

Over Training in the Young Soccer Player.

What is Over Training Syndrome?

Over training syndrome is a common cause of continual tiredness in soccer players. There are many reasons and causes for 'over training syndrome' and there is also a lot of variance in opinion between researchers as to the exact causes of over training syndrome (Buckner and Khan, 1999). Researchers now agree on the following definitions:

"Over training" is the general term for any short-term or long-term condition in which there is an imbalance between exercise and recovery resulting in fatigue.

"Over-reaching" follows the initiation of short-term over-training. The symptoms of over-reaching can be reversed with decreased training over a period of days.

"Over training syndrome" is a state of chronically depressed performance accompanied by characteristic symptoms. Recovery from the 'over training syndrome' may take weeks or months.

From Buckner and Khan (1999).



Young soccer players commonly suffer from 'over training syndrome', due to their physical make up, pressure from themselves, coaches and parents to perform, and the large amount of trainings and games available to them throughout the year.

How much is too much?

Coaches, parents and players must be aware of the individual variations that occur in the physical, physiological and psychological capacities of young soccer players. Therefore it is difficult for the sports injury professional to advise on the exact amount and intensity of any form of training (games, cross training, gym work etc) for individual soccer players.

There are a number of specific issues and guidelines regarding players that coaches and parents should take into consideration when being involved in the organization of young soccer players.

1. Coaching programs must be individually tailored to the player, taking into account a) Skill level, b) Enthusiasm, c) The presence of physical limitations (including injury).
2. All coaches should gain accreditation by attending a New Zealand Soccer (or similar) Coaching Courses.
3. Any player complaining of pain, tenderness or restriction of movement should be referred to a physiotherapist or sports physician for an accurate diagnosis. No further training should be encouraged until a diagnosis is made or the player is 'pain free'.
4. A structured warm-up and stretching should be encouraged before all games and training.
5. The coach should ensure that sunburn or dehydration does not occur.
6. Soccer players should wear suitable clothing, boots and shin pads.
7. All coaches should have basic first aid knowledge.
8. Equipment (balls, goals, the playing field or training venue) should all be maintained in a good, safe working condition.
9. Training should be conducted on a variety of surfaces.

From Buckner and Khan (1999).



The Development of Over Training Syndrome.

'Over training syndrome' develops when there is a failed adaptation to increasing training levels or sessions due to inadequate regeneration. A combination of too much training and not enough rest and recovery between games and training sessions results in short-term over training or over-reaching. Over-reaching is associated with poor performance. If, at this stage, the player rests and has time to regenerate and the symptoms usually disappear.

Some players react to impaired performance by increasing the intensity of their training. This leads to further impairment of performance, which may, in turn, result in the player increasing training further. A vicious cycle develops and leads to the 'over training syndrome'.

What are the symptoms?



The initial symptoms of the 'over training syndrome' are usually fatigue but in time other symptoms develop. There are a large number of symptoms associated with the 'over training syndrome', Chronic fatigue, Decreased performance, Inability to maintain training load, Prolonged recovery time after exercise, Muscle soreness, Headaches, Nausea, Loss of appetite, Weight loss, Thirst, Sleep disturbances, Loss of co-ordination, Decreased muscle strength, Overuse injuries, Apathy, Anxiety, Depression and Impaired concentration.



What can the player do?



The prevention of 'over training' requires the maintenance of the correct balance between training and recovery. The most important component of prevention is awareness of the problem, particularly amongst coaches and players. Education of coaches and players in the 'science' of training will lead to fewer soccer players developing the 'over training syndrome'. The planning of training sessions, allowing sufficient rest time within the training program, and the use of recovery techniques such as massage and hydrotherapy will help prevent the symptoms of 'over training' occurring.



Some players appear to be at an increased risk of developing the 'over training syndrome'. A young player new to soccer may over train, while a player who is achieving some initial success may be encouraged to train even harder. A soccer player may be led into over training by trying to train with better players or by playing in several teams or competitions.



The player who does not have a coach is far more likely to over train. The support of a sensible, experienced coach is the best means of maximising performance and avoiding over training.

What can the sports injury professional do?

Early recognition that a soccer player may be developing the 'over training syndrome' may enable the coach or a sports injury professional to take the immediate measures to avoid further progression. An early referral to a sports doctor from a coach is important. The coach can provide feedback on the player's condition and details of the past, present and intended training program.

In soccer player's who present with a relatively brief history of over training, complete rest is recommended in the short term and the player is advised to get as much sleep as possible over the next 48-72 hours. Often this can be done over a weekend.

If this brief period of rest does not reduce the player's fatigue, the player's recovery could take weeks or months to resolve. Treatment includes rest, attention to dietary and fluid intake and psychological support. However, the most important aspect of treating 'over training' syndrome is making the appropriate modifications to a player's training and game schedule. Usually a player will need to reduce their game and training schedules. The treatment of 'over training syndrome' varies from player to player depending on the significance of the problem and the level the player is competing at.

