



NetballDiamonds Digital Image. HeythropSU, n.c. Thu 24 Mar 2015
<http://heythrop.su>

Conditioning and Injury Prevention for Netball

Jonathan Moody BAppSc (Physio)
Founder/Director
Physio INQ



Conditioning
and Injury Prevention
for Netball Players
- with Junior Player Supplement

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Director and Founder
Physio INQ

Grew up in Canberra, ACT with a passion for Rugby before a career ending injury decided his future would lie in other pursuits; namely Physiotherapy and the education and empowerment of his clients.

He founded Physio INQ in 2006, establishing his first practice in the outer suburbs of Sydney. This quickly grew to incorporate over 8 practices; all owned and managed with Irene Georgakopoulos, his business partner.

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Together they employ roughly 40 full time staff, with modern education and a professional support network of GP's, specialists and other allied health practitioners.

He has found a new love. Writing. It is his way of spreading the collective wisdom of himself, his staff, his mentors and his business associates to the public. Most of his resources are free as he believes that when you empower people, they make sound decisions. It has grown his clinics immeasurably over the years.

Today you will find him splitting his time between his other great love, writing and directing for film, as well as the odd day on the gold course.

Important

This is to be used as a guide only and is not intended to replace expert advice. The information contained within this guide has been developed for a specific group of athletes by a qualified physiotherapist.

If there is anything in the guide that you are unsure of how to perform the exercises safely, please consult your physio or conditioning coach prior to commencing.

If you suffer any chest pain, unusual shortness of breath or dizziness whilst performing the program, cease what you are doing and consult a medical practitioner. It is always advisable to consult a health practitioner prior to undergoing any sort of intense training program.

Now that all of the pleasantries are out of the way... let's get conditioning.

The Program

The layout of this program is going to be in three distinct sections:

CARDIO: This forms the basis from which you will obtain fitness in the lungs, legs and heart to be able to perform at your best. There are layers to the cardio program and it should be taken as a whole. Picking and choosing parts that you enjoy or are good at will severely hamper your results.

STRENGTH and AGILITY: This section will create the stability and power for you to launch an assault on the sport. It is also important not to ignore the various layers of this program. Some of the exercises are designed to create stability, whilst others are to create power. You need to be stable prior to being strong.

LENGTH: This is the flexibility part of the program. It forms what you would know as the stretching part of the program, updated for the modern era. It really helps to prevent injury.



New+Zealand+v+England+New+World+Series+Game. Digital Image. Zimbio.com, n.d. Thu 24 Mar 2015 <http://www.zimbio.com>

Commencement of the program.

It takes about 3 months to get a great BASE FITNESS. It takes another month to obtain adequate MATCH FITNESS. So ideally start the program about four months out.

This is a guide only. If you have less time, that's fine, just get cracking. The program is scientific and you will get better every day you do the program, so there is no wrong time to start.

Program Coordination

There will be a table at the end that brings it all together. Follow the table, the codes for each session are on it so you can simply refer back to the description of the session if you get lost. The program is on a two week cycle.

Frequency

Pre season the program is designed to be performed 5 days per week. Two rest days should be legitimate rest days. Rest days are there for your body to recover and to refuel. You will often find that if you do not have enough rest your performance will suffer.

During the season if you have a good BASE, then you can drop the program to focus on the MATCH FIT part of the program. This will reduce it by half. So 2 days per week.

Remember, this program is for serious contenders. It is not designed for people who think that rocking up to training is good enough. It is for those who want to take their performance to the next level and get ahead of their peers. It will keep you 5 yards in front of the play and keep you there.

Duration

Each session should last for about an hour. If you want to do more than this, that is fine, but monitor your injuries, burn out and fatigue. No use in being tired all of the time and underperforming due to overtraining.

Program Days

You can perform the program on any day you wish, in any order you wish. But do not miss the layers. Everyone responds differently, some like to train in the morning, others at night. Some like two rest days in a row, others like to split it. Do what works for you, and make sure you MONITOR your progress and change things up if you are floundering.

Each day will have a mixture of cardio, strength and length.

Monitoring

This program needs to be monitored. It will tell you what to monitor, keep a diary. Each and every time you go out to train you are attempting to:

- ▶ Go further
- ▶ Do more reps
- ▶ Go faster
- ▶ Push more weight

If it DOES NOT happen that your performance improves, look at possible reasons why.

- ▶ Environmental factors- Heat
- ▶ Over hydrated or under hydrated
- ▶ Big meal prior
- ▶ Injured
- ▶ Effort
- ▶ Burn out

If it is burn out or an injury, do not ignore it. Take some rest, maybe a few extra rest days and recoup. When you come back your body will thank you for it and you perform better.

Injuries

If you have any niggling injuries, get into see your physio or doc to get it diagnosed and treated. This program is not going to go into how to carry an injury, that is specific to the individual.

Nutrition

Needless to say nutrition is vital. It is beyond the scope of this program to go into detail about nutrition. I recommend eating a lean diet of a solid mix of protein, carbs and veges. In general if you want to build muscle mass, eat more protein and meat. If you want to lose weight, drop the carbs. If you want to increase energy, increase carbs a few days out from you match day, but never carb load the day before.

Here is my complicated nutrition for dummies:

If you intend to put on weight

Look at the scales weekly.
If they are dropping, eat more.
If they are going up, good.

If you intend to lose weight

Look at the scales weekly.
If they are rising, eat less.
If they are dropping, good.

In Netball, you generally need to be as agile as possible, even if you are upfront or at the back. Don't let the D make you lazy! You can be super strong without the kilos that will slow you down. I'm not saying that skinny is the new black, but if your weight is keeping you from getting really fit, then shed a few pounds. This program will do it for you anyway!

Junior Development

This program is intended for use for players over the age of 16, where their bodies have developed sufficiently to cope with the demands. I have included at the end a Junior development supplement. A training guide for players and parents of talented players it is designed to aid elite performance.



PART 1

CARDIO

It is time to start thinking the way our bodies respond. I want you to think of cardio as being three distinct mechanisms.

Lungs

Your lungs drive oxygen to the muscles and tissues to supply them with their vital requirement. Without oxygen getting to the tissues, they cannot process energy, waste products build up and pain sets in. We need our lungs and airway to be efficient, effective and clear.

Whilst we cannot specifically train our lungs to be fit; except for possibly using positive airway pressure devices, but that is beyond the scope of this program, you can improve lung function by the following:

- ▶ Don't smoke. Period.
- ▶ Lose unnecessary weight. The extra fat is inhibitive of proper lung function.
- ▶ Don't ignore exercise induced asthma (EIA) or wheezing. See your doctor if you suffer from these.

Heart

Your heart works by pumping blood around your body. It can either pump FASTER (pulse rate) or it can pump more EFFICIENTLY (ejection volume). This program is designed to improve the ability of your heart to pump more efficiently by improving the elasticity of the muscular walls of your heart. With more blood being forced out per beat, you can get more blood to the vital tissues with less effort, meaning it is easier!

We will generally be referring to the heart in the MATCH FIT layer of the program.

