

Maximizing Recovery and Performance of your athletes during regional soccer camp

USYOUTHSOCCER.ORG



Why Recovery Strategies for Sports Performance?

- If there was one single factor that helped this team to perform to the level they did at Atlanta, it was the recovery program that was put in place and monitored throughout our 1996 program.” Barry Barnes Head Coach, Australian Men’s Basketball, 1996 Atlanta Olympic Report



What is RECOVERY?

- Often referred to as restoration and regeneration
 - Allows athletes to reach their full potential in relation to their training loads
 - Makes athletes Less likely to suffer from overtraining or burnout
- “ . . . the process the athlete goes through to return to a state of performance readiness” (Benardot, 1998, p.2)
- “Involves physical and mental restoration” (Maughan, 1998)

When do we use Recovery Strategies for Sports Performance?

- Usually to assist with rehabilitation or recuperation?
- We need to use recovery strategies constantly
 - Before, during, after every training session and every game.



What are the benefits of a good RECOVERY program?

- Accelerated adaptation and maximal performance
- Reduction of fatigue late in the game with the use of Training, nutritional, and tactical strategies (Reilly T 1997).



What are the roles of Recovery Strategies for Sports Performance?

- Two Primary Roles:
 - Monitoring the athletes adaptation to training and stress so that appropriate recovery strategies can be determined
 - Selection of specific recovery techniques and strategies to minimize any residual fatigue from training and competing

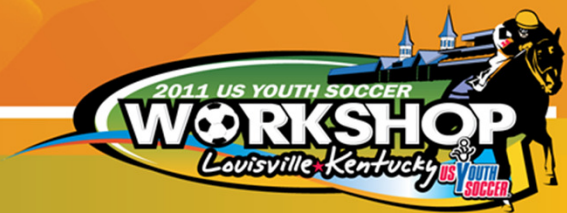
What is the goal of Recovery strategies?

- Coaches can help educate athletes to understand, plan and use recovery strategies with a view to athletes learning to manage this for themselves.
- Effective monitoring and recovery management will enable both the coach and athlete to train hard, perform better and more consistently, to reduce training injuries and illnesses, and to develop sound self management strategies.



COACHES AND MANAGERS

USYOUTHSOCCER.ORG



Are there factors to consider with different athletes (Bompa, 1994)

- Age – Less eccentric muscle stress with younger/smaller athletes
- Experience/Training Status -
- Sex – dietary habits
- Climate – effects of fluid loss



What are the different types of RECOVERY tools?

- Active rest: stretching
- Passive rest: 7-9 hours sleep (too much rest can slow down Central Nervous System)
- Light aerobic work (60% effort, more concentric than eccentric muscle actions)
- Pool sessions (all concentric)
- Psychological strategies (Relaxation)
- Nutrition
- Massage (Increasing blood flow without muscle activity)
- Hyperbaric oxygenation
 - Increase oxygen to fatigued muscle cells
- Contrast shower (Blood vessel pumping)
- Increase motivation (mental recovery)
- Hydrotherapy
 - Ice baths (Ischemic response)
 - Hot and Cold Contrast baths (Blood vessel pumping)

When are recovery strategies needed the most?

- When there is excessive , usually physical, overload on an athlete without adequate physical rest (USOC, 1998)
- High frequency of Competition
- Monotonous training
- > 3 hours of training per day
- > 30% increase in training load each week
- > 2 hard training days in succession
- > More than 1 game in less than 72 hours

What is the result of excessive Physical Overload?

- Damage to muscle
 - Contact injury or Delayed Onset Muscle Soreness caused by eccentric Muscle Activity
 - Eccentric Muscle activity
 - Muscle contraction (shortening) and muscles stretching (lengthening) simultaneously
 - Occurs with changes of direction while trying to slow the body down
 - Occurs with moderate to high intensity running
 - Does not occur with light pool or bike riding
 - Does not occur during stretching, rest, or relaxation techniques

What can Administrators do?

- Match administrators and tournament planners should consider the stressful consequences for players in periods of congested fixtures and alleviate the physiological strain as far as possible by **allowing 72 hours between competitive games** (Reilly 2005)



How much REST do we need between games?

- The present data suggests that a soccer match increases the levels of oxidative stress and muscle damage throughout a 72 hour period (Ascensao 2008, Ispirlidis 2008)
- These results clearly indicate the need of greater than 72 hours for sufficient recovery for elite soccer players between games (Ispirlidis 2008)

How much REST do we need between games?

