

# AIM HIGH

*Improve Your Netball Performance*



## YOUR COMPLETE GUIDE TO NETBALL RECOVERY

HOW TO IMPROVE YOUR PERFORMANCE

**WITHOUT....** EXTRA TRAINING



[netballstuff.net](http://netballstuff.net)

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# HOW TO IMPROVE YOUR NETBALL PERFORMANCE WITHOUT ADDING AN EXTRA TRAINING SESSION....

**INCLUDING A RECOVERY  
SESSION INTO  
YOUR ATHLETES TRAINING  
REGIME IS ESSENTIAL FOR  
IMPROVING SPORTS  
PERFORMANCE AND  
REDUCING THE RISK OF  
INJURY AND BURNOUT!**



**START**



**YOUR**



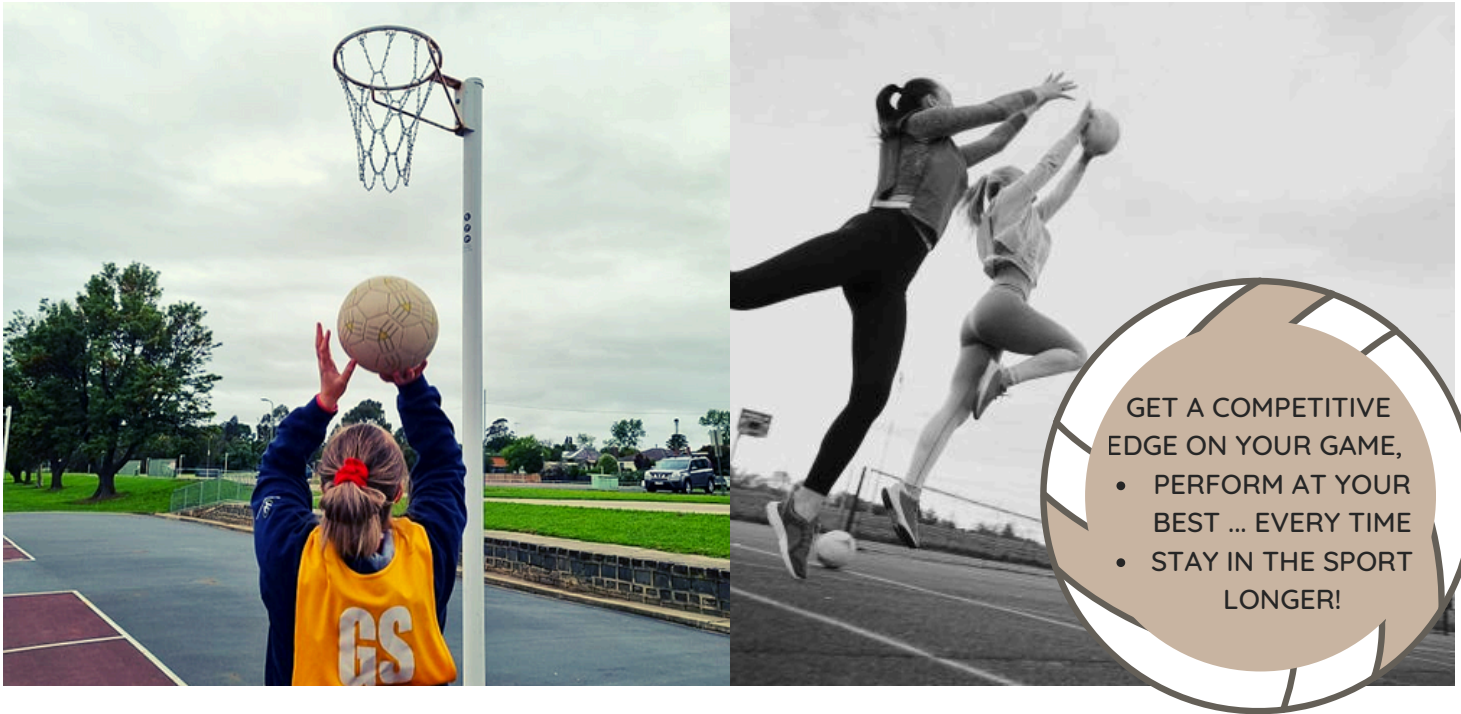
**RECOVERY**



**TODAY!**



# INTRODUCTION



**ATHLETE RECOVERY, INJURY AND BURNOUT PREVENTION  
IS PARAMOUNT FOR IMPROVED SPORTS PERFORMANCE AND  
LONGEVITY IN THE SPORT.....**

No matter how hard your athletes train, without adequate recovery they not only squander their hard training effort – they will also struggle to recuperate for their next session. And the harder and more frequently they train, the more vital recovery becomes!

I cannot stress enough just how important recovery is for sports performance. Including a recovery sessions as part of your athletes training regime not only produces more performance benefits than any amount of increase in training intensity or volume, it also reduces the risk of sustaining an injury and can lengthen their sporting career!

It is well known that constant training and playing matches without adequate recovery is a recipe for an injury, burnout or poor performance....

Athletes need to take care of their bodies, be strong and be injury free, especially young athletes who play multiple sports every week.

Hi I'm Shirl Fromberg, Advance Accredited netball coach with more than 25 years experience at coaching netball athletes of all levels from beginners through to State Level. I am absolutely passionate about the game of netball and helping athletes to reach their full potential.

I have been a regional player myself, umpire, committee member, Academy coach, School sports coach and even coached an Australian overseas touring team - Netball Wanderers.