Tissues and Cells

What I mean here is where the delivery of oxygen and fuel comes to and gets converted into usable energy. Our cells have little work horses (mitochondria) inside of them that can either get better or worse at converting and using energy. If we make them better at using the energy, then they don't need as much blood to do the same amount of work, meaning it gets easier!

We will generally be referring to the tissues in the BASE FIT layer of the program.

CARDIO PROGRAM

Cardio-Exercises. Digital Image. Gigastress.net, n.d. Thu 24 Mar 2015 <http://gigastress.net>



Netballers' positions and the distance they run varies wildly. Centre court players can run up to 8km in a 60 minute game, whilst shooters and goal defence run much less. The type of running that is performed is largely similar though, with nearly all positions operating in the interval type of cardio. This means stop start of course. Being a netballer, you already knew that.

The program is designed to get you fit to the required distances performed in netball, then get that fitness to be match specific.

The pre season will focus on getting your base up to maximal performance, then the interval training really kicks in about 6 weeks out.

CARDIO BASE SESSIONS

CB1- Long Run.

Simple. Got to run to get fit, there are no shortcuts. Depending on your level of fitness will depend on how fast you run, but the time spent running will not change. If you are really unfit, then still go for the same length of time, but walk where you cannot run. KEEP THE TIME THE SAME.

This improves your cells' ability to utilize oxygen and energy immensely. Your tissues will get better at converting the energy and over time you will find it easier to exercise.

Duration: 30-40 minutes.

Monitor: Distance, Walking episodes.

CB2- Intermediate Run.

This is a more intense session. There are two methods to this session.

Method A - Time Trial

20 minutes and cover as much distance as you can. Each session you are required to cover more distance than the previous in the same amount of time. This method works well on a treadmill, but if you are out on the street, set a course on say www.mapmyrun.com

and check your distances each time.

Monitor: Distance.

Method B – Distance Trial

5 km run. You are wanting to run the same course or the same distance each time you exercise. You are wanting to drop your overall time on the course each time.

The intermediate base sessions are designed to both improve the ability of the cells to convert energy, but also to start getting your heart to become more efficient at pumping the blood. The increased intensity of this run will cause your heart to DISTEND more and become more elastic. This helps it pump more blood in each beat.

Monitor: Time.

CB3- Short Run.

This session is very intense. Two methods.

Method A – Time Trial

12 minutes.

Monitor: Distance

Method B – Distance Trial

3 km.

Monitor: Time.

Running Tips:

Stride length.

Increasing your stride length by a fraction can improve flexibility and limit injury. You know you are have a good stride length when your thighs are passing **BEHIND YOUR HIPS** on the follow through part of your action. This opens out the hips and will improve your speed and ground covered. Increase your stride length **SLOWLY** or it can result in some pain.



image 1

You can see (image 1) here that his trailing leg passes his hips. This is a good follow through.

Foot Strike.

Landing on your heels is a great way to

get injured. Look at the bottom of your runners. Are the heels worn out? Or are you landing on the **MIDFOOT**? The **MIDFOOT** is designed to absorb shock much better than your heels. If you promote midfoot striking, you are likely to start increasing the length of your stride, which benefits speed and foot/leg health.

Hills.

Hills will cause your heart to race, placing added pressure on it to perform. This has the added benefit of aiding the **EFFICIENCY** part of its beat. It really helps. Add hills to your program instead of taking them away. None of us like hills, but your performance will!



image 2

You can clearly see (image 2) here that the heel on the runner on the right is about to impact **HARD**. This places shock up the leg. The runner in front has the idea.

CARDIO MATCH FIT SESSIONS

All cardio match fit sessions are interval based. Intervals are how Netballers compete in sport. Intense for short bouts, then a period of relative rest, whereby you still need to move across the court or field. It is also one of the finest ways our hearts respond to when they are becoming more EFFICIENT at pumping blood.

The old school used to call them WIND SPRINTS. They are more valuable than ever before.

In these match fit sessions, you are going to work on your GROUND SPEED as well as your FITNESS.

Interval speeds:

When referring to effort speed, I will be giving percentages of your maximum **sprinting speed**. This is to be used as a guide for how hard you are to push yourself. You should be able to get through each session without stopping. If you need to stop, it may be due to you going too hard, so drop your effort phase a touch.

Rest speed is as a percentage of your normal **jogging speed** that you perform

during the long base session.

All sessions have 5 minutes of JOGGING as a WARM UP, and 2 minutes of JOGGING as a COOL DOWN.

CM1 – Long Intervals

Effort Speed: 60% sprint.
Rest Speed: 70% jog
Interval distances: 200m
Rest distance: 100m.
Repetitions: 12

What it feels like:

You will feel like you are running about 30% harder than when you jog during your effort phase, and about 30% easier than when you jog during your rest phase. **Do not walk.**

CM2 - Short Intervals

Effort Speed: 90% sprint
Rest Speed: 50% jog
Interval Distance: 50m
Rest distance: 50m
Repetitions: 20

What it feels like:

You will feel as close to a sprint for the 50m as you can without losing form. The recovery is a trot, kind of like Cliff Young. **Do not walk.**

CM3 - Varied Intervals

This is a ramping session. It goes through two cycles of the distance and rest periods. The rest speed for this session is a speed at which you are able to continue. The effort speed is always at 90%

It works as follows:

1. Warm Up
2. 50m effort, rest 50m
3. 40m effort, rest 40m
4. 30m effort, rest 30m
5. 20m effort, rest 20m x 10 reps (running backwards for each rest)
6. 30m effort, rest 30m
7. 40m effort, rest 40m
8. 50m effort, rest 50m
9. Cool Down

Monitor: Time, walking episodes.

What it feels like:

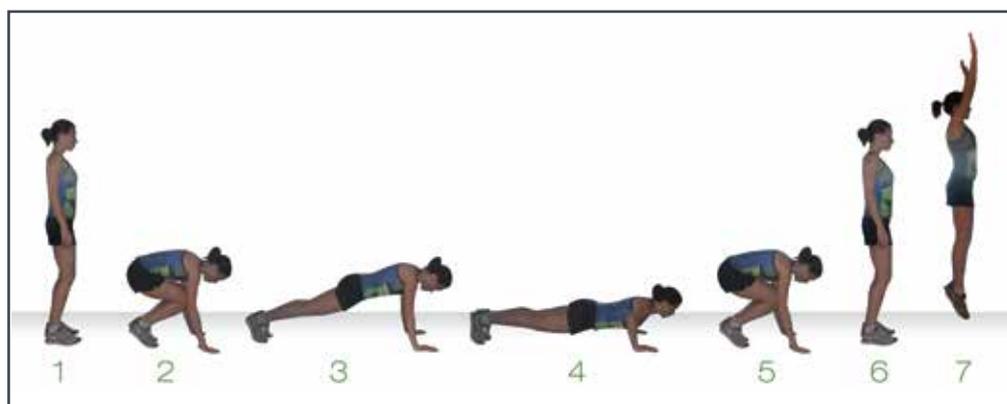
I want to go home. And if doesn't feel like that, then go harder during the rest phase!

