

Physical Training Program

Objectives

At the end of this training program:

- § You should be able to walk and climb moderate hills for up to six hours a day, carrying up to 22 kg of supplies on your back
- § You should be able to recover from a hard day's climbing within an eight to twelve hour rest period to resume another day of hard physical exertion.
- § You should be able to physically and mentally go the extra distance when called upon for survival reasons.

* A NOTE FOR LATE STARTERS *

Don't be scared by this long preparation schedule! By expedition start, you just need to be able to do the following:

- § One hour of strenuous aerobic exercise without rest (especially walking steep hills, swimming or climbing stairs) on 5 consecutive days (ie; Mon, Tues, Wed, Thurs, and Fri). Rest two days.
- § Substitute one aerobic workout day with a two to three hour hill hike carrying a 20kg backpack. Rest for lunch and repeat in the afternoon
- § Substitute two aerobic days (ie; running, swimming) with two days of back-to-back hiking at an easy pace (ie; Saturday and Sunday) with a 20 kg backpack

If you can do this, you are physically ready for Tang La Ang Qu! -- Chris

THE PROGRAM:

SIX MONTHS PRIOR TO EXPEDITION:

During this month, work on getting into the training routine. Physically, by the end of this month, you should be fit enough so that your body does not ache the day after a workout. Mentally, you should feel that you cheated yourself if you do not follow your routine regularly. Find exercises that are fun to do and go to places that are new. Be creative.

Work out four days a week this month, rest one to two days and, if you are up to it, use one of the rest days to do a fun workout (e.g. biking, swimming, etc.). Try to find friends that will workout with you. They can be the motivation for you to get into the routine. It is harder to forgo a workout when you know that someone is planning to workout with you that day.

Aerobic training is the emphasis of your program. You want to have the endurance to exert energy for hours at a time, day after day. This month put in at least two hours per week (thirty minutes per day) of aerobic exercise. This exercise should be a continuous effort for the given time period. The most popular type of aerobic exercise is running, but biking, swimming, and hiking are also good substitutes. Interchange them each day if one gets boring. The objective of this month's aerobic workout is to get your heart rate up to between thirty and forty beats faster per minute (over the thirty-minute workout) than your resting heart rate. Some workout professionals call this the "conversation intensity" where you are working out at a level that allows you to talk to someone during the workout, without dying. You may not start off thinking that you can talk with your heart rate up that high for long periods of time, but you will need to gradually work up to that ability.

Strength training needs to be slowly incorporated this month. You should be working on building strength in your back, shoulders, arms, and abdominal muscles. Your leg muscles will get stronger through the aerobic exercises, but you can include exercises that specifically work the leg muscles too if you feel up to it. Again, don't overdo your routine, which could cause you to lose interest. A strength program should include a three days per week routine (this is besides the aerobic training!). You do not have to join a health club to get a good strength workout. The following examples can be done at home:

- One set of sit ups (abdominal crunches)--as many as you can do.
- Three sets of pull-ups and/or chin ups-- up to fifteen repetitions per set.
- Three sets of as many push ups you can do--up to forty repetitions per set.

If you have access to a weight set or can improvise, you can include the following as well:

- Three sets of bent rowing exercises with weights that will allow you to do ten to fifteen repetitions per set, but no more than fifteen.
- Three sets of military presses with weights that will allow you to do eight to ten repetitions per set but no more than ten.

Muscle fatigue should set in on the last few repetitions of each set and muscle failure should occur on the last repetition of the third set, if you have selected the proper resistance. Do not make your strength routine time consuming or boring at this early stage.

Example week for this month:

- Monday: Run for thirty minutes at a "conversation" pace. Try not to stop, but if you feel that you have to, try to maintain a brisk walking pace. Strength train today with the sit ups, pull-ups, and push ups routine.
- Tuesday: Bike (or substitute another aerobic exercise) for thirty minutes or longer. (Remember that you want to get a workout!) Try to go somewhere different today than on Monday's workout. No strength workout today.
- Wednesday: Strength train today. You may want to include a few more strength exercises than you did on Monday. Rest from aerobic exercise.
- Thursday: Run for thirty minutes like you did on Monday. Find a different route again. You might want to travel to a wilderness trail, if one is close by. No strength workout today.
- Friday: Bike (or substitute another aerobic exercise) for thirty minutes or longer. Repeat Monday's strength workout.
- Saturday: Rest day or do something recreational. Go climbing or hiking for fun.
- Sunday: Rest day.

Some forms of aerobic exercise, such as biking, may not require you to exert the same amount of energy in a given amount of time as compared to running. You will need to monitor how you feel and adjust the duration and/or intensity.

I recommend that you do not jump into any form of exercise without a light form of warming up first. Some stretching of the muscles you are about to use heavily is a good way to prevent injuries and get your skeletal-muscular system prepared for your exercise routine.

