CHALLENGER WEST 2O16

Wind River Wilderness Expedition

**August 7-16, 2016**

Sponsored by: *United Church of God, an International Association*

***CONDITIONING GUIDE***

*Disclaimer: This document is intended to provide overall guidelines and ideas for physical conditioning in preparation for the Challenger West 2016 program. It is not intended to be a specific training regimen or requirement for a given participant. It is highly recommended that each participant consult with his/her licensed medical physician before deciding upon a workout program that best meets his/her needs and physical limitations.*

**A. Overall Training Principles**

1. Frequency. Best results are obtained if a person maintains a regular schedule of exercise. Most trainers recommend 4 – 5 days a week. It is just as important to rest 2 days throughout the week from rigorous exercise. Intense workouts actually break-down muscle tissue – which is rebuilt during rest.

A 60-minute workout per day is optimal and with good planning, should be able to fit into most schedules. This would include 30-40 minutes of cardiovascular / aerobic exercise and 20-30 minutes of muscle workout.

2. Cardiovascular & Aerobic. To improve aerobic and cardiovascular conditioning, it is best to maintain an elevated heart rate – 1.5 to 2 times your resting heart rate – for at least 30 minutes continuously.

3. Muscle Training: Upper Body vs. Lower Body. Most people involved in muscle training (weight-lifting and muscle building exercises) usually alternate days between upper-body and lower-body workouts – in order to allow the other set of muscles a day to rest and rebuild. For example: on Monday, a person may do his aerobic workout + all upper body strength training; on Tuesday, a person would then do his aerobic workout + lower body strength training (and then continue to alternate throughout the week).

In weight training, you have the option of using heavier weights with fewer repetitions (reps), or somewhat lower weights with higher number of reps. While you need a sufficient level of weight to challenge and build muscle, generally it is recommended to have somewhat lower weights and a higher number of reps. This will serve you better for this program, where we will be hiking or rock-climbing over an extended period of time.

A final note with regards to weight training: whenever possible, do each arm (and each leg) separately. If done together, your stronger arm or leg will always compensate for the weaker one. For example: if you are doing arm curls, use a separate dumbbell for each hand/arm, rather than one bar for both arms at the same time.

4. Form. Very important in any exercise – especially weight lifting – is using the correct form / technique. This can greatly increase the effectiveness of the exercise and reduce the risk of injury. Consulting a coach or personal trainer (if you are unfamiliar with an exercise) may be a good idea.

5. Diet. It does little good to give your body a good workout – but then not the nutrients to build itself back up. The best nutrition consists of a healthy balance of fresh foods that include protein (meat, nuts, milk), vegetables, fruits and complex carbohydrates (whole grain breads & rice). Foods to minimize would be almost all processed foods (especially processed carbohydrates and sugars), sweets, “junk food”, snack-foods and soft-drinks. While alcohol can have positive effects in moderation, it can also contribute to unwanted weight gain.

6. Stretching. Do not underestimate the value of careful stretching before and after working out. This can greatly reduce the risk of stress injuries and help you to feel “less sore” after a workout.

7. Start Slow – and then Increase. If you are not used to regular exercise, you won’t become a “fitness machine” overnight. For aerobic and cardiovascular, do what you reasonably can – that is still somewhat of a challenge – for 30 minutes and then increase speed or resistance on a progressive basis. In weight training, start with a lower weight, and increase every couple of weeks.

With this in mind, it is recommended that you start now with a structured fitness program. Your body will need time to get adjust and improve to the level that is needed for the Challenger program.

*The items discussed above are general principles of exercise and fitness. Below are some more specifics related to backpacking and rock-climbing in altitude.*

**B. Cardiovascular & Aerobic**

For this trip (as with most backpacking trips) you will not only be pulling yourself up a mountain, you’ll be carrying considerable extra weight as well, in a lower air-pressure than where most people live – which means your body will be working harder (i.e. you will be breathing faster) in order to obtain the oxygen you require. In other words you may feel fine now, but when you’re lugging a load at 10,000 feet elevation you’ll feel like a chain smoker with one lung – *unless* you have built up your cardiovascular condition.

**The “30-minute Test”.** A good indicator of stamina needed for this backpack trek is the “30-minute Test”. Between now and May 15, go to a running track or route where you can calculate distance accurately. Using a stopwatch, run, jog or walk as far as you can in 30 minutes – with out stopping for anything. For guys, 2.5-3.0 miles (10-12 laps around a standard track) would good to aim for. For girls, 2.25-2.5 miles would be the target to aim for. Applicants will be asked to send their best 30-minute test results as a part of the application process. *If you cannot go for 30 minutes without stopping, then you need to work on your endurance.*

**C. Strength**

The guidelines below should provide a general indicator of your readiness for the regimen of this trip. The figures below range from the “low” end of ‘average’ to the “low” end of ‘excellent’, and are for ages upper teens through 20’s. The times given for jogging, swimming and cycling are from ‘very good’ to ‘excellent’.

