



Conditioning and Injury Prevention for Rugby

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Conditioning
and Injury Prevention
for Rugby League
and Rugby Union Players -
with Junior Player Supplement

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: 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.



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.

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 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: 50 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

30 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

7km 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

15 minutes.

Monitor: Distance

Method B – Distance Trial

4 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 HIP**s 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.



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!



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 we 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: 700m
Rest distance: 300m.
Repetitions: 8

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: 100m
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. 100m effort , rest 100m
3. 90m effort, rest 90m
4. 80m effort, rest 80m
5. 70m effort, rest 70m
6. 60m effort, rest 60m
7. 50m effort, rest 50m
8. 40m effort, rest 40m
9. 30m effort, rest 30m
10. 20m effort, rest 20m x 10 reps(running backwards for each rest)
11. 30m effort, rest 30m
12. 40m effort, rest 40m
13. 50m effort, rest 50m
14. 60m effort, rest 60m
15. 70m effort, rest 70m
16. 80m effort, rest 80m
17. 90m effort, rest 90m
18. 100m effort , rest 100m
19. 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 10 burpee/press ups to the end of the first effort phase, then reduce the burpee/press ups to 9, then 8, then 7 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!

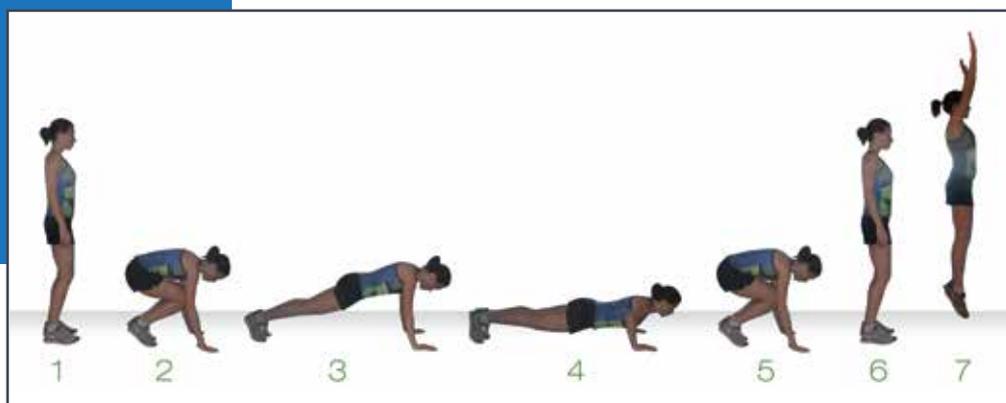


image 3 Burpees

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



PART 2 STRENGTH

Strengthening your entire body is a critical aspect to performance. If there is a weak link, your body and your competitors will find it! It will either get injured, get fatigued or fail to perform.

The base sessions are designed to build your body to a level where your match fit strength sessions will then utilize the size and efficiency of your base. There will be a mixture of core stability exercises, which are the building blocks of your body, as well as peripheral and prime mover exercises, which is where your width and functional strength comes from.

These two different types of exercises exist both in the base sessions and the match fit sessions. Do not miss or skip any sessions! If you are unsure of how to complete any of the exercises, please see your physio or fitness coach for advice.

Exercise References

A terrific reference for all the exercises that I have listed exists on

 <http://www.bodybuilding.com/exercises/>

If you buy ARNOLD SCHWARZENEGGER'S ENCYCLOPEDIA OF BODYBUILDING it will also see you through. A tremendous and classic book.

In these two places you will find a complete directory of the exercises listed. It is important to only use the exercises that I have listed as they are chosen to avoid any unnecessary imbalances that can be caused by certain gym exercises. For instance, you will not see leg extensions or leg curls. These can harm your lower limb mechanics. In general, my rule is

“If you cannot do it in the jungle, do not do it in the gym!”

The sessions can be tacked onto the start or end of the cardio sessions, or done separately. In the program schedule at the end, it will list the strength days and you fit them into suit.

Monitoring

It is **EXTREMELY IMPORTANT** to monitor your strength program. You are to attempt to either add more weight, or do more reps each and every time you do the same exercise on the next session. Keep a diary and be very precise. When adding weight, make sure you do it in small increments for safety.

STRENGTH BASE SESSIONS

During the BASE sessions, it is critically important to exercise to **FAILURE**. This means that you are unable to push any more repetitions. If you can push more out because you have chosen the wrong weight, push them out until you fail. Then add more weight for the next set.



