit you. After the initial period when muscles are sore, activities very tiring, and motivation is low, a program involving the entire body and integrating a number of activities will be both fun and exciting, and you'll find yourself motivated to spend time on your training. The better condition you come in, the more you'll enjoy your climbing.

Good luck on your training program!