- Conclusion – The recovery time between 2 matches, 72-96 hours, appears sufficient to maintain the level of physical performance tested but is not long enough to maintain a low injury rate. The present data highlight the need for player rotation and for improved recovery strategies to maintain a low injury rate among athletes during periods with congested match fixtures (Dupont 2010)

Does intermittent endurance fitness improve performance?

- Effects of intermittent endurance fitness on match performance in young male soccer players
- Intermittent endurance fitness positively affects physical match performance in male young soccer players (Castagna 2009)

Does the level of fatigue effect performance?

- Yes
- Our results demonstrated that junior soccer players may benefit from aerobic training to attenuate the decline in short passing ability caused by a short bout of intermittent activities . . . (Impellizzerie 2008)

Does performance level effect fatigue (Mohr 2003)?

- Top class soccer players performed more high intensity running during a game and are in better shape than lower class players.
- Fatigue occurred towards the end of matches as well as temporarily during the game regardless of performance level.
- Central Defenders covered a shorter distance in high intensity running regardless of performance level
- Central Defenders and attackers are in poorer shape then midfielders and outside full backs regardless of performance level
- Discussion – Pre-conditioning is very important to decreasing fatigue. Rotating player positions might help decrease the level of fatigue per player.

What is the physical effect of playing a man down?

- Following dismissal/Red Card, remaining players covered a greater total distance than normal, particularly in moderate intensity activities and had shorter recovery times between high-intensity efforts.
- Conclusion – tactical alterations may be necessary and/or players may need to adopt a pacing strategy to endure the remainder of a match
- Discussion – Lines of confrontation and restraint, players in each 1/3, playing between and within the lines, style and rhythm of play

Does Tactical improvement decrease physical demands in the game?

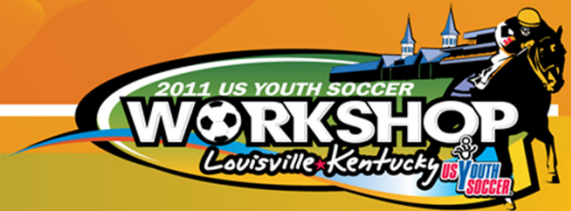
- Effects of video based perceptual training on pattern recognition and pattern prediction ability in elite field sport athletes and whether enhanced perceptual skills influenced the physiological demands of game based activities.
- Conclusion – **Video based perceptual training can be used effectively to enhance the decision making ability of field sport athletes; however, it has no effect on the physiological demands of game based activities (Gabbett 2008).**

What is the effect of Hot Weather?

- Conclusion – The study provides direct reduction in high intensity running toward the end of an elite game played in a hot environment. This fatigue could be associated with training status and hyperthermia/dehydration (Mohr 2010)
- Discussion – Increased rest and increased fluid intake must be considered during play in a hot environment

FLUIDS

USYOUTHSOCCER.ORG



How does fluid loss effect performance?

- If an athlete becomes excessively dehydrated with a 2% reduction in bodyweight from fluid loss, not only can this be dangerous and lead to overheating their aerobic capacity can be reduced by up to six percent

What is the typical amount of fluid that is lost in training and games?

- 14-16 year old males lost as much as 1.5L (48 ounces) of fluids/hour during soccer training
- National team women lost .5-9 pounds of fluid in a match setting
- 2005 University of Florida Women's Soccer team . . . Average player lost 5.5 pounds in the first preseason training session



How much is too much to lose?

- >1% of body weight = impaired performance
- >2% of body weight = safety risks
- >4% of body weight = hard to replace orally

- On days with multiple games or training sessions, athletes must be within 1% of their morning weight to be able to practice in the second session
- 160 pounds morning weight
- 154 pounds afternoon weight is 4%
- Would need to get weight up to 158.5 pounds

Urine?

- Evaluate for color



What should we drink?

- Sports drinks
 - 1.5L per 1kg weight loss
 - 1L = 33 ounces, 1Kg= 2.2 pounds
 - 22.5 ounces of fluid per pound lost
 - Increased sodium and potassium stimulates thirst
 - Sodium speeds fluid replacement and helps salt lost in sweat
 - When consuming plain water the body thinks it is over hydrated. This switches on kidneys to increase urine output (25-50% loss) and decreases thirst mechanisms.

How much fluid does an athlete need?