Tips:

If you want to make it into a really tough session. Add 5 burpee/press ups to the end of the first effort phase, then reduce the burpee/press ups to 4, then 3, then 2 and so on until you get to the 20m efforts. Here just do one burpee/press up on each rep. Cycle up on your way back out to the longer intervals. Do not rest on the press ups. They are meant to be fast. Drop and get them done.

You can also add sit ups to mimic being rolled in a tackle to each effort instead.

Monitor your ground speed for improvements in pace!



Burpees. Digital Image. Hard Body Outdoor Fitness, n.d. Web 23 Feb 2015 <http://www.hardbodyoutdoorfitness.com/>

image 3

Burpees



Digital Image. Timeslive.co.za, n.d. Thu 24 Mar 2015 <http://www.timeslive.co.za>



PART 2 STRENGTH

Believe it or not, strength training in Netball is critically important. Getting bumped off the ball is frustrating at best and can lose you the possession and game. I have devised a training program for Netball players that can continue right through the season.

If you are at all concerned about putting on bulky muscle, don't! Women (if you are male and using this manual I apologise) don't tend to put on muscle the same way that men do. It is mostly due to hormones and the relative absence of testosterone in your systems. It has actually been found that most women when doing heavy weight training can only put on 1kg of muscle per year!

But I went to the gym and I put on weight...!!!

Yes, you probably did. There are two main reasons for this;

1. When you exercise muscle tissue, they get stressed. They also want to recover. What they need is fluid to transport the essential nutrients to your muscles, so naturally they fill up and you put on weight. When you start a strength program, wait about 6 weeks prior to coming to a conclusion about you bulking up. It is at about this time when your body tends to level off and become more used to the trauma.

2. When we do strength training we tend to eat more. FACT. We get hungry. Unfortunately the calories we eat are normally more than the calories we burn when we exercise. So if this is you, fess up and go back to my complicated nutrition plan at the start of the book...

STRENGTH PROGRAM

BASE STRENGTH SESSIONS

We are going to entirely focus on body weight exercises. You need to be strong, but it is always in relation to body weight for Netballers. You never really need to wrestle someone else, it is more about intensity of movement of your own body, and the occasional bumping of someone else when the umpire isn't watching!

I will only give you one body weight strength day, as it is pretty all encompassing. If you start to get bored of it, be creative, get on the net and design your own program. All you need to remember is that no one else will be doing it!

We cover the chest, upper back, lower back, legs, abs and arms in the program.

BW1

Push Ups Twists

These are just like normal push ups, but you then take one hand off the ground at the top of the cycle and turn your entire body with one hand up in the air. Modification: If you are unable to do a full push up, drop to your knees and try it, or perform it on an elevated surface.

Reps: 12-20

Sets: 2



Push Ups Twists. Digital Image. Bodyandsoul.com.au, n.d. Thu 24 Mar 2015 <http://www.bodyandsoul.com.au>

image 4 Push Ups Twists

Chin Ups

Now don't be alarmed... I know most of you would say you cannot do even one. And that is ok. With chin ups, it is about the effort, not the reps. Eventually you will be able to perform a full chin up.

To begin, buy a chin up bar or go to the park and use the monkey bars at the kids gym. Also purchase a THERABAND. This is an elastic tubing or band that you can tie to the bar, then place around your knees that will assist you. When lowering yourself, go until your arms are ALMOST straight, then return. Lift until you can peak over the top of the bar. If you need more help, get a stronger

resistance band.

Reps: 12-20

Sets: 2



Assisted pull ups. Digital Image. Woldfitness.com, n.d. Thu 24 Mar 2015 <http://woldfitness.com>

image 5 Chin Ups

Dips

You should LOVE this exercise. Tuck shop arms be gone! Find yourself a chair, a log, or a low surface, where you can place your feet in front and lower your body. The further you place your legs, the harder it is. To start, keep your knees bent and close, then progress and move them out. To make it really hard, elevate them on another chair!

Reps: Go crazy

Sets: Go nuts



Chair-dips. Digital Image. Pixshark.com, n.d. Thu 24 Mar 2015 <http://pixshark.com>

image 6 Chair-dips

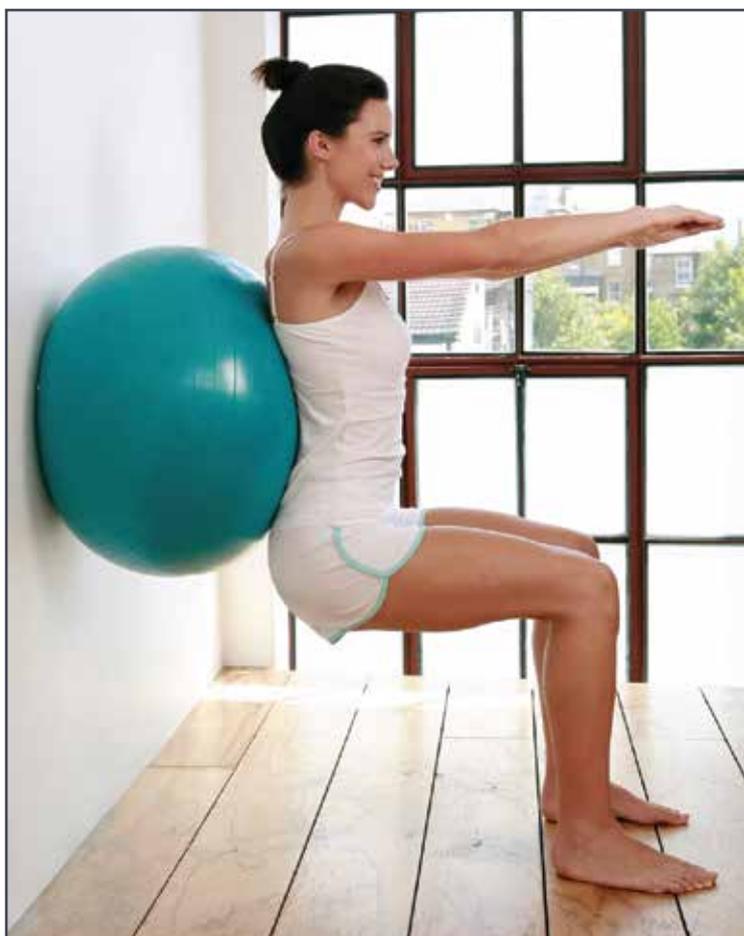
Swiss Ball Wall Squats

These sound easy, but you can make them really, really hard! Start by simply using just the ball and your two weary legs. When you get better, start to hold the position at the bottom of the cycle for a few seconds. As you feel stronger, hold the position for up to 10 seconds. You will feel the burn! Great for shaping...

As you progress even further, try it on ONE LEG. Same thing. Start by perform-

ing it smoothly, then as you grow stronger, slow it down and hold on one leg for the full 10 count.

