



**Be prepared  
To do something everyday  
To become a better athlete**

**Success = Ability x Preparation x Effort x Will**

**A. Training Log Data:**

1. Date
2. Time of practice/conditions
3. Workout description
4. Comments
5. Training Effort – Rating 1 - 7
6. Volume in Minutes
7. Monitors of Stress

Rating of:	poor						excellent
a. Attitude towards training	1	2	3	4	5	6	7
b. General State of well being	1	2	3	4	5	6	7
c. quality of sleep	1	2	3	4	5	6	7
d. Time to Bed and # of hours							
e. Resting Heart rate							

Rating	% Max VO2 (MAP)	Breathing	Power	Tempo	Intensity	RPE Borg	Race Pace	Fatigue
(7) Very very hard	100-120					20 19	400-1500m	Striking evident overwhelming
(6) Very Hard	90-100	Labored	Forced	Fast	Uncomfortable	18 17	3000-5000m	Obvious Major
(5) Hard	80-90	Heavy	Pressed	Rapid	Tolerable	16 15	10K-20K	Noticeable Significant
(4) Moderate	70-80	Huffing	Relaxed	Quick	Comfortable	14 13	Marathon	Appreciable minor
3 Easy	60-70	Conversational	Held back	Slow	Very comfortable	12		Perceptible negligible
2 Very Easy	50-60	Normal	Gentle	Very slow	soothing	11		Imperceptible insignificant
1 Very very easy	<50					10		

## B. Recovery

1. Basics
  - a. Rest

The body cannot recover from hard work without appropriate rest. Failing to recover will result in decreased performance.

    - **8-10 hours** of sleep per night
    - **Routine.** Wakeup and go to bed at the same time each day
    - nap during the day if necessary
  - b. Hydration

The body is mainly water. It requires appropriate hydration to function properly. A 2% dehydration can cause up to a 20% decrease in performance.

    - **minimum of 2 liters of water per day**, in addition to other fluids
    - **caffeine and alcohol** cause a dehydrating effect
  - c. Nutrition

Food is the energy that drives the body. If you do not have the energy, you will not be able to perform.

    - **Carbohydrates** are most important in the first **20 minutes** and the first **2 hours** after a workout. During this time the body is more receptive to absorption and storage of carbohydrates.
2. Physiological Recovery
  - a. Active Recovery

A proper warm-down, which includes light jogging of at least 5-10 minutes and stretching (minimum of the six major muscle groups around the knee). Include PNF stretches when possible.
  - b. Hydrotherapy

Alternating hot and cold: Hot, 3-5 minutes; Cold, 30 seconds – 2 minutes
  - c. Massage
3. Psychological Recovery

## C. Nutrition

1. Training Diet
  - a. Diet should consist of 60-70% carbohydrates, 10-15% protein and 20-30% fat.
  - b. Have a balanced diet of the four major food groups, with a special emphasis on fruits and vegetables.
  - c. Ensure adequate hydration by carrying a water bottle with you during the day. I would suggest you drink 2 liters of water from the bottle and this would be in addition to any other fluids you ingest.
  - d. A carbohydrate snack or drink after practice will facilitate a better recovery of muscle glycogen stores.
  - e. Limit the intake of alcohol, caffeine, saturated fats and simple sugars.
2. Competition Diet
  - a. High (65-70%) carbohydrate diet. This is especially important in the 2 days before the competition. It helps to build up the muscle glycogen stores.
  - b. Limit alcohol and caffeine intake.
  - c. Carry a water bottle to ensure adequate hydration.
  - d. Use sport drinks and carbohydrate snacks after competing to recover glycogen stores.

## **D. Warm-up**

### **1. General Warm-up**

#### **a. Raising Body Temperature**

This is done best by jogging for 10-15 minutes or until the body is in a good sweat. It is important to wear a sweat suit to control body temperature, so that you do not cool down after the jog. Raising body temperature warms the muscles and makes them more pliable.

