

# TRIATHLETE'S TRAINING PLAN

## **2012 SPRINT DISTANCE**

0.5 km - 0.75 km Swim\* 20 km Bike 5 km Run

12 Week Self Coaching Training Calendar Balanced emphasis on Swimming, Biking & Running

\*Sprint swim distance varies by event.



## **DISCLAIMER:**

TriathlonGeek.com requires that you consult with your physician before following any training instructions you receive through TriathlonGeek.com.

TriathlonGeek.com is not a licensed medical care provider and represent that they have no expertise in diagnosing, examining, or treating medical conditions of any kind, or in determining the effect of any specific exercise on a medical condition. TriathlonGeek.com is not a prescription system and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. You should understand that when participating in any exercise program, there is the possibility of physical injury and or death. You should never disregard medical advice or delay in seeking it because of something you have read on the TriathlonGeek.com's Web site. TriathlonGeek.com is not responsible for any health problems that may result from training programs you receive. If you engage in any training program you receive through TriathlonGeek.com, you agree that you do so at your own risk, are voluntarily participating in these activities, assume all risk of injury to yourself, and agree to release and discharge TriathlonGeek.com from any and all claims or causes of action, known or unknown, arising out of the negligence of TriathlonGeek.com. You agree to indemnify and hold harmless TriathlonGeek.com for any loss, liability, claim, damage, and expenses (including reasonable attorneys' fees) brought by you, anyone acting on your behalf, or any third party, in any way arising from or in connection with your use of the information or services you receive through TriathlonGeek.com. TriathlonGeek.com are not responsible for the accuracy, reliability, effectiveness, or correct use of information you receive through TriathlonGeek.com web site and training plans, or for any health problems that may result from training programs, products, or events you learn about through TriathlonGeek.com. TriathlonGeek.com do not certify content or endorse any information supplied by other companies f

PLEASE NOTE: Not all exercises are suitable for everyone. Before you begin following any training instructions you receive from TriathlonGeek.com, you should have permission from your physician to participate in vigorous training. If you ever feel discomfort or pain, do not continue. The instructions and advice presented by TriathlonGeek.com are in no way intended as a substitute for medical counseling. Limitation of Liability: TriathlonGeek.com and their affiliates and sponsors are neither responsible nor liable for any direct, incidental, consequential, special, exemplary, punitive or other damages arising out of or relating in any way to the TriathlonGeek.com Web site, and/or content, or information contained within the web site, and/or content or information contained in e-mails from TriathlonGeek.com in furtherance of such coaching services. Your sole remedy for dissatisfaction with the services provided is to stop using those services. Waiver and Indemnity: Your use of any services and information obtained through TriathlonGeek.com, certifies that you have read this Agreement and hereby for yourself, your heirs executors and assigns, waive, release and hold harmless TriathlonGeek.com from any and all claims, demands, liabilities, rights or causes of action arising out of or in connection with participation in activities proscribed by the aforementioned parties. You agree to defend, indemnify, and hold TriathlonGeek.com and their officers, directors, employees, agents, licensors, and suppliers, harmless from and against any claims, actions or demands, liabilities and settlements including without limitation, reasonable legal and accounting fees, resulting from, or alleged to result from, your violation of the terms and conditions of this Agreement.

WARNING: REPRODUCTION OR RESALE OF THIS TRAINING PLAN IS STRICTLY PROHIBITED.

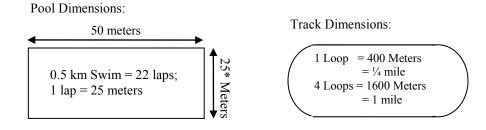
Triathlon Geek is a Registered Trademark.



## PREREQUISITE TO STARTING THE PLAN:

- 1. Ability to swim 50 yards/meters freestyle without stopping
- 2. Ability to run 0.5 mile
- 3. Ability to bike 20 minutes without stopping.

# THE SPRINT TRIATHLON



The Sprint Triathlon is typically measure in Kilometers. The distances are: 0.5 km to 0.75 km swim, 20 km Bike & 5 km Run; The swim translates to 550 meters (22 x 25 meter lap) swim for the 0.5 km distance OR 825 meters (33 x 25 meter lap) swim for the 0.75 km distance. The Sprint distance is great for the first time triathlete or anyone who is new to the sport and for those who have limited to train.

## THE RACE

Each race has its own course variation in bike/run elevations and swim routes (some are lake swims, others are ocean swims) and swim conditions (some mandating a wetsuit while others prohibits the use). Race results are often affected by weather conditions as they are held rain or shine. To determine the closest estimate of your race time, you will have to do a time trial on the race course or one that is similar. Do check out the past year results to get an idea of how long you will be out on the course.

#### YOUR COMMITMENT:

Commit to train 4 - 8 hours a week. There will be at least 2 key workouts per week. Make a point to not miss these workouts. Listen to your body and train intuitively. Enjoy training and make it a part of your new and healthy lifestyle. Commit to cross the finish line.

#### TRAINING GOALS:

Half the battle of Triathlon training isn't the swimming, biking or running itself. It is finding the resolve and motivation to train day after day. Begin by writing down 3 compelling reasons why you want to do a Triathlon. Commit yourself to this training plan and find various ways to get motivated.

3 REASONS WHY I WANT TO DO A TRIATHLON:



## What's New in the 2012 Training Schedule:

Release 18 is a challenging training program that will test your limits. It is important to recognize what those limits are if you are new or have not been active for 3 or more months. Make sure you are able to meet the prerequisite listed in the previous page before starting on this plan. It is not common for non-active athletes to take 12 weeks to meet the prerequisites.

Important changes to Release 18:

- Each training discipline has been re-calibrated this year by balancing a mix of training intensities and training volume.
- We have increased select bike workouts by 10%.
- There are new swim routines that will challenge you.
- Finally, there are changes to weight training routines and core work. Light weight reps. have been increased to 20 25 reps per set totaling 400 to 800 reps for the entire workout.



#### HOW TO USE THE PLAN TO THE BEST OF YOUR ATHLETIC ABILITY

Majority of athletes will come into the program at different swim, bike or run levels. The first 1 - 3 weeks of the Adaptation phase may seem very easy, but as the season progresses, the intensity and duration of each workout will increase. An Age Group Athlete who is new to the sport and has a good background in swimming but is just starting off biking, should follow the Pro-Level workout for the Swim and the Age Grouper level for the Bike. Note that an athlete can be a PRO at Swimming, an Elite at Biking and an Age Grouper at Running throughout the training season. Choose the appropriate workout to suit your level but strive to move up to the next level towards the end of the season if you are not already at the PRO level.

## Scheduling your calendar:

Start by plotting your target race date on week 12 and work your calendar backwards. If you have more than 12 weeks before race day and would like to begin training now, start your week with the Adaptation Phase, then repeat one, two or more weeks in the Aerobic or Endurance phase. Do not repeat any weeks in the Competitive Phase. If you find that you have less than 12 weeks to race day, cut out the Recovery week. It is recommended that you have no less than 12 weeks of training for the Sprint Distance. The majority of people who are new to the sport and are not fit would need 14 - 16 weeks of training.

## If the Plan is Too Difficult at the Age Grouper (A) level:

Decrease distance on the plan. However, keep the intensities at the recommended rate.

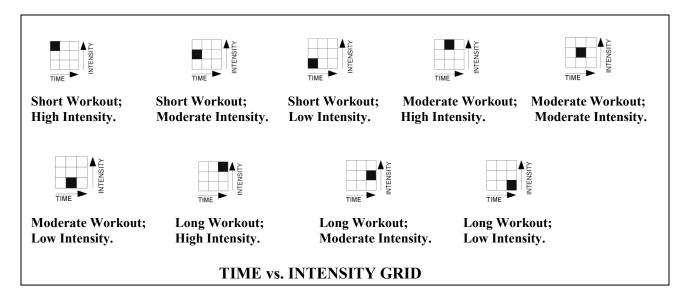
For example if a swim workout calls for 8 X 50 meter (L3), decrease the distance to 25 meter. Keep the intensity (L3) and the number of sets (8) the same. This will increase your endurance level.

## If the Plan is Too Easy at the Pro (P) level:

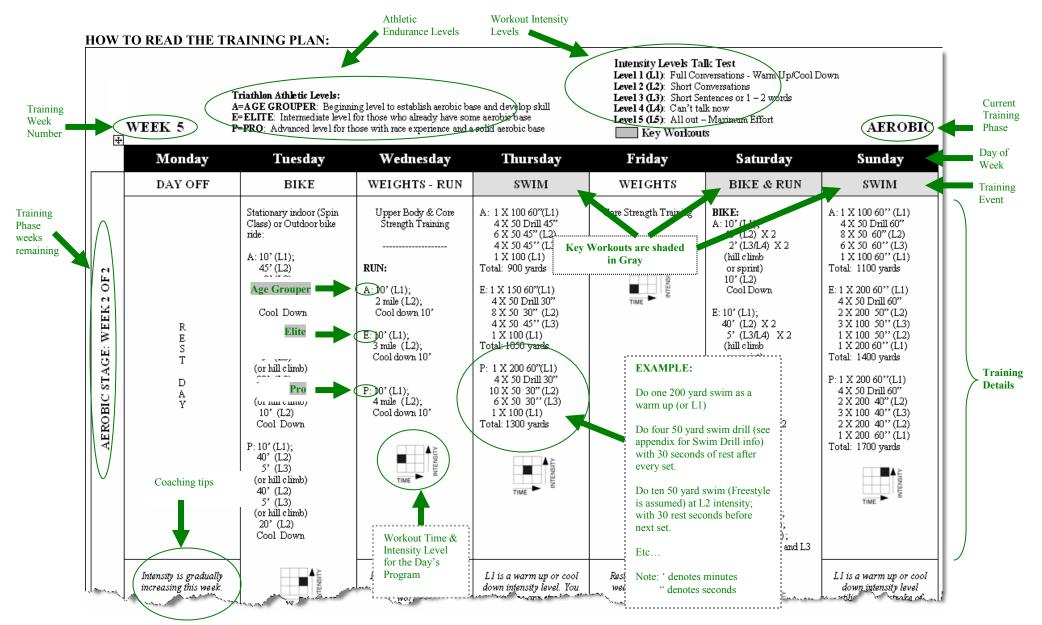
Increase the number of sets and/or distance on the plan while keeping the intensity level the same OR keep the sets and distance the same but increase the intensity level.