Reps: 20
Sets: 2



Swiss-Ball-Wall-Squat. Digital Image. Watchfit.com, n.d. Thu 24 Mar 2015 <http://watchfit.com>

image 7

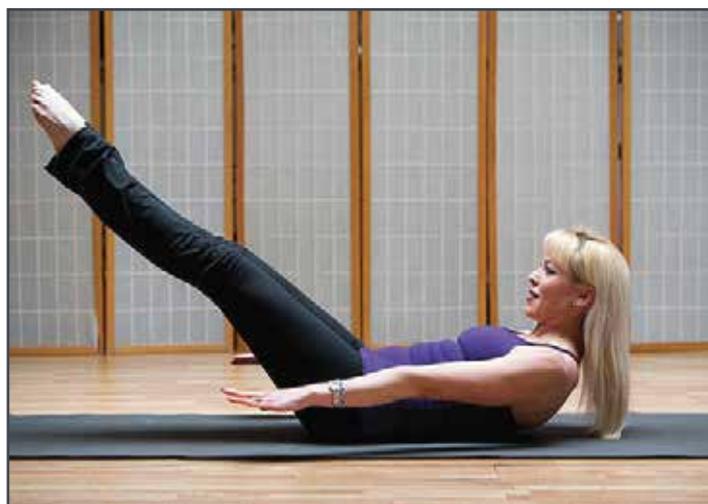
Swiss ball wall squats

100's

These are a favourite of mine. Mostly

because they hurt so much, but produce great results. Lie on your back with your lower back pressed into the floor. You may need some cushioning like a pilates mat. Lift your legs to 45 degrees, hands reaching past your waist. Do a small crunch by reaching forwards about 10 cm, lifting your chest slightly off the floor. Bounce your hands up and down rapidly, you will feel your abs burning....

The idea is to get to 100!



Swiss-Ball-Wall-Squat. Digital Image. Watchfit.com, n.d. Thu 24 Mar 2015 <http://watchfit.com>

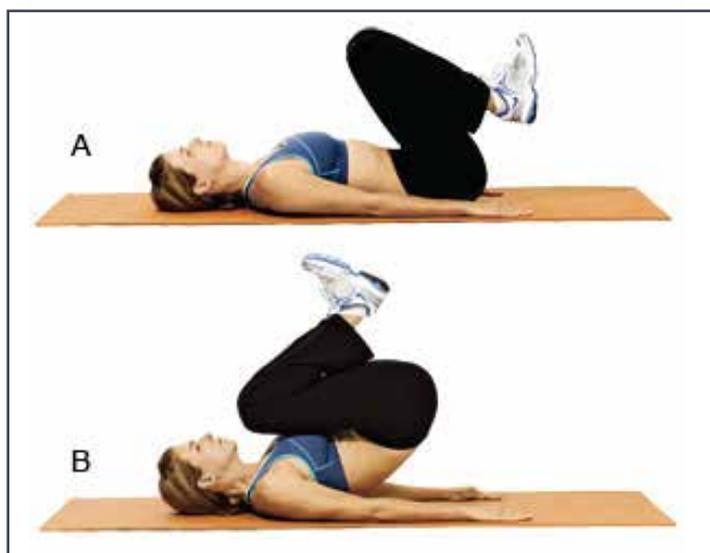
image 8 100's

Reverse Crunches

Another great abdominal exercise! Lying on your back on the same cushioned mat, feet flat on the floor. Lift your knees from the mat, bracing your body with palms flat on the floor. Curl your

knees up toward you, effectively doing a reverse crunch.

Reps: 20
Sets: 2



0611_rev_crunch. Digital Image. Womenshealthmag.com, n.d. Thu 24 Mar 2015 <http://www.womenshealthmag.com>

image 9 Reverse crunches

Lying Back Extension aka Superman

This terrific exercise really helps prevent your lower back from getting injured. Lying face down...cushion mat...

Lift your chest from the ground, with your hands under your chin. Hold for 5 seconds. Relax. Repeat. As you progress, you can move your hands to be in front of yourself... hence the SUPER-MAN. And when ready, lift your legs from the ground too. If you have any sort of back pain, cease immediately

and get advice.

Reps: 12-15
Sets: 2



Back-Extension. Digital Image. Imgarcade.com, n.d. Thu 24 Mar 2015 <http://imgarcade.com>

image 10 Lying back extension

Plank

We know it, we love it, we do it. Miranda Kerr can do it for 10 minutes apparently! Do two reps, to max time. Compete with your friends...

Reps: 2
Time: Max



Bridge-Plank-on-Elbows. Digital Image. Inmotionlife.com, n.d. Thu 24 Mar 2015 <http://www.inmotionlife.com>

image 11 Plank



Woman-Static-Stretching. Digital Image. Safe-sport.pl, n.d. Thu 24 Mar 2015 <http://safe-sport.pl>

STRENGTH MATCH FIT SESSIONS

Getting functional strength is different to getting a base fitness. It is critically important for you to take the clinical type of training you are doing in the gym or park and convert it into something that your body will recognize on the field or court.

Your opponents will not wait for you to 'recoil' for three seconds and they certainly won't let you wait a second between sets!

For the sake of clarity, we will call these exercises our PLYOMETRICS or PLYO sessions. They are explosive, continuous, functional and HARD!

For Netball, the key here is to MINIMISE contact time on the ground and to increase balance. We want to prevent ankle injuries, knee injuries and impact injuries. Doing PLYO's can achieve all of that and more.

Reps are going to be high. Around 60-80 reps per body part is to be expected. We are going to complete them over distances as well, and the focus is on exploding into the movement, to achieve as high, as fast and as powerful a repetition as you can.

It will create a nimbleness to your movements, limit the amount of time your body needs to be in contact with the ground so that your power and speed accelerates beyond what you thought was possible.

The key is to do it regularly!

You will need a field, oval or court to perform the program. A space up to 50m is ideal.

Warm up consists of a 5 minute jog at moderate pace, with your core ballistic stretches. This is outlined in the length section of the guide.

Let's roll.

SMF1

1. Warm up
2. 10m high squat jumps, Little feet pumps for 30 seconds. Repeat x 3
3. 20m 90% sprint, 20m recovery x 5
4. 10m single leg squat jumps, High knee pumps 30 seconds. Repeat x 3
5. 20m 90% sprint, 20m recovery x 5
6. 20m lunge jumps, 15 side to side speed jumps. Repeat x 2
7. 30m 90% sprint, 30m recovery x 5
8. 15 Box Jumps, Fast Skip 1 minute. Repeat x 2
9. Warm Down

SMF2

1. Warm Up
2. 15 Log or box jumps, Dips x 10. Repeat x 3
3. 30m 90% sprint, 30m recovery x 5
4. 10 burpees. Max Plank Repeat x 2
5. 30m agility cones (cones placed 3 m wide and 3 m in front over 30m.

