### The Athlete's guide to



How not to tire, suffer from infections, underperform and burn out.





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# This book

### The key hazards for overtraining:

- not planning your training
- not sleeping
- not eating properly
- copying someone else's training programme
- ignoring the outside pressures of your life.
- Some common symptoms of overtraining
- Excelsior Training Philosophy

- Do you have difficulty in balancing work, exams, training and competition whilst also trying to have a social life?
- Do you feel that you are not trying hard enough to get the best results and that you need to do a bit more work than your competitors?
- Do you struggle to get a healthy diet and are relying on caffeine and sugary drinks and sweets to keep you going?
- Do you find it hard to get up in the morning and have to do extra long warm ups just to get into your session?

Watch out – you are on your way to overtraining. This book will help you avoid going the rest of the way. If you are aware of the 5 key hazards, then you will be sure to find the best way not to overtrain.

# your training...

Planning your training in advance for a day, week, month and a year does not take long and is the sign of a professional. Avoiding planning altogether leads to a higher risk of overtraining.

#### SOME PITFALLS OF NOT PLANNING YOUR TRAINING:

Doing the same training sessions week in week out - By continuing to do the same work your body will quickly adapt to the training demands. Adding more load, volume or increasing the intensity will result in short term improvements, but after 6-12 weeks the improvements will plateau. It is at that stage that you risk overtraining as the monotony both physically and mentally will add stress to your body.

- Monotonous training Avoiding variations in exercise and environments. Performing the same drills at sub maximal intensities for long periods of time.
- Avoiding rest days- Not allowing your body time to recover leads to overtraining. By not having rest days and instead working continuously you will prevent adaptation and instead create fatigue and a feeling of guilt when you have to take unscheduled rest days. This extra stress could result in you breaking down.
- Avoiding recovery weeks- A week of submaximal activity or alternate activities for example working on speed instead of strength every 4th week will refresh your body and your mind. Without recovery weeks, the strain begins to show and overtraining follows.

The type of person who is dedicated to their sport will at this stage try to do what has always worked for them - work even harder. This causes overtraining because the stress of not making improvements, plus the added workload is more likely to result in fatigue.



Click here to access helpful planning resources!

# PLANING...

Another way to overtrain is trying to improve all aspects of fitness at once. You might want to get bigger, stronger, faster and lose body fat - if you try and work on all of those things at once, then you will achieve none of them and risk overtraining. If you work on one fitness goal at a time for a microcycle of 1-2 weeks, with perhaps a minor goal then you will be able to design workouts that specialise in these areas and your body can adapt accordingly.

#### YOUR WEEK MIGHT LOOK LIKE THIS:

Sunday: Hard session, recovery

Monday: Light session plus technical training

Tuesday: 2 hard sessions, short in duration, recovery.

Wednesday: Rest

Thursday: Tactical rehearsal Friday: COMPETE, recovery Saturday: Rest and relaxation

#### **AND YOUR MONTH LIKE THIS:**

Week 1: 3 strength sessions @ 70% capacity, 1 speed session Week 2: 3 strength sessions @ 75% capacity, 1 speed session Week 3: 3 strength sessions @80% capacity, 1 speed session Week 4: 3 aerobic sessions @50% capacity, 3 flexibility sessions.

These overviews have rest in them, and also mean concentrating on specific areas with some progression and recovery built in. That is good if you don't want to get overtrained. The best thing you can do is coordinate your training and recovery efforts and record how you are feeling each day (see training log). That close monitoring of how you are feeling and ensuring that you plan training and recovery is likely to help you not to overtrain.



Sleep disturbances or partial sleep deprivation reduces the body's immunity to infection. Training hard without adequate sleep will put the body under further stress and then lead to infection. In the short term the effects of poor sleep are more mental than physical - irritability, lethargy, increased reaction time, impairment of creative thinking, less ability to perform unfamiliar tasks and learn new sporting skills.

One night's lack of sleep won't impair your physical performance- it will just reduce your motivation to train. However, over time the ability to perform physical work is also reduced. Trying to maintain the same levels of performance without adequate sleep leads to frustration and more stress.

Stress leads to the production of cortisol, a sign of hard training in healthy athletes. Sleeping well at night time inhibits the production of cortisol. Cortisol interferes with testosterone and growth hormone production, both of which are needed for tissue repair and rebuilding. So after hard training and the production of cortisol, sleep is necessary to inhibit its production and allow repair to take place.

Overtrained athletes show lower levels of cortisol over time as a result of adrenaline fatigue. So it is an important indicator in the long term of how you are coping with training.

Sleep and over training are a bit like the chicken and egg. Lack of sleep leads to less recovery, which can lead to overtraining. Poor rest, poor diet, poor lifestyle management and outside stress lead to less sleep. Hard training can disrupt sleep, which hinders recovery, which causes further sleep disruption. Lack of sleep is a critical part of the overtraining process.

#### FOR A GOOD NIGHT'S SLEEP...

Have regular sleeping and waking hours. Don't eat spicy foods in the evening. Don't drink more than 1 unit of alcohol. Don't watch TV, play computer games or do work either in bed or just before going to bed. Drink a moderate amount of fluids post training at a leisurely pace in the evening. Don't drink caffeine post training.

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PITFALLS FOR AN UNHEALTHY DIET:

- Not writing a shopping list waiting until you have cravings and relying on what is closest to hand and easiest to consume.
- Not carrying a full water bottle with you throughout the day. Waiting until you get light headed and dizzy and then reaching for a sugary drink that has "sport" or "power" in the title.
- Not cooking fresh, locally produced foods. Putting some "performance" powder into a shaker may be easy but do you really know what you are putting in your body?
- Not eating fruits, green vegetable, nuts and wholegrain cereals.

