



PHYSICAL CONDITIONING FOR RUGBY

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Providing coaches, referees, players, and administrators with the knowledge, skills, and leadership abilities to ensure that safety and best practice principles are incorporated into all aspects of contact rugby.

INTRODUCTION

Physical conditioning for rugby is becoming increasingly important. The modern game is becoming faster and players are getting bigger^(17,21). Conditioning of players not only enables them to play better rugby, but also reduce the risk of injuries⁽⁶⁾. Empirical evidence, as well as documented scientific research has shown that strength, power, speed, agility, fitness and body size are all important attributes for the performance of a player⁽⁷⁾. The physical demands of rugby are complex, and the concurrent improvements in the above mentioned performance indicators require a carefully planned conditioning program⁽¹⁰⁾.

Fitness coaches should implement a program of structured variation, referred to as periodisation^(18;23). In accordance with this the rugby year may be broken down into these specific areas of emphasis. The resistance training programs typically assign a specific focus to each phase of the training year (Table 1)⁽³⁾. For example, the off-season phase might focus on general preparation and hypertrophy (an increase in muscle size), where the preseason focuses predominantly on strength and power development. During the season the emphasis should be on the maintenance of levels of conditioning achieved during the off- and pre-season periods. Similarly, fitness conditioning emphasis may also be assigned to specific phases of the training year.

Physical conditioning programs designed to increase physical capacities of players are also an effective way to reduce injuries⁽⁸⁾. In particular, injuries occurring in the contact situation may be decreased through strength training. Therefore, rugby players of all levels should be encouraged to participate in physical conditioning^(2,8). There is a myth that prepubescent and adolescent players should avoid resistance training because it will stunt growth. This myth is not supported by any scientific evidence and numerous medical, health and professional bodies advocate that there are advantages for youth engaging in resistance training providing the programme is properly designed and supervised with safe technique and no competition⁽⁶⁾. In particular, resistance training has been shown to be the key in the prevention of injury in youth and adolescent athletes. It may therefore be concluded that the implementation of a properly designed resistance training program will not only give youth and senior rugby players a competitive advantage throughout their rugby careers, but also reduce the risk of sustaining an injury.

OFF-SEASON

The off-season, which is distinguished by not having the constraints of structured team practice sessions, is the most appropriate time for players to emphasise and derive benefit from their resistance (gym) training. The goal of this phase is usually to develop muscle size (hypertrophy), although less conditioned players should first complete a general preparation period, which increases the body's tolerance to training so that more intense loading may be subsequently endured⁽⁹⁾⁽¹⁰⁾. Larger muscles have a greater potential to become strong and powerful muscles, which are also factors which determine rugby playing performance⁽⁷⁾.

Players may be classified, into either beginner, intermediate or advanced depending on how long they have performed structured and supervised resistance training (Table 2) ⁽³⁾. Gym training programs should be specifically designed for players of different training experience ^(2,13). Once beginners have completed 8 weeks of gym training they are sufficiently experienced and in a position to progress to an intermediate program.

Gym training for muscle hypertrophy should include a high volume of training, with generally between 6 and 12 repetitions (reps) and a multiple number of sets^(2,9,13). The number of reps determine how heavy the weight lifted should be. For example, if 12 reps are prescribed, the player should be able to just complete 12 reps with good form and technique. If it is possible to complete more reps, a heavier weight should be used. This is referred to as a 12 repetition maximum, or 12RM. During the muscle hypertrophy phase of training players with advanced gym training experience may perform up to 6 training sessions per week^(2,13).

The amount of fitness conditioning which should be included into this training period is dependent on various factors such as body fat levels and current fitness. Specific fitness conditioning prescription should be made for each player depending on their needs and goals. The state of fitness of the player in the off season is influenced by the length of time since the previous season, as well as duration and activity during the transition or active rest phase after the previous season. When aerobic fitness is low or when body fat levels are high a greater emphasis should be placed on the aerobic fitness conditioning.

A trade-off between endurance training and muscle hypertrophy exists⁽¹⁵⁾. Considering that smaller players are at a disadvantage against larger more robust players, it makes sense that these players should place a greater emphasis on gym training in an attempt to develop muscle size and less on fitness training.