- Always face forwards). 10 push up. Repeat x 3
6. 10 standing sideways long leap. Fast Skipping 1 mins, Repeat x 3
7. 1 minute box or log toe taps fast. 30 second rest. Repeat x 3
8. 5 minute running time trial (as fast as you can go for 5 minutes)
9. Warm down

Lunge Variation 3: Jumping Lunges. Digital Image. Lean It Up, n.d. Web 23 Feb 2015 <<http://www.leanitup.com/>>

image 12

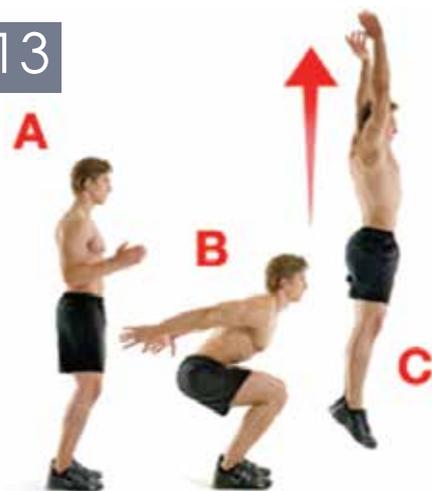
Lunge jumps



Squat Jumps. Digital Image. TRIBESPORTS 2011-15 Web 9 Mar 2015 <http://tribesports.com/>

image 13

Squat jumps



1-Leg 90 degree Squat Jump R. Digital Image. Cari-fit.com , n.d. Web 23 Feb 2015 <http://www.cari-fit.com/>



image 14 Single leg jumps

Cell Block B Squat Jumps. Digital Image. Mi-rEvolution Trainer, n.d. Web 23 Feb 2015 <http://mirev.propaganda3.com/>



image 15 High Knee jumps

Walking Pushup. Digital Image. MH Lists, n.d. Web 23 Feb 2015 <http://www.menshealth.com/>

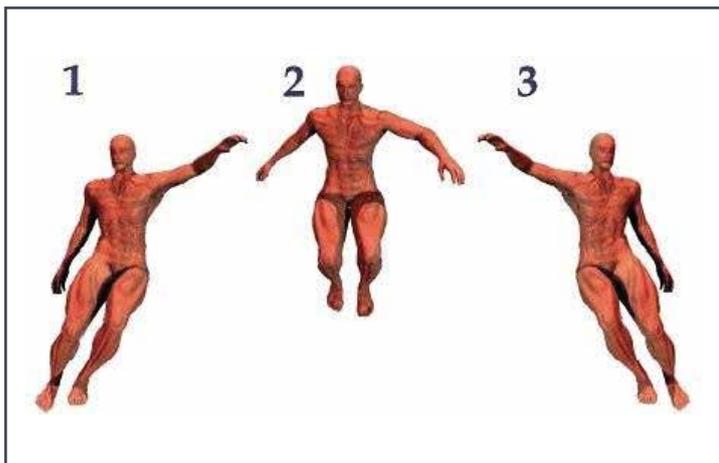


image 16 Side to side jumps



image 17 Push up walking



image 18

Box jumps
(you can also use logs at the oval)

Box-Jump. Digital Image. Womenshealthmag.com, n.d. Thu 24 Mar 2015 <http://www.womenshealthmag.com>

Mountain Climbers. Digital Image. Fitness Perks, LLC, n. d. Web 23 Feb 2015
<http://www.enjoyyourhealthylife.com/>



image 19

Mountain Climbers

Guía de ejecución. Digital Image. Onlinepersonaltrainer.es, n.d. Web 23 Feb 2015 < <http://www.onlinepersonaltrainer.es/>>



image 20

Sideways long leap

Toe Taps. Digital Image. Competitor Group Inc. n.d. Web 23 Feb 2015
<http://running.competitor.com>



image 21

Toe taps on a box or log



PART 3 LENGTH

Stretching is controversial at worst and misunderstood at best. There is no clear and definitive research that guarantees one method is more successful than another. I have drawn upon years of experience in injury prevention and athlete management to come up with this program.

It is important to note that everyone is different and you may respond slower or faster than your peers. Just look after yourself and listen to your body.

There are two distinct ways that I will encourage stretching.

BALLISTIC: Stretching by using movement repetitively. This is to be mainly used PRE MATCH or PRE SPORTS SPECIFIC TRAINING.

STATIC: Stretching by holding the position for longer periods. This is to be used in your GYM TRAINING.

Ballistic stretching has a poor reputation, but the professional community of athletes are understanding that they are not as harmful as previously thought, and they actually offer more advantages, especially pre match and exercise warm up.

Static stretching is in general to be avoided pre match or pre workout. This is a general rule only and some athletes do not feel complete in their pre match routine unless they have done static stretching. In my research, static stretching can reduce performance by basically putting your muscles to sleep.

Stretch duration:

STATIC: 30-60sec holds

BALLISTIC: 10-20sec of movement, repeated two to three times.

Each type of stretching takes the same amount of time.

PRE MATCH or BALLISTIC STRETCHING

Leg swings front to back
Leg swings side to side
Leg and lumbar rotations, side to side in lying
Lumbar rotations
Lumbar rolling
McKenzie full range with cat stretch
Standing lumbar twists
Standing flexion side bends
Shoulder full range claps
Hand overhead tricep stretch
Full range neck movements. Side to side. Forwards, backwards, rotations.

Additional Lower Limb Warm Up

Knee raises with hop and arm thrust
Sideways running
Knee lifts with a lateral rotation
Little feet

Leg and lumbar rotations. Digital Image. The Stretching Institute.com, n.d. Web 23 Feb 2015 < <http://injuryfix.com/> >



image 22 Leg and lumbar rotations in lying

Side-to-side leg swings . Digital Image. Number One Fitness, n.d. Web 23 Feb 2015 <http://blog.no1fitness.co.nz/>



image 23 Leg swings side to side

Straight leg swings. Digital Image. Number One Fitness, n.d. Web 23 Feb 2015 <http://blog.no1fitness.co.nz/>



image 24 Leg swings front to back

Knee rolls. Digital Image. NHS Choices, n.d. Web 23 Feb 2015 < <http://www.nhs.uk/>>