Rehydration and refuelling are key parts of the recovery process and will aid the body's natural recovery process. Eating chips or having a pint of beer after your match hinders the refuelling and rehydration process and contribute to symptoms of overtraining.

Having the correct food available before training, during training and after training means that you can work harder and maintain the intensity for longer. Having a snack within 15 minutes of finishing training and a meal within 2 hours will ensure more rapid recovery. This requires a little bit of planning each week and some forethought - not every athlete's strong points!

Incorporating some protein with a lot of carbohydrate into your post training snack and meal will allow glycogen stores to be replenished more quickly than not taking food, or just having carbohydrate alone.

Protein helps provide glutamine which aids in fighting infections. Chronic fatigue and overtraining have been found to be common in those athletes who have low plasma glutamine levels. Low levels of carbohydrate intake are linked to an increase in muscle soreness and risk of infection in athletes. Vitamins A, D, E and K are fat soluble and are essential to maintain health, eating a variety of natural sources that contain fat will help provide these vitamins – for example, avocado, olive oil, macadamia nuts and fish.

Risk of overtraining comes from having a diet low in carbohydrate and avoiding protein immediately post training.

## COPYING

someone else's training programme...

Running magazines publish training programmes that include things like "recovery runs". Now, for elite runners, who have a history of training, then a submaximal run may aid recovery, but it is unlikely. Instead, this adds more volume to your training without adding any benefit - ideal if you want to overtrain.

For people picking up the magazine and looking at starting training, then rest days will be crucial. The addiction to training and compulsion to get a "fix" of the same type of exercise every day is a key indicator of the type of person who will overtrain.

Similarly, junior athletes who copy a weight training programme from a magazine that features senior athletes' training programmes are likely to get hurt, or try to do too much. If you read that "Johnny Professional Athlete" does 3 training sessions a day including weightlifting, plyometrics and sled pulling and try to copy that, then you are likely to get injured.

Johnny is full time, has been training for years, has supervised coaching sessions and probably has an adequate recovery programme in place. Johnny will have progressed over years and his body will have adapted to the increased training gradually. Junior or recreational athletes have to work or study, perform unsupervised training sessions, and are new to a lot of exercises. Jumping in at the deep end without the intermediate steps is madness. You can not learn weightlifting from the internet or from a magazine.

If you read that Kenyan runners run 110 miles a week, or that Bulgarian weightlifters lift 3 times a day and try to emulate that, then you are missing the point. **The key to successful training is developing a programme for YOU.** This means working with your coach at developing you as an athlete and finding out how you respond to structured planned training and recovery. Although athletes from all sports and backgrounds are similar in many ways, they are also unique, as should be their training.

### 

the other pressures of your life...

One of the reasons athletes are unique is what happens in their life outside of sport. Pressures of life have an impact on your ability to train, and perhaps more importantly, your ability to recover from training. Stress is stress, your body responds to it no matter what the source is.

#### Physical Stress + Mental Stress + Emotional Stress = *BREAKDOWN*

This breakdown can be in the form of underperforming, the inability to concentrate, an increased susceptibility to infection, or difficulty in sleeping.

### COMMON SOURCES OF EXTERNAL STRESS FOR ATHLETES ARE: **Exams • Financial Problems • Travel• Relationships**

All of these use up your coping abilities, which leaves less energy to cope with the stress of the competitive sporting environment - selections, camps, competitions and the media. Increasing your training load at the same time as you are undergoing final exams at university, or just as you are splitting up from your boyfriend or girlfriend is asking for trouble.

If you can plan your training, making allowances for other stressors then this will help with recovery. But, the best way to recover is to have activities that help you mentally and emotionally recover too. Meditation, imagery, socialising, laughter and muscular relaxation are examples of things that can provide relief from stress.

#### Physical Fitness + Mental Fitness + Emotional Fitness = *PERFORMANCE*

Recognising that training addictions, not being able to switch off and the inability to interact with others on a normal level are a potential hindrance to your performance is a key part of looking after yourself as an athlete.

Life balance is a key component of becoming a successful athlete - training, recovery, fun and relaxation are all crucial to successful performance. Neglecting this balance will potentially lead to underperformance, overtraining and burnout.

#### **COMMON SYMPTOMS OF**



#### YOU MAY EXPERIENCE SOME OR ALL OF THESE:

- Easily fatigued
  either with excitability and inability to relax, or with depression and lethargy.
- Sleep disturbances
- Good performances at submaximal levels but unable to produce maximal efforts.
- Reduced appetite
- Weight loss
- Low resting heart rate
- Pale skin- dark circles under the eyes
- Decrease of maximal heart rate
- Increased reactions to normal eventsirritability, aggression or lack of effort.
- Muscle pains
  on day after workouts and increase of the pain with subsequent workouts.
- Increased resting blood pressure
- Loss of humour/ reluctance to socialise with friends.
- Increase in minor injuries and infections.

A lot of athletes will experience these symptoms regularly, especially after training camps or heavy competition periods. If this is part of the plan, then it is over reaching - a necessary part of training.

However, if these symptoms persist after 2 rest days, with adequate sleep, then it is likely that you are overtrained. If you have 3 - 4 rest days and symptoms are still present then you should see a doctor.



Our number one priority is to get the athlete on the pitch ready to play. This is the underlying objective of our training; conditioning is not the end goal. We look to achieve: quality of execution; safety; progression; variety, intensity and balance. In the correct training environment with good coaching you will develop a hard working and winning mentality. This will help develop an underlying confidence in your ability to produce results under pressure.

We do not believe there is a single magic exercise; we use proven training principles to develop the athlete. We avoid fads but keep an open mind to current research. There are no shortcuts to success, but we can help show you the way.

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