### **2. Increase Range of Motion**

This is done through stretching exercises. Static exercises are done first (if needed), followed by dynamic exercises. For runners, it is essential to stretch the six muscle groups around the knee. This will improve efficiency and reduce the risk of injury.

#### **Static Exercises:**

- Hamstrings –
- Quadriceps –
- Abductors –
- Adductors –
- Calves/Soleus –
- Anterior compartment –

#### **Mobility**

##### **I. Skips**

- Skips – arm circles forward, arm circles backwards
- Side skips with arm swings
- Cross overs
- Backwards
- Quick “C”
- Quick “A”
- Hops
- Power Skip
- Bounding

##### **II. ABC’s**

- Running School
  - Ankle range of motion
  - Springing step
  - Straight legged run
- “A” – March, Skip, Run
- “B” – March, Skip
- “C” – Run
- Hops
- Power Skip
- Bounding

### **3. Specific Warm-up**

Strides or accelerations

### **4. Competition Warm-up**

For competition, you should plan your warm-up before the event. You should not have to think about what you are going to do next; you should just do it. This would be part of your Pre-competition plan. The warm-up should finish 10-15 minutes before the start of the event. This

is a time period to relax and focus on your event (avoid distractions). About 5 minutes before the race you should be moderately active (jogging, quick ABC's, short accelerations) to ensure the body starts at a high level of activation.

## **J. Warm-down**

Warm-down is very important in the recovery process. It helps to bring the body back to normal and it facilitates a better recovery for the next day.

Warm-down consists of jogging and stretching. The stretches would include the static stretches done in the warm-up and it is a good idea do some PNF stretches as well.

## **F. Core exercise examples**

### Pelvic Tilt/Transverse Contraction

Drawing the navel in towards the spin; zipping up

### Neutral Spine

The Spine forms an S-curve

Normal position is approximately midway between the full anterior and posterior tilts of the pelvis

## **Stabilization exercises**

### Prone Abdominal Hollowing

- Lie face down, chin tucked in and forehead resting on hands
- Slowly contract abdominals, pulling navel towards spine
- maintain breathing while holding contraction for 10-30"
- Repeat 5-10 times

### Four count leg lift

- Lie on floor with knees bent and feet flat on floor
- maintain hips and spine in neutral alignment and brace abdominals
- Slowly lift right foot 15-20cm from the floor and hold
- maintain contraction and raise left leg adjacent to right
- holding contraction, lower right leg, then left leg
- Repeat 5-10 times

### Four count leg lowering

- lie on floor with both feet raised and knees over hips
- maintain abdominal tension, lower right leg slowly to 45 degrees
- Lower left leg adjacent to right leg
- raise right leg to starting position and then left leg
- Repeat 10-15 times
- decrease intensity by bending knees; increase intensity by less bend of knee

### Scissors

- Lie on floor with both legs raised and slightly bent, so knees are over hips
- Lower right leg while maintaining correct alignment
- Scissor legs while maintaining breathing and proper alignment
- Repeat 15-30 times

### Superman

- On all fours; hands under shoulders and body in natural alignment
- Contract abdominals (pull navel into spine)
- raise right arm out to side at 45 degree angle to spine; arm level with torso and thumb up
- raise left leg up behind you level with torso. Arm and leg parallel with floor
- hold for 10 seconds; slowly return to starting position and repeat with other limbs

### Prone Bridging

- lie on floor with elbows under shoulders
- Brace shoulders and abdominals, lifting hips away from floor; weight supported on forearms and knees
- maintain natural alignment
- Hold for 15-30 seconds and repeat 5-10 times
- Increase intensity by moving from knees to toes; next level: raising one leg slightly off floor

### Lateral Bridging

- Lie on side supported on elbow directly below shoulder and knees bent
- brace abdominals and raise hips toward ceiling to natural alignment position
- Hold for 10-20 seconds
- 10-15 reps