## Time v. Intensity Grid:

The Time V. Intensity Grid on the right allows you to determine the amount of time needed on a workout as well as the intensity level (or how hard you've got to work). Moderate to High intensity days are typically "Key Workouts" and should be performed at optimum levels.









#### TRAINING PHASES:

The Training Plan is broken up into 7 phases:



**Adaptation Stage:** This is a low intensity training phase allowing you to get stronger gradually to avoid injuries further into the season. It is also meant to help you be consistent in your workout – allowing you to adapt your training program into your lifestyle. Do not exceed the recommended workout allocations as this will only cause you to burn out or get injured as our training intensities increases.

Aerobic Stage: This is a period where Intensity levels are gradually increasing. Swim Drills and track workouts are incorporated into your workout.

Active Recovery I: Active recovery period. Allow your body to heal and recover. You will enter the Endurance phase stronger.

**Endurance Stage:** Open Water swimming is incorporated into the workout. Brick workouts (Bike/Run) are introduced in this phase. Distance and intensity levels are gradually increasing. Weight training is decreased. Track workout is introduced for speed work.

Active Recovery II: Active recovery period. Allow your body to heal and recover for higher intensity workouts in the Competitive phase.

**Competitive Stage:** Intensities & distance are at its maximum level. You will be race ready at the end of this phase. There is no weight training in this phase. Endurance training allowing you to "Go Long" is emphasized in this phase.

**Taper:** Recovery period. Intensity levels and distances are decreased. Let your body recover so you can race in peak state on race day.



# **Adaptation Stage**

## Week 1-3

### **Adaptation Stage**

The focus of the Adaptation Stage is on Strength Training and in getting you into a regular training routine. The Adaptation Phase is also a habit forming stage. As anxious as you might be to start doing long workouts, realize that adding too much stress to your body will only lead to injury and mental fatigue. The first 3 weeks is about building your base – allowing your body to adapt to physical activity and stresses that training will incur in later weeks.

Recovery days are just as important as training days. Preferably, a recovery day is a complete day off. However, if you feel compelled to do some form of training, cross-train on anything else but swimming, biking or running. Keep the intensity low so not to affect your next training session.

If you are coming into this program in good cardiovascular shape, continue to maintain your level of fitness in this phase. Incorporate the weight training listed in this phase to your schedule if you are not already doing so.



# WEEK 1 12 Weeks to Race Day

Triathlon Athletic Levels:

A=AGE GROUPER: Beginning level to establish aerobic base and develop skill E=ELITE: Intermediate level for those who already have some aerobic base P=PRO: Advanced level for those with race experience and a solid aerobic base

## **Intensity Levels Talk Test**

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

Level 3 (L3): Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**ADAPTATION** 

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	WEIGHTS	RUN	SWIM	BIKE	WEIGHTS	SWIM	RUN
ADAPTATION PHASE: WEEK 1 OF 3	Upper Body & Core Strength Training (see appendix)  Light Weights Slow 20 – 25 Reps	Run for time:  A: [Run 5' (L1) & Walk 1'] x 5 Total: 30 mins  (i.e Run for 5 minutes followed by a walk for 1 min for a total of 5 times)  E: [Run 6' (L1) & Walk 1'] x 5 Total: 35 mins  P: [Run 8' (L1) & Walk 1'] x 5 Total: 45 mins  'Denotes Minutes  Low intensity. Run for time NOT distance.	All Levels: Warm up 2 X 50  Drill all levels: 4 X 25 Side Kick Right 4 X 25 Side Kick Left 4 X 25 Catch-up Drill 4 X 25 Streamline Kick  Main Set:  A: 8 X 25 60" (L1) 2 X 50 60" (L2) 2 X 75 60" (L2) 2 X 75 60" (L1) Total: 1050 Meters  E: 8 X 25 50" (L1) 4 X 50 60" (L2) 2 X 75 60" (L2) 5 X 50 50" (L1) Total: 1300 Meters  P: 6 X 25 40" (L1) 4 X 50 60" (L3) 4 X 75 60" (L2) 8 X 50 40" (L1) Total: 1550 Meters  "Denotes Seconds	Stationary indoor, outdoor bike ride:  A: 30° (L1)  E: 45° (L1)  P: 60° (L1)   Easy ride	Remember to warm up before doing any strength work.	All Levels: Warm up 2 X 50  Drill all levels: 4 X 25 Side Kick Right 4 X 25 Side Kick Left 4 X 25 Catch-up Drill 4 X 25 Streamline Kick  Main Set:  A: 8 X 25 60" (L1) 2 X 50 60" (L2) 2 X 100 60" (L2) 2 X 100 60" (L1) Total: 1100 Meters  E: 8 X 25 50" (L1) 4 X 50 60" (L2) 2 X 100 60" (L2) 5 X 50 50" (L1) Total: 1350 Meters  P: 6 X 25 40" (L1) 4 X 50 60" (L2) 8 X 50 40" (L1) Total: 1650 Meters	Run Drills:  Perform 10 X 100M Drills of your choice listed in the appendix Run for Distance:  A: 3 km (L1) E: 5 km (L1) P: 6 km (L2)  Stretch after running. Ice your knees for 20 minutes.



# WEEK 2 11 Weeks to Race Day

**Triathlon Athletic Levels:** 

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

#### **Intensity Levels Talk Test**

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**ADAPTATION** 

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	RUN - WEIGHTS	SWIM	BIKE	WEIGHTS	SWIM	BIKE
ADAPTATION PHASE: WEEK 2 OF 3	R E S T D A Y	Run for Time:  A: [Run 6' (L1) & Walk 1'] x 6  E: [Run 8' (L1) & Walk 1'] x 6  P: [Run 12' (L1) & Walk 1'] x 6  Stretch after running  ' Denotes Minutes  Lower Body & Core Strength Training. (See Appendix)  Light Weights Slow 20 – 25 Reps	All Levels: Warm up 2 X 50  Drill all levels: 4 X 25 Side Kick Right 4 X 25 Side Kick Left 4 X 25 Catch-up Drill 4 X 25 Streamline Kick  Main Set:  A: 8 X 25 60" (L1) 2 X 50 50" (L5) 2 X 75 60" (L2) 2 X 50 60" (L1)  Total: 1050 Meters  E: 8 X 25 50" (L1) 4 X 50 40" (L5) 2 X 75 60" (L2) 5 X 50 50" (L1)  Total: 1300 Meters  P: 6 X 25 40" (L1) 4 X 50 30" (L5) 4 X 75 60" (L2) 8 X 50 40" (L1)  Total: 1550 Meters	Stationary indoor bike ride:  A: 20' (L1) 4 X 40" Single leg Drill 10' (L1)  E: 35' (L1) 6 X 40" Single leg Drill 10' (L1)  P: 40' (L1) 8 X 60" Single leg Drill 10' (L1)  "Denotes Seconds  This drill should only be done on a stationary bike.	Lower Body & Core Strength Training. (See Appendix)  Light Weights Slow 20 – 25 Reps	All Levels: Warm up 2 X 50 slow and steady, breast stroke or freestyle.  Main Set: A: 8 X 25 60" (L1) 2 X 50 60" (L2) 2 X 100 60" (L2) 2 X 50 60" (L5) 1 X 100 (L1) Cool Down Total: 800 Meters  E: 8 X 25 50" (L1) 4 X 50 60" (L2) 2 X 100 60" (L2) 5 X 50 50" (L5) 1 X 100 (L1) Cool Down Total: 1050 Meters  P: 6 X 25 40" (L1) 4 X 50 60" (L2) 4 X 100 60" (L2) 8 X 50 40" (L5) 1 X 100 (L1) Cool Down Total: 1350 Meters	Stationary indoor or outdoor bike ride:  A: 45' (L1)  E: 60' (L1)  P: 90' (L1)
	Your day off. No workouts scheduled for today. Rest and get stronger.	Low intensity. Run for time followed by lower body & core workout	" Denotes Seconds  L5 is an all-out sprint	Single Leg Drill: Alternate Pedaling with one foot for the allocated amount of time per foot.	Remember to warm up before doing any strength work.	Get use to swim warm ups before getting into the main workout.  L5 is an all-out sprint	Celebrate your second week in training!



