Keeping a training log

These log books have been designed to assist cross country ski racers to record & improve their performance

- Keeping a log book is easy and will provide you, and your coach with data to evaluate your training objectively.
- Your training log is your training partner, a motivator and a great source of feedback as your training progresses.
- Your log book is also a health record, showing your morning pulse, weight, and how you feel from day to day. This information is important to detect possible overtraining or oncoming illness.

1. Get into the habit of taking your resting heart rate before you get up in the morning.

2. Record your heart rate & morning weight as soon as you get out of bed each morning.

3. Fill out your log as soon as possible after each workout session. Do not leave it until tomorrow or the end of the week!

Make the effort and keep an accurate log. You will be pleased you did.

A Far West Nordic Ski Education Association / Auburn Ski Club Publication

The Far West Nordic Ski Education Association is working hard to develop and promote cross country skiing, participation, youth development and ski racing in the region. Membership is just $20 for the year. The association supports many junior development programs, runs clinics and camps for seniors, masters and coaches, and keeps you informed with the latest cross country ski news.

To join write to: PO Box 10046, Truckee, CA 96162.
Call (530) 582 9036.

Staying Healthy

Staying healthy is vital for successful training & competition. Eating a balanced diet, getting plenty of sleep, not sharing water bottles, & washing your hands frequently will help you avoid sickness.

**Nutrition**
Junk food may taste great but you will not reach skiing success without adding some of that healthy stuff into your diet. "you are only as good as the fuel you burn in your engine !"

Be sure to eat a variety of food which will provide your body with the essential nutrients and energy required to perform at its best.

- "Good" foods: Fruit, vegetables, potatoes, pasta, rice, beans, lean meat and low fat dairy foods are what you should be eating regularly.
- If you do not eat meat, be sure to eat enough other sources of protein to build your strength.
- Sodas, candy, chips, etc, taste too good to give up, but try to moderate your intake of these.
- You will be healthier if you choose healthy snacks (bagels, fruit, energy bars etc).
- Be sure to eat enough calories to build and maintain your strength.
- Eat a simple carbohydrate snack immediately after a workout for quick recovery. Delaying food intake after training will inhibit recovery and make the next workout hard.

**Hydration**
More than 60% of our bodies are water. It is a well proven fact that we should be drinking 8 cups of water a day to stay healthy, even without working out. For performance (& health) be sure to drink before, during & after workouts.
Sweet, alcoholic and caffeinated drinks again may taste better, but do not hydrate you as well as water. DO NOT share water bottles if you want to stay healthy!

**Avoid chills**
After a workout session, change into warm dry clothes as soon as possible to avoid chilling.

**Watch out for the common cold**
It's as simple as washing your hands before they get anywhere near your face or mouth; eating well, & getting plenty of sleep. A cold can put your training back by several weeks and of course needs to be avoided during important race periods.

**Sleep**
8-10 hours of ZZZZs each night will give your body the best chance to recover, and stay healthy & fit.
Training Methods

Warm up
It is very important to warm up and cool down ESPECIALLY when you are doing high intensity workouts. Begin with an easy 15-20 min jog or ski to warm up then stretch the muscles you are about to use in the workout.

Distance:
Long & easy (Level 1 with occasional level 2).
30 minutes + of continuous activity. To build your endurance both physically & mentally. Distance workouts improve your aerobic capacity and ability to get vital oxygen to your muscles. Workout suggestions: Ski touring, hiking, roller skiing, ski walking, cycling, kayaking, swimming. Remember LONG & SLOW. You should be able to talk easily as you train, and should be breathing only slightly harder uphills.

Over distance
Very long & easy (Level 1). These workouts should be at least twice as long as the longest distance that you race. i.e. for J2 skiers overdistance workouts should be 1hr 15mins - 3hrs & 1hr 30mins - 4 hrs for J1 & OJ skiers. Should be all LEVEL 1. Workout suggestions: Hiking, ski walking with poles, easy bike ride, easy ski tour.

Intervals:
Short & intense (Level 3-4) 1-10 mins of intensity
Challenges & trains your system to go fast and recover quickly.
Levels of intensity depends on interval length (level 3 for longer intervals, level 4 for short).
Intervals are best done on a long gradual hill or in undulating terrain.
Be sure to pay attention to rest periods between intervals.
Intervals 1 min or less: rest an equal length of time.
Intervals over 1 min: rest 3/4 of the interval time.
e.g. 30 sec interval, 30 sec rest; 3 min interval, 2 min rest

Fartlek intervals (also known as speed play) are intervals of faster harder periods during a distance workout. The length and frequency of interval & rest are determined by how you feel (should average 30 sec for very 3 mins) Try to vary the terrain on which you do these intervals.
Workout suggestions: Skiing, roller skiing, hill bounding, running.

