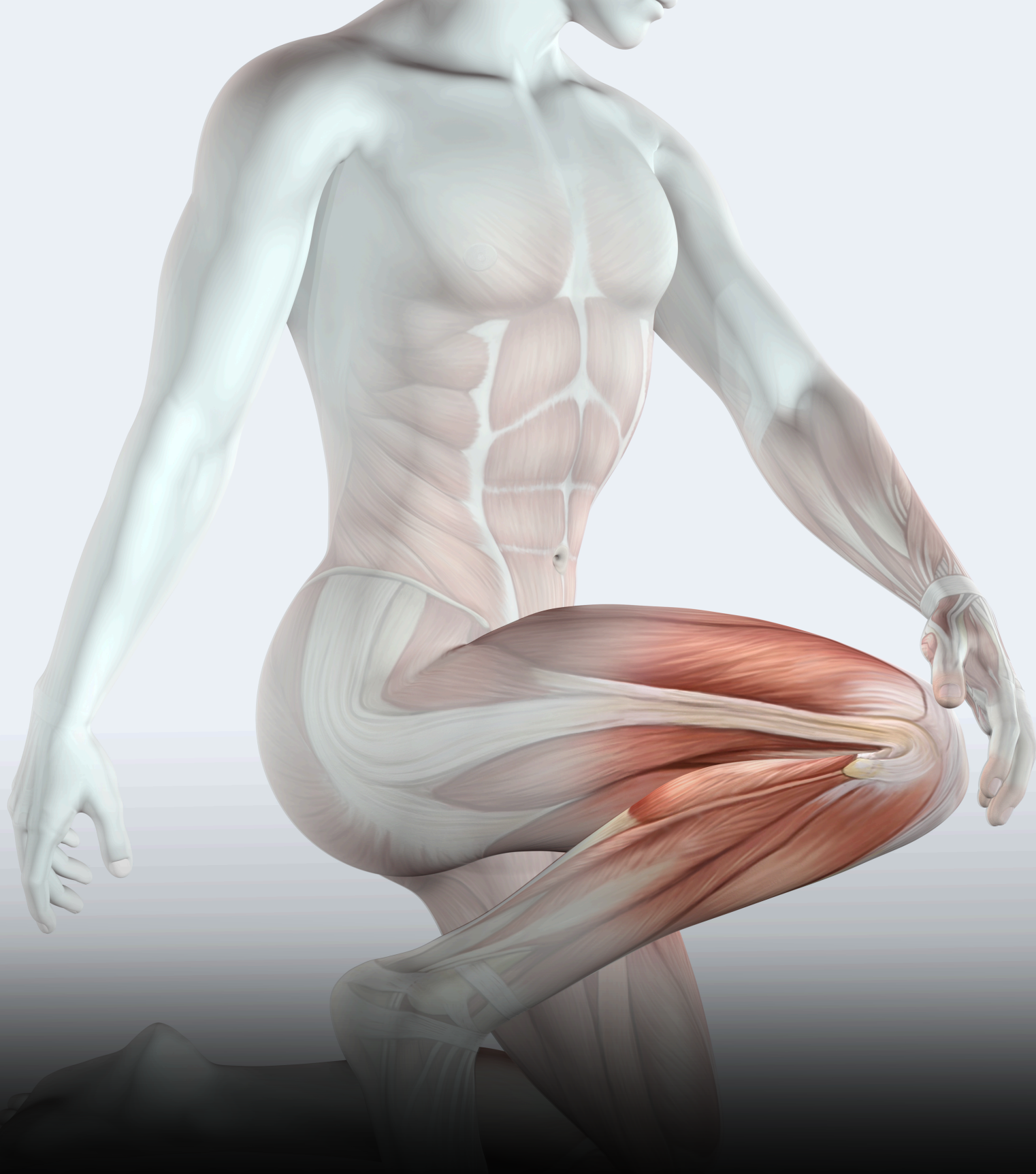




RECOVERY ROADMAP
HOW TO RECOVER FASTER
AND GET OPTIMAL RESULTS

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INTRODUCTION

How much your body changes and performance in the gym improves depends on how well and how quickly you can recover. The faster you recover, the sooner you can begin again with the next training session.