# WEEK 3 10 Weeks to Race Day

#### **Triathlon Athletic Levels:**

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

#### **Intensity Levels Talk Test**

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**ADAPTATION** 

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	RUN - WEIGHTS	SWIM	BIKE	WEIGHTS	SWIM - BIKE	RUN
ADAPTATION PHASE: WEEK 3 OF 3	R E S T D A Y	Run for Time:  A: Run 20' (L1)  E: Run 30' (L1)  P: Run 40' (L1)  Stretch after running  Lower Body & Core Strength Training. (See Appendix)  Light Weights Slow 20 – 25 Reps	All Levels: Warm up 2 X 50 slow and steady, breast stroke or freestyle.  A: 1 X 100 60" (L3) 4 X 50 Drill* 4 X 50 Kick 60" (L2) 2 X 100 60" (L2) 1 X 100 (L1) Total: 900 Meters  E: 1 X 100 60" (L3) 4 X 50 Drill* 8 X 50 Kick 60" (L2) 4 X 100 60" (L2) 1 X 100 (L1) Total: 1300 Meters  P: 1 X 100 60" (L3) 4 X 50 Drill* 8 X 50 Kick 60" (L2) 1 X 100 (L1) Total: 1300 Meters  P: 1 X 100 60" (L3) 4 X 50 Drill* 8 X 50 Kick 60" (L2) 6 X 100 60" (L3) 1 X 100 (L1) Total: 1500 Meters  "Denotes Seconds *Drill: Choice of drill listed in the appendix.	Stationary indoor bike ride:  A: 30' (L1) 4 X 40" Single leg Drill 10' (L1) E: 35' (L1) 6 X 50" Single leg Drill 10' (L1)  P: 35' (L1) 8 X 60" Single leg Drill 10' (L1)	Upper Body & Core Strength Training (see appendix)  Light Weights Slow 20 – 25 Reps	All Levels: Warm up 2 X 100 slow and steady breast stroke or freestyle.  A: 1 X 100 60" (L3) 4 X 50 Drill 60" (L2) 4 X 50 Kick 60" 2 X 100 60" (L2) 1 X 50 (L1) Total: 950 Meters	Run Drills:  Perform 10 X 100M Drills of your choice listed in the appendix.  Run for Distance:  A: 3 km (L1)  E: 5 km (L1)  P: 6 km (L1)  Stretch after running.  Ice your knees for 20 minutes.
	Your day off. Rest well. Workout time increases this week.	Push yourself to run non stop this week.	TIME TIME	Single Leg Drill: Alternate Pedaling with one foot for the allocated amount of time per foot.	Remember to warm up for 10 minutes. Stretch after your workout.	E: 60' (L1) P: 90' (L1)	Aerobic Phase begins next week. Celebrate the completion of your Adaptation Phase! You are in great shape.



# **Aerobic Stage**

## Week 4-5

### **Aerobic Stage**

You have now been training for a month and you should be starting to feel comfortable with your workout schedule. At week 4 you are now starting the Aerobic Stage. While still emphasizing on weight training, this stage is meant to build distance and power gradually.

#### **Training Notes:**

- There is a continued emphasis on Weight Training and Core Strength exercises.
- Take complete day off from training on rest days.
- It is okay to move your workouts to suit your schedule.



#### **Triathlon Athletic Levels:**

**WEEK 4**9 Weeks to Race Day

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

**Intensity Levels Talk Test** 

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**AEROBIC** 

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
DAY OFF	WEIGHTS	SWIM	RUN	WEIGHTS	SWIM - BIKE	RUN
R E S T D A Y	Lower Body & Core Strength Training. (See Appendix)  Light Weights Slow 20 – 25 Reps	All Levels: Warm up 4 X 50 40" slow and steady breast stroke or freestyle  Swim Drills: All Levels: Perform 4 X 50 drills listed in the appendix (any 4 drill of your choice).  Main Set:  A: 4 X 50 45" (L2) 2 X 50 Kick 45" (L2) 2 X 50 Kick 45" (L2) 1 X 100 (L1)  Total: 950 Meters  E: 5 X 50 30" (L2) 2 X 50 Kick 45" (L2) 1 X 150 (L1)  Total: 1050 Meters  P: 6 X 50 30" (L2) 2 X 50 Kick 45" (L2) 1 X 150 (L1)  Total: 1050 Meters	All Levels: Warm up 5 – 10 mins of easy running.  Run Drill (perform twice for all levels):  High Knees: 100 M Butt Kicks:100 M Jump Skips:100 M Karaoke:100 M ———————— Main Set: Run for time:  A: Run 15' (L1); Run 15' (L2);  E: Run 20' (L2);  P: Run 30' (L2);  All Levels Cool Down for 5'	Upper Body & Core Strength Training (see appendix)  Light Weights Slow 20 – 25 Reps	Swim: A: 3 X 50 60" (L1) 4 X 50 60" (L2) 4 X 50 60" (L5) 4 X 50 60" (L2) 1 X 100 (L1) Total: 850 Meters  E: 1 X 100 60" (L1) 5 X 50 50" (L2) 5 X 50 50" (L2) 1 X 150 (L1) Total: 1000 Meters  P: 1 X 200 60" (L1) 4 X 100 40" (L2) 6 X 50 40" (L5) 4 X 100 40" (L2) 1 X 200 (L1) Total: 1500 meters  A: 10' (L1); 45' (L2); 5' (L1) Cool Down E: 10' (L1); 60' (L2) 5' (L1) Cool Down P: 10' (L1); 75 (L2) 5' (L1) Cool Down	Run Drills:  Perform 10 X 100M Drills of your choice listed in the appendix.  Run for Distance:  A: 10' Warm Up 3 km (L2); Cool down 10'  E: 10' Warm Up 5 km (L2); Cool down 10'  P: 10' Warm Up 6 km (L2); Cool down 10'  Stretch after running.  Ice your knees for 20 minutes.
enough sleep. Aerobic case Begins Tomorrow with higher intensity workouts.	Remember to warm up!!	TIME TIME		Did you remember to warm up? Have a good rest for the weekend.	TIME	Workouts are harder. Eat right and rest well.
ıa	Y enough sleep. Aerobic ase Begins Tomorrow ith higher intensity	enough sleep. Aerobic se Begins Tomorrow ith higher intensity	Y  E: 5 X 50 30" (L2) 2 X 50 Kick 45" (L2) 3 X 50 45" (L2) 1 X 150 (L1) Total: 1050 Meters  P: 6 X 50 30" (L2) 2 X 50 Kick 45" (L2) 1 X 200 (L1) Total: 1200 Meters  Remember to warm up!!  Property Aerobic are Begins Tomorrow ith higher intensity	Total: 950 Meters   E: Run 20' (L1);   Run 20' (L2);	Total: 950 Meters   E: Run 20' (L1);   Run 20' (L2);	Potal: 950 Meters   E: 5 X 50 30" (L2)   E: 5 X 50 30" (L2)   2 X 50 Kick 45" (L2)   3 X 50 45" (L2)   1 X 150 (L1)   Total: 1050 Meters   P: 6 X 50 30" (L2)   2 X 50 Kick 45" (L2)   4 X 50 30" (L2)   2 X 50 Kick 45" (L2)   4 X 50 30" (L2)   2 X 50 Kick 45" (L2)   4 X 50 30" (L2)   1 X 200 (L1)   Total: 1200 Meters   P: 6 X 50 30" (L2)   1 X 200 (L1)   Total: 1200 Meters   Did you remember to warm up!!   P: 10" (L1);   Total: 1200 Down   P: 10" (L1);   Total: 1500 meters   Total: 1500 mete



**Triathlon Athletic Levels:** 

WEEK 5 8 Weeks to Race Day **A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

**Intensity Levels Talk Test** 

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**AEROBIC** 

					·		
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	BIKE	WEIGHTS - RUN	SWIM	WEIGHTS	BIKE & RUN	SWIM
AEROBIC STAGE: WEEK 2 OF 2	R E S T D A Y	Stationary indoor (Spin Class) or Outdoor bike ride:  A: 10' (L1); 20' (L3) 2' (L4) (or hill climb) 10' (L3) 2' (L4) (or hill climb) Cool Down  E: 10' (L1); 20' (L3) 5' (L4) (or hill climb) 15' (L3) 5' (L4) (or hill climb) 5' (L4) Cool Down  P: 10' (L1); 20' (L2) 5' (L4) (or hill climb) 20' (L3) Cool Down	Upper Body & Core Strength Training (see appendix)  Light Weights Slow 20 – 25 Reps	A: 1 X 100 60"(L1) 4 X 50 Drill 45" 6 X 50 45" (L2) 4 X 50 45" (L5) 1 X 100 (L1) Total: 900 Meters  E: 1 X 150 60"(L1) 4 X 50 Drill 30" 8 X 50 30" (L2) 4 X 50 45" (L5) 1 X 100 (L1) Total: 1050 Meters  P: 1 X 200 60"(L1) 4 X 50 Drill 30" 10 X 50 30" (L2) 6 X 50 30" (L5) 1 X 100 (L1) Total: 1300 Meters	Lower Body & Core Strength Training. (See Appendix)  Light Weights Slow 20 – 25 Reps	BIKE: A: 10° (L1); 40° (L2) 2° (L3/L4) X 2 (hill climb or sprint) 10° (L2) Cool Down  E: 10° (L1); 40° (L2) 5° (L3/L4) X 2 (hill climb or sprint) 10° (L2) Cool Down  P: 10° (L1); 40° (L2) 5° (L3/L4) X 2 (hill climb or sprint) 20° (L2) 5° (L3/L4) X 2 (hill climb or sprint) 20° (L2) Cool Down  RUN (5 mins on, 2 mins off): A: 3 km (L2/L3); E: 5 km (L2/L3); (alternate L2 X 5° and L3 X 2°)	A: 1 X 100 60" (L1) 4 X 50 Drill 60" 8 X 50 60" (L2) 6 X 50 60" (L3) 1 X 100 (L1) Total: 1100 Meters  E: 1 X 200 60" (L1) 4 X 50 Drill 60" 2 X 200 50" (L2) 3 X 100 50" (L2) 1 X 200 (L1) Total: 1400 Meters  P: 1 X 200 60" (L1) 4 X 50 Drill 60" 2 X 200 40" (L2) 3 X 100 40" (L2) 3 X 100 40" (L2) 1 X 200 (L1) Total: 1700 Meters  *Pull: Use a pull bouy and hand paddles
	Intensity is gradually increasing this week.	TIME	Remember to warm up. Stretch after your workout.	L1 is a warm up or cool down intensity level. You can utilize any stroke of your choice.	Rest well for a long weekend workout.	TIME	
		111112				11006	



# **Active Recovery**

# Week 6

## **Active Recovery**

Active Recovery weeks consist of low intensity workouts that are done after a high intensity training period. Instead of complete rest, research is beginning to find some advantages in active recovery. Active Recovery periods are incorporated into this training plan for 2 purposes. One, It allows your body to heal from the stresses of physical activity and two, it allows you time to cross-train so you don't burn out, over-train and loose motivation.



