WCCTC Tri News

Injury Prevention, Recognition and Care

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 irritability, 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 apparent 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 Prevention:

1. Warm-up/Cool Down
2. Being Flexible
3. Strength train
4. Avoid dramatic training changes in mileage
5. Replace worn shoes
6. Cross Train
7. Year round conditioning and consistency
8. Environment and training on even surfaces
9. Let old injuries completely heal

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 o nerve ending
5. Loss of Function

Injury Assessment:

1. Is there pain, tingling, numbness and/or stiffness?
2. Is the pain dull, or sharp, deep or superficial?
3. What was the mechanism of how the injury occurred?
4. Was the injury acute or chronic?
5. Was the injury associated with a pop or click?
6. Was the injury from a pre-existing condition?

Race Preparation

You now have come to the part of the training in which you have done all the preparation possible and the race drawing closer. Getting ready for a race, whether it is for competition or just for fun involves proper preparation. Above all the information you receive in this section the most helpful piece of advise I can give you is to HAVE FUN. In order to make this preparation more understandable I will present the information as though you were preparing for a race in four days, Day 4, where race day is Day 0.

Several weeks, even months, prior to the race it is important to determine what type of pace you would like to hold for the triathlon. For many individuals finishing the race is the main goal and for others a specific time is the goal.   You are encouraged to choose a reasonable goal time. By doing so you have created a more motivating setting for your self which will make the triathlon more enjoyable, challenging and memorable. Once you have an idea of your goal time, what times do I need to complete each of the race disciplines and what type of pacing does that involve.

To begin, use your pace for any shorter triathlons as a guideline to your race pacing. If you have not completed any triathlons use your training sessions as your guide.

Day 4:
Your last high intensity workout should be on or before day 4. This last hard workout will serve to deplete your muscle glycogen stores so to enhance your ability to carbohydrate load. Your mileage should also have already been tapering off. Your diet should remain consistent on this day with carbohydrate loading beginning on Day 3. My recommendations regarding the proportions of food intake are as follows: CHO = 55%, Protein = 20 % and Fat = 25%. Get a good nights sleep!!!!

Day 3:
Begin cutting back on the intensity of your training. There should no longer be any workouts harder than 90% in your schedule and your mileage should also have already been tapering off. This workout should be low mileage and at a 70-75% effort. At the same time you should begin

Common Injuries Pat 1 of 4

Shin Splints – Pain associated along the front portion of the lower leg (anterior and/or medial aspect of the tibia). Caused by excessive pounding through running and a predisposition to injury such as over pronation or flat feet. Treatment – RICE. In particular rest is a critical aspect to a quick recovery. If you can continue to train or when you resume training, train on a more cushioned surface, purchase new shoes if the old ones are worn, add more arch support to your existing or new shoes, and strengthen the calves, anterior tibialis muscles and calf support using a neoprene brace or ace bandage.

Ankle/Knee Sprains and/or Tears - Pain associated along the front, side, back or inside portion of the ankle or knee. Caused by a sudden impact, twist, jump, cut etc. at the ankle or knee. Treatment – RICE. It is critical that RICE procedures be followed immediately after injury. A physician is usually required for a more thorough examination to assess if tendons, ligaments, muscles and/or bone structures have been affected. Typical injuries include a tendon or meniscus tear. If a meniscus or anterior cruciate ligament tear occurs, a clicking or popping sound sometimes is associated with the tear. The knee may also give out when the subject squats down. Swelling is often associated with an anterior cruciate, ligament tear. Resuming activity should be done with caution and exercises that places the knee or ankle in an unstable position such as squats should be used with extreme caution. In addition, a neoprene ankle or knee support may be necessary once training resumes until strength has been regained in that area.
Low Back - Pain or numbness associated along the side, middle or inside portion of the lower back and down the back portion of the leg. Caused by long term static positioning that can occur while riding, a sudden impact, twist, jump, cut etc. or repetitive motion and/or incorrect lifting technique. Treatment – RICE. It is critical that RICE procedures be followed immediately after injury. Icing should continue 2-3 times a day 10 – 15 minutes for 2-3 days. A physician is usually required for a more thorough examination to assess if tendons, ligaments, muscles and/or bone structures have been affected. In addition, it is necessary to take extreme caution on exercise such as squats, military press, bench press, and lat pullover. Forced flexion of the spine, as in crunches, may also aggravate the injury. Any exercises that are considered should be ones in which the pelvis is stabilized.