Glossary of TERMS

Exercise Choice:

You can choose your exercises from each subgroup. You will be told how many to choose. Vary and mix them up each session. Monitor which exercises you do and how much weight/ reps you performed. Write it down. Keep variety in your program to get a more global result.

Repetitions:

Reps will be cycled in this program. I tend to ignore the old rules of certain reps for certain type of effect. All reps have good effect if you go to FAILURE. I will limit the reps to 20 at most, and these sessions are killer for growth and PAIN!

Timing for each repetition is as follows:

EFFORT PHASE- as quickly as you are able.

RECOIL PHASE- 3 seconds

PAUSE: 1 second pause between all reps.

Safety and Motivation:

Always train with a partner for safety. When you are going to failure, it is critical that you have someone to 'spot' the bar and lift it from you when you fail. It also keeps you accountable and motivated. Send this program to your mate and get training together...

Spotting:

When you are watching over your partner, make sure you push them to failure. By using just a tiny amount of help, you can get your partner through 'sticking points'. Sticking points are places where the joint is at a mechanical disadvantage and is unable to move the weight. If you help a tiny bit in these sticking points, you can get to a more fatigued muscle!

Dumbbells or Barbells?

I generally encourage dumbbell use for the added benefit of helping with stability. Barbells can be much easier to get to failure though due to the solid nature of the bar allowing your spotter to assist.

Soreness or Delayed Onset Muscle Soreness (DOMS)

This will unfortunately be a part of your life now! The program is designed to continually challenge your body and will incur swelling inside the muscle tissue. This swelling comes on a day later, and can last for up to a week. There isn't much you can do about it, other than wait it out. If it is really bad a massage or a visit to the physio may be necessary.

Warm up.

Warm up with 5 minutes on the treadmill, rower or cross trainer. Each time you move to a new muscle group, perform one set with a lower weight (70% of what you usually lift) and do a set to adjust for coldness, seat positioning, and to check for niggling injuries prior to your effort sets.

Core work reps/sets.

There will be specific instruction on these in the program.

Drop setting.

When you reach failure, you get your partner to take enough weight off so that you can continue doing more reps. You do so until you cannot push any more reps. Then they drop more weight off a second time, and you then continue. Then again a third time. You should end up performing about DOUBLE what you did on the first attempt.

PROGRAM

SB1

Method A - Low Reps, High Weight

Reps: 6-12
Sets: 3

Method B - High Reps, Lower Weight

Reps: 14-20
Sets: 3

Method C - Drop setting

Reps: 8-12, with 3 DROP SETS.
Sets: 3

outs, dips, skull crushers, standing overhead extensions.

CORE (Choose 3)

Front plank (failure x 3)

Side plank (failure x 2 each side)

Crunches on swiss ball (3 sets of 30 reps, add weight and slow the recoil phase down if necessary)

Alternating cross over crunches. (3 sets to failure)

Reverse crunches (3 sets to failure)

Leg lifts (3 sets to failure)

5kg medicine ball rotations with feet off the ground (3 sets to failure)

EXERCISES:

CHEST (Choose 2)

Flat bench, decline bench, pec flies, incline bench, cable crossovers, swiss ball chest press, alternating presses on swiss ball, incline alternating presses, pull overs

LEGS (Choose 2)

Leg Press, one legged leg press, squats, lunges, one legged squat, front squat

Leg exercises to avoid: Seated leg extensions and lying hamstring curls. In general these have the habit of disrupting the biomechanics of the pelvis and lower limb.

TRICEPS (Choose 2)

Tricep rope extensions, horizontal push

Core exercises to avoid: Full sit ups if you have lower back problems. Exercise caution with leg lifts and make sure your lower back remains flat.

SB2

Method A - Low Reps, High Weight

Reps: 6-12
Sets: 3

Method B - High Reps, Lower Weight

Reps: 14-20
Sets: 3

Method C - Drop setting

Reps: 8-12, with 3 DROP SETS.
Sets: 3

EXERCISES:

UPPER BACK (Choose 2)

Lat pull downs wide grip, lat pull downs reverse grip, seated row, bent over row, reverse flys, shrugs, close grip chins, wide grips chins

Exercise caution with shrugs. It can lead to neck complaints if overdone.

