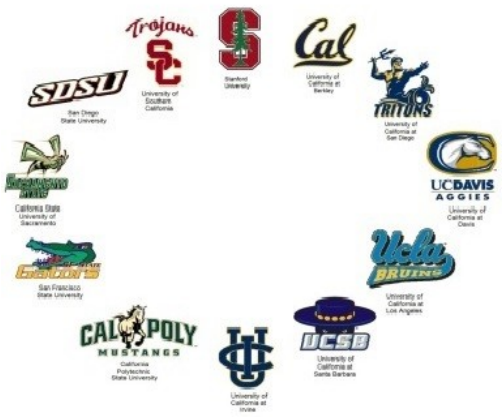

WCCTC Tri News

Bike to Run Transition tips:

Prior to the race know your bike in and run out locations and mark your transition spot with a special marker (handkerchief, etc.). Remember the marker you established for your self prior to the race and calmly look for you it as you enter T2. Knowing where all your exits and e trances are and where your tra-sition spot is will help you to stay relaxed and not only waist energy.

Pedal in your small chain ring at a higher cadence the last ¼ mile of the bike ride to help redi-stribute blood flow which will lessen that feel of running on "tree stumps". Once off your bike jog through the transition area to rack your bike this helps to make some initial biomechan-cal adaptations before you actu-ally start your run.

As you begin the run portion of the race that "stumpy" feeling can really be evident so don't force your pace. The first portion of the run will feel awkward for the first ½-1 mile but you will be able to settle in to your running goal pace early in the race.

These tips along with regular BRIck training, in which you complete Bike and Run workouts back to back, will make a big difference you making T2 as seamless as possible.

Over-training, Injury Prevention and Injury Diagnosis

Over-training:
Over-training is often the leading component for injury. Over-training is the result of changes in your training regime that your body cannot adapt to and can result in excessive fatigue and injury. Symptoms of over-training include: increased irritabil-ity, trouble sleeping, unusually poor concentration, constant fatigue (whole body and local muscle fatigue), inability of the body to recover from training runs or races, poor training or racing performances and injury. If any of these symptoms are ap-parent please notify your coach immediately so I can recommend training changes. If an injury does occur make recovery assessments with your coach and stay in the game mentally. Do not let injuries prevent you mentally from completing the training and the triathlon. Injuries should only be looked at as a physical limitation.

Injury Recognition:
1) Increased temperature - increased blood flow and blood vessel dilation
2) Increased redness - increased blood flow
3) Swelling - due to fluid build up or hemorrhaging
4) Pain – swelling placing pressure on nerve endings
5) Loss of Function

Injury Assessment:
Is there pain, tingling, numbness and/or stiffness?
Is the pain dull, or sharp, deep or superficial?
What was the mechanism of how the injury occurred?
Was the injury acute or chronic?
Was the injury associated with a pop or click?
Was the injury from a pre-existing condition?

Injury Prevention:
Warm-up/Cool Down, Being Flexible, Strength train, Avoid dramatic trainin changes in mileage, Replace worn shoes, Year around conditioning and Consistency, Environment and train on even surfaces, Let old injuries heal

Injury Care:
Rest - avoid activities that place stress on the injured area. Further stress may re-injury the area.
Ice -reduces swelling and inflammation, stabilizes the vascularization of the injured area and aids in supplying nutrients via blood to the injured area. Apply immedi-ately after injury for 5-10 minutes, remove and re-apply in 60 minutes. Repeat 2 – 5 times per day for the first 3 – 5 days after the injury. Do not ice just for sore or tired muscles
Compression - use an ace bandage or compression wrap aids in reducing swelling by increasing the fluid pressure and forcing the fluid back into the drainage systems of the body and should accompany icing.
Elevation - allows gravity to assist in the movement of fluid towards and into the drainage systems and should accompany icing and compression. Always elevate above the heart.

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Training Intensity

The intensity at which you training varies and it is necessary to monitor that intensity in order to optimize your chances for success. To monitor your intensity there are two methods available to you. First is the perceived exertion method in which you rate your perception of how hard you are exerting yourself during a run. The acronym for this is RPE (Rating of Perceived Exertion). The scale on which to base your perceptions ranges from 1 - 10. 0 being no perceived exertion and 10 being a very, very strong perception.