No matter which age group or level of netballer I am coaching, I also teach and practice 'The Recovery Technique' to ALL of my athletes after every training session and games.

As a coach of State, Academy and Regional Netball teams in particular, I had to be able to get my players through a week of competition and for them to be their best by the end of the week for the finals.

Without adequate daily recovery sessions the players would not have been able to get on the court every day for a week and play each game like it was their first.

To this day I still use 'recovery techniques' myself, especially after a gym or swim session during my knee replacement rehab. I myself have reaped the benefits of adding recovery to my training regime over the years. If only I could have added the recovery session when I was playing a lot of sport in my 20's, I may have lengthened my sporting career at a higher level.

Without implementing the recovery techniques I am going to share with you, players WILL NOT be able to play at their best, performance will decrease, fatigue will set in and muscle soreness will develop.

Recovery sessions make up 1/3 of the pie to complete an athlete's regimen for training and playing in any kind of sport.

Recovery is equally as important as their training and nutrition which is the other two parts of the pie.



Many of these recovery techniques described in this guide are simple and low cost, yet have a tremendous impact.

To ensure your athletes are performing at their best, they must recover quickly and efficiently after competition or training. This enables them to gain the full benefit from a hard workout or strength-and-conditioning session. If they don't recover efficiently, then performance and fatigue can set in, eventually succumbing to the effects of overtraining, injuries and Burn-out.

Once I started my coaching career and learnt about these simple recovery techniques to help my athletes, myself (and my own teenagers) get their bodies back in tip top condition after playing or training, it all made sense.

I always get my athletes to refuel, rehydrate and stretch their bodies, as a minimum, to get rid of the lactic acid for faster muscle recovery and improve their flexibility to enhance sports performance and reduce risk of injury.

“Recovery days and recovery sessions give the body a chance to reboot and recharge,” “The body can only handle so much load before things start to shut down and break down.”

If your athlete has hit a wall in their training, maybe it's because their body isn't recovering enough from each activity to become stronger.

Hard training sessions and workouts tear down the body, but rest allows the body to repair and come back stronger than before. Athletes who neglect their recovery will gain little from extra training sessions and can actually increase their risk of injury, overtraining, and burn out.



Teenagers are already going through a lot of things in their life, social and emotional and then add high intensity training and matches to their schedule and you have a recipe for 'Burn-out' unless you introduce 'recovery sessions' to form part of their everyday training.

These 10 Steps for improved sports performance  
for the Junior Netballer (or senior)  
are quick and easy to make them part  
of their weekly routine.

1. Hydrate
2. Stretch
3. Re-Fuel
4. Alternate Hot And Cold Water Therapy
5. Wear Compression Garments
6. Foam Rolling
7. A Good Night's Sleep
8. Pool Session
9. Massage
10. Rest Day



MAKE  
RECOVERY  
A HABBIT -  
\*EVERY TRAINING  
\*EVERY GAME

#### Bonus Sections

- Active and Dynamic warm up and cool down for Netballers
- Mental Imagery
- Nutritional Snacks - quick guide
- Recovery points system & Check List

# 1. HYDRATION:

As you probably already know, the human body is made up of over 70 percent water and that drinking enough every day is essential for everything from maintaining a healthy weight to energy levels and flushing toxins out of the body, let alone sports training and matches.

But, despite everything we know about how critical water is for human health, statistics show that almost half of adults do not drink enough water on a daily basis.

As many as 7 percent of adults admit to not drinking any water at all. So, are you and your athletes drinking enough?

Water is an essential item before, during and after training and playing. Ensure the body is well hydrated all the time, don't rely on thirst before drinking any water. If you or your athletes are feeling thirsty, then chances are the body is probably already dehydrated!!

Drinking small sips all the time throughout the day and during training and game day is ideal.

## WATER SHOULD BE THE 1ST CHOICE.

Adequate fluid intake throughout the day is just as important as food intake to ensure optimum health and performance of any junior netballer/athlete.

Hydration and Nutrition play a vital role in all children, not just active athletes. Hydration and Nutrition make up 1/3 of the overall 'pie' for optimum sports performance.

Getting young people to drink water, in particular, as a course of habit and sipping regularly throughout the day is a great skill to teach and a good habit to get into that will stay with them for the rest of their lives.



**SMALL SIPS THROUGHOUT THE DAY**

## HOW MUCH SHOULD I DRINK?

Around 1.5 - 2 litres of water per day, however, this depends on how active and intense the training and games are. Individual fluid needs vary significantly depending on each individual, the current environment and how active they are. Hot and humid conditions can lead to an increase in fluid loss through sweat and the intensity of which they are playing/training can also increase fluid loss. Often children need to be reminded to stay well hydrated before, during and after playing or training.

During the winter months you might expect fluid losses to be a bit lower, however, they may still need to be reminded to hydrate as they may not feel thirsty.



### AM I DEHYDRATED?

An indication of dehydration can be if their urine is a darker yellow than normal. (NOTE - if an athlete is taking any recommended vitamin/mineral supplements, then this can alter the colour of their urine as well).

## SPORTS DRINKS - Are they good for you?

While sports drinks can benefit athletes who engage in long or intense training sessions, they are probably unnecessary for most social athletes and young children.

Activities of light-to-moderate exercise, such as walking or jogging, for less than 1 hour, probably doesn't warrant the need for sports drinks.