LOWER BACK (Choose 2)

Static Horizontal back extension on roman chair, static back extensions on swiss ball, Dead lifts, superman lifts on floor, superman lifts on swiss ball

Exercise caution if you are doing full dynamic reps of back extensions. This can cause issues in the lower back. Static

holds are preferable.

SHOULDERS (Choose 2)

Lateral Raises, Front raises, Upright row, military press, dumbbell overhead press, Arnold presses, Swiss ball seated shoulder press

Exercise caution with front and side raises. If you experience sharp shoulder pain, cease immediately.

BICEPS (Choose 1) (or 2 for those inclined to vanity)

Barbell curls, dumbbell curls, rope curls, seated supported preacher curls

CORE (Choose 2)

Lumbar Jack rope rotations, Prone swiss ball knee crunches, Rope crunches in kneeling, hanging knee raises, hanging knee raises with a twist, Dumbbell side crunches in standing,



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!

Reps are going to be high. 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. We will arrange two distinct sessions here, but once you get a feel for what PLYO training is, you can get creative, making your own choices and improving on your own weaknesses.

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

Warm up

20m deep squat jumps, 10 press up burpees. Repeat x 5

50m 90% sprint, 50m recovery x 5

20m single leg squat jumps, 10 sit up burpees. Repeat x 5

20m 90% sprint, 20m recovery x 10

50m lunge jumps, 25 side to side speed jumps. Repeat x 2

100m 90% sprint, 50m recovery x 5

20m sideways press up walking, 20 high knee jumps. Repeat x 2 each way (L-R)

50m partner drag running (get your partner to hold your shorts and try to stop you from running) Swap, repeat x 5 (if you do not have a partner drag a tire)

Warm Down

SMF2

Warm Up

25 Log or box jumps, Max speed press ups. Repeat x 5

1 x Shuttle Run (Sprint to 10m line, return, then 20m, return, 40m return, 50m, return, 60m, return, 80m, return, 90m, return, 100m, return)

1 minute mountain climbers, 10 burpees. Repeat x 5

50m partner carry, swap. Repeat x 5

15 standing sideways long leap. 10 sit up burpees. Repeat x 5

Fast Skipping 2mins

1 minute box or log toe taps fast. Planking 1 min. Repeat x 3

5 minute running time trial (as fast as you can go for 5 minutes)

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

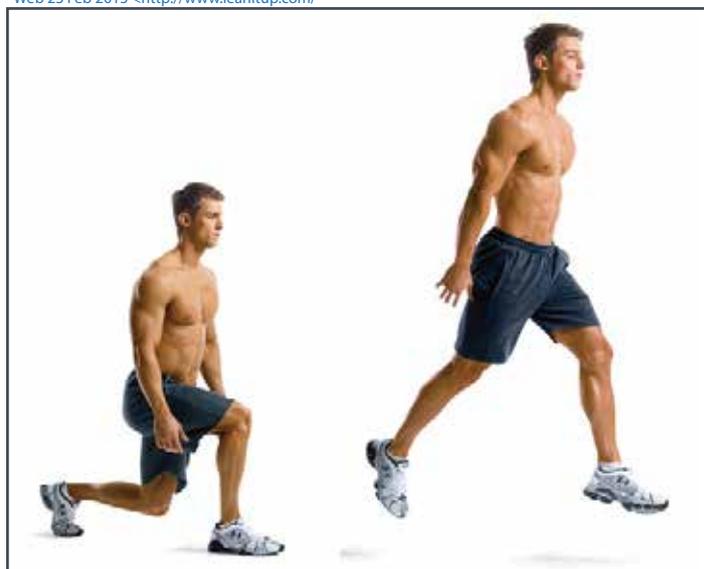


image 4

Lunge 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 5 Single leg jumps

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



image 6 High Knee jumps

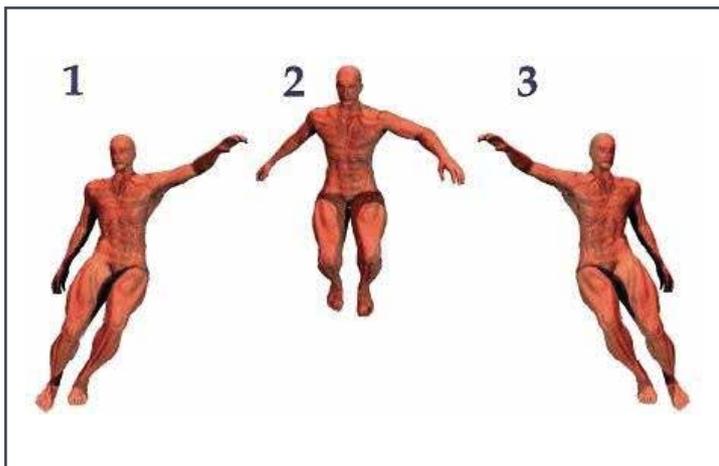


image 7 Side to side jumps

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



image 8 Push up walking

The Tire (Prowler) Push. Digital Image. WannaBeBig, n.d. Web 23 Feb 2015 <http://wannabebig.com/>