A fully recovered body is far more resilient. Plus, you don't tend to get injured as easily. In fact, it's during the time after your workout that the body improves its performance.

The important thing to understand is that you are systematically tiring your body during training. Bones, ligaments, muscles and tendons are being strained and your energy reserves are being depleted.

At first, this leads to decreased performance, but then your body starts working to restore your level of performance immediately after your workout. Recovery from exercise refers to the time period between the end of a bout of exercise and returning to a recovered state. It also refers to specific physiological processes or states occurring after exercise that are distinct from the physiology of either the exercising or the resting states. Given the necessary time, the body will use the recovery phase to raise its capabilities to a new level and build up longer lasting resources. If there is too little time for this process and the body cannot recover completely before the next training session, the body reacts with stagnation or decreased performance, the rest phase determines whether and how quickly the body can improve its performance. Or whether the sum total of the training sessions is simply too much for it.

In this day and age, stressors surround us. These include the job we have, where we live, the lifestyles we lead and even foods we consume. In a world where we are constantly looking to accomplish more in less time it's paramount that we examine how to maximize what little downtime we have in our daily lives. Specifically when it comes to recovery. Rest and recovery are two critical components of any successful training plan and in my opinion two of the most neglected. They are the least planned and under-utilised ways to enhance performance.

Being your best doesn't just mean training hard.

You need these recovery methods to stay on top of your game.

ARE YOU OVERTRAINING?

One of the biggest misconceptions to training and getting results is that doing more will elicit a faster response.

This couldn't be further from the truth. Less is more!!

If you want to stay injury free and have longevity within your training creating a stimulus with the least amount of volume will be the best approach. There are many issues surrounding overtraining and a lot of the information is misleading.

And because of this I have a lot of clients coming to me for coaching off the back of being on a training program that has had a ridiculous amount of volume without seeing any actual progression.

Apart from joint pain!

Some of the main issues caused by overtraining include:

- 1** ▶ Acute inflammation of connective tissues
- 2** ▶ Leading to things like tendonitis.
- 3** ▶ Overwhelming central nervous system fatigue.
- 4** ▶ Suppression of anabolic hormones under certain circumstances where calories are restricted.
- 5** ▶ Reduced recovery time for micro tears in muscle fibres.
- 6** ▶ Mental fatigue or brain fog and reduced focus.

WHAT HAPPENS WHEN YOU OVERTRAIN?

Your progression slows down, stalls and in some cases you will even regress! Not ideal is it! If you're going into training sessions pre fatigued you simply won't progress.

When overtraining leads to tendonitis it takes a long time for that inflammation to go down meaning that intensity in the gym will inevitably slow down and be sub optimal at best.

As the Central Nervous System (CNS) declines into a state of excess fatigue it becomes harder and harder to generate muscle recruitment. What were microscopic tears which would usually recover now grow into injuries when there is not enough rest or recovery time during the training week.



So you can see how overtraining can lead to poor performance, poor recovery and inevitably this will slow down progression. However, you do 100% need to be pushing your body in training. The aim is always to create a stimulus for your body to adapt to.

If you stay in your comfort zone all the time, then you are unlikely to be creating enough training stimulus at all. So the question of how do you know when to push, how often and how to measure intensity? If you train consistently and have a mixture of training modalities (for example you do strength training and cardio) per week its advisable to keep a log of how hard these sessions are to be able to balance out the hard training sessions.



SESSION RPE:

Using a subjective measure like RPE (rating of perceived exertion) is not a new thing, but is a massively underutilised tool.

The rpe score is a measure of perceived effort and is scored on a scale of 1-10. Using a scoring system to gauge the global fatigue in the session is a great way of logging your proximity to failure.

Session RPE is usually taken after a session where you score based on how close to the maximum the overall session was.

Scores of 5 and above are tough sessions with 9 being very close to max and 10 being so hard that you had to stop or were very close to stopping. But strength sessions are a bit harder to score globally, as the overall goal of strength training is different and each lift has its own target. In this situation using a reps in reserve (RIR) based scoring works well.

