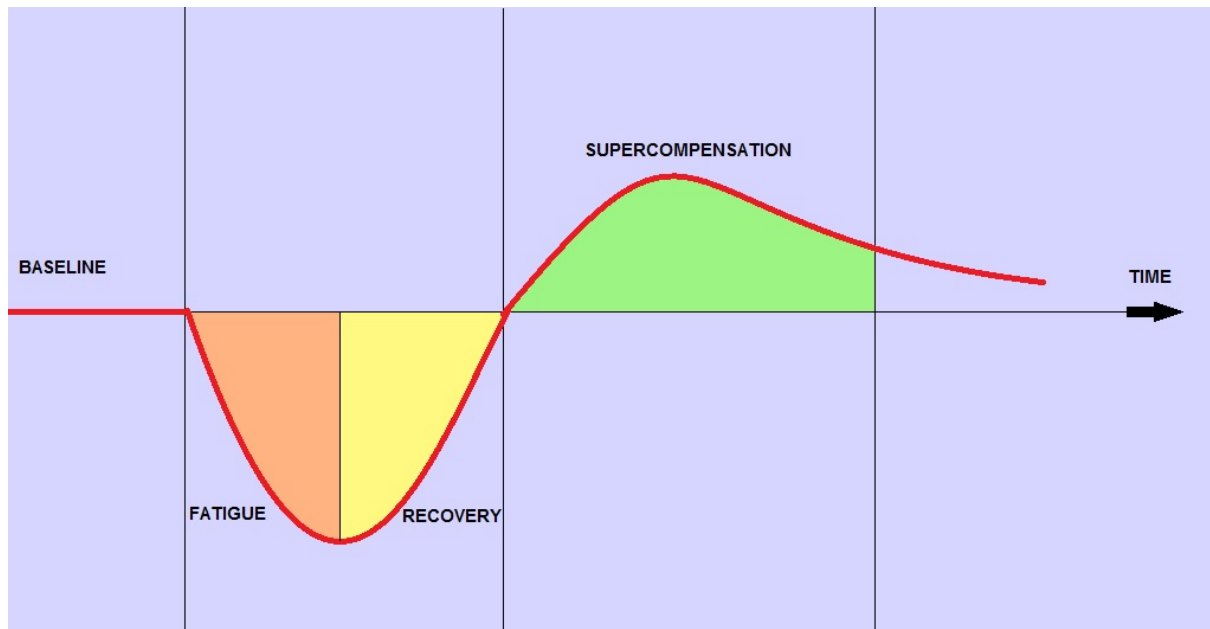


## Recovery: It's just as important as Training.

All too often coaches and athletes design and implement training programmes without any consideration given to recovery strategies and how these can benefit the athlete. Athletes who do not take their recovery into consideration will NEVER get the most out of their training.

### The Need for Recovery:

Training (of any form) is a stress to the body. When we apply this stress to the body and then allow a period of adaptation (recovery), we allow for an increase in subsequent performance, whether that be in the gym or on the playing field. This process is often known as the “supercompensation” theory of training. This is the essence of sports training and without that period of adaptation there is no performance improvement. Worse still, if we continue to apply stress without allowing for recovery we become weakened/fatigued, our immune system is down-regulated, and we are more likely to be injured during bouts of physical exertion.



## Methods of Recovery

### **Nutrition**

The first port of call for a recovery strategy is to have a good nutrition plan. The goal is to halt the breakdown of muscle (catabolism) and replenish glycogen stores as soon as soon as possible. A simple protein shake and some fruit, a carb/protein blend from a sports supplement company or some low fat milk are all great options here. Each choice will aid in protein synthesis, will start to restock glycogen stores and the fruit option will also provide some very useful micronutrients.

As stated already, when we train our immune system is down-regulated. To help bring restore it the more micronutrients we can consume the better; vitamins, minerals, anti-oxidants etc. So meals consisting of more protein, carbs and some healthy fat sources with as many veggies/fruits as possible is ideal. Also including things like turmeric and fresh ginger, which have anti-inflammatory benefits, and chilli and cumin which are potent anti-oxidants, is always a good idea.