## **Triathlon Athletic Levels:**

WEEK 6
7 Weeks to Race Day

A=AGE GROUPER: Beginning level to establish aerobic base and develop skill E=ELITE: Intermediate level for those who already have some aerobic base P=PRO: Advanced level for those with race experience and a solid aerobic base

#### **Intensity Levels Talk Test**

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

ACTIVE RECOVERY

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	SWIM	WEIGHTS	BIKE	RUN	DAY OFF	DAY OFF
REST WEEK: ACTIVE RECOVERY	R E S T D A Y  Active Recovery Week; Schedule a sports massage this week.	All Levels EASY SWIM at L1  4 X 50 (L1) 40" 3 X 100 (L1) 30" 2 X 150 (L1) 30" TOTAL: 900 Meters  Optional use of Pull Bouy, Hand Paddles or both on longer sets.	Lower Body & Core Strength Training. (See Appendix)  Light Weights Slow 20 – 25 Reps	EASY BIKE 45' L1/L2  TIME  Review your training goals	EASY RUN 30' L1/L2  TIME  Plan your free weekend Endurance Phase Begins on Monday.	R E S T D A Y	R E S T D A Y



# **Endurance Stage**

Week 7 - 8

Congratulations on making it this far. You have built up your strength in the past few weeks. This training phase will emphasize on "going long". You will also be establishing your race pace in this stage. This will be the pace in which you will be Swimming, Biking and Running on race day. Your Race Pace is a pace in which you are running at "cruise control". A swim pace is best established by doing a 200 yard time trial. Similarly a bike pace is established by doing a 12 - 16 km ride and a run pace on a 5 km distance run. This is a relaxed pace in which you should feel comfortable swimming, biking and running without stopping. It is a "cruising" speed. It is however not an easy workout. A Race Pace should be between the intensity level of L2 and L3.

#### **Training Notes:**

- Begin experimenting with sports nutrition such as gels, power bars and sports drinks during your workout. Find out what works best for you. Refer to the Athlete's Nutrition guide in the appendix for some great suggestions.
- It is important to establish your Race Pace by the end of week 8
- Weight Training continues but decrease the amount of weights used. Emphasize on muscular endurance by increasing the number of repetitions per set.



WEEK 7

6 Weeks to Race Day

**Triathlon Athletic Levels:** 

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

**Intensity Levels Talk Test** 

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**ENDURANCE** 

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	WEIGHTS	SWIM	BIKE	RUN	DAY OFF	SWIM – BIKE	BRICK
ENDURANCE STAGE: WEEK 1 OF 2	Lower Body & Core Strength Training. (See Appendix)  Light Weights Slow 20 – 25 Reps  Optional Bike, Eliptical or Row 50 mins	A: 1 X 300 (L1) 6 X 50 50" (Drill) 6 X 100 50" (L2) 4 X 50 50" (L3) 1 X 200 (L1) Total: 1600 Meters  E: 1 X 400 (L1) 6 X 50 40" (Drill) 6 X 100 40" (L2) 8 X 50 40" (L3) 1 X 300 (L1) Total: 2000 Meters  P: 1 X 400 (L1) 6 X 50 40" (Drill) 6 X 100 30" (L2) 8 X 50 30" (L3) 2 X 100 30" (L3) 1 X 200 (L1) Total: 2100 Meters  Reduce one set if this workout is too dificult. Keep the recommended intensity level.	A: 16 km E: 24 km P: 32 km  Aim for a steady 19 – 24 km/h on first half and slightly higher on second half  Include 2 X 5' hill climb on this ride.	Speed Work Week 1 of 2 600m Superset (Preferably on Run Track) IMPORTANT: It is important to warm up thoroughly before doing the superset workout. Warm up @ L1 and L2 for 1600 m (or 4 track loops)  Technical Approach: Run 200m at fastest possible pace, immediately followed by 400m at 5 sec slower than the first 200m. Repeat 3-4 Times after total recovery in each set.  For example if you run the first 200m in 40 sec, the 400m will be run in 90 sec for a total 600m time of 2 mins 10 secs.  Non-Technical Approach: Run 200m @ L5 (your fastest possible pace) immediately followed by 400m @ L4 Repeat 3-4 times after total recovery between each set.	R E S T D A Y	SWIM: Warm up: A: 1 X 100 (L1) E & P: 2 X 100 (L1)  Swim Ladder workout: 1 X 50 50" 1 X 100 50" 1 X 150 50" 1 X 250 50" 1 X 250 50" 1 X 300 50" 1 X 250 50" 1 X 100 50" 1 X 150 50" 1 X 100 50" 1 X 150 50" 1 X 100 50" 1 X 100 50" 1 X 100 50" 1 X 50  Total Ladder: 1800 meters.  Intensity: A: L2 E: L2/L3 P: L2/L3 BIKE: A: 30 km (L2/L3) E: 35 km (L2/L3) P: 40 km (L2/L3)	16 km bike ride immediately followed by a 3 km run.  A & E: Double Brick (as Bike-Run-Bike-Run)  P: Triple Brick (as Bike-Run-Bike-Run)  Logistics of transitioning from Bike to Run and Run to Bike is key to minimize time between each transition for maximum benefit of this brick workout. Find a good location to store your bike as you head out for the run.



**Triathlon Athletic Levels:** 

WEEK 8
5 Weeks to Race Day

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

**Intensity Levels Talk Test** 

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

Level 3 (L3): Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**ENDURANCE** 

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	SWIM	BIKE	WEIGHTS	RUN	SWIM	BRICK
ENDURANCE STAGE: WEEK 2 OF 2	R E S T D A Y	A: 1 X 200 (L1) 10 X 50 30" (Drill) 1 X 100 20" (L3) 1 X 50 20" (L4) 2 X 100 20" (L3) 2 X 25 20" (L5) 1 X 200 (L1) Total: 1300 Meters  E: 1 X 300 (L1) 10 X 50 30" (Drill) 1 X 100 20" (L3) 1 X 50 20" (L4) 3 X 100 20" (L3) 4 X 25 20" (L5) 1 X 200 (L1) Total: 1550 Meters  P: 1 X 400 (L1) 10 X 50 30" (Drill) 1 X 100 20" (L3) 2 X 50 30" (Drill) 1 X 100 20" (L3) 2 X 50 20" (L4) 3 X 100 20" (L3) 6 X 25 20" (L5) 1 X 200 (L1) Total: 1750 Meters  Speed work is introduced for the first time this week.	ALL LEVELS:  45 – 60 min ride with one legged pedaling drills.  Pedaling Drills:  8 X (30" right leg; 30" left leg; 2 minute both legs)  Maintain 90+ RPM  Include 2 X 10' hill climbs on this ride.	Upper Body & Core Strength Training (see appendix)  Light Weights Slow 20 – 25 Reps Optional Bike, Eliptical or Row 50 mins	Speed Work Week 2 of 2 600m Superset (Preferably on Run Track) IMPORTANT: It is important to warm up thoroughly before doing the superset workout. Warm up @ L1 and L2 for 1600 m (or 4 track loops)  Technical Approach: Run 200m at fastest possible pace, immediately followed by 400m at 5 sec slower than the first 200m. Repeat 3-4 Times after total recovery in each set.  For example if you run the first 200m in 40 sec, the 400m will be run in 90 sec for a total 600m time of 2 mins 10 secs.  Non-Technical Approach: Run 200m @ L5 (your fastest possible pace) immediately followed by 400m @ L4 Repeat 3-4 times after total recovery between each set.	A: 1 X 200 (L1) 1 X 300 30" (L3) 1 X 250 20" pull* 1 X 200 20" (L3) 1 X 250 20" pull 6 X 50 Descend 1 X 200 (L1) Total: 1700 Meters  E: 1 X 200 (L1) 1 X 300 30" (L3) 1 X 250 20" pull* 2 X 200 20" (L3) 1 X 250 20" pull* 2 X 200 20" (L3) 1 X 250 20" pull 8 X 50 Descend 1 X 200 (L1) Total: 2000 Meters  P: 1 X 300 (L1) 1 X 300 30" (L3) 1 X 250 20" pull* 3 X 200 20" (L3) 1 X 250 20" pull* 3 X 200 20" (L3) 1 X 250 20" pull 10 X 50 Descend 1 X 200 (L1) Total: 2400 Meters   Descend: For every set, reduce the time taken to complete 50 meters.  *Pull: Use a pull bouy and hand paddles.	Fartleck Run:  1 km warm up.  60" L1 30" L2 60" L1 30" L3 60" L1 30" L4  REPEAT 3 X  Bike:  A: 1 hour bike ride. Try to maintain 19 – 24 km/h  E: 1.5 hour bike ride. Try to maintain 24 km/h or above  P: 2 hour bike ride. Try to maintain 24 km/h or above.