Sports drinks can be effective for replacing lost fluids, providing energy, replenishing glycogen stores and electrolytes lost during intense and extended training sessions.

They may be also beneficial during hot and humid conditions

Isotonic sports drinks are preferred over hypotonic, but choose carefully so as to avoid ones with a high sugar content and be mindful of your child's dental health and avoid over consumption of sports drinks.



**Sports drinks low in sugar can be beneficial for high intensive training sessions**

## 2. STRETCHING

For maximum benefit, athletes should stretch each of the major body muscle groups before and after sporting activity.

### STRETCHING BEFORE AND AFTER ANY EXERCISE ACTIVITY

Stretching pre-training and pre-matches should be part of a 'Dynamic' Warm up to help prepare the athlete, reduce the risk of injury and prepare the muscles for the intensity training and matches bring.

Post stretching and flexibility stretching is just as important and should be done post training and after matches as the muscles are warm and this helps increase the athletes flexibility in the muscles and joints which reduces the stress on these areas during training and playing to help reduce injuries.

### Why stretch??

- Reduce Muscle stiffness
- Increases range of motion
- Help reduce risk of injury
- Improves posture
- Prepares the body for movement pre training/match day
- Promotes circulation
- Increase flexibility - post training/match day
- Helps with back pain
- Helps to relax and recovery from training/match day



Because stretching may aggravate an existing injury, if your athlete is injured, they should consult their Doctor or physical therapist about an appropriate flexibility program.

Stretching is one of my favourite recovery techniques. I can still touch my toes at 58, can you??



## Never bounce a stretch.

Bouncing can cause muscle strains and other injuries.

### POST STRETCHING FOR RECOVERY

Stretching should be incorporated as part of the 'Cool Down' process as it allows the body to cool and also helps the heartbeat to return to normalcy.

**The release of lactic acid during an intense workout is broken with stretching.**

This allows muscle recovery and repair. The blood circulation to the muscles is once again resumed with stretching. The practice of post stretching is extremely common and has been performed for many decades.

### Flexibility Stretching is done post training/matches.

It is the ability to have a range of movement across a joint. ...

Netball requires a good amount of flexibility. Having good flexibility prevents injuries by reducing the chance of straining or pulling a muscle.

Flexibility involves stretching the muscle and holding it for around 20-30 secs x twice through.

Make sure your athletes don't stretch the muscle beyond what is necessary - it shouldn't be painful and they may find that they can stretch the muscle a bit further the 2nd time around

### The major muscles used in netball include:

- The muscles in the legs; the quadriceps, hamstrings, and the muscles in the calves (especially when jumping), the gastrocnemius and soleus.
- The muscles of the hips; the adductors, abductors, and gluteals.
- The muscles of the shoulders and arms; the deltoids, biceps, triceps, and the forearm muscles.
- The core muscles are needed for balance; the rectus abdominus, obliques, and spinal erectors.

### Some examples of flexibility stretches could include:

Forward lunges

Side lunges

Cross over to touch toes

Standing quad stretch

Seat straddle lotus

Seat side straddle

Seat stretch

Knees to chest

STRETCHING  
IMPROVES RANGE  
FOR MUSCLES  
AND HELPS WITH  
INJURY  
PREVENTION

### 3. RE-FUEL/NUTRITION

#### What is re-fuelling -

Athletes need to ensure they are fuelling their bodies and muscles of depleted nutrients that the body uses to help get them through training and games. If they do not eat appropriately before and after training and games, athletes run the risk of muscle fatigue, low energy levels and loss of motivation.

ARE  
YOUR  
ATHLETES  
REFUELING THEIR  
MUSCLES ADEQUATELY  
POST TRAINING  
AND ON MATCH DAY?



Making sure your athlete is getting enough energy (refuelling) plays a vital role in their overall performance, both physically and mentally. Adolescents require protein, carbohydrates and other nutrients to support general growth and development, in addition to enhancing the response to exercise training.

Adequate energy is not only required to meet both the growth, development and everyday living needs of the individual as well as the extra demands associated with physical activity, training and competition. Changes in training and competition load, participation in more than one competitive sport, part-time employment, social activities, school etc all require energy and at times energy intake needs to be increased.

Making sure your athlete is getting enough energy (refuelling) plays a vital role in their overall performance, both physically and mentally. Adolescents require protein, carbohydrates and other nutrients to support general growth and development, in addition to enhancing the response to exercise training.

The junior Netball player will play better, for longer and recover quicker from training and games when they are well fuelled. A player who is not giving adequate consideration to their diet when choosing meals and snacks may become tired, irritable and lethargic, and may even struggle to maintain interest and enjoyment in sport.

It is important for the junior netball player to eat well every day - not just on game days or before a tournament or carnival. The foods they eat on a day to day basis help develop the ability to store (carbohydrates) glycogen in their muscles, maximise their growth and development and prepare them for performing at their best on game day.

Active children need constant refuelling and hydrating. Their nutrition needs are particularly important as they must meet requirements for not only their physical activity, but also their growth and development as well as overall health and wellbeing.

The average person burns around 1800 calories a day doing absolutely nothing.

## Carbohydrates for Energy:

Carbohydrate rich energy foods need to be eaten at frequent intervals each day as they provide the 'fuel' needed to keep players active, help with concentration and keep blood sugar levels consistent.

The body can only store a limited amount, therefore, snacking around training/game times and post training/game times can help maximise the muscles uptake of the carbohydrates.

Good Carbs could include: Cereals and grains, milk, yoghurt, custard, fresh fruit, vegetables & legumes.

