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PRACTICAL GUIDE TO **RECOVERY**

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INTRODUCTION

To understand why we need to recover, it is first important to understand what we are recovering from. Exercise and the stress involved with sporting competition is varied and can come in many forms.

Having an understanding of the contributing factors that cause fatigue can help guide targeted recovery strategies. There is never a one size fits all approach. As this e-book will demonstrate, there are many different applications and options when it comes to selecting the right type of recovery to undertake. It is important that every athlete takes the time to try different approaches, so that they are able to identify the routine that works best for them. What works for you will not necessarily be the best option for someone else.

WHAT YOU NEED TO KNOW

01

RECOVERY IS A KEY DRIVER OF ADAPTATION TO EXERCISE.

If you don't recover adequately, your fitness won't improve.

02

THERE ARE MANY COMMON RECOVERY TECHNIQUES USED BY ATHLETES.

Recovery techniques include active recovery, sleep, self-massage and nutritional practices.

03

IT IS IMPORTANT TO USE WHAT WORKS BEST FOR YOU.

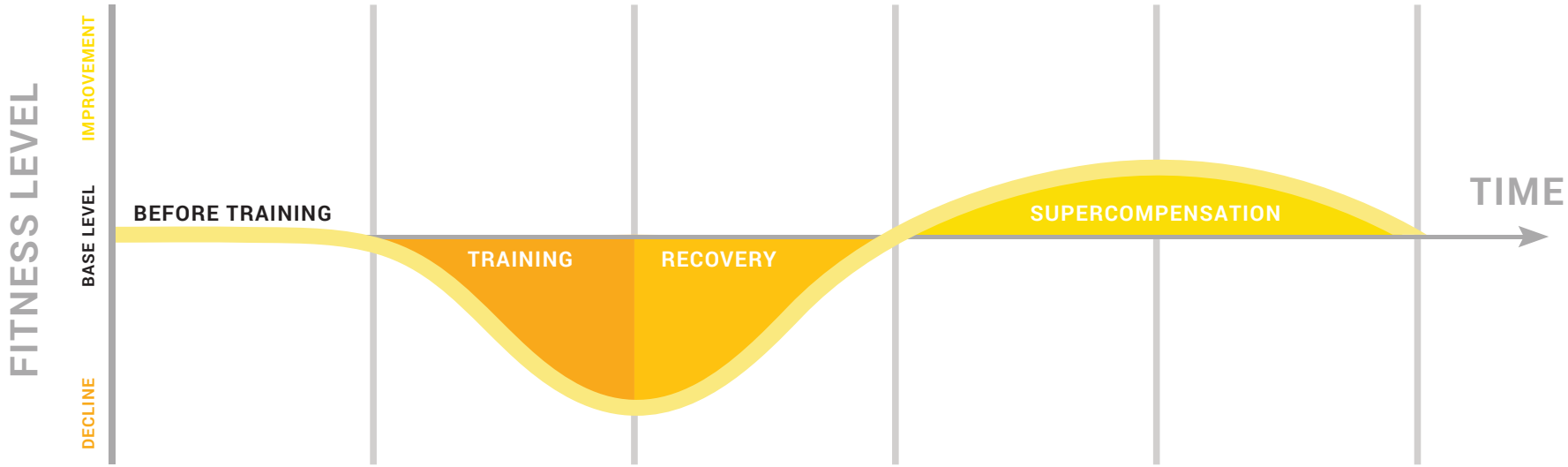
Conflicting scientific evidence exists across a range of recovery techniques.

PERFORMANCE FACTORS

Below are some of the many factors that may affect athletic performance.

TRAINING & COMPETITION	Training Volume Training Duration Training Intensity Type of Exercise Training Frequency
PSYCHOLOGICAL STRESS	Stress Mood Fatigue
ENVIRONMENT	Weather conditions Altitude
LIFESTYLE	Diet Sleep Social Life Work School
HEALTH STATUS	Injury Illness Soreness

PHYSIOLOGICAL BENEFITS



Improvements in physical capacity and performance do not actually occur DURING exercise, improvement comes whilst you are recovering AFTER exercise.

If an athlete undertakes a fatiguing bout of exercise (eg. a pre-season training session or a significant block of training), their theoretical performance level or fitness will decline due to increased fatigue.

It is only once the athlete commences the recovery process (and fatigue reduces) that the performance benefits are realised.

This process is termed as 'super compensation', the above graph demonstrates this theorical process.

It is important for an athlete to prioritise recovery in the exact same way that they would prioritise training. It would be counter productive to train hard all the time with little to no recovery time factored in to the weekly schedule.

PSYCHOLOGICAL BENEFITS

Athletes train to withstand the physical rigours of competition, and as a result, they put a lot of time and energy into their training. With that comes the expectation to recover physically, but often athletes will neglect the psychological element of recovery.

Match days for athletes encompass more than just the competition itself. The night before, the morning of, and directly after a match all demand large amounts of mental capacity.

Do not take mental recovery for granted, there is a large body of scientific evidence supporting the need to undertake recovery specific to psychological load. Competition and training can be very emotionally taxing.

Take the time to ‘decompress’.

As a starting point, athletes should consider the following methods to aid in mental decompression following a prolonged period of heightened awareness and stress: Minimise time spent on mobile devices in particular on social media and spend time undertaking recovery methods that promote mental relaxation such as reading or meditation.