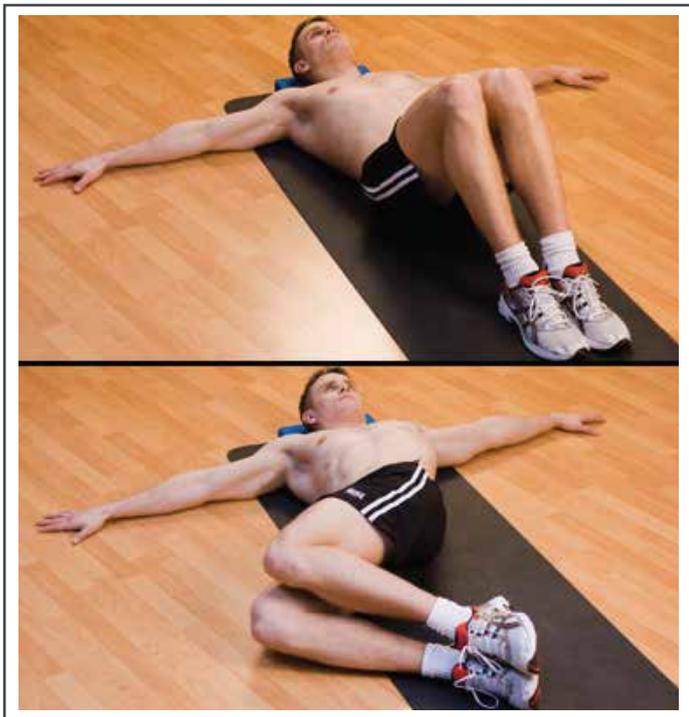


image 25 Lumbar rotations

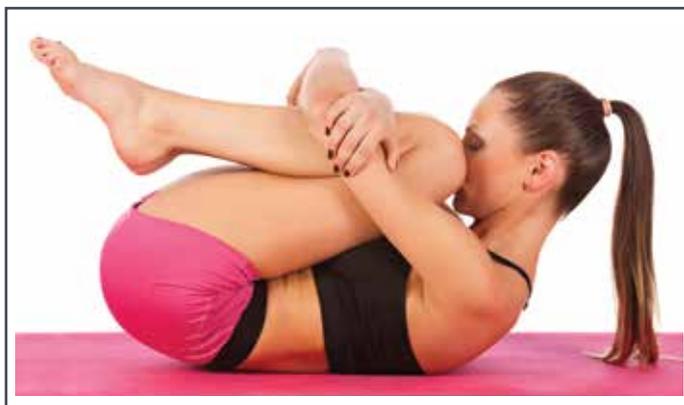


image 26

Lumbar curls - rock backwards and forwards

Press Up: Sphinx Position and . Digital Image. Kenai Spine, n.d. Web 23 Feb 2015 < <http://www.kenaispine.com/>>