Speed & Agility Rugby 7's Starter Pack. Digital Image. Speed Power Stability Systems Ltd, n.d. Web 23 Feb 2015 <<http://www.xlr8.co.nz/>



image 9 Tyre or partner dragging



image 10

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

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



image 12

Mountain Climbers

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



image 11

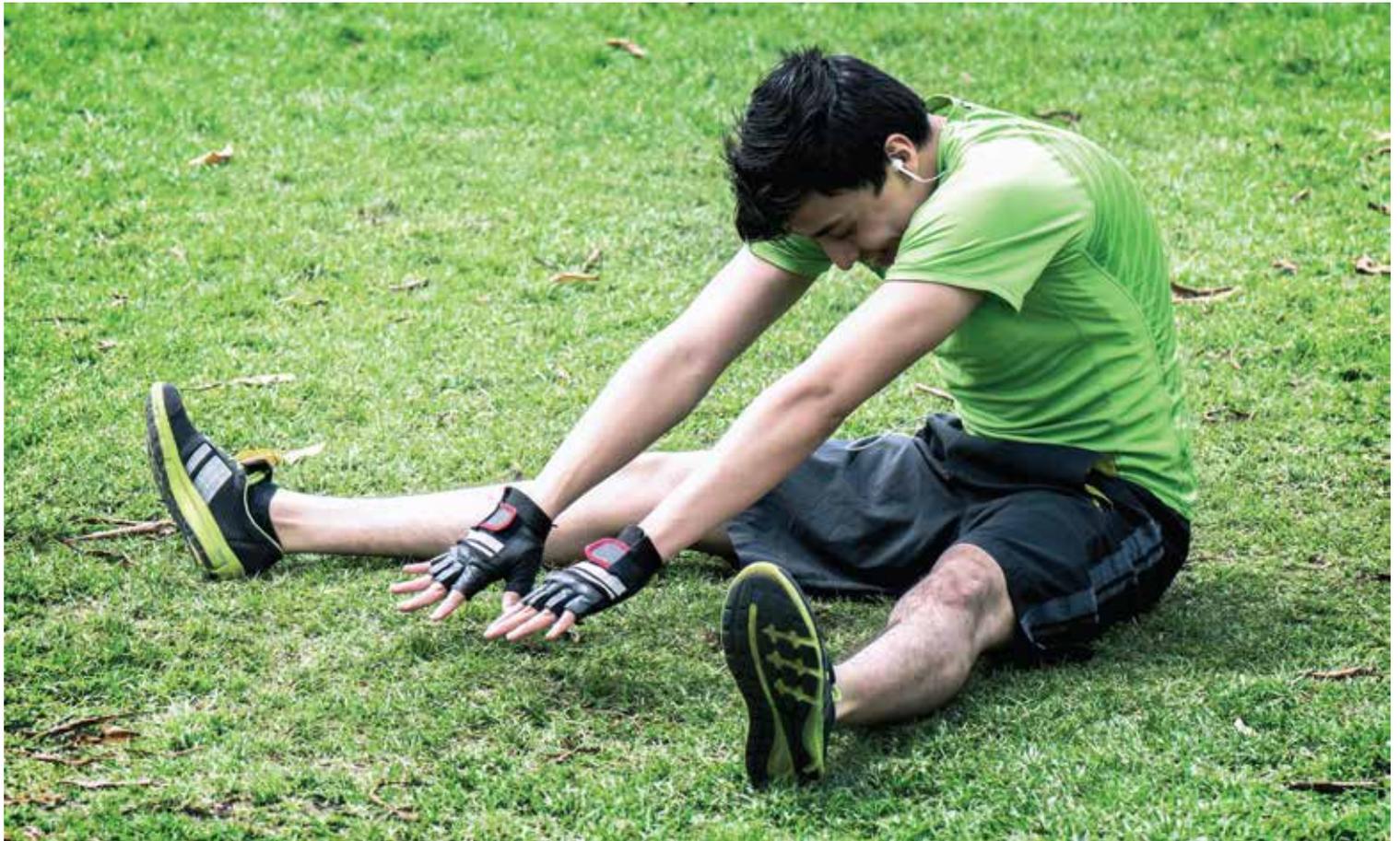
Sideways long leap

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



image 13

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 14 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 15 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 16 Leg swings front to back

