

ASPECTS OF RECUPERATION, FATIGUE AND EXCESSIVE TRAINING

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Summary:

Most the information available about fatigue and excessive training are post being, that is after the sportsmen have been through the negative effects of excessive trainings. Little has been done in order to prevent overload and to avoid performance deterioration before important games effectively. The trainer can often remedy these facts planning the trainings so that work should be permanently alternated with recuperation.

Introduction

Coaches usually appreciate their work according to how well they train the players.

While many elements are often well made, most coaches neglect to pay due attention to recuperation methods and techniques, although the use of these techniques is as important as the practice.

The more quickly the players recover themselves after trainings and games, the more they can work and so the increased level of training may be translated by a more productive game. That's why those who are involved in trainings should change the mentality towards the importance of rest and recovery.

There can be used a lot of methods and techniques of recovery after trainings and games' fatigue. The more these techniques are used, the better the fatigue is controlled and so the excessive training negative effect is prevented.

Many players have a busy programme (games, travel and training).

Therefore, you should learn and you should use the methods which will diminish the players' effectiveness.

For a better training and for the players to be more efficient during the game, you should always be aware of the chain of events before and after the game:

- train as much as possible,
- relax or listen to music before each game in order to remove physical and mental fatigue,
- play different games,
- use recovery techniques to remove the fatigue after a game.

The use of adequate recovery techniques may increase the recovery speed and may decrease the fatigue level and the frequency of accidents. Note that when the players are tired, their coordination weakens and the concentration is less and of short duration and uncontrolled movements and inefficiency reach. Therefore, chances of injuries may increase. The process of recovery and rehabilitation is multi-dimensional, depending on the following factors:

- it has been shown that the player's age may affect the recovery speed. The older players (>25 years old) generally need longer recovery periods than their younger mates. Similarly, players who are below 18 years old will require longer periods of rest between periods of excessive effort and a series of games.

- very experienced players will recover quickly because they have a more rapid physiological adaptation to effort and a greater efficiency of movement.

- gender may affect the speed of recovery. Players tend to have a slower rate of recovery. This is due mainly because endocrine differences, particularly with the lower amount of testosterone, male hormones, which are in the body of women.

Recovery techniques should be used at certain intervals before, during and after the trainings or games in order to have a high physiological and psychological recovery in human body. Ignoring the need for proper regeneration may have negative influence on players' training and their ability to play.

Misuse of substances such as nicotine, caffeine, alcohol and abuse of sleeping pills should be avoided.

Recovery equipment and methods

Before using different restorative techniques the coach should work in close cooperation with doctors and the medical staff. This can reach a maximum of efficiency for players' regeneration through the application of certain techniques, but also avoid misconception.

Natural means of recovery:

- *Aerobic activity* – After tough trainings or difficult games / tournaments you should have 1 or 2 meetings of aerobic effort. Thus,

players will soon be helping to remove harmful substances from the body. These meetings will refill store energy faster than a full rest.

- *The stretching therapy* – Stretching should be used not only during the warm up training and after the force training, but also immediately after different games. A stretched muscle is more flexible than a strained muscle and makes the removal of harmful substances be faster. Dazzling light, continuous, alternate with massage, helps muscles to recover more quickly from minor injuries. It's a must for the coach to know that the increased muscle elasticity makes the muscles more resistant during accidents. Active extent for 15-20 minutes before the game will prepare the players to be able to start the game. This thing becomes more important for the hockey players, because they play in cold conditions– on the basis that they are inactive and immobile between line changes. Stretching is particularly important for tendons which are highly required during the hockey game. A tough and flexible tendon will be more resistant during traction and break effort.

- *Total rest* – The total or the passive rest is one of the main means of the rehabilitation of players' working capacity. A player who has the desire to succeed in hockey must rest 9 or 10 hours, especially during the night time. The hockey players shouldn't go to bed after 10 p.m.

Different methods may be used in order to have a relaxing sleep. Relaxing techniques, a massage or a hot bath before going to bed may help. The bedroom should be dark, noiseless and it must have pure air.

You may also take into consideration eye shields to prevent light entering in the eye. You should get up at the same hour every morning.