### **SLEEP**



Sleep is easily one of the most important aspects of recovery yet it is also the most underappreciated and most ignored. Athletes and those who are active need a minimum of 8 hours a night. If our bodies are broken down in the gym or on the training pitch, it's during sleep that all the rebuilding occurs.

Here's just some of the negative effects of sleep loss which are backed by research:

- There is a consistent relationship between less hours of sleep and greater levels of body fat. This remains true even when controlling for demographic, lifestyle, work and health related factors.
- Missing out on sleep while dieting for fat loss at the same time has a negative effect on nutrient partitioning. This means you are more likely to lose muscle than fat.
- Lack of sleep increases hunger.
- A reduction in sleep also reduces cognitive function. Things which are vital to sporting performance e.g. decision making, are impaired.
- Reduced sleep in otherwise healthy people can cause insulin resistance, which itself then causes a whole host of other problems; increased inflammation, grogginess, high blood sugar, fat storage etc.
- Impaired or reduced sleep causes a rise in the hormone cortisol. Cortisol is responsible for a host of catabolic processes e.g. muscle breakdown. It is also known as the stress hormone. After training when cortisol levels are raised it is during sleep that cortisol is lowered and the rebuilding of tissue can begin with huge releases of growth hormone and testosterone.

So please, please, please! Get some sleep!

## Soft Tissue Work

Delayed onset muscle soreness (DOMS) is that painful, stiff feeling you have in your muscles for two days after a tough training session. Plenty of research has shown that doing some sort of soft tissue work immediately post session and through-out the following days has a reduction in an athlete's perception of muscle soreness. Whether you choose to pay for a massage or instead torture yourself on a foam roller and hardball, either way you'll end up feeling the benefit! Likewise stretching has been known to reduce muscle soreness as has whole body vibration.



Personally, I find foam rolling and stretching to be the most effective of the soft tissue modalities. Both are cheap and can be done anywhere so an athlete has no excuse!

## Water Therapy

Again many forms of water therapy have been shown to improve recovery after training and matches. As with the soft tissue modalities, the research is limited, as such, whatever the athlete prefers themselves is always the best option. Different forms of water therapy include; cold water immersion, contrast baths, hot water immersion. Of the three, cold water immersion (CMI) and contrast immersion have been shown to best reduce DOMS.

A good protocol for CMI is 5-15 minutes in total under a cold shower, in an ice bath or if you really hate yourself why not take a dip in the Irish Sea or Atlantic Ocean?!

For contrast immersion, a shower is the most practical method. Try working up to 15 minutes in bouts of a minute as cold as you can stand it followed by a minute of a comfortably hot temperature.

## Active Recovery

Active recovery is hugely beneficial and much underutilised. Active recovery entails doing some low intensity work for short to moderate durations immediately post exercise or in the following days. I like to use active recovery the day after a heavy training session or a match. It works by increasing blood flow, allowing nutrients to be brought to the muscles and also allowing metabolites to be shipped from the muscles to the liver where they can be processed. Active recovery also helps to lower the activity of the sympathetic nervous system and stimulates the parasympathetic nervous system in to action.

The sympathetic nervous system is also known as the “fight or flight” system. It’s responsible for many of the stimulant hormones such as adrenaline and it’s necessary to perform on match day and during those intense training sessions. However overreliance on the sympathetic nervous system can lead to sleeplessness, increased muscle tone and general anxiousness/uneasiness among other things. Stimulating the parasympathetic nervous system can help offset all of these issues, helping you sleep better, decrease muscle tone and feel more relaxed in general.

**It doesn’t have to be mind numbingly boring though.**

**If you’re not a fan of jogging**

**Easy cycling or some ball/technique work is a great option.**



# Socialising

Switching off and having other interests away from sport are vital. It doesn't matter if you like watching movies, reading, playing music or just sitting around chatting and eating with friends and family; make time to do other things you enjoy.

As we know sport is so much more than a physical pursuit. So making time develop and nurture your psycho-social side is important for building the appropriate mind-set and the cognitive ability to utilise all of those physical qualities you're improving in the gym and on the pitch.

If you dedicate time to enjoy other things in life you'll enjoy your sport more too. And after all, sport is all about enjoying the journey!