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CANBERRA BILBYS TRIATHLON CLUB NOVICE PROGRAM

EXERCISE RECOVERY & INJURY MANAGEMENT

Presented by Craig Wisdom
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- Outline:**
1. Recovery – benefits and techniques
 2. Over-training and consequences
 3. Troubleshooting injuries

1. Recovery

Adequate rest and recovery (R & R) following exercise allows for repair of the normal 'micro-damage' which occurs in exercised muscles and organs in the body, and adaptation of body systems which undergo exercise stress during activity. These adaptations are essential preparation for future work outs.

Improvements in fitness and performance occur during the R & R period **after** exercise, not during the exercise bout itself.

Optimal training benefits are achieved through effective R & R management.

Recovery Strategies for Optimal Improvements in Performance:

Essential

- Stretching
- Warm Down
- Adequate nutrition & fluid intake
- Sufficient rest **especially sleep**

Beneficial

- Massage
- Compression garments
- Hydrotherapy
- Supplements

2. Over-training

One description of over-training is an **excessive exercise volume without sufficient R & R**, therefore, the body is unable to be sufficiently restored before undertaking further exercise.

Exercise volume depends on

- DURATION of exercise
- INTENSITY of exercise
- FREQUENCY of exercise

Signs of over-training can include

- Poor sleep patterns
- a.m. heart rate >10 beats/minute above normal
- a.m. body weight reduced >3% below normal
- Persisting fatigue
- Reduced motivation
- Overuse injuries



3. Troubleshooting Injuries

- Post-exercise 'aches, pains and tightness', especially where the exercise has been novel or of a higher intensity than accustomed to, is known as **Delayed Onset Muscle Soreness – DOMS**.
DOMS is normal, usually does not require treatment, and generally eases within 4 or 5 days.
DOMS should not persist for longer than a week if training and R & R are well managed. If it does, there would be a high probability that the ongoing discomfort is the result of an injury, and assessment and treatment while restricting training would be advised.
- **Previous injuries** are the highest risk factor when determining the likelihood of future injuries. The implications of this are that any injury should be fully rehabilitated, and where feasible, over-compensated for, to reduce future injury risk.
- **Causes of injuries and training problems:**
 - Trauma e.g. fall; direct blow; muscle tear
 - Degeneration i.e. 'wear & tear' relating to previous injury, overuse or aging
 - Imbalances e.g. muscle tightness &/or weakness
 - Biomechanical problems e.g. leg length difference; feet over-pronation; poor technique
 - Over-training
- **When to stop training – Symptoms that should not be ignored!**
 - Muscle/Tendon pain – sharp; guarding or causing a limp; if minor - may warm up then returns/worse with cool down. If more severe, pain does not settle with warm up, worsens during exercise & persists with cool down.
 - Joint pain – occasionally sharp; catching; aching; giving way
 - Bone pain – usually deep ache; hard to localise; persisting after exercise stops; occasional night pain
 - Nerve symptoms – pins and needles; numbness;; shooting; "electric"; persistent abnormal muscle tightness
- **When & where to find help**

If symptoms persist after appropriate rest and recovery, seek advice from health professionals who deal with active, sporty people.....**and then follow their advice!!!!**

Aim to **fully restore**, or even improve, strength, ROM, co-ordination and function after any injury.

“DO YOUR REHAB.....to the end!!”

- **Common Triathlon-Related Injuries.**

Running

- Leg muscle strains/tears
- Ilio-tibial band (ITB) friction syndrome
- Patello-femoral pain syndrome (PFPS)
- Knee meniscus damage
- Achilles/patella tendinosis
- Plantar fasciitis- Lower back pain (LBP)
- Spinal nerve irritations
e.g. sciatica

Cycling

- Neck Pain
- Wrist pain
- LBP
- PFPS
- ITB friction syndrome

Swimming

- Rotator cuff tendinosis
- Sub-acromial impingement
e.g. bursitis
- LBP

Craig Wisdom and [Kingston Physiotherapy & Sports Injury Centre](#) have been associated with [Canberra Bilbys Triathlon Club](#) since 1999, including presenting information sessions to the annual Novice Program since inception.

In association with [Sophie Stanwell](#) of [EACTIVE NUTRITION - Kingston](#) all [Physiotherapy, Massage & Dietetics](#) consultation rates are [discounted by 15%](#) for Bilbys members. Mention you are a '[Bilby](#)' when making your initial enquiry.

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