• Compiled by Al Fisher and Dave Wood (Black Jack Head Coach)

# **HEALTH - MEDICAL - DENTAL CHECKLIST**

- Without good health you have no chance to be successful. Look after yourself; rest when you have to; respect your body.
- Athletes should have a thorough medical check-up in the spring; based on the results, additional tests can be scheduled.
- Blood Tests (every month)
  - should be taken after a mild workout and one day's rest (Randy Eichner, M.D.)
- Should be taken at the same time of day...
  each morning before a workout (Randy Eichner, M.D.)

#### CBC blood test

 is an index of the overall health of your body (Randy Eichner, M.D.)

#### Plasma ferritin test

 best test for iron deficiency (Randy Eichner, M.D.)

#### CPK enzyme level blood test

- persistent high levels indicate over training and that you need rest (Randy Eichner, M.D.)
- Flu shot in October
- Check teeth for abscesses every six months
  - mild infections in your body destroy the training effect from your workouts.

### **DIET CHECKLIST**

- Diet is very important, athletes ask a lot from themselves and must give back by feeding yourself well at the right times and with the right foods
- Have some protein in all your meals including breakfast
- Have 5 feedings per day
- During heavy training periods, have carbohydrate food before bed (cereal)
- Eat foods that keep your body PH alkaline (Google alkaline and acidic food charts)
- "An acidic body is a sickness magnet"
- Remember you don't need to adhere strictly to the alkaline side of the chart, just make sure a good percentage of the foods you eat come from that side
- Fresh fruits and vegetables in daily diet to maintain electrolyte balance (Randy Eichner, M.D.)

#### Citrus fruits

• the pulp prevents disease (Executive Health Bulletin)

#### Oatmeal porridge

- the sticky substance produced while cooking prevents disease (Executive Health Bulletin)
- Complex carbohydrate foods (see recovery guideline)

#### Examples:

- fruits (fresh and dried)
- whole grains, brown rice
- complex carbohydrate drinks by Power Fuel, Hypocel, Cytomax (Iron Man lectures – Kono 1985)
- Balanced diet

75% complex carbohydrates 15% protein 10% fat (Iron Man lectures – Kono 1985)

- Cod liver oil or halibut oil daily
- Flax seed oil daily (Omega 3)
- A multi vitamin daily
- Adequate calcium-magnesium supplements with an oyster shell base
  - prevents muscle cramping
- Foods with a high iron content assist the production of red corpuscles in the blood that carry oxygen to the muscles (see the following food list for iron content)
  - eat red meats for the "HEME" iron

# FOODS WITH A HIGH IRON CONTENT (United States Dept. Of Agriculture)

Food	Iron Content	
(100 grams)	(milligrams)	
Almonds	4.7	
Apricots – Dried		
Baby Food Cereals		
Bacon - Canadian		
Beans - Raw	7.8	
Beef	3.5	
Beef Jerky	5.1	
Bran	8.8	
Caviar	11.8	
Chicken Giblets	6.5	
Chick Peas	6.9	
Cocoa	10.7	
Coffee	5.6	
Corn Flakes with added Nutrients	17.9	
Fish Flour	41.0	
Kidney-Beef	13.1	
Lentils	6.8	
Liver		
- Calf	14.2	
- Hog	29.1	
- Lamb	17.9	
Malt Extract	8.7	
Molasses - Blackstrap	16.1	
Oats – Dry	7.1	
Oysters	8.1	
Peaches – Dried	6.0	
Peas - Raw	5.1	
Potato Flour	17.2	
Pumpkin Seeds	11.2	
Raisins	3.5	
Rice Bran		
Sesame Seeds	10.5	
Soybean Flour		
Sunflower Seeds	10.5	
Wheat Bran		
Wheat Germ		
Yeast - Brewers		