RIR BASED RPE SCORES:

Reps in reserve is like it sounds. At the end of your final working set, you score how many more reps you think you could have got at that weight. If you failed to complete the last rep or you know there was no way you could have got 1 more rep then it's a 0 RIR which is equivalent to a 10/10 RPE. Or if you finish and you think you could have got 3 more reps then it's a 3 RIR which is a 7/10 RPE. This measure of scoring is a great way to know whether you should increase the load the next week.

Training to failure all the time in strength training is not an efficient way to train long term.

If you are struggling at a certain weight, it's better to stay at that weight for 2-3 week and use the RIR score until it feels easier to achieve the lift. Let's say you are close failure on a lift, you can score it as a 9 or 10 then keep at that weight over the next few weeks until it feels like a 7 and at that point go up. This is a great way to log progression while staying at the same load. Plus is a much safer way to train.

WHAT IS REST AND RECOVERY?

Your body needs time to recovery in order to progress.
Training should always be about quality opposed to quantity!

And recovery should always be a big priority. You can only train as hard as you recover. You only get stronger, fitter, faster and leaner by recovering from the demands of a workout.

Lack of optimal nutrition and sleep make it almost impossible to recover from too many bouts of hard training. The focus should be training smart, not training hard!

If you overtrain, your muscle fibers tear and your body does not have enough time to heal the muscles before you go back into the gym and tear the fibers again. This is overtraining! If you overtrain your muscles will not grow in size or strength and can actually get weaker or smaller.

Don't Skip Rest Days.

There are times when you just need to rest.

Getting an early night and a good sleep can help to speed up the muscle repair process and leave you feeling refreshed the next day. With any demanding physical activity, I recommend making sure to schedule at least one day of complete rest every seven to 10 days to allow your body to recover and adapt to the work done on the previous training days.

Also looking at the most taxing sessions across a week and strategically placing a rest day where its most needed. A balanced combination of rest and recovery along with a structured macronutrient meal plan should be a fundamental part of any training plan.

You can still do light exercise on rest days while your muscles need time to recover after an intense workout, you can still do light exercise on recovery days, such as walking, swimming, or yoga.



TWO MUSCLE RECOVERY TECHNIQUES



There are basically two types of recovery: Passive and active.

PASSIVE

We rely solely on the body's own powers of recovery and hope that it can compensate for the training load as well as it can and restore its physical capabilities as quickly as possible.

ACTIVE

We can also positively influence the regeneration process. Active support means using a variety of measures to stimulate the body during the rest phase.

The Effect:

Your body requires far less time to recover. You can get back to training faster or increase the intensity of your workout, which in the end leads to enhanced performance in a shorter period of time.

Rest can be defined as a combination of sleep and time spent not training. Whereas recovery can be defined as actions and techniques implemented to maximise your body's repair. When we exercise our muscles are broken down and micro tears occur, by a process labelled as catabolism. When exercise stops the recovery process begins. However, without a prioritised post workout recovery regime, recovery will not occur efficiently. In order to understand how to recover properly, the definition must be recognized and the difference between rest and recovery established.

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OTHER FACTORS THAT PLAY A PART

In the sections below I've explained some of the main factors for helping your body recover faster.

NUTRITION

Nutrition is crucial for recovery in and out of the gym. Sure, you can out train a lousy diet for a short period of time, but I encourage you to look at the bigger picture. If your routine and rest are in order but your nutrition is sub par, expect diminished recovery and progress in your fitness activity of choice.

Protein, at 4 calories per gram, is the most discussed macronutrient in the fitness community. So I'll keep it simple.

Protein is made of up amino acids, which are used for protein synthesis and muscle recovery. If you are an athlete or highly active person, aim to eat 0.68 - 1 gram per pound or 1.5 - 2.2 grams per kilogram of bodyweight. Beyond 1 gram per pound of bodyweight, the law of diminishing returns kicks in with regards to body composition benefits, but there doesn't seem to be significant negative effects from protein consumption in the 1-2g/lb of bodyweight range. The excess protein is typically converted to glucose which the body uses for energy and protein provides the highest satiety of all three macronutrient.