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



image 18

Lumbar curls - rock backwards and forwards

image 17

Lumbar rotations

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

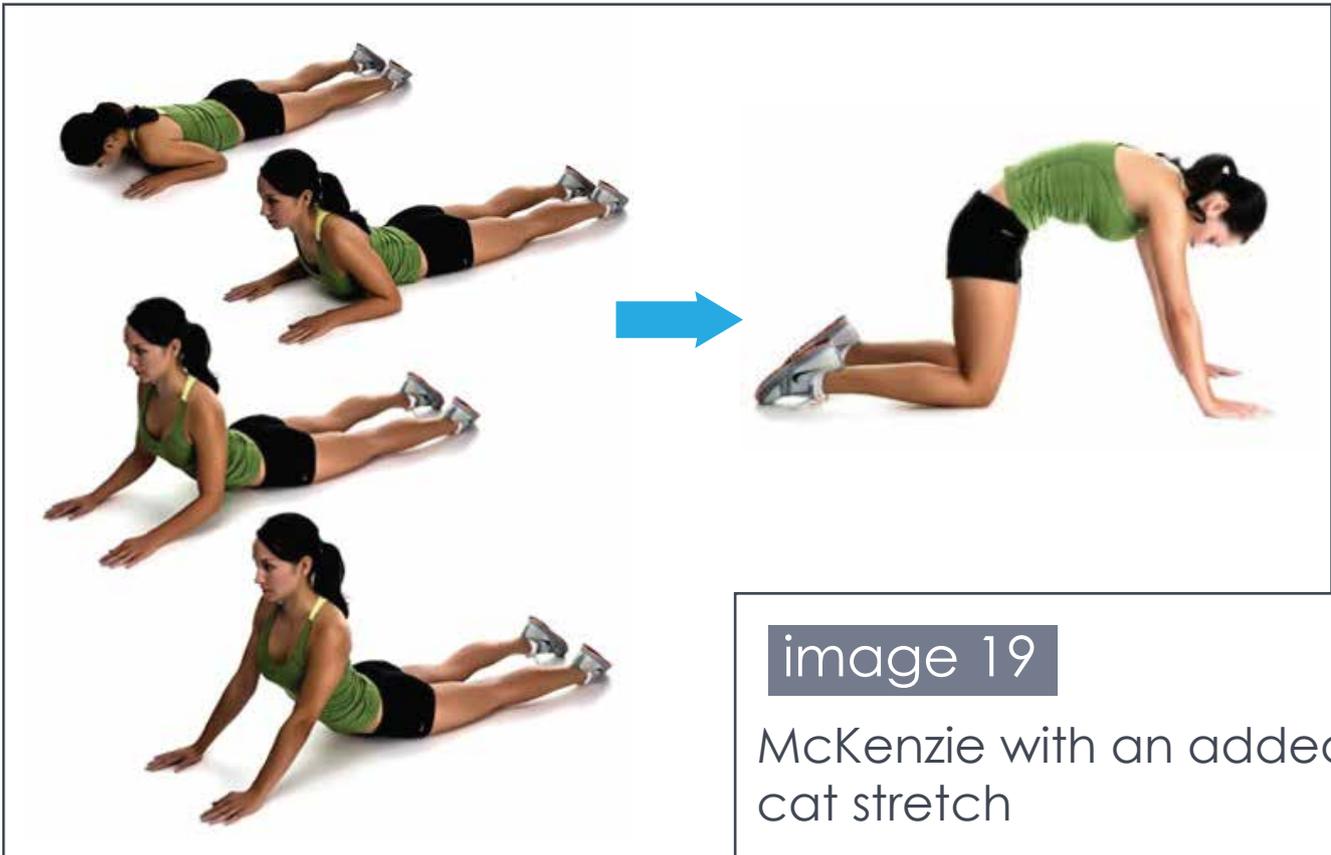


image 19

McKenzie with an added cat stretch

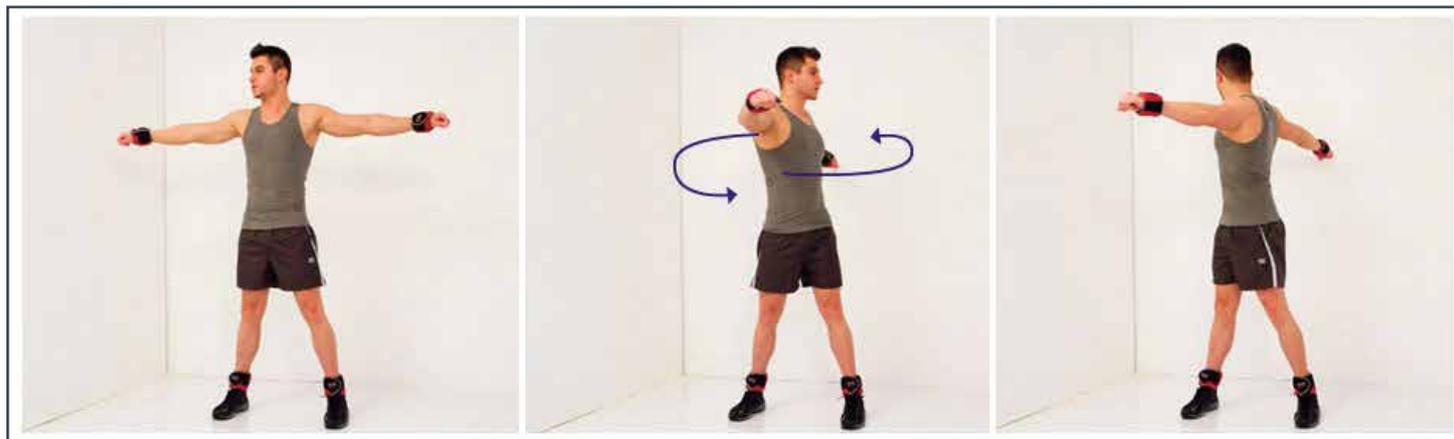


image 20 Standing lumbar twists

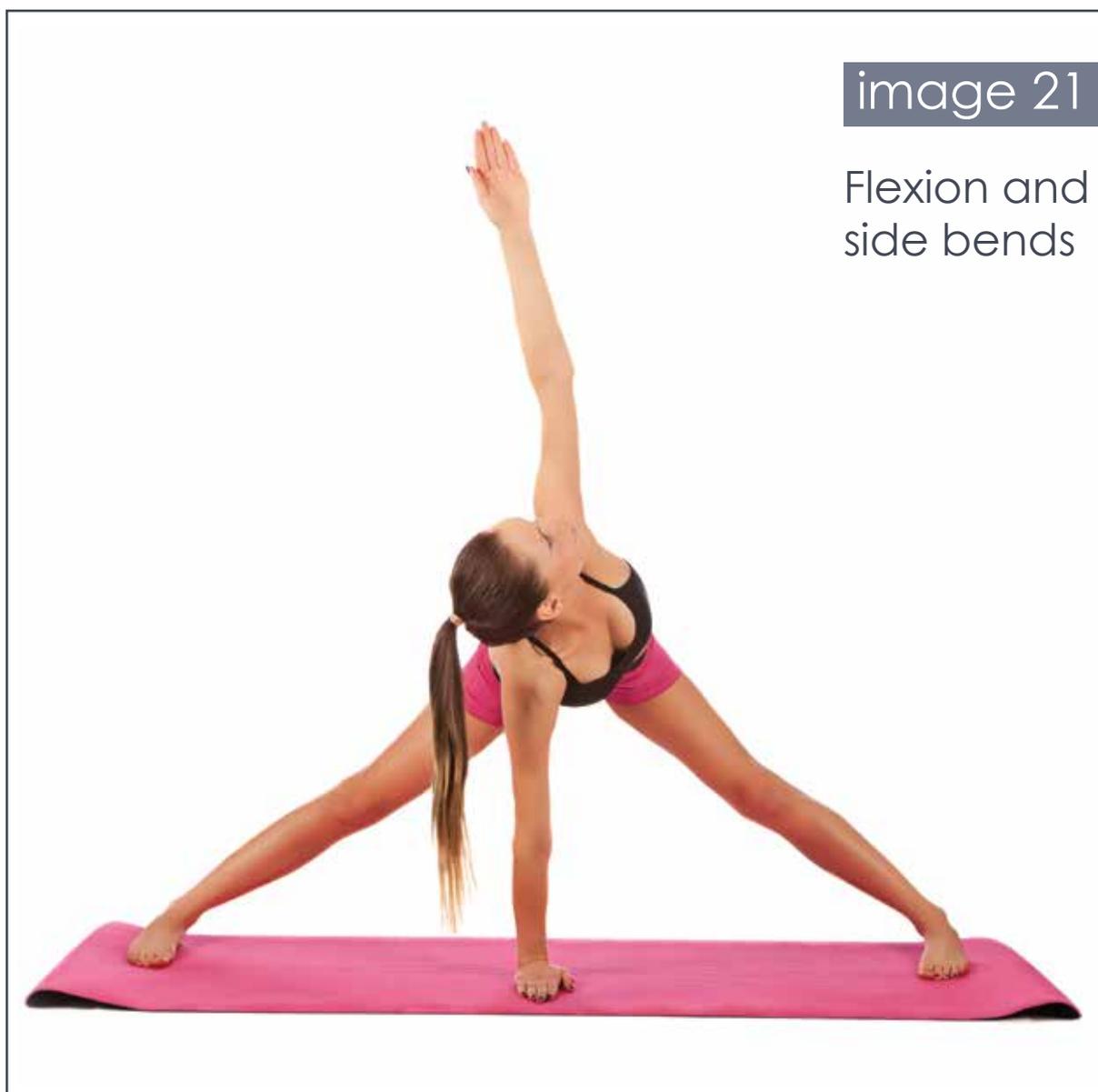


image 21

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.

Lower back - Having a good range of movement both forwards and backwards is critical. It will help to prevent injury when you are in those tricky situations.

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.

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

PROGRAM SCHEDULE

BRINGING IT TOGETHER

We are working on a 5 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
SB1 - A + B + C	STRENGTH BASE 1 METHOD A, B, C
SB2 - A + B + C	STRENGTH BASE 2 METHOD A, B, C
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