### **HYDRATION CHECKLIST**

- GENERAL RULE...most athletes are dehydrated
  - they do no drink enough fluids (Iron Man Lectures – Kono 1985)
  - note: 1 litre of water = 1 kilogram
  - when training in the heat, it is good to weigh oneself before and after
- Drinks that dehydrate the body
  - coffee and tea
  - alcohol (Iron Man lectures – Kono 1985)
- 2% fluid loss (by weight) causes fatigue and decreased performance (Dr. Doug Hiller)
- 5% fluid loss (by weight) causes severe cramping (*Dr. Doug Hiller*)
- Drink eight to twelve glasses of water daily (Iron Man lectures – Kono 1985)
- Training or competing at altitude increases the dehydration rate
  - use water or a complex carbohydrate drink like Power Fuel, Hypocel, Cytomax when competing and training
- Endurance events in the heat will cause sodium depletion which in turn causes severe cramping
  - 10 days before a race or training in the heat, add salt to your food
  - training or racing in the heat requires 0.5 grams of salt per hour. (Do not take salt pills, they are very hard to digest). (Dr. Doug Hiller)

# **SLEEP CHECKLIST**

- Most athletes are sleep deprived
- An athlete in serious training requires 10 hours sleep per day
  - less than 10 hours will gradually build up a "sleep debt" in the body
- Sleep Debt
  - Example: if you sleep eight (8) hours one night, nine (9) hours another night, you will have a sleep debt of three (3) hours by the end of the week, that must be made up on the weekend when you have the time, in order to keep your body in a sleep balance.
  - If possible take a nap mid-day to make up for the losses.
- Problems caused by "sleep debt" are as follows: (take extra note of this)
  - your strength decreases;
  - your mental I.Q. decreases;
  - your immune system is decreased;
  - to perform at a given work level requires more energy.

# TRAINING CHECKLIST

- Train according to a plan. Strive for perfect execution of the plan and work within your own effort/intensity levels. Strive for good technical work and monitor yourself continuously.
- Strength weight training three times per week
  - we want an overall body strength <u>plus</u> some specifics for your event muscles
  - get a professional to assist in designing the program
- Anaerobic threshold training
  - based on the enclosed chart you will have to run five or 10k races to determine your anaerobic threshold training pace
  - you will have to purchase an athletic heart monitor, in order to know your anaerobic threshold heart rate during this type of track workout
  - by knowing your anaerobic threshold heart rate from your track workouts you will able to apply the same principle to your other workouts
- Full body massage once a week (if possible)
- Warm-up prior to a race or training session

Warm-up period - 15 minutes

- pace should be 75% of your maximum heart rate
- stand still no more than 30 seconds before the race (if necessary run on the spot to maintain warm-up)

# TRAINING CHECKLIST

- Speed workouts for runners (two per week)
  - distances 150 to 250 meters to avoid generating excessive lactic acid
  - full recovery between intervals
  - amount four to eight at 85 to 90% your max. speed
- Your immune defences are at their lowest for up to six hours after a race or hard workout (see Recovery Cool Down Checklist)
  - during this period eat well, rest and avoid situations like crowds and people with the flu or colds that might expose you to respiratory viruses
  - take a sauna to hot bath long enough to make the body sweat. This changes the body chemistry from acid to alkaline and increases the body's resistance to viruses
  - two tablespoons of pure lemon juice or apple cider vinegar will also turn your body chemistry alkaline
- Two week training cycle (Dr. Bannister, Simon Fraser University)
  - increase your training work load every two weeks
  - at the end of a two week training load your body is tired and requires a light load recovery period from three to five days. Following this recovery period you should feel refreshed and ready to go into another two week work period that is increased approximately 5% over the previous two week period.