### Two point bridge

- Full push up position
  - brace abdominals and raise right arm and left leg simultaneously
  - Leg parallel to the floor and arm 45 degrees out from the spine and parallel to the floor;
- thumb up

### Kneeling Stabilization work

- start kneeling on floor in upright position in neutral alignment
- extend right leg out to side, keeping it straight
- keeping left thigh perpendicular to the floor, lean to left to create a straight line through body and right leg
- Hold for 10-20 seconds
- Repeat 5-10 times before reversing leg position

### Supine bridge

- lie on back, arms at side; knees bent and feet on floor
- brace abdominals and slowly raise hips; aim to get hips in line with torso and thighs
- Hold for 10-20 seconds; repeat 8-12 times
- increase workload by having alternate legs in the air

### Spiderman

- On all fours; weight evenly distributed between hands and toes; torso near horizontal
- keep feet and knees turned out slightly
- brace abdominals and crawl forward up to 30m
- Repeat 2-3 times

### Standing Balance

- Stand upright; hips and spine in neutral
- brace abdominals; raise right foot off the floor and maintain balance
- Hold for 10-20 seconds
- can be done with eyes closed

### Horizontal Balance

- Upright stance; lean forward and raise one leg behind
- keep alignment between upper body and extended leg; supporting leg is slightly bent
- brace abdominals to maintain alignment
- Aim for horizontal position
- increase intensity by extending arms

## **Abdominal exercises**

1. Abdominal Curl
2. Oblique Reach
3. Reverse Curl
4. Internal Oblique (basic crunch)

- lie on side. Bend slightly at waist so angle between torso and leg is no more than 30 degrees.

5. Slow Eccentric Curl
  - lie on floor with legs in air and knees bent over hips.
  - With hands holding aback of thighs, rock you forward, bringing feet to floor.
  - extend arms so palms are over knees; contact abdominals to maintain position and the slowly roll down through the spine over 15-30 seconds
  - Repeat 5-10 times
6. Super slow bicycles

## **Lower Leg Exercises (Barefoot)**

### Lower Leg bounds

Flat footed

Various forms:

Forwards

Backwards

Sideways

Jumping Jack

Split

Cross over

### Calf Raises

Single Leg, no support

Start with 1 set of 10 and build to 3 sets of 15 on each leg.

### Balancing

T position with eyes closed

Step and pause

## **Cross Training**

Water Running

Cycling

Hiking/Walking

Elliptical Trainer

Swimming

## **Test for Insufficient Recovery**

### **Orthostatic Heart Rate Test**

- lay down and rest for at least 15 minutes
- record your pulse rate (beats/min) - R1
- stand up
- 15 seconds later record your pulse rate (beats/min) - R2
- record the difference between R1 and R2

If the difference is greater than 15-20 beats then it is probable that the athlete has not recovered from the previous days training or is under stress. The athlete should consider adjusting the training program to allow them to fully recover.

## Psychological Training

### MOTIVATION = ENERGY X PASSION

#### Goal Setting

Set Goals for the year. Set goals for the indoor season. Set goals for training. These will provide the stepping stones for success.

When setting performance goals you should have three levels:

Ultimate – if everything goes perfect, this is what you could achieve.

Realistic – if you work hard and consistently, this is what you could achieve

Minimum – this would be the minimum you would be happy with.

You should have performance goals (specific times) and you should have result goals (i.e. Medalist at National championships) which are appropriate to you performance goals.

Write your goals down. Visualize getting them and what it will take to get them. Act as if you already are capable of doing your ultimate goals.