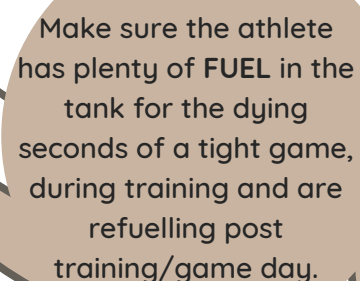
Some easy snacks are: low fat grain bars, fruit scones, pancakes, pikelets, smoothies, oat biscuits, fruit buns, carrot/banana cake.

Protein forms the building blocks of muscles, including protein in the athlete's diet will help to optimise growth and development. There is probably no other nutrient that has captured the attention of athletes more than protein. While junior netball players have protein needs higher than their sedentary counterparts, most will easily meet their needs each day through their normal eating habits. Junior netball players should focus their attention on a wider distribution of protein over the day, instead of large serves at 1-2 meals.

Having a small amount of protein after strenuous exercise has been shown to be beneficial in adults, for faster muscle recovery. Not a lot of research has been done around active kids, however, it does make sense to include foods rich in both protein and carbohydrates as recovery snacks post training and match days.

## Growth Protein foods:

Meat, seafood, eggs,  
plain and flavoured milks,  
yoghurt, custard, milk desserts,  
legumes, nuts and seeds.



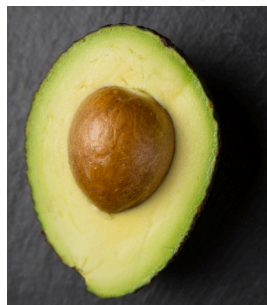
Make sure the athlete has plenty of FUEL in the tank for the dying seconds of a tight game, during training and are refuelling post training/game day.

Be careful not to have an excessive intake of high sugar foods.



## FATS

All children require a small amount of fat (3-4 teaspoons) in their daily food intake for normal growth and development. They should be healthy unsaturated fats like fish, nuts, seeds, avocados, full cream milk, cheese and yogurt.



The day before a big sporting event requires extra effort to ensure adequate carbohydrates are eaten and fluid intake has been sufficient to ensure a good state of hydration and energy.

## PRE GAME MEALS

The focus for meals and snacks over the day should be 'fuel foods' and fluids, with a reduction in high fat foods during this period.

The meal eaten in the evening the night before should have a carbohydrate base such as pasta, rice, noodles or quinoa, with a small serve of a lean protein food.

## POST GAME FOR RECOVERY

After training or match play athletes need to refuel their muscles by having a 50g snack high in carbohydrates and protein within 20-30 minutes of finishing. Snacks could include a banana, jam sandwich, muffin, chocolate milk etc. This should then be followed by a normal meal within about 2hrs of finishing an activity.

Depending on their training load and amount of games they play each week will determine their total calorie intake and it will be different for every athlete as everyone has individual needs and training loads.

Adolescence is a period of significant growth and physical development that includes changes in body composition, metabolic and hormonal fluctuations, maturation of organ systems, and establishment of nutrient deposits, all of which may affect future health. Young athletes have unique nutritional requirements as a consequence of undertaking daily training and competition throughout this period. To ensure an adolescent athlete fulfils their potential, it is important that those involved in managing younger athletes advocate and promote healthy eating habits that prioritize sound physical and mental development.

## 4. ALTERNATING HOT AND COLD

### Fast facts on Hot and Cold treatment:

- Cold treatment reduces inflammation by decreasing blood flow. ...
- Heat treatment promotes blood flow and helps muscles relax. ...
- Alternating heat and cold may help reduce exercise-induced muscle pain.

I wish I had of known about this recovery technique during my peak years of playing sport! Alternating Hot and Cold is a technique that I get all my athletes to use, regardless of their skill level or Age. It's a great habit to get into and I still use it with my knee replacement rehab and exercise work outs - 30 years on!



Let's face it, athletes need to have a shower after their activities anyway, so why not make it a habit to assist in their recovery!  
30 - 60 sec hot water  
30 - 60 sec cold x 3 times.  
OR cold pool plunge followed by a warm shower



This recovery method also assists with lactic acid removal and helps prevent muscle fatigue. This method speeds up the recovery process after training and games and can have a positive effect on subsequent performances.

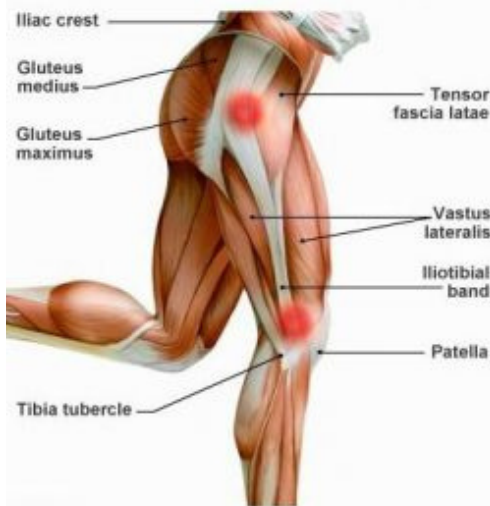
Utilising the 'Hot and Cold' recovery technique should not be set aside for just the "elite", but for all athletes who take part in regular exercise. Building this recovery strategy into any training program is important for both short and long term benefits and will assist your athlete in reaching their goals.

Brrrr yes it's cold, but so worth it. Very entertaining to hear your squad players squeal when the cold water kicks in.

