

# FITNESS & TRAINING ▲ EXPEDITIONS

*Congratulations on your decision to join an AMS expedition! We want to help best prepare you for a successful experience. Please read the following information.*

Most mountaineers find the Alaska Range to be a great physical and mental challenge and emphasize the importance of training beforehand. The sustained nature of Alaska Range expeditions takes its toll; we call it the "Alaska Factor." Winter camping and glacier travel in a severe environment which fluctuates from storms to blistering heat coupled with long days breaking trail and building camp can whittle one down; and it only gets harder with altitude. The oxygen-deprived environment alone provides a significant challenge, but when coupled with the other variables, Denali (for example) is just plain tougher than most other mountains on earth. The better condition you are in, the more you will enjoy the climb, the safer it will be for you and your teammates, and the better chance for reaching the summit. The big mountains of the Alaska Range are not for everyone, but for those who choose to take on the challenge the rewards are worth it. The amount of time needed for training depends on your level of fitness at the start. Committed athletes need only to adjust their training habits to include expedition-specific routines. Those starting "off the couch" may need a year or more of training. When setting up your exercise regime, consider that you will need to develop the endurance to carry a 60-80 pound pack (depending on your body weight) and pull a 40-pound sled while wearing snowshoes for 5-8 hours each day, day after day. As you gain elevation, the terrain changes to steeper snow, blue ice, and exposed ridges that require crampons. Crampons go on at 11,000' and do not come off until the return to 11,000'. You need the prior experience and strength to climb in balance at a reasonable pace under these conditions. Though it is difficult to "train" for altitude, you can put yourself on a conditioning program that best prepares you for it. The more conditioned your body is to prolonged physical exercise; the better you can pace, rest, remain mentally sharp and be a productive team member. After many years of experience climbing Denali and other Alaskan peaks, we can offer these effective training strategies:

- 1) *Discuss your plans with your doctor.* Participants on AMS Expeditions are required to have a medical exam within 1 year of the expedition start date. If you are over 40 or have a history of heart disease, it is recommended that you have a stress echocardiogram. [www.heartsite.com/html/echo\\_stress.html](http://www.heartsite.com/html/echo_stress.html)
- 2) *Develop aerobic stamina.* Run, bike, ski, speed walk, climb, bushwhack. Maintain a pulse rate 80% of maximum for a half hour to an hour during your workout. Train on irregular terrain, soft sand, and snow. Vary your routine to prevent overuse injuries, and push yourself with care not to injure yourself. Remember to do warm up and cool down stretches. This type of training will prepare you for the long hard days of breaking trail and moving camp.
- 3) *Work on upper body, abdominal, and lower back strength.* Do calisthenics: sit-ups, push-ups, pull-ups and pyramid type repetitions. This conditioning helps with day-to-day activities of putting on and taking off your pack as well as camp building chores.
- 4) *Progressive resistance weight training* improves anaerobic metabolism that feeds much of muscular work.
- 5) *Aerobic hill training with a pack.* Start with a light pack of 20 lbs. and gradually increase the weight to 60 lbs. Hike up hills with filled water jugs for weight and empty them before descending to decrease strain on the knees. Never run with a pack on. If feasible, walk to and from work with a pack in all weather conditions. You are trying to prepare yourself for thousands of feet of uphill climbing.
- 6) *Walk with ankle weights, building up to 2 pounds,* that simulate the extra weight of double boots, snowshoes, and breaking trail.
- 7) *Winter climbing trips combined with overnights are probably the best thing you can do.* Reach a comfort level moving in mountainous terrain for multiple days. Keeping a steady pace, breathing in a calm and controlled rhythm during exertion cannot be emphasized enough.
- 8) *Get psyched!* Mental fortitude is as important as physical strength and your attitude will ultimately determine overall success. Days of wind and cold are trying, but storm days cramped in a tent or snow cave are harder still. Know that discomfort in one form or another can be a daily occurrence. Patience is truly a vital quality, especially with the weather and working with fellow expedition members all under stress. You are leaving the comfort and privacy of home in order to experience a unique challenge in a remarkable environment.
- 9) *Push yourself while staying focused and alert.* During your workout, toward the end when your mind is less sharp, challenge yourself mentally – spell the alphabet backwards! This will help you stay focused and alert during trying conditions. On the climb, you must know your body well enough to recognize the difference between pushing yourself and injuring yourself. Frostbite, acute mountain sickness, pulmonary and cerebral edema are serious and life-threatening and have a sudden onset. It is possible to push yourself too far. Prevention is paramount and infinitely better than treatment in the backcountry.
- 10) *Maintain a diet that promotes health and builds strength.*
- 11) *Train for activity specific skills:* snow shoeing, cramponing, pulling a sled. Snow shoeing requires a body position where your legs are slightly arched like a cowboy. This poses increased strain on your groin. Include some long walks in the bow-leg position or other groin-specific routines. Cramponing on hard ice raises your body an inch off the ground and places increased strain on your ankles. Inefficient cramponing techniques while wearing a heavy pack at altitude is a huge energy sink. If alpine ice is not available, build a 30° incline slope out of plywood and practice at home. Drag a sled weighed down with firewood or a tire through the woods or over sand, and think of other creative ways to simulate the rigors of climbing Denali, Foraker or Hunter. *Have fun and tell us what works for you!*