The scale can be broken down as follows:

0 - Nothing .5 - Very, very, easy 1 - Very, easy 2 - Easy 3 – Moderate 4 - Somewhat strong
5 - Strong 6 – 7 – Very Strong 8— 9 – Very, very, strong 10 - Maximal

As you have noticed the scale increases non-linearly. Most of your training will have a rating of 3. Training sessions designed to increase stamina will have a rating of 4, training sessions designed to increase economy will have a rating of 5-6, training sessions designed to increase stamina at threshold will have a rating of 7-8 and training sessions designed to increase speed will have a rating of 9-10. As everyone knows the harder you work the higher your heart rate gets. Thus if you have the means of checking your heart rate you can gauge how hard you are working and not have to rely on perception alone. Heart rate monitors are designed to gauge that effort.

Coaches advocate the use of both the RPE and heart rate monitors, which can cost as little as $45, because they are a good tool to regulate your effort.

Once you have a heart rate monitor it will be necessary to determine your training heart rate zones. The following formula (4) is the most widely used method to determine a running training heart rate zone, however there are many others and it can be as much as 10 beats off your actual training heart zones:

A. (220 - age) = Hear Rate Reserve (HRR)
B. ((HRR - Resting Heart rate (heart rate when you first wake up in the morning)) x %) + Resting Heart Rate = Training Heart Rate

As indicated in the formula, resting heart rate should be measured when you're first wake up, for one minute. It should be done over several mornings in which you do not wake up to an alarm clock or anything startling and after a few minutes in which you lie in bed and relax.

Typically your hear rate zone will be determined using a "%" between 65 and 95. These percentages will vary depending on which phase of training you are in and the day of the week.

For example: a women who is 35 years old, has a resting heart rate of 64 has a training heart rate zone of and will be training between 70 and 80 percent will have a training heart rate zone of 149 – 161:

At 70 %	at	80 %
220 - 35 = 185		220 - 35 = 185
185 - 64 = 121		185 - 64 = 121
121 x .7 = 85		121 x .8 = 97
85 + 64 = **149**		97 + 64 = **161**

This training heart rate zone becomes critical when you are trying to monitor your recovery and increase your economy. These training zones require you to train at specific heart rates to optimize the benefits you gain form those workouts. Note: the training heart rates are designed to establish a heart rate zone for running. To correlate these zones to biking simply subtract 6-8 for each figure or perform a specific biking HR assessment. Thus in the example above the biking heart zone would be 142-154.

WCCTC Tri News

Training Intensity - sample threshold run

The intensity at which you training for a threshold run based one the RPE scale mentioned previously, is RPE 7-8.

The scale can be broken down as follows:
0 - Nothing .5 - Very, very, easy 1 - Very, easy 2 - Easy 3 – Moderate 4 - Somewhat strong
5 - Strong 6 – 7 – Very Strong 8— 9 – Very, very, strong 10 - Maximal

The intensity at which you training for threshold workouts, based one the Heart Rate percentage mentioned previously, is 87-92%. For example: a women who is 35 years old, has a resting heart rate of 64 has a training heart rate zone of and will be training between 80 and 85 percent will have a tempo training heart rate zone of 161 – 167:

87 %	at	92 %
220 - 35 = 185		220 - 35 = 185
185 - 64 = 121		185 - 64 = 121
121 x .87 = 105		121 x .92= 111
105 + 64 = **169**		111 + 64 = **175**

Running Drills #1

High Knee Running / Quick Feet Drill

The aim of this drill is to increase leg turnover and improve your knee lift for when you need to pick up the pace a bit. Start off jogging slowly, when you hit the point where you want to start your drill, increase your stride rate so that you take as many steps as possible over about 20 meters or so with a high knee action. You should be bringing your legs up in front of you and maintaining a nice upright posture. The aim is not to move forward quickly but to maximize the number of steps that you take; remember this one is about leg turnover not stride length. You should feel this one in the front of you hips and thighs (hip flexors) as they will be working hard to lift your legs up in front of you. Do a few quad stretches after this one to loosen things up.

Technique Tip:
A good way to figure out how high your legs should be coming up is to do this drill a couple of times with your elbows at your side and your forearms at 90 degrees to your body, palms facing down. Your knees should come up and hit the palm of your hands, this is where you want your knees to come up to whenever you are doing the drill.

Freestyle Stroke Phases part 5 of 5

Up-Sweep Phase-

As the hand and upper arm move from the in-sweep phase, they push through the water so the thumb could brush the outside of the hip joint. The elbow flexes as the shoulder and upper back muscles bring the elbow out of the water, keeping the hand and wrist below the height of the elbow. The heel of the hand should break the surface of the water before the fingertips.

Recovery Phase-

Once the elbow breaks the surface of the water it continues to rise upward until the hand and wrist also break the surface. At this point the upper arm and hand pendulum forward in a relaxed manner, while the elbow remains high. This follow through sets you up for the entry phase.