- 2-3 cups of fluid for every pound lost during exercise
- Weight management
 - Keep the same during competition
 - Failure to replaced fluids lost through exercise can compromise performance and safety

What is the effect of Glycerol added to sports drinks?

- Carbohydrate beverage versus a Carbohydrate-Glycerol Beverage
- Conclusion – Ingestion of a Carbohydrate Glycerol Beverage provided players with better hydration than Carbohydrates alone. However, if training sessions are short (<75 minutes), with adequate time for recovery, both drinks are sufficient for maintaining performance intensities during soccer- specific training (Siegler 2008)

What is glycerol?

- Glycerol can easily be purchased through local health food stores (there it is typically called “glycerin” rather than glycerol). Also, glycerol in small quantities (2 tablespoons as used in this study) is safe and rarely causes any major stomach or intestinal discomfort. Thus, drinking a glycerol supplemented sports drink a few hours before a match may lessen the risk of dehydration and could be beneficial to performance.

What should we not drink?

- Fruit Juices – Too high in sugar can slow absorption and cause stomach ache
- Soft drinks – Too high in sugar
 - Carbonation can upset stomach and create bloated feeling
- Caffeine - diuretic



What else is lost in training and games?

- 132-165 pound athlete after a hard training session may lose
 - Water 4.5 pounds
 - Sodium Chloride (Salt) 5g
 - Muscle Glycogen 500g
 - Liver Glycogen 50g
 - Intramuscular triglycerides (fat) 50-100g
 - Adipose Tissue Triglycerides 50g

Is chocolate milk better than sports drinks?

- Effects of chocolate milk consumption on markers of muscle recovery following soccer training: a randomized cross-over study
- Chocolate Milk versus a same calorie carbohydrate drink
- Conclusion – Post-exercise chocolate milk provided similar muscle recovery responses to the carbohydrate drink during 4 days of increased training duration (Gilson 2010)

How do we balance Carbohydrates and Fluid needs?

- If a hard game of soccer is played under warm conditions, there are conflicting demands for carbohydrates and for fluid replenishment, with both variables having a potential influence upon competitive performance.
- Try and have a Good mixed diet before and after competition with 8 grams of carbohydrates per kg of body mass or 3.6 grams per pound of body mass
- Water or dilute sports drinks during the game is probably best (Shephard 1990)

NUTRITION

USYOUTHSOCCER.ORG



What are the goals with Nutritional Recovery?

- Maintain hydration
- Maintain fuel with Carbohydrates
- Rebuild and prevent muscle breakdown with Protein



What are the Nutritional Priorities?

Within 30 minutes food is more rapidly absorbed

- Replace Energy/Carbohydrates
 - Fruits are more nutritious than sweets
- Replace protein to Minimize Muscle Breakdown
- Replace Fluids
- Replace Electrolytes



Are there different nutritional concerns between the boys and girls?

- As with male soccer players carbohydrate consumption is essential to support the demands of playing, training, facilitate recovery.
- Females may consume diets with a lower energy intake due to the desire to lose or maintain body weight
- In extreme cases dietary calcium and iron supplements may be useful precautionary measures in players who are known to be at risk of deficiencies in these areas
- Correct and sensitive nutritional counseling is essential for players and coaches (Brewer 1994)



When and How much should we eat?

- Carbohydrates and protein within 30 minutes after exercise
 - 1-1.5g of carbohydrates per kg of body weight 10-15 minutes after exercise (68-102g for a 150lb athlete)
 - 7-10g of carbohydrates per kg of body weight per 24 hours (476-680g for a 150lb athlete)
- 10-20 grams of protein
- Continue the above every 2 hours until your next complete meal

Why do we need carbohydrates?

- Adequate supplies of glycogen in the muscle and in the liver are needed to support the energy demands and promote recovery for the next training session



Why do we need carbohydrates?

- Soccer involves high intensity, intermittent exercise and places a heavy demand on the body's liver and muscle glycogen reserves.
- Diet should be rich in carbohydrates 55%
- Inclusion of carbohydrates in beverages consumed during and after a soccer match is likely to enhance performance and facilitate the recovery of liver and muscle glycogen reserves (Hargreaves 1994)



What has 50g of Carbohydrates (Hawley and Burke, 1998)?