RECOVERY MODALITIES

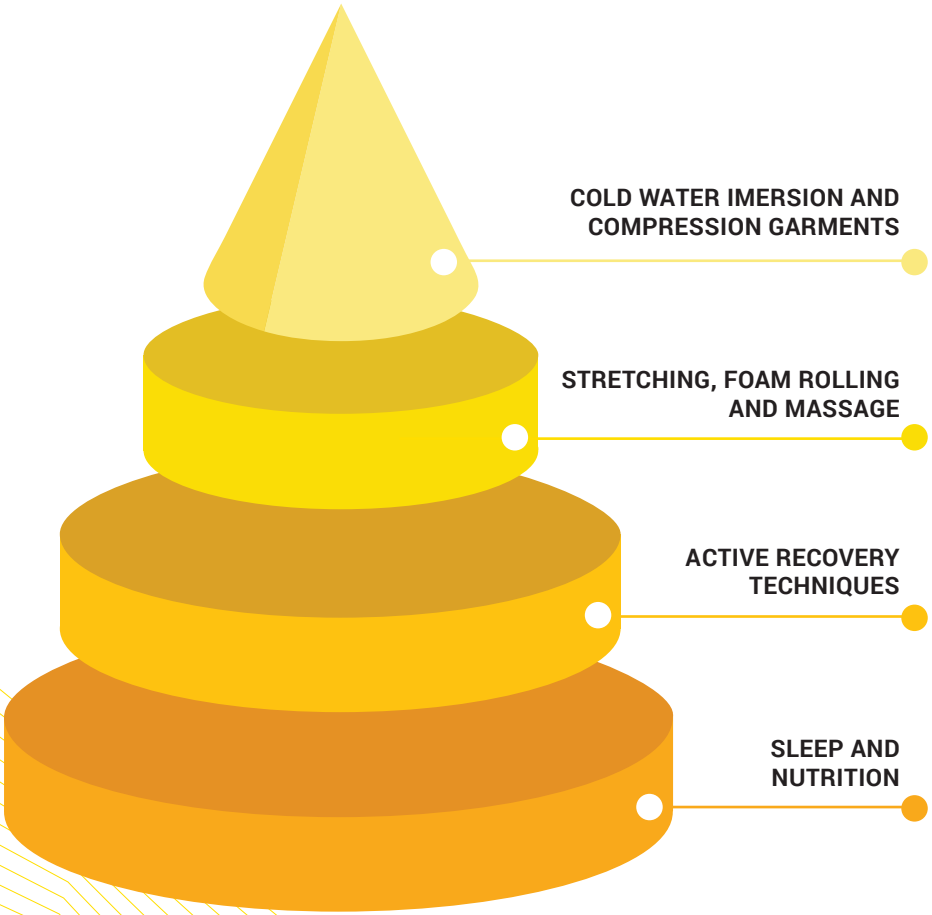
This section will detail what recovery modalities are the most important to consider along with specific protocols associated with each method.

With the information provided, you will be able to implement or experiment and find the structure that works best for you. These recommendations are by no means hard and fast rules to follow, use them as a guide and then change them as needed from there.

It is important to consider the individual variability that comes with recovery and what works well for one athlete may not necessarily work well for another.

**This guide does not include specific nutritional recommendations or advice. Contact a qualified professional to provide those guidelines for you.*

SELECTING MODALITY



Elements closer to the bottom of the pyramid should be your recovery priorities. These are your 'big rocks', they will provide you with the most value and ensure that you are giving yourself every opportunity to appropriately recover.

If you neglect to undertake elements relating to recovery such as adequate sleep and eating food high in nutritional value, other methods you choose to employ may have minimal effect. Choose wisely and prioritise accordingly.

Benefits of appropriate recovery modalities and prescription:

- Promotes blood flow and facilitates the transport of oxygen around the body.

- Stimulates the Central Nervous System (CNS).

- Allows for resynthesis of protein/hormones integral to tissue repair.

- Decreases acute inflammation, this can be beneficial during heavy competition phases when the aim is to recover as quickly as possible.

TYPE	APPROPRIATE PRESCIPTION	OVERVIEW
Cold Water Immersion	2x5min Temp @ 9-12°C	Water temperatures of <11°C for short periods of time have been shown to decrease levels of muscle soreness. While the mechanism is largely unknown, it appears that a reduction in acute inflammation is the main driver for the benefits of cold water immersion.
Active Recovery	3x6x60m 20min Sub-Max Aerobic Activity	Active recovery can be undertaken in many forms. Typically we are looking to undertake some form of aerobic exercise (intensity 50-60%) for 20 minutes. Active recovery promotes blood flow around the body, facilitating the transport of oxygen and in turn aiding in the restoration of damaged tissue.
Stretching	15-20min	Stretching promotes blood flow around the body and elevates athlete your heart rate, in turn this facilitates the transport of oxygen around the body.
Compression Garments	24hrs Post	There is a growing body of evidence that wearing compression garments (lower body) for up to 24h post exercise may aid in decreasing muscle soreness. The working theory is that the compression aids in decreasing acute inflammation and thus muscle soreness.
Massage	15min of Self-Massage	Massage promotes blood flow around the body, facilitating the transport of oxygen and in turn aiding in the restoration of damaged tissue.
Sleep	8-10hrs of Quality Sleep Every Night	Ensure your bedroom is pitch black, avoid using your phone or laptop before bed and ensure your bedroom is cool.

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STOP GUESSING.
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