A good night sleep may be affected by:

- physical disturbances – anxiety, insomnia, arthritis, chronic pain, asthma and exercises to 3 hours before bedtime.
- physiological difficulties – nightmares, depression, stress, anxiety disturbances, impressive conversation, different fights, permanent stress.
- poor sleep environment – noise, too high or too low temperature, a too tough bed, snoring, etc
- inadequate sleeping habits – too much time spend reading or watching TV, sleeping during the daytime (more than 1 hour and after 4 p.m.), irregular timetable, etc.

During the trainings, as a coach, you should avoid to show your negative feelings and emotions, such as fear during the game, the lack of determination or of will. All these may influence the players. The same things may affect the players, too. If a player has such stressful emotions

will trigger the secretion of hormones that respond to stress. They may cause a variety of physiological problems which may inhibit growth and recovery of tissue, they may increase muscle tension, they may reduce the response to inflammation and they may affect neuromuscular coordination in time. Considering all these, the coach must ensure that players are not physically or mentally exhausted during demonstrations or first league matches.

When the players have games in foreign countries with different time zones (more than 3 hours), this thing may affect the cardiac rhythm. We can talk about discomfort (fatigue), the loss of appetite, fatigue during daytime, digestive disturbances or sleep disturbances.

Results and discussions

When your team travel long distances, it is recommended:

For short distances with few different time zones

- You should settle the sleeping and activity times in connection to the time zone.
- You should have the trainings and the games in the morning after West flights and in the afternoon after East flights.
- Dine at regular times after you have arrived
- Eat lightly before the flight. Have a rich protein breakfast and a poor protein dinner; the dinner should be carbohydrate rich.
- Avoid alcohol before, during and after the flight.
- After the flight get involved into a light social / physical activity.
- You should avoid food that may cause gas.

For long distances with different time zones

- You should arrive a day before for each time zone that you cross.
- For the flights that cross 10 time zones the West flights should be chosen.

In these cases you should arrive a week or two weeks before the first game. For the best adaptation the first 4-7 days of training should be of low intensity with an aerobic effort in natural environment. Try to synchronize partial sleep cycles and periods of activity and the dining time from that destination.

Allow a light physical and social activity.

- After you have arrived, keep regular sleep hours and regular dining hours from that destination.

- Have a rich protein breakfast and a poor protein dinner; the dinner should be carbohydrate rich in accordance with increased time zones.
- Avoid alcohol before, during and after the flight.
- You should avoid food that may cause gas.
- Using scheduled prescribed drugs should diminish symptoms of biological rhythm disorders caused by changing the time zone.

In order to cause the best physiological and psychological recovery of the human body there should be used certain recovery techniques at certain hours before, during or after the trainings and the games. If the need for adequate restoration is ignored negative influence may appear on the players during the training and may influence their ability to play.

Excessive use of substances such as nicotine, caffeine, alcohol inhibits melatonin production, excessive use of sleeping pills, etc.

Conclusions

There are a lot of factors which may influence the recovery speed or / and excessive trainings. These factors are almost always the result of an imbalance between demand, resistance and recovery. If the players keep training and / or playing in conditions of advanced fatigue, all these may cause them overload. An adequate planning is thus necessary as an efficient means to reach the positive conclusions, especially if the coach and the players use certain methods which could monitor the reactions towards the training.

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Titlu: Aspecte privind refacerea, oboseala și antrenamentul excesiv.

Cuvinte cheie: refacere, oboseală, antrenament excesiv.

Rezumat: Cele mai multe din informațiile disponibile despre oboseală și antrenament excesiv sunt post-fact, adică după ce sportivii au trecut prin efectele negative ale programelor de antrenament foarte solicitante. Puțin se face, totuși, pentru a se preveni suprasolicitarea și pentru a se evita

efectiv deteriorarea performanțelor înainte de jocurile importante. Deseori, antrenorul poate remedia aceasta prin planificarea programelor de antrenament astfel încât munca să fie permanent alternate de refacere.

Titre: Aspects de la récupération, la fatigue excessive et la formation.

Mots-clés: la récupération, la fatigue et la formation excessive.

Résumé: La plupart des informations disponibles sur la formation et la fatigue excessive sont poste étant, soit après que les sportifs ont été, par les effets négatifs des formations excessives. Peu a été fait afin d'éviter la surcharge et d'éviter une dégradation de performance avant les matchs importants de manière efficace. Le formateur peut souvent remédier à ces faits, la planification des formations afin que le travail doit être définitivement en alternance avec la récupération.