PRE SEASON TRAINING SCHEDULE

DAY	CARDIO TYPE	STRENGTH TYPE	STRETCHING TYPE
DAY 1	CB 1	SB 1A	STATIC
DAY 2	CM 1	SMF 1	BALLISTIC
DAY 3	CB 2A	SB 2 A	STATIC
DAY 4	CB 3A	choose	STATIC
DAY 5	CM 2	SB 1B	SATIC
DAY 6	CB 1	SMF 2	BALLISTIC
DAY 7	choose	SB 2 B	STATIC
DAY 8	CB 2B	SB 1C	STATIC
DAY 9	CB 3B	SMF 1	BALLISTIC
DAY 10	CM 3	SB 2 C	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.

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

I have bolded some entries, as these are not essential, but will add to your performance if you continue to do them during the season.

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 milestones like 20 push ups or 5 chin ups! They will want to continue and do more, more often!

Equipment:

The following is needed:

- Chin Up Bar (you can get mobile ones from any good sports store)
- Push Up handles (not completely necessary, but good to have)
- Box or landing step

DAY 1

12 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 12 minutes



The next time you run, go a little further by a few houses in the 6 minutes. Get your parents to measure how far you are going.

Max Press ups x 3 sets

DAY 2

Max Chin Ups x 3 sets
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

Complete as many shuttles as you can of the following:

- Try line to 10m sprint, then jog back.
- Try line to 20m sprint, then jog back.

Try line to 40m sprint, then jog back.
Try line to Half way sprint, then jog back.
Try line to Try line, then jog back.
Repeat for 5 minutes,
15 Burpees, 2 minute rest.

Repeat x 3

DAY 4

Box/Log Jumps x 25
Max Push Ups
Max Chin Ups
Max Sit ups

Repeat x 3

DAY 5

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

Nb:

With Chin ups, it is ok if you can't do any at all. Just try as hard as you can to lift yourself up. When you get as high as you can, hold it there for as long as you can. Repeat this 3 times. You will find you will get higher each time, hold longer and in no time you will be doing chin ups!