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| **Activity** | **Fitness Test Range** | **Conditioning** |
| Sit-ups (crunches) | M=30-50/1 min.; F=25-43/1 min. | 75-100, 3-4 days per week. |
| Push-ups\* | M=30-50/1 min.; F=25-43/1 min. | 75-100, 3-4 days per week. |
| Pull-ups | M=8-15; F=3-8 | 15-25, 3-4 days per week. |
| Jogging/Walking | 1 mile in 7 minutes. | 30-40 minutes, 5 days per week. |
| Swimming (in lieu of jogging) | 400 yards in 7 minutes. | 30-40 minutes, 5 days per week. |
| Cycling (in lieu of jogging) | 4 miles in 12.5 minutes. | 30-40 minutes, 5 days per week. |
| Jump-rope (in lieu of, or in combination with, jogging) | (None specified.) | 30-40 minutes continuous (if done in isolation). |

M=male, F=female \*Girls modified push-up (from knees)

Start out easy and gradually increase. Pick an aerobic activity and gradually increase your exercise duration (right column above). If you have rarely (if ever) done athletic conditioning, you may want to invest some time and money in the services of a personal trainer at a local fitness club. The cost is not that high – but they can provide excellent advice on specific workouts for this type of activity.

For *overall* conditioning for backpacking, it’s hard to beat simply walking up hills – with a backpack! This isn’t always possible depending on where you live. But if there’s any way you can get a pack on and find a high hill to walk up—or even flights of stairs—you’re going to get both cardiovascular and muscular conditioning you need for the real thing. Start with 10 or 15 pounds of weight in your pack and build up to about 40 pounds, over the course of a month or two. You can load your pack with big bags of cat food, phonebooks, wood scraps, or anything else you can find. Just try to load the pack so the weight is distributed through the vertical length of the pack – i.e. not a big cast-iron dumbbell at the bottom of your pack (which is also very hard on seams). Aim for 30 minutes of uphill time.

To avoid undue pressure on your shoulders, use a backpack with a waist-band so that the majority of the weight is on your waist / hips – not your shoulders.

**Lunges** are *excellent* (even better with the backpack, or with dumbbells). There are several types of lunges—one is illustrated on the left, below. Squats are very good too (better with backpack or dumbbells). There are many kinds of squats too—a few illustrated below. Weight or resistance training is recommended as well. In fact it would be wise to get into the resistance/weight training habit for life, as it increases your stamina, energy, bone density, metabolism, HGH (human growth hormone), stress-management; decreases your risk of injury, plus *many* other benefits. It is beyond the scope of this outline to provide weight training routines here, as you probably already know some yourself and there is a huge volume of information on the subject, even on the web. For example at: www.bodyresults.com.





**D. Exercises for Rock Climbing**

For enjoyable rock climbing you need strong calves so they won’t tire out quickly while climbing. You also need strong wrists and forearms so you can hang onto the rock longer. The two exercises below are very good.

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| **Standing Calf-raise**  Hold a dumbbell in your left hand and step up onto a step or platform with ball of your left foot. Your heel should be hanging off the edge. Place your left hand against a wall for support and tuck your right foot behind your left ankle. (All of your weight should be on the ball of your left foot.) Slowly rise on to the toes of your left foot, raising your heel as high as you can. Pause, then slowly lower your heel as far as possible. After a set of 12-15 reps, switch legs. |





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| **Wrist Roll**  This is with a short dowel or rod (such as a piece of broom handle) with a chain or cord attached in the middle. Tie a weight (plate, dumbbell, rock, etc.) at the bottom of the rope or chain. Stand upright, feet shoulder-width apart, holding the roller in both hands, palms down, with your arms extended in front of you. The weight should be dangling in front of you. Slowly roll the weight up with your wrists. Use long, exaggerated up-and-down movements with your wrists to get their full range of motion. Keep the rest of your body stationary—don’t sway your body or drop your arms. When the weight has reached the top, slowly lower it using the same motion. Go all the way up and down 10-12 times. |

**Using a Fitness Center (YMCA, Planet Fitness, etc.)**

If you have access to, or can join a fitness center, this would be optimal. Most fitness centers offer a variety cardiovascular-aerobic machines (treadmills, bikes, stair-stepper) and a variety of muscle-building equipment that can provide excellent workouts in preparation for *Challenger West.* If you decide to join such a facility, I am happy to advise on specific workouts. (From Matthew Fenchel).