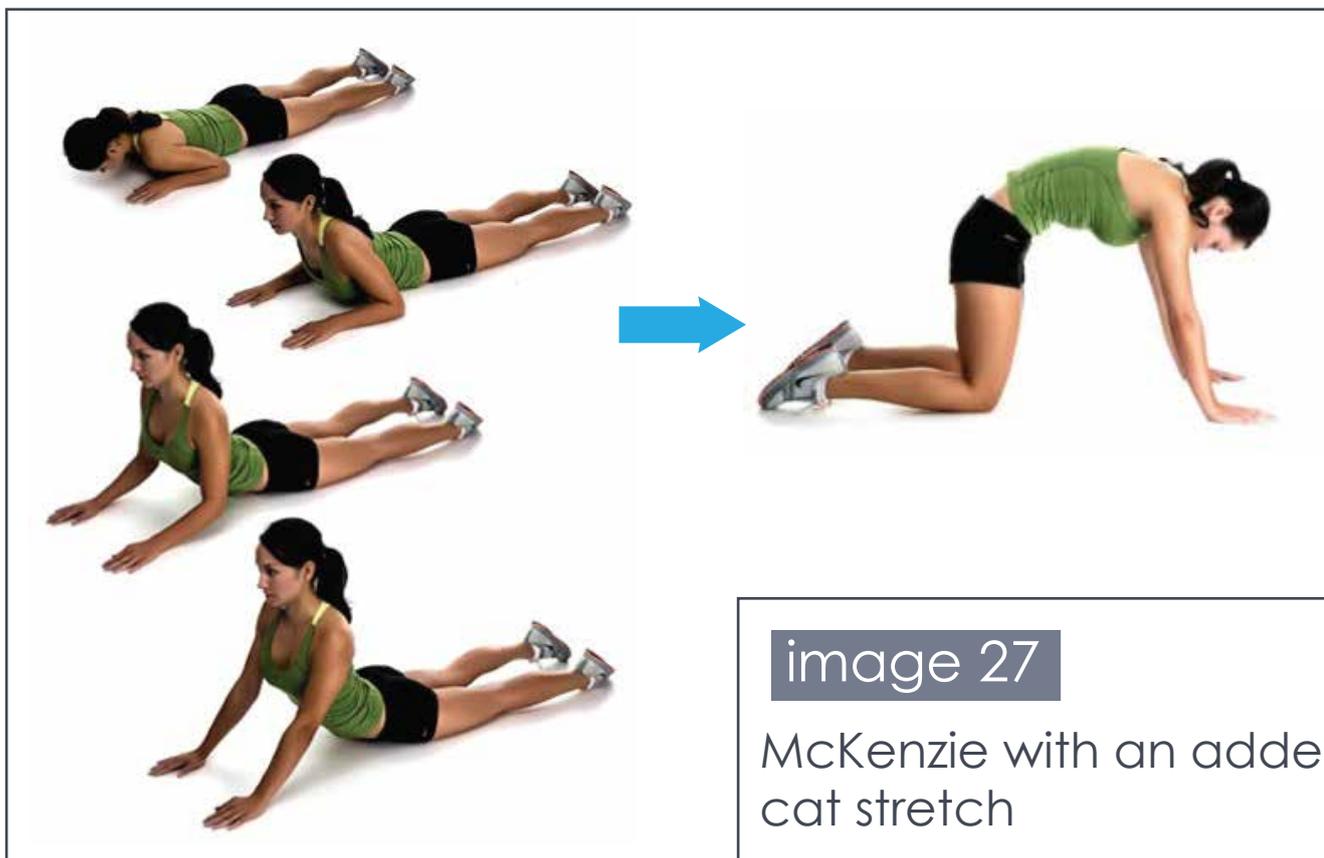


image 27

McKenzie with an added cat stretch

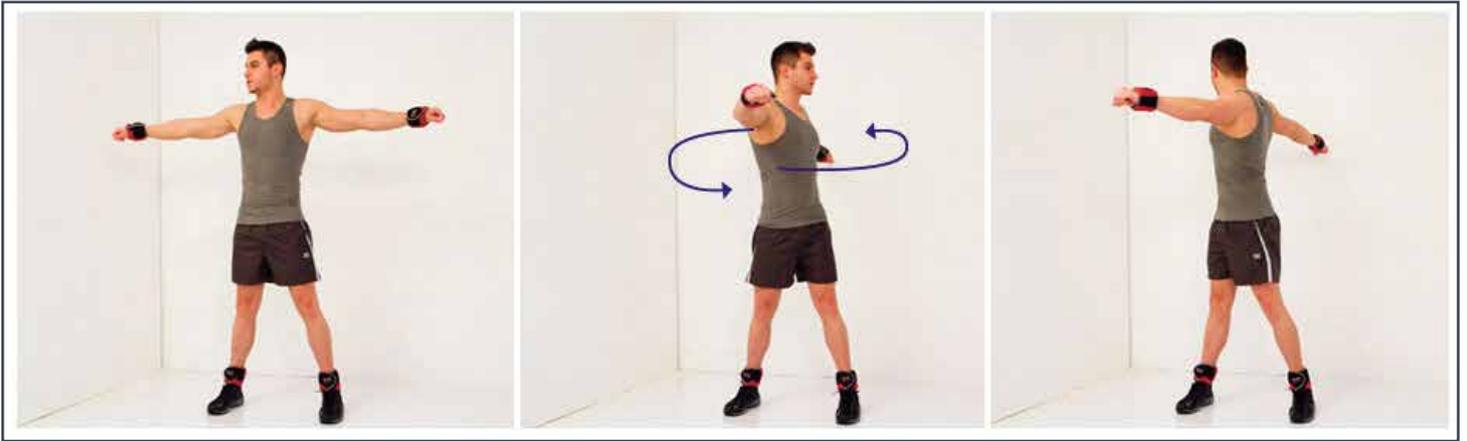


image 28 Standing lumbar twists

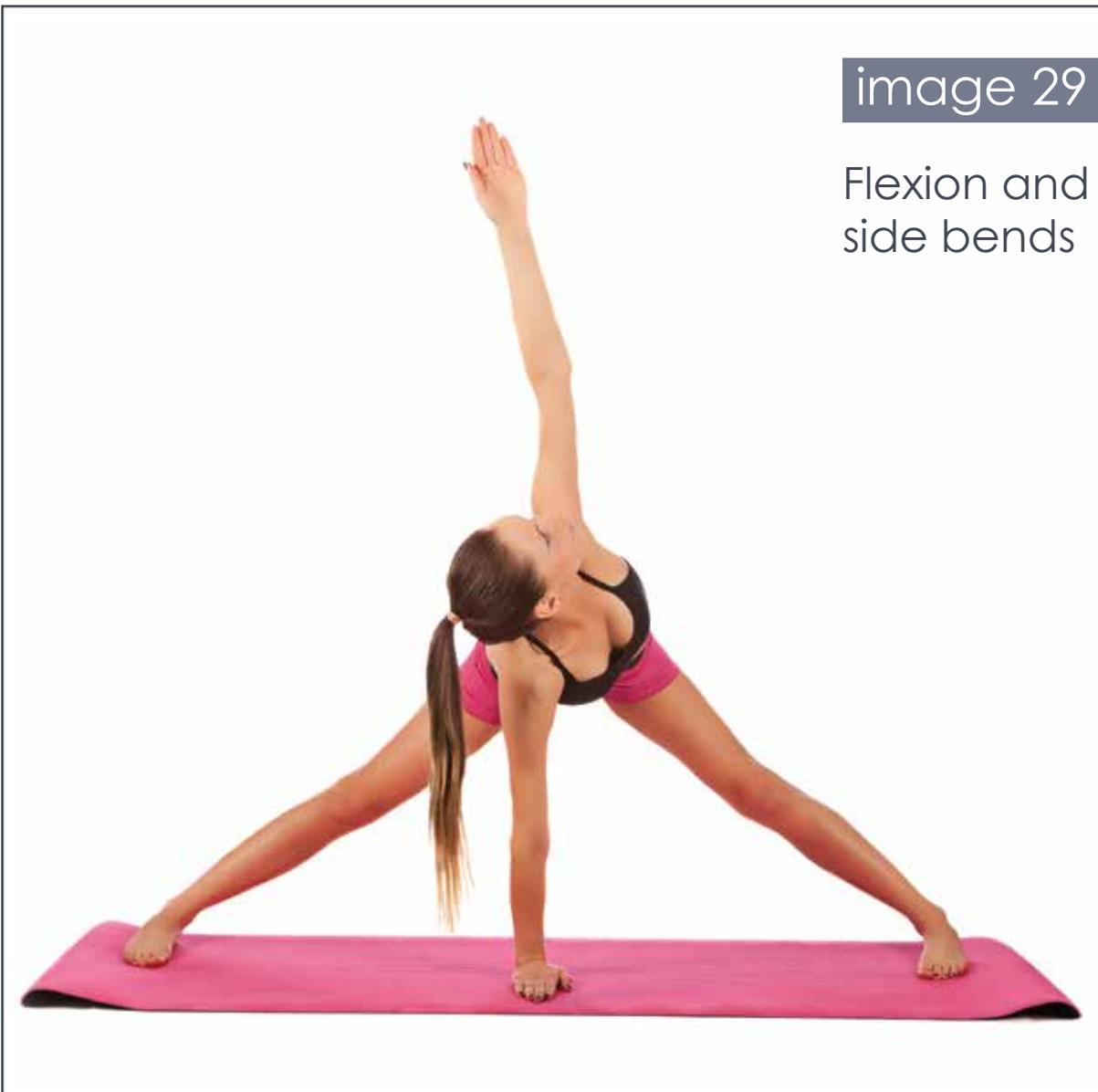


image 29

Flexion and side bends

STATIC STRETCHING

This is really a no brainer. You need to cover all muscle groups evenly, hold each stretch for a minimum of 30 seconds, up to 1 minute. All athletes do not stretch enough, period!

If you are really keen on performance, attending yoga or pilates is a tremendous way to guarantee you are getting a good overall stretching regime. If you don't want to go that route, use the website:

➔ <http://www.stretching-exercises-guide.com/static-stretches.html>

It is an incredible reference for an enormous range of stretching exercises. You will also find ballistic or dynamic exercises on this website too. I will summarize what stretched are of particular importance to your performance here.

AREAS of PARTICULAR IMPORTANCE

Chest - when weight training, the chest muscles tend to get extremely tight, they can cause curving of the shoulders and injury. Keep your chest open for better training and better performance.

ITB - Due to the increasing amount of running this program commits to, you better keep your ITB's loose. Try a foam roller to roll them out if stretching doesn't work.

Calves - These are also a big problem in athletes. Tension in them usually stems from poor running technique rather than a lack of stretching. Get your gait checked out by a pro and avoid unnecessary hardships and stretching.

Lats - Believe it or not, the lats also cause rounding of the shoulders. Keep these loose too.

AREAS of PARTICULAR IMPORTANCE

Glutes - These powerful muscles in your butt need to be kept supple to prevent pain in your lower back and aid in range of movement for running.

Hamstrings - Often the hamstrings are tight due to inactive or poorly controlled glute muscles. Stretching them may help somewhat, but if it doesn't, get in to see your physio to check what is really going on.

PROGRAM SCHEDULE

BRINGING IT TOGETHER

We are working on a 4 day per week commitment schedule. The program is designed to cover everything each FORTNIGHT.

YOU HAVE TWO REST DAYS PER WEEK.

If you miss a session, don't worry, just have your sessions lined up, and tick



them off as you do them. When you get comfortable with training in this fashion, you are more than welcome to mix up your training by combining different elements on different days.