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

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

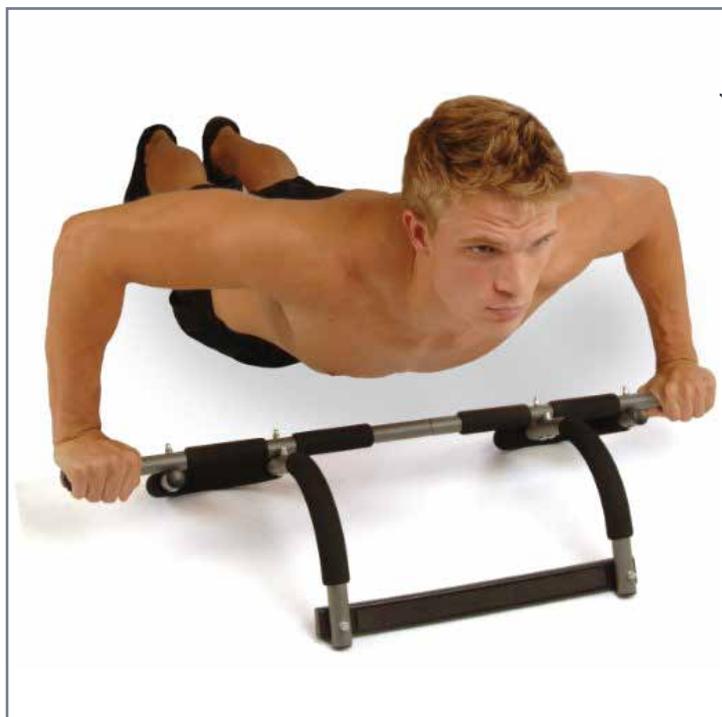


image 22

Chin up bar. Digital Image. Blessed By The Potato, n.d. Web 23 Feb 2015
< <http://www.holypotato.net/>>



image 23

Chin up bar that hangs in a door frame. Very useful.



image 24

You can perform them under or over-handed. Variety is best.

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



image 25

Find something solid to do box jumps. A landing is ok too. As they get better, increase the height.

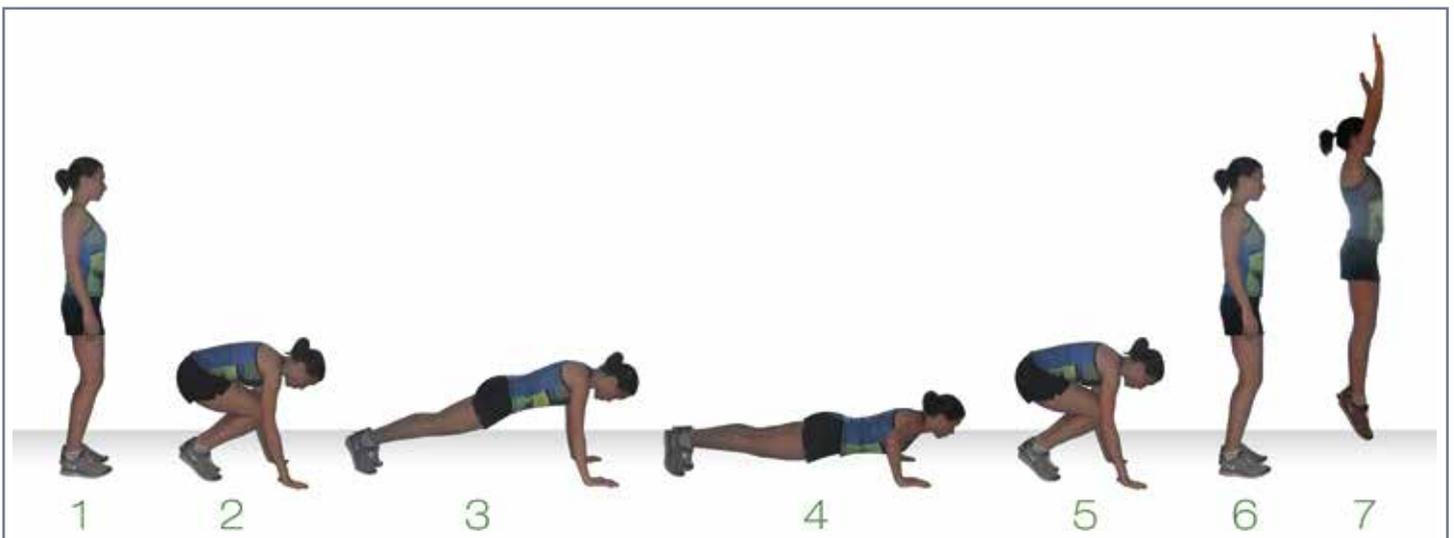


image 26

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!



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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.