Adequate fat intake, at 9 calories per gram is crucial for optimal hormonal production and prolonged low fat diets can decrease serum testosterone and 4-androstendione levels, which can decrease libido, mood and muscle recovery.

Many females might misinterpret my previous part thinking that they should eat low fat diets because testosterone will make them big and bulky. This couldn't be further from the truth.

Even when testosterone levels are optimized, assuming females are natural trainees, these levels will only reach a fraction of their male counterpart. Prolonged low fat diets can also negatively impact female trainees' menstrual cycles resulting in increased instances of irregular periods.

I recommend a minimum of 0.4 to 0.5 grams per pound of bodyweight to ensure proper hormonal function. Don't be scared of fat. It's crucial for recovery, mood, energy and libido.

Carbohydrates, at 4 calories per gram, are an exceptional source of short term energy and can help replenish glycogen stores after an intense workout.

Carbohydrates can increase endurance capacity, restore endurance capacity and improve net protein balance after resistance training. There is no clear-cut formula for determining how many carbohydrates are optimal for you. Intake should vary based on your age, gender, training history, activity level and goals.

I encourage you to pick a reasonable carbohydrate intake and adjust based on how your body responds and the biofeedback you receive. From a psychological standpoint it's much more enjoyable to start at a conservative intake and adjust upward rather than overshooting your needs and having to cut carbohydrates.

I personally find that eating the majority of my (starchy) carbohydrates pre / intra / post workout optimizes my energy levels throughout the day, my performance in the gym and my recovery capabilities from my gym sessions.

As I increase the volume in my programming I typically increase my carbohydrate intake while holding my fat and protein intake constant.

Alcohol, at 7 calories per gram, has been the focus of a large body of research and discussion in the fitness community regarding its role in a healthy diet.

Alcohol, in its purest form, carries no macronutrient, vitamins, or minerals, which often has it labelled as a source of empty calories.

HYDRATE

Drinking water is essential for both pre and post workout recovery, including muscle repair. But it's not the only way you should rehydrate, according to a 2004 study on rehydration and recovery after exercise the school of sport and exercise sciences at Loughborough university in the UK, found "...rehydration will only be achieved if a volume of fluid in excess of the sweat loss is ingested together with sufficient electrolytes."

Electrolytes include minerals like magnesium, potassium, calcium and sodium, and are found in most foods. These minerals are important for your nervous system, and they also get used up during muscle contraction.

CAFFEINE

Although caffeine can increase short term alertness, anaerobic running capacity and power output in healthy individuals, it can also increase blood pressure, heart rate and cortisol (re: stress hormone) levels.

We all know the guy or gal that can drink a pot of coffee or pop 3 caffeine pills, workout and then fall asleep an hour later.

For most of us mere mortals, concentrate your caffeine intake prior to physical activity and preferably consume your last caffeinated product 6 hours prior to bedtime. I advocate at 2pm curfew. This will help to maximize the performance enhancing benefits of caffeine and minimize the side effects such as increased tolerance and sleeplessness.

I encourage you to start conservatively with caffeine quantity and timing, adjusting based on your individual response and sensitivity to caffeine.

SLEEP

Try to avoid looking at a digital screen 1-2 hours prior to bedtime. Artificial light interferes with your body's natural circadian rhythm and melatonin release.

Of course, the easiest and most effective method of helping us recover faster is sleep. Proper sleep hygiene is paramount for muscular recovery, memory recall, and improving short-term alertness. All of the training stimuli are processed while our body sleeps. Minor tissue damage is repaired, muscles are developed and our whole body and mind are restored.

True to the motto:

"Your muscles grow and repair while you sleep." Depending on the intensity of your workout, you should get between 6-8 hours of sleep per night.

Our body's reaction to a lack of sleep in different ways. This could include a reduction in metabolism, slower recovery, Irritability, a weakening of the immune system and uncontrollable hunger attacks.





Crookes
Nutrition & Fitness