So, the CODES OF TRAINING we have is:

CB1	CARDIO BASE 1
CB2 - A + B	CARDIO BASE 2 METHOD A, B
CB3 - A + B	CARDIO BASE 3 METHOD A, B
CM1	CARDIO MATCH FIT 1
CM2	CARDIO MATCH FIT 2
CM3	CARDIO MATCH FIT 3
BW1	BODY WEIGHT SESSION
SMF1	STRENGTH MATCH FIT 1
SMF2	STRENGTH MATCH FIT 2
BALLISTIC STRETCHING	DYNAMIC STRETCHES FOR PRE MATCH AND PRE TRAINING
STATIC STRETCHING	HOLD STRETCHES FOR GYM

EARLY PRE SEASON TRAINING SCHEDULE (6-12 weeks out)

DAY	CARDIO TYPE	STRENGTH TYPE	STRETCHING TYPE
DAY 1	CB 1	BW1	STATIC
DAY 2	CB 2A		STATIC
DAY 3	CB 3A	BW1	STATIC
DAY 4	CB 1		STATIC
DAY 5	CB 2B	BW1	STATIC
DAY 6	CB 3B		STATIC
DAY 7	CB 1	BW1	STATIC
DAY 8	CB 2A		STATIC

PRE SEASON TRAINING SCHEDULE (6 weeks out)

DAY	CARDIO TYPE	STRENGTH TYPE	STRETCHING TYPE
DAY 1	CB 1	SMF1	BALLISTIC
DAY 2	CM 1	BW1	STATIC
DAY 3	CB 2A		STATIC
DAY 4	CM 2	SMF2	BALLISTIC
DAY 5	CB 1	SMF1	BALLISTIC
DAY 6	CM 1		STATIC
DAY 7	CB 2B	SMF2	BALLISTIC
DAY 8	CM 2	BW1	STATIC

MID SEASON TRAINING SCHEDULE

We are assuming that you have two days of training with your club and a game day. This takes its toll on our bodies, and I have adjusted the program accordingly.

Training day in this table refers to your club training.

There are reduced strength sessions here. You can do more if you wish. This is entirely dependent on the individual.

DAY	TRAINING DAY	CARDIO TYPE	STRENGTH TYPE	STRETCHING TYPE
DAY 1	No		BW1	BALLISTIC
DAY 2	Yes	CM 1		STATIC
DAY 3	No	CM 2	SMF1	BALLISTIC
DAY 4	Yes	CB 3A		STATIC
DAY 5	No	CM 3		BALLISTIC
DAY 6	Rest			STATIC
Game day				BALLISTIC
DAY 1	No		BW1	STATIC
DAY 2	Yes	CM 1		STATIC
DAY 3	No	CM 2	SMF 2	BALLISTIC
DAY 4	Yes	CB 3B		STATIC
DAY 5	No	CM 3		BALLISTIC
DAY 6	Rest			STATIC
Game Day				BALLISTIC

NOTE:
It is important that you do your ballistic stretches prior to games and club training.



Junior Development Supplement

When the body is growing, it is important to let it continue on its natural course without too much intervention. There are many myths regarding the stunting of growth by starting weights too early, or altering eating habits to the detriment of development.

In extreme cases, over doing anything will lead to a changing of the physicality of the growing body. I have developed this guide as a way to enable players under 16 years of age benefit from the same principles, but avoid any unwanted issues that may arise from over doing vigorous exercise.

Some notes on kids and sport.

Hydration

It is critical that the growing body stay adequately hydrated when exercising. Kids generally won't drink as much as they should and do not realize they are losing fluid.

Nutrition

Maintain a healthy varied diet of protein, carbs and veges. Avoid excessive sugar and soft drink, as well as attempting to avoid packaged foods. In a simple sense putting any food that does not come in a packet is a pretty good thing.

Monitoring

It is important to be monitoring your child's performance. Keep a wall chart of how they go in their regime. Monitor their weight, keep regular photos of their bodies to monitor weight gain or loss. You can adjust their intake accordingly if you see a trend that is not preferable.

Environment

Kids need a varied environment. Anything from sleeping habits, sitting habits and standing habits can lead to imbalances in their bodies. Encourage your children to exercise regularly outside and with their friends. Avoiding long periods of sitting or lying will help their spinal development.

Stress

Do not be an idiot with sport. Encourage, do not push! You will not get a better result out of your child by pushing them against their will. If they enjoy it, they will grow to love it and want to do well. Encourage the enjoyment, the rest will follow.

Sleep

They need heaps. The more they sleep, the more they grow.

The Junior Program

Many of the same principles exist, but I have put it into a semi repetitive format that is carried out five days per week. Two of the days the program only goes for 10 minutes, so it will always fit in with their schedule.

When monitoring the program, make sure you reward them for getting to mile stones like 20 push ups or 5 chin ups! They will want to continue and do more, more often!

DAY 1

10 minute run

The aim is to go further each time you run. From your house, run 6 minutes out, and then get back within the 10 minutes. The next time you run, go a little further by a few houses in the 5 minutes. Get your parents to measure how far you are going.

Max Press ups x 3 sets

DAY 2



Max Press Ups x 3 sets

Max Sit Ups x 3 sets (if there is any complaint of back pain, please see your physio)

DAY 3

Warm up by doing three laps of the netball court.

Sprint Goal line to D and jog back

Sprint Goal line to first third and jog back

Sprint Goal line to end third and jog back

Sprint goal line to back D and jog back

Sprint goal line to goal line and jog back
10 Burpees, 2 minute rest.

Repeat x 3

DAY 4

Box/Log Jumps x 20
Max Push Ups
Max Sit ups
Repeat x 3

Repeat x 3

BONUS DAY

20 minute jog at a pace you are comfortable with.
Max Dips Ups x 3 sets

Pull-up Bar. Digital Image. Wanderful Media, n.d. Web 23 Feb 2015
< <http://www.findsave.com/>>



image 30

Shows good form on a push up. The

object in the photo is a push up bar that doubles as a chin up bar to hang over the door. Good sports stores stock them.

You can perform them under or overhanded. Variety is best.

Box jump. Digital Image. Men's Health, n.d. Web 23 Feb 2015
< <http://www.menshealth.co.uk/>>



image 32

Burpees are great for kids.



image 33

Burpees

Burpees. Digital Image. Hard Body Outdoor Fitness, n.d. Web 23 Feb 2015 <http://www.hardbodyoutdoorfitness.com/>

More Information

If you would like more information on how to get the most out of your training, contact us at one of our clinics throughout Sydney. We have a crew of highly trained physiotherapists waiting for the right client to take on.

All the information contained in the program is to be used as a guide only. If you experience any issues performing the exercises, talk to your local physio or sports trainer about how to better do them.

We would love to help you in your training and hope to see you soon!



Play safe!



69 Phillip St, Parramatta, NSW 2150

Physio INQ is part of a network of Physio clinics across Australia, employing and empowering the highest quality of practical and support staff

We are a cutting edge business of superb ethical standards, striving to be the most professional and personal health care business you will come across.

Physio INQ, originally Greater West Physio was established to get rid of the old school and bring in the new. Our practitioners have open minds, strong hands and an unwavering goal to improve the lives of every client we come across. Our mission is simple- to bring quality health care to the common man in a way that is personable, professional and memorable.

Through the utilization of our Unique Total Care Philosophy Framework, through to the efficient and clean paperless offices we are driving, to the embracement of the digital age with online bookings, exercise prescription and more, Physio INQ is moving with you.

Focusing on the family unit, we have developed a training program of our staff to be better communicators and mediators of health. Our aim is to have a completely open and transparent health relationship with all of our clients from day one.

Every clinic is run by locals for locals. Being Powered By Physio INQ is a sign of corporate care. We train, cultivate and embrace only the brightest local talents and aim to deliver our service with a strong community focus.