Never use extreme heat  
and never put ice directly on the skin.

## 5. FOAM ROLLING

Used by athletes from across all sports and fitness enthusiasts, foam rolling has become very popular as part of an athletes warm up and cool down regime to reduce the effects of 'delayed onset muscles soreness' (DOMS) and helps promote recovery of muscles.



Inflammation of the iliotibial band (ITB) causes outer knee pain and possible pain in the hip.

My advice is to be careful when purchasing a foam roller for the first time as the ones with the larger bumps and grooves on them can be quite painful, especially if you have never used a foam roller before. I would recommend starting out with a low cost, smoother one to get your muscles used to it, trust me.... I know, I tried the bumpy one first!!! Bad idea!!

**Never Foam Roll over your joints!**

Foam rolling is a simple self-manual therapy technique often used to improve flexibility, relieve muscle soreness pre and post exercise, injury prevention and athletic performance. Foam rolling can also help to improve range of motion and mobility and help with some postural control.

### 3 foam rolling exercises for netballers would be:

1. ITB's - (Iliotibial) the muscle band that runs down the outside of your leg and to your knee and just on the outside of your quad.
2. Calf muscles
3. Shoulders



Buy your foam roller here:  
<https://amzn.to/3yjBVtP>

Yes those ITB's will hurt the first time, but feels great once you get used to it.

## 6. SLEEP

Sleep provides crucial time for the body to recover.



Adequate levels of sleep allow time for fundamental processes to occur.

Insufficient levels of sleep, impairs recovery from exercise via several pathways:

### Sleep plays a major role in athletic performance and recovery.

The quality and the amount of sleep, to a great extent, determines the effectiveness of recovery. The majority of muscle repair and growth occur during sleep when hormones are being released. Athletes who do not get enough sleep will see a decrease in their game, increase the possibility of fatigue, have low energy levels and poor focus.

This puts an athlete at a greater risk for injury.


The American Academy of Pediatrics Childhood Sleep Guidelines recommend children between the ages of 6-12 should get 9-12 hours of sleep and teenagers aged 13-18 should sleep 8-10 hours to promote optimal health.

You might be thinking- “How is my kid going to get 8 hours of sleep?”

Let me remind you, that everyone is given 24 hours in a day.

As a parent but especially a parent of an athlete, it is **IMPERATIVE** that you make sleep a priority.

Without it, your athlete will not reach their full athletic potential.



Sleep allows the body time to heal.

## 7. POOL SESSION FOR RECOVERY

‘Performing active recovery in a pool helps to reduce muscle soreness, flushes out lactic acid and prevents a drop off in performance.’

A 2010 study in the International Journal of Sports Medicine concluded:  
A "swimming-based recovery session enhanced following day exercise performance."

“You’re flushing out some of the lactic acid while helping your muscle fibres recover.”

Swimming is a great way to recover after a hard strength day or to get in some fat-burning cardio. In fact, a further study in the International Journal of Sports Medicine found that athletes who hit the pool for a moderate workout on a recovery day were able to subsequently work out longer than those who took it easy.

A pool recovery session is a terrific way to assist with sports recovery, doesn't have to be every session, but if you have access to one, then I would suggest you use it.

Water is low impact and provides active stretching in every direction.  
And the faster you move, the harder you'll work.

My body loves a pool session.  
You feel so good and relaxed afterwards.

## 8. MASSAGE

Using sports massage as part of your recovery can:

- Reduce excessive post-exercise muscle tone
- Increase muscle range
- Increase circulation and nutrition to damaged tissue
- Deactivate symptomatic trigger points
- Identify soft tissue abnormalities
- Improve mobility
- Treating and preventing injury
- Psychological benefits - relaxation and stress reduction



This makes it a perfect tool within all sports to help improve individual performance.

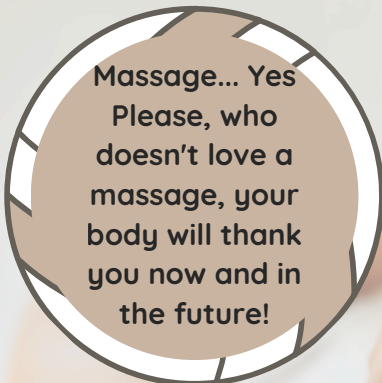
Massage therapy should be a part of an athletes 'toolbox' for recovery.

It can help to play a pivotal role in recovering and staying injury-free  
- allowing more training and game time..

Sports massage helps relieve pain and promote the growth of new muscle cells while repairing the damaged ones. Even if the athlete is not in pain, sports massage will improve muscle function, thus making the body more efficient while recovering and competing.

Reducing tension and adhesions in muscle allows the body to improve it's range of motion. The massage will also dilate blood vessels and have a positive effect on the cardiovascular system. This improves the delivery of oxygen and nutrients throughout the body while removing waste products and toxins at a quicker rate.

Muscle repair times are faster, ultimately reducing the risk of delayed onset muscle soreness.



Massage... Yes  
Please, who  
doesn't love a  
massage, your  
body will thank  
you now and in  
the future!

According to some physio's, sports scientists and masseuses, regular sports massage may help take your fitness to the next level!!!

## 9. COMPRESSION GARMENTS

Compression garments have been worn by elite athletes for the past two decades and have been scientifically tested to prove the benefits of wearing compression garments for performance and recovery.

They are designed to help reduce exercise induced muscle damage and help athletes quickly bounce back to their maximum level of performance.

