

# Mansfield Ski Club

## Physical Training General Notes

### Summer 2016 - June through August



During the summer it is difficult to get everyone together for centralized training, but it is also the most important time of the year for getting fit for skiing. Therefore, I am giving you the information you need to create your own summer dryland program.

There are 5 elements for training; they are called the **5S's**:

**Stamina - Endurance**

**Suppleness - Flexibility**

**Speed**

**Strength**

**Skill - Agility, Balance & Coordination**

An athlete needs to become fit in all of these elements. Your summer training program will aim at increasing your general fitness by training all of these elements. You must do the work, put in the time to get results.

To assist you in developing your personalized dryland program I have included a **Training Log** with some notes on how to fill it in. It is very important that **you set Goals and then keep track of your efforts** and success. You are also going to be required to do a little **online research to select cool down stretching exercises**.

You need to do **five or more workouts per week** to achieve good results. By the end of the summer you can expect to be much more fit and ready for specific training for alpine skiing.

If you can work out the same time every day that is best, but if not, workout early enough in the day so that you are not already tired before you start your workout.

What you put into your body is very important for training. You need to drink a lot of fluids which do not contain a lot of sugar and/or caffeine (coke, pepsi, etc). Clear water and natural fruit and sport drinks are best...chocolate milk is great after a workout

You need carbohydrates for energy, good sources are pastas, fruits, veggies.  
You need protein for building muscle and tissue - eat fish, eggs, and lean meat.  
You also need fats for your body but there are lots of fats in your foods generally so do not go out of your way to find it, a lot of fast food is generally fat food.  
If the food is shiny (like a hamburger or doughnut) it's got a lot of fat in it.

Eating smart is part of getting fit. You should eat five to six times a day. Three good meals and two - three good snacks (one in the morning, afternoon, evening) is a good routine.

You need to drink water during your workouts and exercise and you should start to eat carbohydrates within 30 min of ending your workout to keep your energies up .

# MSC Physical Training Program

**Stamina - Aerobic Training - Endurance**

**Strength - Free Body and Weights**

**Skill & Speed - A-B-C - Agility - Balance - Coordination**

**Suppleness - Flexibility**

## **Aerobic Training 4 X per week**

Heart rate 70-80% of your max heart rate - approximately 150-160 beats per min

The four principal exercises you can use to build your endurance are running, biking, swimming and rowing

It is very important that you ensure that your heart rate is in the right zone in order to get a positive training effect - uses of a heart rate monitor is recommended

If you are swimming do so for 20+ min - continuous effort

If you are running do so for 30+ min - continuous effort

If you are rowing do so for 45+ min - continuous effort

If you are biking do so for 60+ min - continuous effort

You can do the same exercise for each of the four aerobic workouts or you can mix it up just make sure you reach your weekly goal of 4 aerobic workouts

## **Strength Training 4 X per week**

You should be doing 2 lower body and 2 upper body strength workouts each week. Alternate your upper and lower body workouts - you should do lower body one day then the next strength workout should be upper body - try and space your strength workouts evenly throughout the week if you can. You can do core strength training every day.

The principal strength exercises are attached - "Strength Training – Starting Points"  
You need a gym and a certified trainer to supervise your lifting if you are doing free weights - Proper technique is critical to strength gains and injury prevention.

Each Strength Workout at this stage should consist of 3 sets of 12-15 reps of each exercise per set. You should be working with lower weights and more reps in order to build strength endurance first.

## **Skill & Speed - A-B-C Training 2 X per week**

You should be doing your ABC workouts in games and sports not isolated, because games and sports call for more complex reactions and interactions of the muscles and central nervous systems

I recommend that you be engaged in an additional sport that you do on a regular basis. Good sports to consider are:

Swimming  
Tennis or Squash  
Ultimate Frisbee  
Canoeing/Kayaking/Paddle Boarding  
Basketball or Volleyball  
Soccer  
Mountain Biking and/or Road Biking  
Ropes Courses and Climbing  
Cross Country Running or Eco-Challenges  
Dual or Triathlons

## **Suppleness - Flexibility – Stretch Every Day**

Stretching develops and protects your muscles by making you more flexible and increasing your range of motion – the greater range of motion you have the more athletically you can perform.

There are two major types of stretching – one is known as **active stretching** and the other is **passive stretching**. With active stretching you are moving your whole body while focused on specific muscles and joints while with passive stretching you are focused just on the specific muscles and joints.

Active stretching should occur before a physical workout or training session and passive stretching after –active stretching is part of **warm up** while passive stretching in part of **cool down**.

Here is good **active stretching routine** form most of your summer dryland training.

Each of these exercises should be done for a distance of 20 meters – walk back after each – do each exercise once – this is active warm up for 10 min:

Knee High Walk

Knee High Skip

Knee High Run

Heel Kick Walk– kick your butt with alternating heels as you walk

Heel Kick Run – kick your butt with alternating heels as you run

Straight Leg Walk – keep lifted leg straight as you step forward

Backward Run – reach backward with each step

Backward Pedal – quick step backwards

Backward Lunge

Forward Lunge

### **Passive Stretching – Cool Down**

Stretches should be held for 10 to 30 seconds or until you feel a mild tension in the muscle group you are stretching – flexibility increases slowly over time – be patient.

These are the areas you need to stretch in line with the workout you are doing and the muscle groups you have been training; i.e., lower or upper body and core.

Full Body Stretch

Calf Stretches

Hamstring

Quads

Hip Flexors

Lower Back

Abdominals

Shoulders

Upper Back

Neck

There are 100's of sources online for stretching – I recommend you look up a book titled “Stretching” by Bob Anderson. This is a comprehensive and simple guide – full of illustrations.

## Notes on Training Log

Notes for the Training Log re volume of training.

A heart rate monitor is an accurate and individualized training tool. Some of them come with alarm systems which beep when you fall below or go above your target range and this is a very useful feature as it keeps you in the proper training zone.

Training Goals - Increase General Fitness & Create Training Routine  
Training Objectives - 8 Train Session Per Week Cycle - Some Workouts include double objectives ex: Aerobic & A-B-C in same workout or Strength & Flexibility in same workout  
Aerobic Training 4 X per week cycle  
A-B-C (Agility Balance Coordination) Training 2 X per week cycle  
Strength (Body, Machine or Free Weight) 4 X per week cycle  
Flexibility & Core Training 5 X per week cycle - This is the routine

**The Aerobic Zone** is 70% to 80% of your Maximum Heart Rate = Beats/min  
(Ex: MHR = 220 – 15 = 205 X 70% = 150 beats/min)

General guideline for Aerobic training is 4 times each week with your heart rate at 70 - 80% of your max heart rate which is easily calculated  $MHR = 220 - \text{Your Age} = X$  (ex:  $220 - 15 = 205$  MHR)

Training in this zone will develop your cardiovascular system. The body's ability to transport oxygen to, and carbon dioxide away from, the working muscles can be developed and improved. As you become fitter and stronger from training in this zone it will be possible to run some of your long weekend runs at up to 75%, so getting the benefits of some muscle building and improved aerobic capacity.