# **DISTANCE RUNNERS**

# HARD DAY WORKOUTS

#### TEMPO RUN FOR 20 TO 22 MINUTES (ONE PER WEEK)

- Two mile warm-up and a two mile warm-down
- Do temp run at 1600 m threshold pace

#### AN INTERVAL TRAINING SESSION (ONE PER WEEK)

- Two mile warm-up and a two mile warm-down
- Amount -8% of your weekly training distance

Fitness Level			Threshold Pace Per		
5-K	10-K		800 M	1200 M	1600 M
		Recovery Time	30 sec.	45 sec.	60 sec.
24:08	50:03	-	4:12	6:18	8:24
23:09	48:01		4:02	6:02	8:04
22:15	46:09		3:52	5:48	7:45
21:25	44:25		3:44	5:36	7:28
20:39	42:50		3:36	5:24	7:13
19:57	41:21		3:29	5:13	6:58
19:17	39:59		3:23	5:04	6:46
18:40	38:42		3:17	4:55	6:34
18:05	37:31		3:11	4:46	6:22
17:33	36:24		3:06	4:38	6:11
17:03	35:22		3:00	4:30	6:01
16:34	34:23		2:55	4:23	5:51
16:07	33:28		2:51	4:16	5:42
15:42	32:35		2:47	4:10	5:34
15:18	31:46		2:43	4:04	5:26
14:55	31:00		2:39	3:58	5:18
14:33	30:16		2:36	3:53	5:12
14:13	29:34		2:32	3:48	5:05
13:54	28:55		2:29	3:43	4:51
13:35	28:17		2:26	3:38	4:48
13:18	27:41		2:23	3:34	4:46
13:01	27:07		2:20	3:30	4:40

(Reference – Jack Daniels Ph.D)

# RECOVERY COOL DOWN CHECKLIST

Following a race, interval training and anaerobic threshold training, a 15 to 20 minute cool down is required. Jog slowly and easily at about 60% of your maximum heart rate.

#### Why are you doing it?

- To reduce lactate levels
- Return heart rate and blood pressure to resting state
- · Reduce adrenaline levels
- Improve flexibility and possibly for injury reduction

A cool down is not necessary after a long slow training effort – incorporate a slow down over the last 1600m.

When you finish a race keep moving through the finish chute – do not stop; also following a race, interval training of anaerobic threshold training, rehydrate immediately and eat some carbohydrate in liquid or solid form. Within the first 20 minutes, consume 200 to 300 calories (min.); 40 grams of complex carbohydrates (2/3) and protein (1/3).

- The 2 hour window following a race or hard training session is when you can replace muscular glycogen the quickest. This is important at hard training camps and multi-race events.
- If possible, immersion in cold water for 5 minutes following a race or hard training session, then walk until warmed up.
- Stretching
  - Not immediately after a race or hard training session, let the muscles have a short rest, then stretch your core muscle groups and thighs, hamstrings, gluteals, hip flexors, calves and back
  - Hold the stretches for 15 to 30 seconds without straining (Running Research News & Dave Wood, Ex National Cross Country Ski Head Coach)

# **MENTAL RECOVERY CHECKLIST**

- After a training session or race, you can debrief the events that took place with your coach and set new goals for the next sessions; then you must "park it". Do not overanalyze past events, it will drain you mentally and physically. Get on with the future.
- Take a nap or have some quiet time in the middle of the day if possible
- Laughing is good for you!

# BIKE WORKOUT GUIDELINE FOR DUATHLONS AND TRIATHLONS

Bike to Run Distance Ratio - five bike to one run

Volume Workouts - 2x racing distance

Interval Training Session - one per week

20 minute warm-up, 20 minute warm-down

Gear ratio that you can maintain 90 to 100 RPM

Interval Time	Recovery Spin	No. Of Intervals
one minute	one minute	six working up to 12
	five minutes	
30 seconds	30 seconds	three working up to six
	five minutes	
three minutes		one

**Note:** Each interval should be done at the same speed. If you cannot maintain the speed, stop, rest and select a gear ratio you can handle for the entire workout.

Tempo Training Session – one per week

- 20 minute warm-up, 20 minute warm-down
- 18 to 20k at anaerobic threshold pace

Hill Climb - one per week