#### Relaxation

- to maintain optimal stress level
- to prepare for mental imagery
  - a. Progressive Muscular Relaxation
  - b. Centering

#### Mental Imagery

- the mind controls the body
- imagine success
  - Practice with familiar places and objects
  - Practice with parts of skill or competition
  - Tape of skills or Competition
- Visualize yourself performing your event (see, hear and feel)
- Arriving at the competition site or just the competition itself
- Vivid – feelings and senses
- Being ready – relaxed, confident, powerful and in control
- Include – affirmations and cue words that help you perform
- Go through your entire event being clear about each piece
- Technical and tactical tasks
- Feelings of strength control and toughness
- Write down script
- Pick a piece of music you enjoy and find relaxing
- Tape the music and dictate the visualization script
- Now you can listen to your perfect race
- This will probably work for one season. It may need adjustments at end of season



## Positive Self Talk

- Good Self image is key to performance
- Awareness of our thoughts during the day and the competition
- Positive Self-Statements
  - Present tense
  - Positive
  - Brief
  - Vivid – feeling and senses
  - Write them down
  - Examples:
    - “I am a stronger runner every day”
    - “I m cool, calm and collected at the race”
    - I feel loose, quick and light in my running”
    - “I enjoy the challenge of my race. I enjoy taking risks”
    - “I have great reserves of strength”
    - I feel sharp and alert”
    - I am committed to my goals in the race”

## Pre-Competition Plans

- Plan the 24 hours before the event
  - Eating
  - Sleep
  - Travel
  - Clothing
  - Warm-up

## Competition Plans

- Parts – break race into quarters
- For each quarter
  - Expected result (split time)
  - Tasks
  - Feelings
- Contingencies

## Gumption

- Take risks
- Assert yourself
- Have enthusiasm
- Be persistent
- Maintain your confidence

You have an emotional battery that can be charged or drained.

- You are in control
- The battery is subject to many influences, but not at the mercy of these influences
- You monitor your level

## **Races**

- ii. IT's OK to WIN!
- iii. Monitor your Gumption level during the race
- iv. Contact
  - a. Grab opportunities
  - b. Accept mishaps (challenge) and maintain a relaxed concentration

## **PAIN!!!**

- Races are painful
- How you do is dependent upon how much discomfort (pain) you can tolerate
- Recognize it, accept it. Welcome it because it represents the real challenge of the race.

**General Preparation Phase  
Distance Runners Training Week**

**Sunday Monday Tuesday Wednesday Thursday Friday Saturday**

Aerobic Endurance	Medium CR	Short-Medium CR	Medium CR	Short CR	Medium CR	Long CR	Rest/Light exercise
Mobility	Mobility #1	Mobility #2	Mobility #1	Mobility #2	Mobility #1	Mobility #2	
General Strength	Circuit	Core	Circuit	Core	Circuit	Core	
Speed	Strides		Strides		Hill Sprints		

**Aerobic Endurance Volumes**

<b>Beginner / Post injury</b>								<b>Minutes</b>	<b>Km</b>
A	30'-35'	30'-35'	30'-35'	rest	30'-35'	30'-35'	rest	150'-175'	30-45
B	30'-35'	30'-35'	30'-35'	30'-35'	30'-35'	45'-60'	rest	195'-235'	35-60
<b>More than 2 years organized training</b>									
C	40-50'	30-50'	40-50'	30'-35'	40-50'	60'-75'	rest	240'-305'	45-80
D	45'-55'	35'-55'	45'-55'	30'-35'	45'-55'	75-90'	rest	275'-325'	50-85
E	50'-60'	40'-60'	50'-60'	30'-40'	50'-60'	75-90'	rest	295'-360'	55-90
F	50'-60'	45'-60'	50'-70'	30'-40'	50'-70'	75-90'	rest	320'-505'	60-85
extra 1-3 x	30'-45'		30'-45'		30'-45'				
<b>5k/10k/Marathon</b>									
G	60'-75'	60'-75'	45'-75'	45'-60'	60'-75'	90'-120'	rest	390'-605'	80-150
extra 1-3 x	30'-45'		30'-45'	30'-45'					