# **Active Recovery**

Week 9



#### **Triathlon Athletic Levels:**

WEEK 9
4 Weeks to Race Day

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

**Intensity Levels Talk Test** 

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Kev Workouts

ACTIVE RECOVERY

					Kcy workout		RECOVERI
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	SWIM	WEIGHTS	BIKE	RUN	SWIM	DAY OFF
REST WEEK: ACTIVE RECOVERY	R E S T D A Y	All Levels EASY SWIM at L1  4 X 50 (L1) 40" 3 X 100 (L1) 30" 2 X 150 (L1) 50"  TOTAL: 900 Yards  Optional use of Pull Bouy, Hand Paddles or both on longer sets.	Upper Body & Core Strength Training (see appendix)  Light Weights Slow 20 – 25 Reps	EASY BIKE 60° L1	EASY RUN 45' L1	Open Water swim 1 km	R E S T D A Y



# **Competitive Stage**

Week 10 - 11

#### **Competitive Stage**

Welcome to the Competitive Stage. Congratulations to YOU for coming this far in your training. This is it – the last few weeks prior to the big day. The Competitive Stage is the most important stage in Triathlon training. It is important not to miss any workouts unless you have an injury or if you fall sick. Note that a training day missed cannot be made up easily. Stay healthy. Increase your intake of Protein by supplementation and post recovery sports drinks.

## **Training Notes:**

- There will be no weight training in this phase.
- Rest Days are complete days off from training.
- It is okay to move your workouts to suit your schedule
- Your longest training days will be in this phase.
- Remember to start hydrating a day or two before long workouts.
- Continue practicing your race nutrition and find the optimal intake of gels, power bars or sports drinks during your long training days.



#### **Triathlon Athletic Levels:**

# WEEK 10 3 Weeks to Race Day

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

### **Intensity Levels Talk Test**

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

## **COMPETITIVE**

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	SWIM	DAY OFF	BIKE	RUN	SWIM	BRICK	SWIM
COMPETITIVE STAGE: WEEK 1 OF 2	Endurance Swim (Pool) All levels: Warm up 200 Meters  A: 30° Continuous Swim E: 35° Continuous Swim P: 40° Continuous Swim  Open Water Drill:  Close you eyes and swim freestyle 25 yard and see how straight you swim. Most will pull to one side because we tend to have a stronger side to one side of our body (core, arm, legs etc).  Practice sightings by popping your head up before breathing.	R E S T D A Y	Endurance Ride:  A: 32 km E: 40 km P: 48 km  A&E: Maintain 90 RPM at an average speed 18 - 24+ km/h at the end of your ride  P: push to maintain an average speed of 32 km/h.	Power Run:  All Levels: 10' Warm up (L1)	Endurance Swim (Pool) All levels: Warm up 200 meters  A: 20' non stop E: 30' non stop P: 40' non stop  Open Water Drill:  Swim heads up for 25 meters X 4 Times.  Practice sighting 4 X 25 meters  Rest well for tomorrow's high intensity workout. Hydrate well.	Race Power Workout  12 km bike ride (L3/L4) immediately followed by a 15 minute run  A: Double Brick (as Bike-Run-Bike-Run)  E&P: Triple Brick (as Bike-Run-Bike-Run)  Maintain 19 - 24+ km/h. Keep intensity high.  Bike and Run at race pace.	Race Power Workout  Endurance Swim All levels warm up 200 yards.  A: 2' (L2) 1' 4' (L2) 1' 6' (L2) 1' 10' (L2) 1' 12' (L2)  E: 3' (L2) 1' 6' (L2) 1' 12' (L2) 1' 15' (L2)  P: 4' (L2) 1' 15' (L2)  P: 4' (L2) 1' 16' (L2)  Swim continuously at the time indicated followed by a 1 minute recovery. This is a great mental and physical workout.  Optional Open Water Swim 1 km.



#### **Triathlon Athletic Levels:**

WEEK 11
2 Weeks to Race Day

**A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

**Intensity Levels Talk Test** 

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

## **COMPETITIVE**

					· · ·		
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	SWIM	BRICK	RUN	BRICK	SWIM – BIKE	BRICK
COMPETITIVE STAGE: WEEK 2 OF 2	R E S T D A Y	Endurance Swim (Pool)  All levels Warm up 200 Meters.  Continuous swim:  A: 1000 Meters  E: 1200 Meters  P: 2400 Meters  Open Water Drill:  Swim heads up for 25 Meters X 4 Times.  Practice sighting 4 X 25 Meters	Bike:  A: 30' (L2) 10' (L3)  E: 35' (L2) 15' (L3)  P: 40' (L2) 20' (L3)  Include some hill climbs in this workout.  Run: Run 3 km immediately after biking.	Endurance Run: A: 6 km run (L3) E: 8 km run (L3) P: 10 km run (L3)	Bike: ALL LEVELS 45' bike ride followed by 5 km run.	Race Power Workout  Endurance Open Water Swim  A: 1.5 km swim E: 2.0 km swim P: 2.5 km swim OR A: 30' non stop E: 35' non stop P: 40' non stop  Swim at race pace.  Endurance Ride:  A: 56 km E: 64 km P: 70 km  Ride for distance.	Race Power Workout  A: 30' Bike Ride  E: 40' Bike Ride  P: 50' Bike Ride  Bike at Race Pace.  Immediately followed by:  A: 5 km run  E: 6 km run  P: 8 km run  Run at race pace
	This will be your hardest training week before you start tapering. Stay healthy, increase your protein intake and plan for your race hydration and nutrition this week.	Continuous Swim: Swim continuously any style/stroke. Do not stop. Go slow and steady. Wear your race gear. Make sure everything fits so there are no surprises on race day.	To get maximum benefit, run immediately after biking.	Optional 600M Superset Run.	Easy workout day to prepare for the long weekend workout	Stay well hydrated on the bike. Plan for water stops – this is your longest bike ride.	Plan your race wear today. Make sure everything fits so there won't be any surprises on race day.



# **Taper**

# Week 12

#### **Taper**

Rest and Active Recovery workouts are the primary focus of this week. Tapering increases muscle glycogen and will give you a well recovered body on race day. Release any tension related to your finishing time. Have fun on race day. It will be a remarkable feeling to cross that finish line. Maintain proper hydration throughout the week. Increase your carbohydrate and salt intake.



#### **Triathlon Athletic Levels:**

WEEK 12 Race Week **A=AGE GROUPER**: Beginning level to establish aerobic base and develop skill **E=ELITE**: Intermediate level for those who already have some aerobic base **P=PRO**: Advanced level for those with race experience and a solid aerobic base

### **Intensity Levels Talk Test**

Level 1 (L1): Full Conversations - Warm Up/Cool Down

Level 2 (L2): Short Conversations

**Level 3 (L3)**: Short Sentences or 1-2 words

Level 4 (L4): Can't talk now

Level 5 (L5): All out – Maximum Effort

Key Workouts

**TAPER** 

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	DAY OFF	SWIM	BIKE	RUN	BIKE	DAY OFF	RACE DAY
TAPER	R E S T D A Y	Short bike ride: A: 20' (L2) E: 30' (L2) P: 40' (L2)	A: 30' (L2) E: 45' (L2) P: 60' (L2) All Levels: 2" X 8 (L5) sprint during this ride. Perform 8, 2 minute sprints during your ride.	All Levels: 2 mile run (L1)	EASY BIKE RIDE All levels 20' – 30'	R E S T D A Y	There's nothing like that feeling of crossing the finish lineit never gets old. You have just become part of an athletic elite.  Congratulations.
	Rest well and begin to taper.				Optional Day off. Sleep early today. It's the night you'll be getting the most rest. Increase sodium intake. Increase carb intake.	Stay off your feet.  Increase carb intake to saturate muscle glycogen.	This is your day!!  Have a great race!



#### **APPENDIX:**

## **Swim Training Notes:**

For all swim workouts, Freestyle is assumed. If you can do Backstroke, you can alternate longer workouts with Backstroke to work opposing muscle groups. Incorporate these workouts during the Endurance phase.

Swim Drills: The following drills can be found from various websites on the internet. Search for the drills listed below on your favorite search engine.

- 1. Catch Up
- 2. Finger Tip Drag
- 3. Kicking with a board

- 4. Fist Drill Swim freestyle w/closed fist
- 5. Sculling
- 6. Right Side Kick with Right Arm Extended Out
- 7. Left Side Kick with Left Arm Extended Out

**Bike Drills and Training Notes:** Bike workouts on a stationary bike or by attending a Spin class will allow you to get stronger as you emphasize on rapid spins (sprints), hill climbs, single leg spins and total RPMS (Revolutions per minute). Getting "stronger" on the bike also means added saddle time or bike time and confidence on your bike. The more you bike, the better off you'll be. Emphasize hills climbs, downhill rides and fast flat road rides during your workout.

**Run Drills:** Running drills and Supersets should be done on a run Track for accurate measurement and safety. It should never be done on a treadmill. The following drills can be found from various websites on the internet. Search for the drills listed below on your favorite search engine:

- 1. Walk on Toes
- 2. Walk on Toes (Heels in, Heels Out)
- 3. Walk on Heels
- 4. Walk on Heels (Toes in, Toes Out)
- 5. Strides
- 6. Butt Kicks

- 7. High Knee running
- 8. Karaoke
- 9. Skipping
- 10. High Knee Skips
- 11. Run Backwards pushing off from your fore foot

**600 M Supersets:** This drill is for you to gain speed in your running. It will make you a faster runner, allowing you run fast at a pace that is easy for you. To gain maximum benefit in this workout, you need to do it in three or more weeks in a row – one workout per week. Before doing this drill, be sure to warm up and do short strides.