You should also drink lots of water. Your body will need it with these workouts, but it also needs to get use to hydrating. A common cause of adverse altitude affects is dehydration. You will need to drink large amounts of liquids on Ning Jing Kang Sha (2-3 litres per day) and your body should now start getting use to taking in those copious amounts. Drinking two litres of water per day is recommended.

Remember that you are not training to compete in the Olympics next week and this workout schedule is probably

a change in your current lifestyle, so take it gradually and easily to begin with this month. You want to maintain the training, so it is better to do parts of this program rather than none at all.

FIVE MONTHS PRIOR TO EXPEDITION:

The focus of this month is building a foundation for your mountaineering fitness.

Aerobic workouts should still be, at least, four days a week with no more than two days rest per week. You should substitute one rest day for your recreational day. Increase the duration of these workouts to at least forty minutes, but you must now make sure these sessions are a continuous effort.

Strength workouts should remain at three days per week. Try to increase your weights and/ or reps, but do not exceed the maximum reps stated earlier.

This month you should include hill climbing or stair climbing as part of your weekly routine. At least once a week, but no more than twice a week, find a long hill or flights of stairs to climb. The duration of the climb should be no less than five minutes. Repeat the climb until you have completed a thirty-minute session. If you find something that allows you to climb continuously for thirty plus minutes before coming back down, that would be excellent. Carry a backpack that has about 10 kg in it. Avoid stopping during this routine. This workout is probably the best simulation of what you will be doing most on The Mountain. (Caution: Do not carry too much weight in your pack now because the coming down portion of this workout can kill your knees if you are not use to the weight.)

FOUR MONTHS PRIOR TO EXPEDITION:

The focus for this month is building your endurance.

Aerobic workouts should now be five days per week, with one day rest. Increase your workout sessions to a minimum of forty-five minutes. Concentrate on working continuously throughout the entire forty-five minutes. Continue to include a hill or stair-climbing workout with a backpack at least once a week. Increase the weight carried in your backpack by 5 kg and the duration of this session to 35 - 45 minutes. You can substitute one or two of your aerobic workouts with the hill or stair climbing session. Be careful with your knees on downhill.

Strength workouts should increase to four days a week. Increase weights and repetitions, but again, do not exceed maximum repetitions already mentioned.

At this point of your training you may find that motivation might be lacking at times. Don't give up! Be creative, find new places to train, more friends to train with, go climbing to get psyched, read books on mountaineering, and watch videos or slide shows of other mountaineering adventures.

THREE MONTHS PRIOR TO EXPEDITION:

This month you begin your training in earnest. You must now get mentally conditioned, as well as physically. Take each day as it comes.

You may want to consider taking a good daily multiple vitamins with the RDA of iron, if you do not already do so. This will make sure that your body is getting its recommended amounts of vitamins and minerals that you might need with your increased exercise routines. The iron will assure that your blood will have the iron needed to maintain the haemoglobin in your red blood cells (good for carrying oxygen). Don't forget your daily intake of water and eat a healthy diet.

Your aerobic workouts should remain at five days per week and take one rest day per week. Your sessions should now last a minimum of fifty minutes.

Incorporate a shortened "stress" or anaerobic workout session for one day of the week. This workout should be around thirty minutes and you want this session to get your heart rate up to around 130 to 180 beats per minute for at least one minute duration at a time, but not longer than two minutes. Recuperate between these high intensity bursts within three minutes before going at it again. Physiologically, the faster your heart rate

during the stress exercise and the less rest time you give yourself between the exercises, the more training benefit you will reap. You should really be working hard during this session and feel relatively exhausted at its end. An example of this type of workout is running a hilly course, sprinting the uphill (as your high intensity burst), and jogging the downhill and flats, for your recuperation. This type of workout is one of the best natural ways to build up your red blood cell count (which is responsible for getting oxygen to your cells) and getting your cells to get rid of lactic acid (a waste product of cellular respiration and cause of muscle fatigue) more efficiently.

Strength workouts remain at four days per week and should be a habit for you by this time. Increase your weights and repetitions accordingly.

Continue your hill and/ or stair climbing workouts, but do this twice a week now. This can be a replacement of two of your aerobic sessions. Increase your backpack weight by another ten pounds. You may want to consider carrying jugs of water for weight so you can empty them at the top of your elevation gain, assuming that you do not have to repeat the climb often in the one session. This way you do not have to carry the weight down and pound your knees. (Caution: Remember that you will be carrying very heavy loads down the mountain when the expedition is over, so strengthening your leg muscles for downhill should be considered.)

This month try to get out into the countryside once or twice testing your gear. Make sure your boots are comfortable, apparel fits and does what you want it to do, backpack fits and handles the heavy loads, sleeping bag feels good, and you are getting familiar with the stoves, etc. The only way to do these things is to go camping and climbing. You do not want to find out that things are not just right in Tibet!. You can substitute two of your aerobic workouts for this outing if it is an overnigher.