- 600 to 850ml of a sports drink (20-28 ounces)
- 800 ml of a cordial (27 ounces) (Squash and Ribena)
- 60g of jelly beans
- 3 medium pieces of fruit
- Jam or Honey sandwich
- 3 muesli bars
- 70g chocolate bar
- 2 breakfast bars
- 3 rice cakes
- 2 crumpets with Vegimite
- Cup of vegetable soup with bread roll
- Toast and Banana
- 1 large muffin, fruit bun or scone
- 330g creamed rice

What has 50g of Carbohydrates (Hawley and Burke, 1998)?

- 1 large baked potato with salsa filling
- 1-2 large pancakes with maple syrup
- Flavored Milk
- Flavored Yoghurt
- Fruit Smoothies
- Sandwiches with meat, cheese chicken, or peanut butter
- Cereal with milk
- Sports Bars



What has 60 grams of carbohydrates?

- 32 ounce Gatorade
- 1 large fruit smoothie
- 1 bagel and 16 ounces of Gatorade
- Banana and 2 cereal bars
- 1 sports bar handful of grapes
- 2 slices of pizza
- 6" sub roll
- 20 ounces of orange juice and 2 slices of bread

What has 10 grams of protein?

- 1 sports bar
- ½ cups of nuts or 2 Table spoons of peanut butter
- 2 thin slices of deli meat
- 3 medium pieces of beef jerky
- 1 string of cheese
- 1 yogurt
- 1 chocolate milk
- 2 eggs
- 1 cup of beans



What is the effect of Carbohydrates with different glycemic indexes?

- The effect of high carbohydrate meals with different glycemic indices on recovery of performance during prolonged intermittent high-intensity shuttle running
- Conclusion – The Glycemic Index of the diet during a 22 hour recovery did not effect sprint or endurance performance the following day as long as the calories remained the same (Erith 2006)

What habits can inhibit Recovery?

- Delay in intake of carbohydrates after exercise
- Inadequate amount of carbohydrates
- High Intensity exercise during recovery

What habits can inhibit Recovery in the Evening?

- Caffeine (Coffee, tea, coke, chocolate) – might decrease sleep
- Nicotine - decrease oxygen uptake, sleep disturbance
- Alcohol - effects sleep, increased fatigue, dehydration
- High Protein Meals - not enough carbohydrates to maintain glycogen/energy levels
- Reduce thinking and worrying in bed – learn to switch off

What happens if you miss the Nutritional window?

- Low energy
- Poorly repaired muscles
- Dehydration
- Decreased Performance
- Poor mental clarity
- Increased risk of injury



What are some Recovery Strategies?

- Have proper fluids and foods available/ Post Game Snacks
- Build refueling into your teams daily routine (32 ounce Gatorade while stretching)
- Weight ins and weigh outs



The meal before the game?

- Meal 3-5 hours before start time
- Lots of carbohydrates, some protein, minimal fat
- At least 1 fruit or vegetable
- A salty item
- Lots of fluid no caffeine
- Skip greasy or fried foods, high sugary foods, spicy foods, entre salads, foods never eaten before, over or under eating



Snack before the game?

- Top off 1 hour before with 30 grams of carbohydrates
 - Large piece of fruit
 - ½-1 sports bar
 - ½ bagel
 - 3 large hard pretzels
 - ¾ cup dried cereal
 - 16-24 ounces of Gatorade
 - 1 cup of apple or grape juice



During the Game?

- During the game
- 8 ounces of fluid every 15 minutes
- 60 – 90 grams of carbohydrates per hour?
- Half time carbohydrates up if not a lot of fluid has been lost?
 - Carbohydrates gels, raw fruit, jello shots, graham cracker sticks, pretzels, honey

How often should we eat?

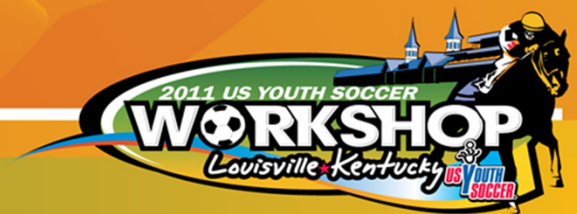
- 3 meals and 2 snacks
- Breakfast and 30 minutes after training is the most important periods

What about nutrition during games?

- They can top-up during the event with sports drinks and take other carbohydrate and protein foods. Might be dependent upon fluid loss.
- Small amounts of protein taken with carbohydrates before, during, and after hard training, are also recommended to help minimize muscle protein breakdown as a result of heavy work loads (tarnopolsky, 2000).

SUPPLEMENTS

USYOUTHSOCCER.ORG



Is Caffeine an effective supplement for soccer players?