Run 200m at fastest possible pace, immediately followed by 400m at 5 sec slower than the first 200m. For example if you run the first 200m in 40 sec, the 400m will be run in 90 sec for a total 600m time of 2 mins 10 secs.

**Run Form:** Emphasize on quick feet while landing on your forefoot and not on your heel. Running by landing on your heel stops your forward motion thus making you slower. Focus on landing on your forefoot at almost the same time as your heel touches the ground. When you watch an efficient runner run, you will not be able to see his/her forefoot while running. Have a slight lean forward when you run allowing for a forward motion while running.



## **Triathlon Specific Weight Training Routines:**

Upp	er B	ody							Lov	ver B	ody	
Lat Pull Down			Dips			Walking Lunges						
Set 1	Set 2	Set 3	Set 4		Set 1	Set 2	Set 3	Set 4	Set 1	Set 2	Set 3	Set 4
Bent	over F	Row				bell Pı			Leg	Extens	ions	
Set 1	Set 2	Set 3	Set 4		Set 1	Set 2	Set 3	Set 4	Set 1	Set 2	Set 3	Set 4
Cabl Set	e Seate	ed Row Set	Set						Leg	Curls Set	Set	Set
1	2	3	4						1	2	3	4
	ral Dur								Calf	Raises	<u> </u>	l
Set 1	Set 2	Set 3	Set 4						Set 1	Set 2	Set 3	Set 4
Trice	p Exte	ensions							Hip	Abduc	tion	
Set 1	Set 2	Set 3	Set 4						Set 1	Set 2	Set 3	Set 4

#### **Muscular Endurance**

Light Weights Slow 20 – 25 Reps per set

Squats

Leg Press

Set

Set

Set 2

Set

Set 3

Set

Set 4

Set

The goal of this triathlon specific weight training is to allow you to build up your slow-twitch muscle fibers. Performing each set slowly with light weights and high reps will allow you to build up on muscular endurance.

Set 1: 30% of the maximum weight you can lift.

Set 2: 35% of your maximum.

Set 3: 40% of your maximum.

Set 4: Back down to 30% of your maximum

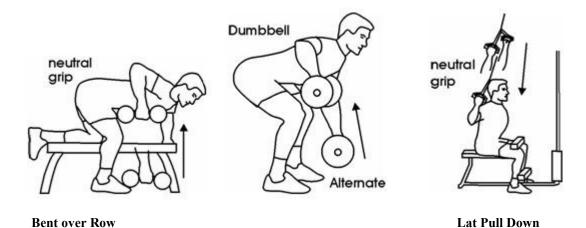


## **UPPER BODY:**

## Target Muscles in the Pull Phase of the freestyle Swim Stroke:

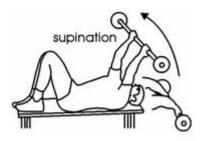


**Cable Seated Row** 





## Work on muscles in the Catch Phase of the freestyle Swim Stroke:



**Dumbell Overhead Pullovers** 

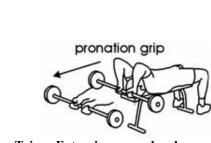
## Target muscles in the Push Phase of the freestyle Swim Stroke:







Dips



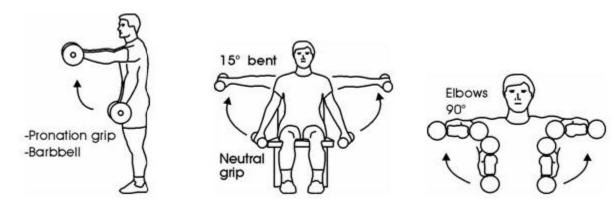
Tricep Extension - overhead



**Tricep Extension – Dumbell** 



## **Swim Injury Prevention:**

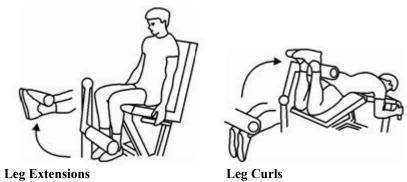


**Latteral Dumbell Raises** 

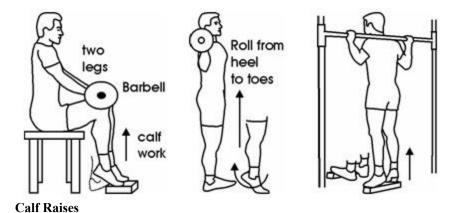


## **LOWER BODY:**

## **Run Strength:**

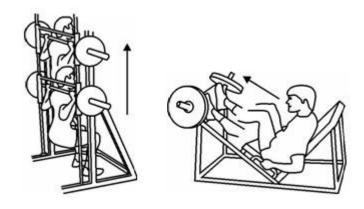


eg Extensions





## Cycle Strength and Power (muscles necessary for hill climbs):

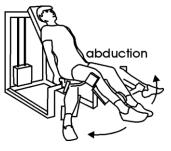


**Squats** 

Leg Press







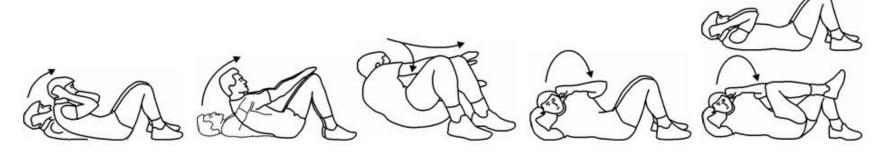
Walking Lunges

**Hip Abduction** 

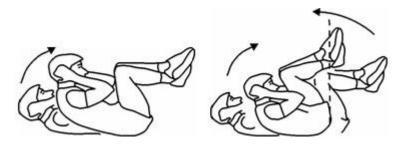


## **CORE STRENGTH:**

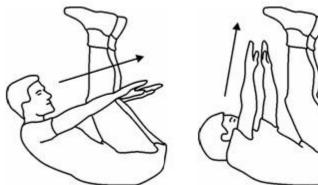
Pick 6 to 8 variations below and perform 15 - 25 crunches each.

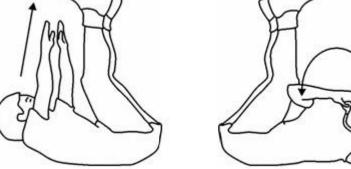


Floor Crunches (legs Bent, feet on the ground)



Floor Crunches (Legs Up, knees at 90 degrees)



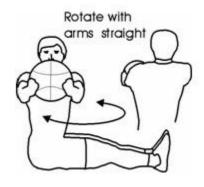




Floor Crunches (Legs Straight Up)

**Bent Knee Raises** 



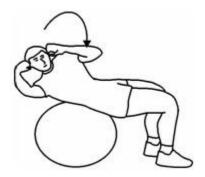


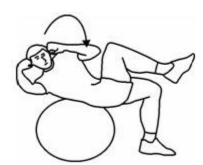


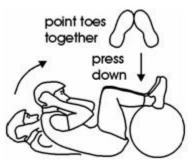


**Floor Side Crunches** 

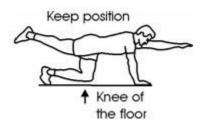








**Swiss Ball Crunches** 



**Supermans** (alternate Right Arm, Left Leg and Left Arm Right Leg) Hold for at least 20 secs. Max. 45 seconds. Perform 3 sets.



## **ADVANCED CORE STRENGTH:**









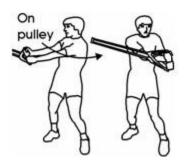


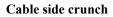
**Hanging Leg Raises** 

Leg Lifts

**Hanging Side Leg Raises** 

**Abs Wheel** 







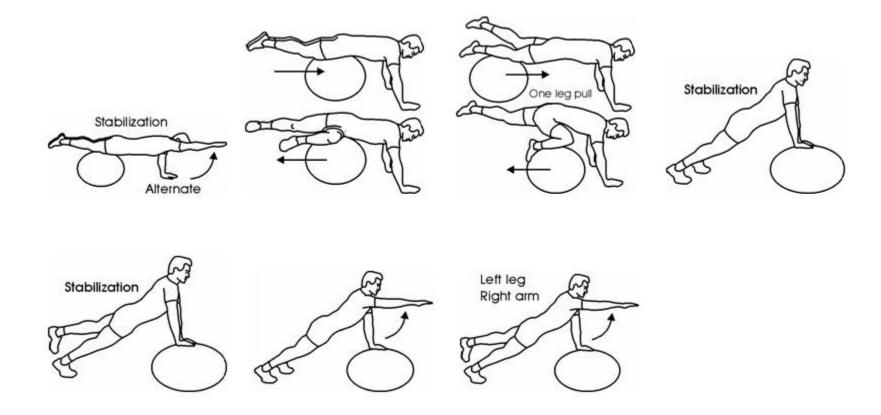
**Crunch on Pulley** 



**Swiss Ball Reverse Crunch.** 

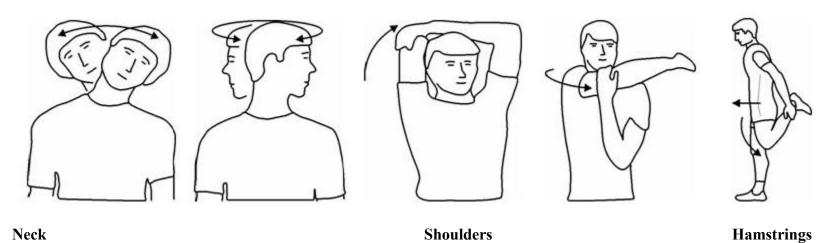


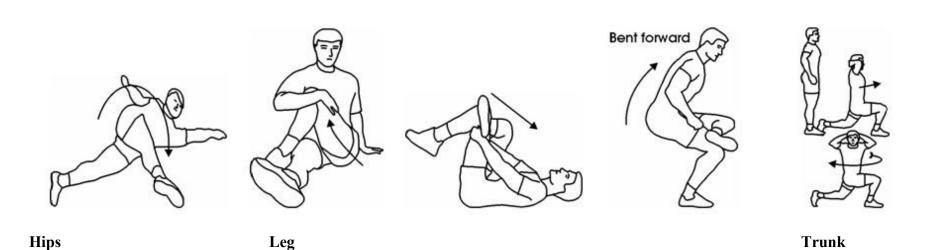
# 7 Core & Stability Exercises:





# 10 Flexibility Stretches (Hold each position for 30 secs)







## **RACE DAY CHECKLIST:** SWIM: **BIKE: TRANSITION AREA:** Bike Wetsuit ☐ Large Towel to dry off from swim Swim Suit or Race Suit Helmet ☐ Smaller towel to lay transition Bike & Goggles (Clear/Shaded) Bike Shoes Run items Sunscreen ☐ Backup Goggles Bike Jersey (with or without race number) Sports Drink Race Swim Cap Socks Nutrition (e.g powerbars, gels) Body Glide Water Bottles ☐ Bike Floor pump Sun Screen Gloves Photo ID Arm Warmers **RUN**: ☐ Money Run Shoes Bike Jacket Post Race wear ☐ Visor/Cap ☐ Spare Tubes Recovery food/drink Race Belt w/Race Number CO2 Cartridges & Valves Socks ☐ Bike Lever Sunglasses Road ID e.g emergency contact; medical info. Bike Tools



TriathlonGeek.com is pleased to provide to you a complimentary section on Performance Nutrition by Dr. Clyde Wilson. Dr. Clyde Wilson is the Director of the Center for Nutrition at the Sports Medicine Institute (a nonprofit) in Palo Alto, CA, teaches nutrition courses in the Medical Schools at UCSF and Stanford and teaches nutrition and human movement courses in Athletics at Stanford. Dr. Wilson is a research fellow in the Cardiovascular Research Institute at UCSF investigating the mechanisms of muscle fatigue and metabolism. This work is carried out in the Department of Biochemistry and Biophysics. He received his Ph.D. from the Department of Chemistry at Stanford and previous to this worked in the area of nuclear engineering on an aircraft carrier in the US Navy. To read more about Dr. Wilson please see his web site: www.DrClydeWilson.com

# <u> Athlete Nutrition by Dr. Clyde Wilson</u>

Cardiovascular Research Institute, School of Medicine, UCSF Department of Athletics, Stanford University
Center for Nutrition, Sports Medicine Institute
Contact Clyde@DrClydeWilson.com

## **Optimum Health is central to performance.**

Health requires balanced nutrition meeting all your body's needs: Protein for tissue building, carbohydrate for energy, and fats for increased metabolism and nerve recovery after exercise. But simply eating healthy foods in balance is not enough; caloric pacing and hydration play critical roles as well. Caloric pacing involves eating moderate amounts throughout the day rather than skipping breakfast and eating a large dinner. Caloric pacing is also the fundamental principle behind proper pre-, during and post-exercise nutrition. Hydration requirements are determined primarily by how much you eat, perspiration losses during exercise and electrolyte needs.

## **Meal Composition**

**Dietary fat:** Eating less than 20% of total calories as fat or consuming more saturated fat than unsaturated fat (regardless of the % calories) reduces health and performance significantly. Eating more than 30% (up to 50%) of total calories as healthy fat has been shown in several cultures to be the healthiest approach to eating in the world, but that approach will not leave enough room in your diet for carbohydrate and protein to support high levels of exercise training.

**Guidelines:** Around 25% of total calories as dietary fat, less than 1/3 of these saturated. Include some omega-3 fat each day (1 serving low-mercury fish e.g. salmon or sardines, 1 Tbsp flax seeds, 1 Tsp flax oil, 3 Tbsp canola or soy oil, or a couple servings of tofu).

**Protein:** Less than 10% of total calories coming from protein will result in reduced recovery, whereas over 25% induces many negative health effects as defined by the American Heart Association (fatigue, bone demineralization, kidney concerns, gout, arthritis, high blood pressure, increased chances for cancer, obesity and diabetes).

**Guidelines:** 10-25% of total calories, choose protein sources that are low in saturated fat.

**Carbohydrate:** Carb sources includes whole grains, fruits and vegetables. Vegetables are much higher in fiber and phytonutrients (including anti-oxidants to help with recovery) than any other food. Therefore, any diet not high in vegetable intake requires a greater number of total calories to achieve the same levels of nutrients. Supplements can not replace vegetable intake because the



active nutrient profile of a mixture of vegetables, such as in a dark-green salad with other vegetables on top, is much greater than any powder or tablet can contain. The type of starches (whole grains) you should include in your diet include high-fiber cereals, breads, pastas, rice and yams. Sometimes it is not practical to eat whole grains, such as when in a restaurant or if your meal goes better with white pasta or potatoes. In such cases just reduce the amount you consume a bit relative to the amount of whole grain/high-fiber starches you would eat.

**Guidelines:** 50-60% Carbohydrate where fully 1/3 of those carbohydrate calories are vegetables. Note that this amount of vegetables corresponds to 20% of your total caloric intake, which would take up a full 1/3 of your plate since vegetables are low in calories compared to their volume. Lunch and dinner should have extra vegetables on sandwiches or both a side of vegetables and a salad when possible. Breakfast should include vegetables when eating eggs (spinach, tomato, etc go well in eggs), but when eating cereal fruit can be used instead. Dark and orange fruit is the healthiest (berries, plumbs, papaya, passion, guava, red grapes) whereas bananas are relatively high in sugar and digest quickly (which is fine in moderation). Eat at least as many vegetables as fruit, and do not replace fruit with fruit juice (which is essentially sugar water).

**Summary:** Of your total calories in the day and preferably per meal, 25% fat (less than 1/3 of that saturated), 1025% protein, around 50% as carbohydrate. Emphasize vegetables, whole grains, protein low in saturated fat and ensure that your fat intake is both sufficient and not excessive.

## **Caloric Pacing and Hydration**

The body can store fat incredibly well, but does not do such a good job at storing carbohydrate, protein or fluids. Within a few hours after a meal, blood sugar levels, available essential amino acids, and your hydration levels start to slowly fall. For this reason, a healthy snack should come between your main meals and water should be consumed on a regular basis throughout the day. Your main meals should be made smaller to accommodate the addition of 2-3 healthy snacks so that your total calories for the day stay the same. The amount of water you need through the day is 1 Liter or Quart for every 1000 Calories that you eat. For example, if you eat 2000 Cal/day you need 2 L of water, which is about 8 cups. If you only eat 1500 Cal, then you need 1.5 L or about 6 cups. This does NOT include fluid needs to make up for perspiration losses during training (see "Exercise Hydration").

## Weight loss

Often, endurance athletes are interested in reducing body fat and increasing performance simultaneously. The only way to achieve this goal is to minimize how many calories go to fat and increase how many go to muscle. A diet containing healthy fats, high-fiber foods (whole grains, vegetables, some fruit) and moderate (no greater than 25% of total calories) in protein intake dramatically increases muscle fueling and reduces the fueling of fat cells. This is as opposed to diets high in saturated fat, added sugar or refined carbohydrate (e.g. white bread, white rice, white pasta). The types of fats and carbohydrates, as well as the total amount of protein you eat, have a dramatic impact on muscle fueling regardless of how many calories you eat. In other words, reducing calories to lose weight without improving the composition of meals usually results in reduced health and performance. There is no need for this to occur; simply follow the general guidelines in this handout and, equally important, measure out some of the foods you eat. Use a Tbsp measuring device to determine the amount of peanut butter, salad dressing or any other fat source you add to your meals for at least one day (I personally do this almost every day). Use a ½ cup measuring device to put rice or pasta onto your plate or to put cereal into your bowl. Knowledge is power, and knowing how much fat and carbohydrate you are actually eating is critical to taking charge of your caloric intake.



## For a 600-Calorie meal, choose 1 food item in the specified amount from each column:

Unsaturated Fats	Moderate Protein	Whole Grain Starch	Fruit, Vegetable
(100-150 Cal)	(100-150 Cal)	100-250 Cal	(100-200 Cal)
18 small nuts (peanuts) 1-2 Tbsp nut butter • Seeds (¼ cup) flax, sunflower	<ul> <li>3 egg whites (optional 1 yolk)</li> <li>4 oz chicken, lean beef</li> <li>1 cup legumes, beans</li> <li>1 cup nonfat milk, yogurt or soy milk</li> <li>Fish (4 oz serving)</li> <li>Tofu (4 oz serving)</li> </ul>	<ul> <li>1-2 slices Bread</li> <li>1/2 - 3/4 cup of</li> <li>Pasta</li> <li>Rice</li> <li>Cereals</li> <li>1/2 - 1 cup of</li> <li>Oats</li> <li>Bran cereals</li> </ul>	<ul> <li>Fruit (50-100 Cal/piece)</li> <li>Vegetables (20-60 Cal/piece, lots of fiber &amp; nutrients!!)</li> <li>Salad (10 Cal/cup)</li> </ul>

**Grocery list:** If you don't buy it, it won't be at home and you therefore won't eat it. Pre-planning is key. Print this out, circle what you are going to buy, and take your list with you to the grocery store for a super healthy week.