TWO MONTHS PRIOR TO EXPEDITION:

Maintaining your routines and your health is key for this month.

Continue your aerobic workouts at five days per week and at least one rest day. Workouts should be a minimum of an hour in duration. One aerobic workout per week should last for at least an hour and a half. Continue with at least one stress session per week and shorten the rest periods between the high intensity portions. Wear your climbing boots for these sessions to get use to them.

Strength training is now for endurance purposes. Continue to strength train four times per week, but use two of those days for emphasizing repetitions done quickly. If you have someone who can time you, do your exercises in the same number of sets, but use lighter weights (decrease your resistance by 40% of what you used before) and do as many repetitions as you can in a minute per set. You should use a weight that gets you to almost complete exhaustion at the end of the minute. If no one is available, do your exercises till muscle failure.

ONE MONTH PRIOR TO EXPEDITION:

THIS IS IT! The final month to tune up for this long awaited climb. This is the month of training that will get you physically up the mountain.

Your aerobic workouts will still be five days a week. Remember to rest at least one day per week. Each workout session should be maintained at a minimum of one hour in duration. You should be able to do two stress sessions per week. You can forego the stress sessions the week prior to departure. These stress sessions do not need to increase in duration, but the recovery periods should be shortened again. The hill and/ or stair climbing workouts, with a loaded backpack, should dominate your aerobic workouts now. Increase the weight in your backpack by ten pounds. If you hate to give up the running or other aerobic exercises, then do the hill and/or stair climbing workouts in addition to the others. Remember what you will be primarily doing on the mountain. The "The mountain Edge" should now be a part of every aerobic workout session.

Your strength workouts should still be maintained at four times per week, concentrating on the number of repetitions with lower weights.

<u>THREE MONTHS PRIOR TO EXPEDITION</u>	WORKOUT	1	2	3	4	5	6	7	Purpose: Your training should be very serious now. You will focus on the training of both the mental and physical aspects of yourself. Exercises: 1.) Aerobic workouts are still 5 days a week, but you are using 2 days for hill or stair climbing. Increase weight in your backpack by another 10 lbs. for the uphill/stair workouts. Aerobic workouts should last at least 50-min. 2.) Stress session should be 30–40 min. long of alternating fast and strenuous periods (1-2 min.) of running, biking, or another aerobic exercise and short rest periods (less than 3 min.) Before repeating the speed portion again. 3.) Strength training continues as before and increase resistance and reps according to your strength gains. 4.) Your recreation activity should include an overnighter to test your gear and can be an aerobic workout.
Aerobic train 5 days a week	Aerobic	X		X					
Stress train 1 day a week	Stress		X						
Hill or stair climb 2 days a week	Hill or Stairs				X	X			
Strength train 4 days a week	Strength	X	X		X	X			
Recreate 1 day a week	Recreation						X		
Rest 1 day a week	Rest							X	
<u>TWO MONTHS PRIOR TO EXPEDITION</u>	WORKOUT	1	2	3	4	5	6	7	Purpose: Continue building your mental and physical endurance and strength. Exercises: 1.) Aerobic sessions should last at least an hour. One session in the week should aim for at least an hour and a half (you can incorporate this into your recreational activity). Your hill or stair climbing should continue using at least 40 lbs. in your backpack. 2.) Stress workouts continue and try to shorten your rest periods.
Aerobic train 5 days a week	Aerobic	X		X					
Stress train 1 day a week	Stress		X						
Hill or stair climb 2 days a week	Hill or Stairs				X	X			
Strength train 4 days a week	Strength	X	X		X	X			
Recreate 1 day a week	Recreation						X		
Rest 1 day a week									



	Rest								X	3.) Strength training shifts to less resistance (decrease by 40%) but doing as many reps as you can in a minute twice a week. Maintain doing 3 sets.
<u>ONE MONTH PRIOR TO EXPEDITION</u> Aerobic train 5 days a week Stress train 2 day a week Hill or stair climb 3 days a week Strength train 4 days a week Recreate 1 day a week Rest 1 day a week	WORKOUT	1	2	3	4	5	6	7		<p>Purpose: Maximize your training to give you that extra endurance and strength when you may need it in Tibet</p> <p>Exercises:</p> <ol style="list-style-type: none"> 1.) Aerobic training should now last over an hour. Continue trying to do one aerobic session that lasts at least an hour and a half. 2.) Stress sessions should be maintained as last month but now you should try for 2 sessions a week. Your rest periods should be shortened again from last month's sessions. 3.) Strength training continues as last month. Try for more repetitions. 4.) Your climbing workouts should be lasting as long as your other aerobic workouts and you should be carrying around 20 kg in your backpack. 5.) Your last week before departing to the big mountain can be a modified routine of more endurance workouts and less strength and stress workouts.