- In conclusion – The pronounced increase in the white cell count in the group receiving caffeine appeared to be caused by greater muscle stress and consequently more intense endothelial and muscle cell injury. **The use of caffeine may augment the risk of muscle damage in athletes (Bassini Cameron 2007)**

How important is Iron?

- Low iron means low energy
- High iron foods
 - Beef
 - Dark chicken or turkey
 - Seafood
 - Green veggies
 - Healthy cereals
 - Dried fruits



Is Creatine an effective supplement for soccer players?

- Creatine supplementation and sprint performance in soccer players
- In conclusion – acute Creatine supplementation favorably affected repeated sprint performance and limited the decay in jumping ability after the intermittent endurance test in highly trained soccer players.
- Intermittent endurance performance was not affected by Creatine (Mujica 2009)

Does oxygen supplementation work?

- Effects of 100% oxygen on performance of professional soccer players
- **Conclusion – using 100% oxygen applied for short periods offers no advantage of recovery from exhaustive exercise or on subsequent exercise performance (Winter 1989)**



MESSAGE

USYOUTHSOCCER.ORG



What does massaging claim to do?

- Increase blood flow and lymphatic circulation to the muscles which enhances the flushing out of waste products caused by intensive exercises
- Assists the muscles to relax by affecting the nerve-muscle activity levels
- Reduces muscle soreness
- Improves flexibility
- Realigns scar tissue, maximizing its strength and flexibility
- Loosens up spasms, knots etc in the muscle



Is Massaging an effective method of RECOVERY (Monedero and Donne 2000)?

1. Passive recovery
2. Active Recovery 50% maximum VO₂
3. Massage
4. Combined Active Recovery and Massage

RESULT: Massaging was an effective method of maintaining performance level only if it was combine with activity recovery such as a very low load aerobic exercise.

Is Massaging an effective method of RECOVERY (Hemmings et al 2000, Tildius 1997)?

1. Massage
 2. No Massage
- RESULT: Not by itself

Post-competition Massage

- Possibly the best time for a massage for recovery
- Helps maintain flexibility and relieving any muscle spasms
- Firm but slow movements
- No scientific evidence that this assists recovery



HYDROTHERAPY

USYOUTHSOCCER.ORG



What does Hydrotherapy claim to do?

- Improves nutrition to muscle cells
- Helps eliminate metabolic wastes
- Decreases blood pressure
- Decreased tension
- Decreases soreness
- Decrease Creatine Kinase
 - (Chemical sign of Muscle damage)



Does Hydrotherapy help Recovery (Viitisaalo, 1995)?

- Researchers demonstrated that underwater massage (using the jets in a spa) following plyometrics training helped athletes to maintain leg-explosiveness on the following day. In contrast, passive rest after such training resulted in a significant reduction in leg power.
- **RESULT:** indicates that it might help leg explosiveness but muscular endurance was not determined

What does Cold Water Immersion claim to do?

- Shorten time of recovery – no evidence
- If too close to next competition may decrease performance
- Popular because they feel less pain
- Treatment time is typically 3-15 minutes
- Decreases – tissue temperature, activity of muscle spindles, muscle spasm, and pain
- DISCUSSION – May be counterproductive. Athletes have not recovered but feel better so may push more beyond their readiness.

Does Ice bath immersions assist
RECOVERY (O'Connor and Cowe, 2006;
Schniepp et al, 2003; Conmeau 2000;
Kinugasa 2009)?

- Ice bath immersion did not enhance recovery but caused a significant decrease in peak power and total work during a cycle sprint with one hour recovery between bouts
- RESULT: No

Does Cold water immersion work?

- Effects of cold water immersion on physical performance between successive matches in high performance junior male soccer players
- Cold water (50) versus thermo neutral water immersion (93)
- **Conclusion – immediate post match cold water immersion does not affect physical test performance or indices of muscle damage and inflammation but does reduce the perception of general fatigue and leg soreness between matches in tournaments (Roswell 2011)**

What is a Contrast Bath?

- Alternating between hot and cold
- 3 minutes in the spa - 104 degrees
- 30-60 seconds plunge in a pool - 52 degrees
- 3 cycles
- Not recommended if there is any illness, open wounds, or acute injury
- Variation: Hot and Cold shower 30 seconds each for 3 minutes

RECOVERY EXERCISES

USYOUTHSOCCER.ORG



What is Active Recovery / Cooling down?