‘True compression wear does have a purpose and, if the science is to be believed, true benefits. Designed to increase blood and lymphatic flow to the specified limb, compression wear is said to improve performance and shorten recovery time in both athletes and workout warriors when used post exercise.’

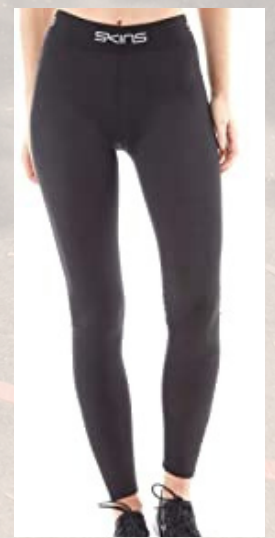
(source [physioroom.com](http://physioroom.com))

Studies have shown that compression garments can actually enhance performance by improving muscle recovery, by speeding up the process without any extra effort or training.

The world champion Silver Ferns netball team used compression garments throughout a previous Netball World Campaign, specifically around travel and training recovery, which they believe played an important part of their recovery and improved performance on court.

Wearing the garments post exercise works by increasing circulation, accelerating the delivery of oxygen to muscles and improving lactate shuttle.

What a terrific invention and super easy to help with recovery.



Buy yours here:

<https://amzn.to/3ESsCUf>



## 10. INCLUDE A REST DAY!

If an athlete does not properly recover, this can weaken even the strongest athlete. Overtraining and lack of recovery have serious side effects.

When you exercise, tiny tears form in the muscles that will eventually help the muscle grow bigger and stronger as it heals. The recovery time is when the body adapts to the stress that was placed on it during exercise. This is when the real effects of training take place - NOT when the athlete is exercising.

Most athletes know that getting enough rest after any type of exercise is essential.”

Rest days are critical for the athlete’s physiological (body) and psychological (mind) well-being.

By having a rest day the body is allowed to adapt to the stress associated with exercise, replenishes muscle glycogen (energy stores) and provides time for the body tissue to repair.

It’s recommended to take a rest day every three to five days. If your athletes do heavy training sessions and games, they’ll want to take more frequent rest days. They can also have an active rest day by doing a light workout, like gentle stretching, Yoga, Pilates, casual walk, light pool session.

As a parent of a young athlete you can help advocate for them by ensuring they have at least one ‘Rest Day’ per week, 2 per week if possible.

Biologically, **your body** is the only thing that heals your body!

Let me say it again:

It is **YOUR BODY** that does the healing after you break it down.

The best way to promote recovery...

is to place the body in an optimal healing environment.



# SUMMARY

Recovery allows for improved performance, permits time for the body to heal itself in preparation for the next training load and decreases the risk of potential injury.

All these benefits allow for the attainment of new goals and PB's. Factors influencing recovery include sleep, mental fatigue/stress levels, nutrition, hydration, frequency and type of training loads and methods of warm up pre exercise and cool down post exercise. All of these can be manipulated, nurtured and controlled to have positive or negative effect on one's recovery.

## Remember.....

Recovery is just as important as the training!

Research shows there are several ways to allow the body the best possible chance to recover and improve sporting performance.

- **Hydrate** – make sure your athletes are drinking at least 2L of water per day, possibly more, dependent on the amount of training they do. This should be spread out throughout the day, not all at once – the body can only absorb a certain amount of water at one time.
- **Refuel** the body with at least 50g of carbs within 20 minutes of playing or training. Plan meals and post-match snacks in advance and get advice on appropriate nutritional intake required for your athletes training program.
- **Warm Up & Cool Down** sessions should be completed before and after any training and matches. Ideally this should be specific to the training they are about to complete. The warm up and cool down should address movement in all three planes of motion, include dynamic stretches/movements, strengthening exercises and cardiovascular work.
- **Static stretching** is no longer the preferred warm up pre exercise as it has been shown to reduce muscle strength, power and explosiveness.
- **Alternating Hot and Cold** Water for post training and matches. This can be done in the shower - 30secs to 1min cold then alternate to 30secs to 1min hot x 3 times on major muscle groups - ie legs, arms, shoulders etc. This assists with the removal of lactic acid from the muscles for a quicker recovery.
- **Foam rolling**/Self myofascial release – Can be used pre and post exercise to help with recovery without affecting performance.
- **Compression garments** – The use of compression garments appears to reduce the severity of DOMS and accelerate the recovery of muscle function.
- **Sleep** at least 8 hours per night.
- **Rest Day** - Include at least one full day of rest/light exercise per week.

# SUMMARY

One thing every athlete knows is how amazing you can feel during and right after your activity..... and how sore you can feel the next day or two.

That's why a good recovery plan is key.

When you give your body and mind what they need to properly recover, you can keep doing the things you love without worrying about performance, burnout and increased risk of injury. Plus, it can help you see the results you want, such as running faster times, performing better on the court, more endurance —something that gives you a little mental boost to keep working hard.



Make RECOVERY part of your training  
AND ON MATCH DAYS...

## **BONUS SECTION: WARM UP & COOL DOWN:**

It is important that athletes warm up their muscles and include some stretching prior to undertaking any fitness sessions. Dynamic stretching is now the preferred method, movement involving stretching as you go.

### **DON'T BOUNCE STRETCHES**

An active cool down, ie slow jog or walk and stretch is more beneficial than just sitting, as this will help the body recover quicker. It will assist the muscles to remove the lactic acid build up (which causes fatigue).