Unsaturated Fats	Moderate Protein	Whole Grain Starch	Fruit, Vegetable
<ul> <li>Avocado</li> <li>Nuts: Walnuts, almonds Nut butr: PB, almnd, soy</li> <li>Seeds: Flax, pumpkin, sunflower</li> <li>Vegetable/Legume Oil: Olive, Canola, Safflwr, Soy, Sunflower, Corn</li> <li>Fish: Salmon, Sardines</li> <li>Tofu: Soy products</li> </ul>	<ul> <li>Eggs (limit yolk intake)</li> <li>nonfat milk nonfat plain yogurt low-fat cottage cheese</li> <li>soy milk (healthy fat)</li> <li>Tofu products (full fat)</li> <li>chicken (free range)</li> <li>turkey (don't eat skin)</li> <li>lean beef (top round)</li> <li>Venison, buffalo, ostrich</li> <li>legumes, beans no lard</li> <li>Fish: Salmon, sardines Tilapia, freshwater trout</li> <li>Shrimp, clam, oyster</li> <li>See FDA fish mercury sight for other low mercury marine sources</li> </ul>	All Whole Grain  Bread, bagels Cereal with bran Oatmeal Hot cereal w/bran Brown, Wild rice Pasta Some potato Yams Crackers  All Whole Grain with NO PARTIALLY- HYDROGENATED OILS	Dark fruit  Dark plums, grapes, berries  Citrus, Grpfrt  Apricot, cherry  Apple, Mango  Small bananas  Passion, Guava  Main focus of diet:  Bag spinach, beets  Kale, chard, mint Broccoli, parsley  Red Leaf, tomato  Red cabbage  Cauliflwr, carrot  Onion, garlic  Zucchini  Try new things



## Fueling and hydrating your body during exercise

## **Fuel type**

Glucose is the sugar your body burns as fuel. Any other sugar, such as fructose, sucrose or galactose, must be converted into glucose by the liver before it can be used by muscle; this occurs at a maximum rate of 1 Cal/min or 60 Cal/hr. You can ingest and get to muscle about 4 Cal/min or 240 Cal/hr of glucose; about 3 times the rate at which you can use non-glucose sugars. For this reason, use primarily glucose sources to fuel your workouts. Look at the label of what you are using. If it does not list maltodextrin (chains of glucose) or glucose itself as the primary ingredient, switch to another product. There are many maltodextrin products on the market, including e-Gel, Hammer Gel, Power Gel, Gu, Carboom, Sustained Energy, Complex Carbs, etc.

## **Fuel timing**

If your muscles are fully stocked with fuel they will not allow more fuel to come in. This means that during the first 30-60 min of exercise or competition, there is little benefit from ingesting calories unless this training is first thing in the morning and you have not had time for breakfast. Also, sugar ingestion uses up a lot of water in the body, so if you are dehydrated (such as in the of a marathon) any calories coming into your body can result in gastrointestinal distress. Since muscle can effectively absorb 4 Cal/min of glucose and 1 Cal/min fructose or sucrose, ramp up your fueling from zero to 100-200 Cal/hour over the first hour and maintain this throughout your marathon. It is critical that the fuel enter your body slowly and continuously every time you drink fluid and that you do not to exceed 250 Cal glucose or 300 Cal glucose and fructose per hour even when fully hydrated. This set of recommendations (fuel type and timing during training or competition) helps athletes more than any other advice.



## **Exercise hydration**

Perspiration rate averages 1-2 Liters/hr depending on running intensity and environmental conditions. However, every person perspires at a unique rate. Therefore, each athlete must measure the change in their body weight over a training session. Your body weight at any one time does not matter; it is the CHANGE in body weight that correlates to fluid losses. For every 2 lb (1 kg) that you lose on the scale over the course of a workout, you have perspired roughly 1 L of fluid. Any fluids you consumed during the training increased your body weight back towards normal by replacing some of your perspiration losses. Therefore, the total perspiration rate is your body weight change converted to a volume of fluid (2 lb or 1 kg = 1 Liter or Qt or 32 oz) added to the volume you drank during the training session. Divide by the number of hours you exercised to get the rate per hour. If the amount you drank during exercise is less than half of the total amount you perspired, you are replacing less than 50% of your losses you are reducing your performance significantly, particularly in the last 1-2 hours of your marathon. Determine your fluid losses before the race (during a training session) and practice replacing 50-100% of your losses. Less than this and you can induce muscle cramping, more than this and you can induce hyponatremia (the cause of 10% of all ER visits by marathoners during a competition).

## Electrolytes

There is less salt in a Liter of sweat than there is in a Liter of fluids in your body, so the salts in your body concentrate as you perspire. This is the reason that dehydration contributes to muscle cramping. If you replace less than half of your fluid losses (see "exercise hydration" above), do not use salt (electrolyte) supplementation during exercise; instead, replace your salt losses after exercise when you replace all your fluid losses. If you replace more than 50% of your perspiration losses, using some electrolyte supplementation is fine (see below). If you replace all or close to all of your fluid losses during exercise, then replace all of your electrolyte losses during exercise to avoid hyponatremia. Each Liter or quart (32 oz) of perspiration contains roughly 600-1200 mg of sodium and 100-200 mg potassium, depending primarily on fitness level. The average marathoner (i.e. a person with a significant level of fitness) will lose about 700-800 mg sodium/L perspiration, which corresponds to just over ¼ teaspoon of table salt, and ~100 mg of potassium. This amount of potassium loss is relatively small, so potassium supplementation is optional (100 mg/L perspiration), and magnesium supplementation is even less, so supplementation is not warranted. My recommendations for sodium supplementation during exercise are as follows:

If, DURING exercise you replace 50% or less of your fluid losses 75% of your fluid losses 100% of your fluid losses	use mg sodium/L fluids none 350-400 mg 700-800 mg	use teaspoons sodium/L fluids none just over 1/8 Tsp just over 1/4 Tsp
For a detailed perspective on your exerci	se hydration, fill out the fol	lowing for an exercise session
Date: Weight change from be Fluid volume corresponding to weight chan Fluid volume consumed during the exercise Total perspiration = Fluid volume consume % perspiration losses replaced during exerc Perspiration rate = Total perspiration / Tota Your notes, comments, or plans for future e	ge (2 lb or 1 kg = 1 Liter or 0 c:d plus fluid volume corresponses = Fluid volume consumed l length of time of exercise =	nding to wt change:



## **General Plan for Meal Timing and Hydration**

Total hydration: 8 cups (2 morning, 4-5 during day, 1-2 evening, none in the ½ hr before bed) Total meals/snacks: 3 small meals, 2-3 snacks (including pre-& post-exercise if exercising)

## Morning nutrition and preparation for your day

- Wake up: Drink 2 cups (16 oz) of water immediately, no more than 1 cup of this as coffee
- Critical: Eat breakfast within ½ hour of waking
- Make snack bag for mid morning and mid afternoon (nuts, whole-grain crackers, fresh or dried fruit)
- Take snack bag and either two 16 oz water bottles or one 1L water bottle for the day

## Lunch, dinner and hydration throughout your day

- Lunch and dinner at convenient times 2/3 the regular amount you usually eat unless your meals are already less than 600-700 Calories, have about 1/3 of your plate as vegetables (salad, etc).
- Optional: If reducing your lunch and dinner size means not eating all of a meal that you buy or are served, you can eat the remaining 1/3 of the lunch or dinner 2 hours after the respective meals as your snack and save your pre-prepared snack bag for the next day
- Drink the 1 L water throughout your day, completing it before you go home
- If dinner is more than 4-5 hours before bed, eat a small healthy snack 1-2 hours before bed
- Critical: If dinner is less than 3 hours before bed make is the smallest meal of the day and eat a snack 2 hours before dinner
- Drink 2 cups of water (for a total of 8 cups) in the last 5 hours of your day
- Don't drink water in the last 20-30 min before sleep so you can equilibrate your internal fluid volumes and go to the bathroom to urinate out any excess fluid intake prior to sleeping

## On days when your exercise training is low to moderate in intensity

- Eat a small healthy snack 30-60 min before and immediately after exercise
- Example snack: 150 Cal of whole grain bread with 50 Cal peanut butter, 1 small piece fruit
- Replace around ½ -1 Liter of water for each hour of exercise

## On days when your exercise training is intensive early in the morning

If your body can handle solid food eat foods you normally eat for breakfast but have two smaller feedings 1 hr apart. Otherwise: Blend ½-1 cup uncooked oats (125-250 Cal), 1 piece fruit (40-80 Cal), 1-1.5 Tbsp peanut butter (80-120 Cal) and ¾-1 cup nonfat milk (75-110 Cal). Use the lower amounts if you weigh closer to 120 lbs (320 Cal), the higher values if you weigh closer to 200 lbs (560 Cal). Consume ½ of this shake ½ hour before exercise and the other ½ within 10 or 15 minutes after exercise. This is a healthy way to rapidly fuel your body without the energy drop that comes 20-30 minutes after consuming the equivalent number of calories of sports drink or bars. For particularly hard workouts or for the actual marathon, add ¼ cup of pure maltodextrin (100 Calories) instead of ½ of the oats you would normally put into the shake. This provides your body a small amount of fuel fairly quickly, but digestion is slowed down by the healthy fiber, protein and fat in the shake (a benefit you do not get from the sports drinks and bars). Pure maltodextrin is in complex carbohydrate (chains of glucose molecules).

## The night before a competition

Eat a colorful salad with 1-2 Tbsp vegetable-or olive-oil based dressing, a starch source (whole grain bread, whole wheat pasta or brown rice), and a protein source containing healthy fat (tofu or salmon is the ideal). Split the dinner up into two portions. Eat half 1-2 hours before your regular dinner time and the other half 2 hours later. **Carb loading:** Double your carbohydrate intake for 1 day only before endurance competition! This process increases body fat stores. Since excess carbohydrate entering the bloodstream at any one time increases body fat, split your intake into 6 equally-sized meals instead of 3.