- Low intensity exercises and stretching
- There is No evidence for stretching improving recovery.

How effective is dynamic stretching for RECOVERY (Miladi 2010)?

- Passive Recovery vs Active Recovery vs Dynamic Stretching
- Dynamic Stretching appeared as the best recovery mode to enhance performance and cardio-respiratory and lactate responses during intermittent supra-maximal cycling exercise.

What RECOVERY strategy works?

- Passive vs dry aerobic exercises vs water aerobic exercises vs electrical stimulation
- **Perception of recovery was the best with electrical stimulation and water exercises**
- No significant difference was found b/w recovery interventions for anaerobic performance, hormones, muscle pain, or subjective rating (questionnaire) (Tessitore 2007)

What RECOVERY strategy works?

- Active recovery versus passive recovery
- **The active recovery had no effects on the recovery pattern of performance or biochemical signs of fatigue (Anderson 2008)**

What RECOVERY strategy works?

- Effects of immediate post game recovery procedures on muscle soreness, power and flexibility levels over the next 48 hours
- Control group vs stretching vs pool walking vs hot/cold recovery. All groups did next day 25 minutes pool of exercises.
- Conclusion – recovery of muscle soreness, flexibility and power at 48 hour post game was not significantly enhanced by performing an immediate post game recovery beyond that achieved by performing only next day recovery training (Dawson 2005).

Does Low Level laser therapy work?

- Effects of 830nm low level laser therapy applied before high intensity exercises on skeletal muscle recovery in athletes
- Conclusion – **Low level laser therapy irradiation** before the Wingate test seemed to inhibit an expected post exercise increase in CK level and to accelerate post exercise lactate removal without affecting test performance. **This may be of benefit in accelerating post exercise recovery** (Leal Junior 2009).

Does Static Stretching effect Performance?

- Three days of Static Stretching within a warm up does not affect **repeated sprint ability** in youth soccer players
- 13 minutes aerobic warm up versus 10 minute aerobic warm up and 3 minute static stretching
- It is premature to recommend that static stretching could be included in in-season daily warm-up routine because **some movements such as jumps and single sprints are more sensitive to static stretching** (Wong 2010)

COMPRESSION GARMENTS

USYOUTHSOCCER.ORG

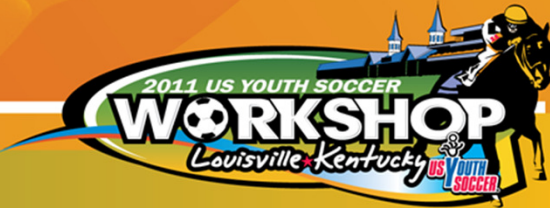


Do Compression Garments help RECOVERY (Davies et al, 2009)?

- Does Increase blood flow and venous return
- Did Decrease lactate, Creatine Kinase (CK), and perceived soreness
- Discussion: No effect on performance recovery. Because of elasticity and limitations in motions might decrease muscle breakdown as evidenced by the decrease in lactate, CK, and perceived soreness.

SLEEP

USYOUTHSOCCER.ORG



SLEEP

- Sleep is probably the most important form of recovery an athlete can have
- A good night's sleep of seven to nine hours provides invaluable adaptation time for adult individuals to adjust to the physical, neurological, immunological and emotional stressors that they experience during the day

SLEEP

- An adolescent experiencing heavy training and a growth spurt may need up to ten hours a night and athletes who are sick often need more sleep as a part of recuperation.

SLEEP

- However, too much sleep can be detrimental to performance as it can slow down the central nervous system and lead to increased levels of melatonin that can leave the athlete feeling slow and lethargic

Sleeping Tips

- 1 Practice relaxation techniques before going to bed (relaxing music, muscle relaxation, breathing exercises, visualization)
- 2 Lie down to sleep only when you are sleepy
- 3 If you don't fall asleep within 30 minutes after turning out the lights get up and do some relaxation work (see point 1)
- 4 If you wake up in the night and can't go back to sleep follow point 3
- 5 Get up at the same each day



MENTAL RECOVERY

USYOUTHSOCCER.ORG



What are Psychological Strategies?

- There are four main psychological strategies that are used to enhance recovery: debriefing, emotional recovery, mental toughness skills and relaxation techniques.



What is debriefing?