Flexibility stretching is best done when the muscles are warm, ie **AFTER** fitness activities and holding the stretch for longer.

A good way to understand this is to think of the muscles as a rubber band. What happens to a rubber band in the cold if you try to stretch it? It snaps and breaks pretty quickly. Now what about if you stretch a rubber band when it is warm? It is able to withstand a stretch without breaking. Same goes for your muscles. You never want to stretch “cold” muscles. Rather you get a longer lasting, more effective stretch once your muscles have been “warmed up.” It is important to recognize that not all stretching is created equal, and recovery tools like a foam roller CAN be effective as well when used correctly.

It is essential for all netballers to establish good stretching, warm-up and cool-down practices, no matter what their age, in order to reduce the likelihood of injury, enhance play and allow optimal recovery. Emphasis should be placed on the development of a consistent routine, both at training and when playing, to ensure the integration of these important components throughout playing years.

### **DYNAMIC NETBALL WARM UP**

Netball warm up should include mobility to free up joints and tissues, netball specific movement, muscle activation, kinesiology (crossing over the midline), plus stretching and even some foam rolling for Myofascial release.

#### **Foam rolling for Myofascial Release:**

Target areas may include : Hamstrings, Calves, Glutes, Quadriceps, Lower & Upper Back. 5-10 rolls in each direction in a controlled manner might be all you need.

## BONUS SECTION: DYNAMIC NETBALL WARM UP



Dynamic stretches have continual movement as you are not holding a stretch for a long period of time. You take the muscle to the end of its range then straight back again. By targeting muscles and replicating actions you would use in a game, this will help to reduce muscle tension by increasing flexibility and freedom of movement.

Netball Specific Movement, mobility and muscle activation:  
Alternate exercises up and down the court, for example:

- Jog 60% effort  $\frac{1}{3}$  third, walking lunges  $\frac{1}{3}$ , sumo Squats  $\frac{1}{3}$ ,
- Jog 70% effort  $\frac{1}{3}$ , Skip  $\frac{1}{3}$ , Grapevine  $\frac{1}{3}$ ,
- Jog 80% effort  $\frac{1}{3}$ , side shuffle right  $\frac{1}{3}$ , side shuffle left  $\frac{1}{3}$ ,
- Jog 90% effort  $\frac{1}{3}$ , pushing off side to side  $\frac{1}{3} \times 2$ ,
- Jog 90% effort  $\frac{1}{3}$ , Walking Quad stretch  $\frac{1}{3}$ , Skip for height using arms  $\frac{1}{3}$ .



Other muscle areas to stretch during this time are:

Arms, Shoulders, back

Warming up prepares the muscles for the game.

## BONUS SECTION: COOL DOWN

After every game and training, it is important to cool down in the right way.

Do some low-intensity active cool down exercise, like a slow jog/walk and include some static stretching for improved flexibility.

Holding stretches for 20-30 seconds to improve the mobility and range of movements so that the body recovers from its exertions.

### FLEXIBILITY STRETCHING EXAMPLES:

- HAMSTRINGS
- GLUTES
- CALVES
- GROIN
- QUADS
- SHOULDERS



Hold each stretch for 20-30 seconds to improve flexibility

My legs used to ache as a kid, I wish I had of known about stretching to help reduce my muscle soreness!

## **BONUS SECTION: MENTAL IMAGERY** **TO IMPROVE PERFORMANCE ON COURT**

### **What is it?**

Mental Imagery is also called visualization or mental rehearsal. Mental Imagery means using all of your senses (e.g., see, feel, hear, taste, smell) to rehearse your sport or a particular skill in your mind. If you believe you can, practice the skill in your mind - Mental Imagery - you will achieve it!

This is true as I have done it myself. I always wanted to be able to ‘front cut’ the ‘front cut’ and intercept a pass from the opposition, coming from behind to cleanly intercept in front of the player with no contact. I used this Mental Imagery strategy and I did it! I was so excited and went on to intercept these types of moves several times after.... Intercepting is so much fun in netball.

### **How does it work?**

Mental imagery involves the athlete imagining themselves in an environment performing a specific skill using all of their senses (sight, hear, feel and smell). The images should have the athlete performing successfully and feeling satisfied with their performance. Dreaming is unstructured imagery, however Mental Imagery is structured with very specific images.

Research shows that the more able an athlete is to control his or her imagined movements, the greater the potential performance enhancement

### **How can it improve sports performance?**

Research has shown that the visualisation of a muscle movement in the mind can create electrical activity in that muscle even though there’s no actual movement in the muscle itself and also that the pattern of electrical activity closely resembles that seen during actual movement.

There are two implications that follow:

- Targeted and controlled imagery can stimulate electrical activation in relevant muscles, and so ‘prime’ those muscles for subsequent physical activity;
- Physical skills can be maintained or even improved by appropriate imagery when practice isn’t possible (eg during injury) and indeed, evidence suggests that using imagery can accelerate rehabilitation and recovery after injury.

**I think I can....**



## BONUS SECTION: MENTAL IMAGERY TO IMPROVE PERFORMANCE ON COURT

### How do I do it?

Think of a skill or exercise that you are struggling with and you want to perfect it. For example, Goal shooting technique and accuracy, taking the intercept cleanly instead of lunging for it and only tapping it, getting free of your opponent.

Think about the skills you need to execute your activity:

Footwork, body control, hands etc.