Race Pace:
Sustained effort over varied terrain (Level 3-4)
Skiing fast for longer periods on terrain that you would normally ski in competition, will really test your fitness, efficiency and performance.
Workout suggestions: Skiing, roller skiing, ski walking, running
**Time Trials:**
Sustained effort over varied terrain (Level 3-4). Less important races, time trials etc give you the chance to prepare for the important competitions - working out bugs in technique, equipment, concentration, pacing and strategy.

Workout suggestions: Skiing, roller skiing, running & cycling races, ski walking.

**Speed:**
Short & intense (Level 3-5)
5-20 second all out speed with 1-2 mins recovery between. Teaches you to go fast! Speed workouts differ from intervals as they train muscles to fire at their fastest. Speed work also improves flexibility coordination & efficiency. Can be added to training 2 times a week as easy to recover from speed workouts

Workout suggestions: Speed workouts again are more specific if done on skis or roller skis, but running, biking, kayaking, etc., at speed are beneficial also. Some speed workouts should be at level 5 (for 15-20 secs only) to train the body to go as fast and hard as possible.

**Strength:**
Isolation and development of the muscle groups used for skiing will enhance your skiing power & speed. Most of the improvement in strength takes place during the summer and fall months. During the winter you should do some strength training to maintain what you developed during the dry land season. There are 2 main ways to train for strength General & semi specific exercises, & specific workouts.

1. **Circuits:** 3 laps of 6-10 exercises; 2-3 times a week in dry land season & some maintenance in early winter. Circuit training is more effective than gym workouts for developing general strength. Using weights should only be attempted with skilled guidance & is not recommended for juniors under 14yrs.

   - **General strength** -
     sit ups, pull ups, push ups, dips, triceps press, back up (& other back exercises), jump straight up, side to side jumps, hold tuck position.

   - **Semi specific exercises** -
     plyometrics, stretch band, slide board, exergenie, roller board.

2. **Specific strength:** 1-2 times a week all year, except within 3 weeks of an important set of races. Specific leg, torso or arm strength drills on skis or roller skis.

   - **Level 2 effort for 6-30 repetitions of various exercises. For example:**
     - 3-10 x 20 sec - 2 min. gradual uphill diagonal arms only
     - 3-10 x 20 sec - 2 min. gradual uphill double pole only
     - 3-10 x 10 - 60 sec. gradual uphill skate no poles
     - 5-8 x 5 - 12 sec. gradual uphill power double pole

   Continuous distance training using double pole, diagonal arms only, or skating without poles for up to 60 min, or combine different exercises switching every 5-10 min.
Technique & Balance
All that power & speed is easily wasted if your skiing technique is not efficient. Work towards perfecting skiing efficiently at all speeds.

Workout suggestions: Technique clinics, skiing, roller skiing, hill bounding, balance drills, video analysis. Other activities such as rock climbing, or balancing on a chain are good for balance.

Warm Down & Stretch
After the session again jog or ski slowly, change into warm dry clothes to avoid chilling, and stretch.

Training Activities

On snow technique
Both skating & classic technique should be practiced equally unless you are focusing on a specific weakness.

Running - a great way to stay in shape for skiing. Can be used for distance, speed & interval workouts. More beneficial if running on undulating terrain as more leg strength is developed on uphills. Dirt trails are softer surfaces & tend to be more interesting than roads. There is more significant maxVO2 improvement by running on dirt versus pavement.

Roller Skiing - The most specific dry land workout. Excellent for specific arm & torso strength, balance & technique.

*Caution: Do not include roller skiing into your training before consulting an experienced coach. Roller skiing without proper guidance & technique can do more harm than good. Young athletes (under 14) should not roller ski without coaches advice.

Ski Walking - (Specific foot). Imitating the diagonal stride with or without poles. Concentrate on landing on a flat foot and rolling over the foot with a quick & powerful step. Upper body should be leaning slightly forward & arms & legs coordinated. Poles should be slightly shorter than armpit height.

Hill bounding - (Specific foot). Similar to ski walking but more powerful bounds. Both feet should be off the ground between bounds. Hill bounding should be done on a good (fairly steep) hill & is excellent for technique, strength and speed.
Intervals 45 mins - 3 minutes
Speed 5-20 secs with long rests

Other - Swimming, hiking, biking etc: Although not as specific to skiing as the activities mentioned above, these activities can be incorporated into your workouts for variety & fun.
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Remember winning isn't always first place.