- Debriefing is one of the most useful ways to evaluate performance and provide emotional and psychological recovery post training or post match.
- A successful debriefing approach helps both the coach and the athlete evaluate performance objectively, identify what specific changes are needed and then set realistic goals for the next training session or match
- More performance than result oriented

What is emotional Recovery?

- Some of the simplest distracters to use during a tournament or competition are mood lifting activities.
- These can include watching an amusing video or comedy show on television reading an escapist or adventure novel, or going to a fun park, zoo or light entertainment center. A sense of humor and a feeling of comradery, or team support, are invaluable in times of emotional stress. For athletes in extended competitions away from home, and especially overseas, planning such activities as part of the tour is essential.



What is Mental Toughness Skills?

- **Positive self-talk** and developing positive body language are some of the effective skills that have been used by elite tennis athletes (Loehr, 1992).
- These techniques can be used within training and match situations as well as afterwards and coupled with biofeedback techniques for greater effect

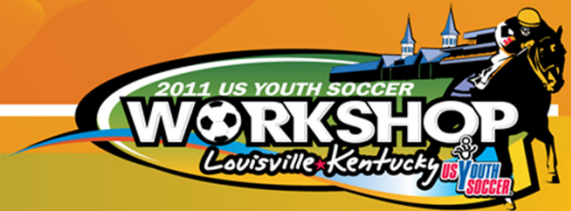


What are Relaxation Skills?

- An athlete needs to practice only one or two techniques on a regular basis for these to become effective tools to use to aid recovery.
- Some of the more common relaxation techniques include: meditation, progressive muscle relaxation, visualization, breathing exercises, music, and floatation.

MONITORS

USYOUTHSOCCER.ORG



How do we know if our recovery plan is insufficient?

- We can use an Early warning response sheet
 - 4 ticks in the right hand column
- We can use an Modified Recovery Cue Test
 - Athletes will mark on the line in regards to response
 - Low responses would indicate a better recovery program
 - High responses would indicate an appropriate recovery program
- The Coaches Recovery Checklist
- RestQ - Sport

Early Warning Response Sheet

	Better than normal	Normal	Worse than Normal
General Health			
General Fitness			
General Appetite			
Effort in Training			
Quality of Sleep			
Stamina			
Acceleration			
Feelings towards others			
Strength			
Flexibility			
Feeling irritable			
Time taken to recover between training			
Stiffness/soreness			
Minor internal aches/pains			
Frequency of arguments			
Feeling bored			
Time taken to recover during training			
Feeling happy and cheerful			
Enthusiasm for training			
Enthusiasm for playing matches			

Modified Recovery Cue Test

- 1 How much effort was required to complete my workout Yesterday?
Excessive _____ Hardly at all
- 2 How recovered did I feel prior to workouts Yesterday?
Not _____ Recharged
- 3 How successful was I at my rest and recovery activities Yesterday?
Not _____ Successful
- 4 How well did I recover physically Yesterday?
Did not _____ Excellent
- 5 How satisfied and relaxed was I as I fell asleep Yesterday?
Never _____ Always
- 6 How much fun did I have Yesterday?
None _____ Always
- 7 How convinced was I that I could achieve my goals during performance Yesterday?
Never _____ Always



The Coaches Recovery Checklist

- Direct Communication
- Body Language
- Performance
- Psychological
- Gut Feeling/Other



The Coaches Recovery Checklist

- Direct Communication - Athlete tells me he has:
 - Heavy legs
 - Doesn't feel good
 - Legs are sore
 - Feels tired

The Coaches Recovery Checklist

- Body Language
 - Facial expression and Color
 - Posture
 - Signs of Frustration

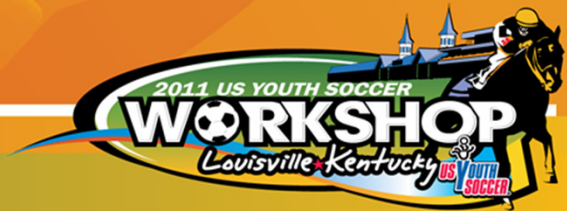


The Coaches Recovery Checklist

- Performance
 - Poor skill execution
 - Slow acceleration off the mark
 - Heavy feet
 - Poor or slow decision making/ response time

The Coaches Recovery Checklist

- Psychological
 - Low motivation
 - Low concentration
 - Low Aggressiveness
 - No self - confidence



The Coaches Recovery Checklist

- Gut feeling / other
 - Poor eating habits
 - Poor diet
 - Poor sleep patterns
 - External stresses