You need to be in a relaxed state and allow yourself to use all of your senses (sight, hear, feel and smell), now imagine where you are, the game, who you are playing, what you can see, hear, feel and smell. Imagine yourself executing the skill you want to achieve. Do this often and you will achieve it!

### MENTAL IMAGERY IS THE ICING ON THE CAKE FOR THE ATHLETES OVERALL PERFORMANCE

As the Quote says - Seeing is believing and achieving.



I know I can.

# BONUS SECTION: NUTRITIONAL SNACKS - QUICK GUIDE

## PLANNING FOR GAME DAY

Remembering back to the principle of **fuelling for the work you are going to do**, it is important to be prepared so you can fuel yourself adequately for your game. This will ensure you can sustain high intensities right until the end of the game.

*See below some simple snack ideas for around game time.*

### PRE-GAME MEAL (2-4hrs pre)

Aim to include a **carbohydrate rich** snack that contains **moderate amounts of protein, fat and fibre.**



SUSHI



GREEK YOGHURT,  
WITH FRUIT & MUESLI



BANANA & PEANUT  
BUTTER TOAST



FRUIT  
SMOOTHIE

### PRE-GAME SNACK (30mins-2hrs pre)

Aim to top up fuel stores with a **high-GI, carbohydrate rich** snack that is **low** in protein, fat and fibre.

1-2 HRS PRE-GAME



<30 MINS PRE GAME



MUESLI BAR



JAM  
PIKELETS



BANANA



HONEY  
SANDWICH



RICE CRACKERS

### POST-GAME SNACKS (0-2hrs post)

Aim to replace fuel stores with a **carbohydrate rich option** and support muscle recovery with a **high quality source of protein.** After this time, return to normal meals that contain carbohydrate, protein, fibre and health fats.



FRUIT SMOOTHIE W/ MILK  
& GREEK YOGHURT



GREEK YOGHURT WITH  
FRUIT & MUESLI



BEEF  
BURRITO



GRILL'D  
BURGER



CHICKEN  
BURRITO BOWL



# RECOVERY POINTS



1. Aim to do 100 points worth of recovery after every hard/medium training session and game.
2. \*First three recovery techniques need to be carried out within 30mins of finishing a session and other recovery points can be done within 6 hours of finishing the session for full benefits and improved performance.

## After Every Training Session & Match

## Duration

**20 Points Re-Hydrate - Water**

Sipping all day, during and at the end of every session

**20 Points Re-Fuel-Healthy Food**

Within 20-30 mins at the end of every session

**20 Points Cool down & Stretch**

At the end of every session

Flexibility stretching of major muscle groups - 20-30 secs hold

**20 Points Hot and Cold Shower**

3 x 30sec - 1min hot and 1min cold after every session

**20 Points Foam Roller**

At the start & end of every session  
10-15 rolls each major muscle

**20 Points Pool Session**

After a session if available

**20 Points Good nights Sleep**

7-8 hours

**10 Points Compression garments**

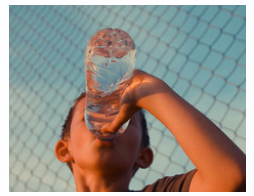
If you have them, wear during and after exercise

- 100 points = excellent
- 80 points = good
- 60 points = average
- less than 60 points = poor





# WEEKLY RECOVERY POINTS



## Weekly Recovery Points System

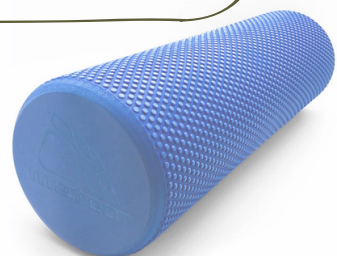
**\*\* Aiming for 100+ points per week\*\***

### Weekly Recovery Session

### Duration

<input type="checkbox"/> 20 Points Stretching & Flexibility	At the end of a session when muscles are warm
<input type="checkbox"/> 20 Points Self Massage/Foam Rolling	At the end of every session 10 mins
<input type="checkbox"/> 20 Points Deep tissue Massage	30 mins - <b><u>not within 6 hrs of training or game day.</u></b>
<input type="checkbox"/> 20 Points Rest Day	All day - light walk, Yoga, Pilates, stretching or pool only
<input type="checkbox"/> 10 Points Full nights sleep	7-8hrs per day
<input type="checkbox"/> 10 Points Pool Session	20 - 30 mins
<input type="checkbox"/> 5 Points Compression Garments	2+ hours
<input type="checkbox"/> 5 Points Drink 2L water per day	Small sips over the day
<input type="checkbox"/> 5 Points Eat Healthy Nutritious Meals	5 points per healthy meal

- 100 points = excellent
- 80 points = good
- 60 points = average
- less than 60 points = poor



# Acknowledgements & References

Special thanks to family and friends for helping me put this e-book together.

I hope you find the information useful and put it to good use.

Some good resources for further research:

<https://stretchcoach.com/articles/stretches-for-netball/>  
<https://betternature.com.au/blogs/news/5-important-stretches-for-netball>  
[https://prezi.com/wm\\_nxfkynxbn/netball/](https://prezi.com/wm_nxfkynxbn/netball/)  
<https://tmphysio.com/pre-season-netball/>  
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**IT NEVER GETS EASIER,  
YOU JUST GET BETTER**

It must be remembered that the information presented is based on the best current available practice. For future updates refer to the Netball Australia website or consult an appropriate health professional. Please note that the author may receive a commission from the reader who clicks through on the product links. © 2022