Typical injuries include a tendon, or ligament tear, muscle pull, bulging or ruptured disc, and pinched nerves due to a muscle spasm and or bulging disc. If the injury is chronic and you continue to train reduce the intensity and volume of your routine, while continuing ice therapy. In addition, a low back support may be required until strength in the area is regained and a solid stretching routine is required.

Race Preparation continued

Day 3 continued:
carbohydrate loading.   Carbohydrate loading is a way to increase the amount of carbohydrates stored in the muscles to aid in enhancing performance during exercise and in typically done prior to a competition. A recommended regime for carbohydrate (CHO) loading includes the following: CHO = 60%, Protein = 20 % and Fat = 20%

This regime allows CHO stores to be built up over a 3-day period prior to competition, as the training is tapered down prior to competition. Carbohydrate loading just the night before and without tapering down the training regime will not maximize the benefits one receives from carbohydrate loading. Get a good nights sleep!!!!

Day 2:
Your training should be very easy (50%) and low mileage. A recommended regime for carbohydrate (CHO) loading includes the following: CHO = 65%, Protein = 15 % and Fat = 20%.

Day 1:
Your training should be very easy (65%) and low mileage(40% of normal) or you may not run at all. Follow what you may have normally done prior to any long training session. A recommended regime for carbohydrate (CHO) loading includes the following: CHO=70%, Protein =10% and Fat = 20%

If you have traveled to a new area and are incline to sight see on this day. Try to keep the walking and standing to a minimum. Having fresh legs for the triathlon is essential. Think positive throughout the day. If you get excited or nervous channel the nervous energy into positive self talk. With all the training you have participated in you are more than ready for this triathlon. Get a good nights sleep!!!!

As part of your travel preparation make a check off list of all the essentials needed for your trip. If you do not want to use this method for all your traveling essentials at least make it for the essentials you'll need for the race. Those essentials include:

1.   Training/racing running and cycling shoes (you may have a pair of training and racing shoes)
2.   3 pair of your favorite socks
3.   2 pair of your favorite used shorts
        (preferably shorts that can carry some type of CHO gel)
4.   1 pair of your favorite used tights (cold weather) and a towel
5.   Water bottle or fanny pack
6.   3 water bottles and colored handkerchief
7.   5-8 packs of a CHO gel or CHO powder to mix for a CHO drink. Food normally eaten in the evening and morning prior to AM hard workouts.
8.   Swim suit, swim cap, goggles, Super Slick or Glide, wet suit (if needed) and cap (if needed), bike, helmet, sun glasses (if desired), bike pump, bike repair items including tubes, cycling shorts and jersey (if needed for last raining session at race site), running and racing shoes, running socks, racing kit.
9.   Old running hat or visor and/or gloves (cold weather).
10.   A pair of old running sweats (bottom & top) if the weather is cold enough to require wearing sweats prior to the race to remain warm. It will be necessary to remove the sweats, hats, and gloves prior to racing and place those items at your bike in the transition area or in a numbered bag for transport. Thus if the sweats are not important to you, losing them will not be significant.
11   Running watch and/or heart rate monitor.
12   Get a good nights sleep. A lack of sleep can negatively effect your performance. This is particularly true if the sleeplessness came two days prior to racing. Thus it is important to get a restful sleep on this night. In addition, it is important to maintain good sleeping habits overall since the night prior to the race you may find it difficult to sleep from all the excitement.

2.) Butt Kickers

Butt Kickers have a very similar objective to the high knee running drill, to increase leg turnover. However, as you most probably have guessed from the name the emphasis is on the hamstrings and the recovery stage of your stride. The hamstrings are often overlooked by triathletes who have strong thighs from cycling so this one is good for getting a bit if balance back.

Once again begin by jogging slowly towards the spot where you want to start your drill and increase you stride rate, concentrating on getting you feet moving as quickly as you can and getting your lower leg to swing up behind you. Your heel should literally be hitting your butt. Continue on for about 20 metres.

This one you will feel in your hamstrings so show them some love and jog out of each repetition. Stretch gently if things are feeling a bit tight.

Technique Tip:

With this one your upper leg should remain reasonably still and you be aiming to bring your leg up to your butt, not the other way around. This is important as otherwise you will sag and not be able to maintain good upright body position.

Day 1 continued:

This day will be the day for package pick-up. The packages will include a race number, a designated colored swim cap, a T-shirt and/or what ever the give-away is and possibly other information and/or giveaways such as other race information and an energy bar.

The day also serves as means to prepare all the items needed for the race the following day. This includes pinning you race number on the appropriate side on your running top, knowing how to get at you CHO gel easily and having all your racing shoes, shorts, tops, etc out and ready to slip into in the morning.

Get a good Nights sleep!!