PRE-SEASON

The beginning of the pre-season, which typically coincides with the start of structured team training sessions, should see the introduction of more specific preparation. In the gym there should initially be an emphasis on strength development with a shift towards power development during the second half on the pre-season⁽³⁾.

Strength, which refers to the maximal force a muscle is able to produce, is a pre-requisite at top level rugby. To develop strength, one has to lift heavy weights^(19,23), but unfortunately one cannot sustain the demand of lifting heavy weights every workout, and one should thus vary the training stimulus. Low repetitions (i.e. 1-6 repetitions), have been shown to be the most appropriate for gains in strength. However, the repetitions which are prescribed are influenced by training experience^(2,13). Until athletes have become sufficiently trained they should keep their repetitions above six^(2,13). Players with weight training experience may use heavier loads, closer to their 1RM (the maximum weight they can lift with correct form and technique for 1 repetition), but should use a varying range of loads in a periodized fashion to avoid overtraining⁽²³⁾.

Power is the maximal amount of force a muscle can produce over a specific time period⁽³⁾. By definition it is a product of force (muscle strength) and velocity (speed). For optimal power development players need to focus on both strength and velocity training. Lighter weights should be used during power training as the emphasis should be on the velocity of the movement and not the size of the weight moved. Olympic-type exercises such as the power clean, hang clean, hang-pull etc. are perfectly suited for velocity specific training. Generally weights of 30-60% of the 1RM should be used for a maximum of 6 reps for power exercises^(2,13). Power exercises should also always be performed first in a non-fatigued state. Heavy strength training, which increases the force component of the power equation should still be continued in the power phase.

As the season approaches, there should also be a shift toward more specific fitness conditioning⁽¹⁰⁾. The pre-season phase should include aerobic and anaerobic interval type training, and as the start of the season approaches a greater emphasis should be placed on anaerobic high intensity fitness conditioning with match specific conditioning drills which mimic the demands of a rugby match. Match specific conditioning drills should attempt to mimic the activities, as well as duration, of periods of work in a rugby match. In other words, fitness drills which, for example, include static exertions (e.g. wrestling), leg power (e.g. driving contact shield), maximal intensity sprinting, and agility should be included to get players "match fit". Agility is also an essential part of rugby specific conditioning. Speed, agility and quickness (SAQ) drills should also be included in the preseason period to enhance performance^(6,16). During the pre-season period coaches should also adequately prepare players for full contact. Coaches should

gradually progress contact sessions from contact shields and semi-contact drills to full contact drills to avoid unnecessary injury during the pre-season and condition players for match contact.

IN-SEASON

The main emphasis and goal of the in-season phase should be to maintain the levels of fitness, strength and power achieved during the pre-season. This poses a great challenge to fitness trainers, as players generally lose muscle, strength and power as the season progresses due to the increased energy demands of training and competing⁽¹⁾. However, with the implementation of correctly designed conditioning programs throughout the season it is possible to maintain muscle mass, strength and power. ^(1,4,5).

In accordance with this it is important that players keep on training in the gym throughout the season on two separate days of the week⁽⁴⁾. The first gym session should be performed early in the week and focus on heavy strength exercises, the second gym session should be performed 48-72 hours after the 1st and should emphasize power development ⁽⁴⁾. It is important to vary the loads (weight lifted) from week to week.

Fitness conditioning should also be maintained during an in-season period. Coaches often wrongly assume that they do not need to do any fitness conditioning in the in-season period. High intensity interval type fitness conditioning as well as highly-specific conditioning should be included early in the training week to ensure players are fully recovered for their next match. SAQ conditioning should also be maintained during the season. This type of training is less taxing on the body and may thus be incorporated later in the training week.

Although not always possible due to the amount of preparation time required, coaches should attempt to keep practices as short and sharp as possible. Short sharp sessions will help decrease the physical and psychological strain associated with long seasons. If possible, players should ideally be monitored and workloads adjusted according to measures of fatigue⁽¹²⁾. It is recommended that players' training volume, intensity, rate of perceived exertion and mode of training be monitored⁽²⁴⁾. Monitoring of players, implementation of recovery strategies and ensuring optimal recovery within each week is critical if optimal performance from week to week is to be ensured⁽¹¹⁾. Recovery strategies after training and matches should include rehydration and refuelling (i.e. ensuring optimal energy levels), a structured cool-down session, hydrotherapy and relaxation⁽¹¹⁾.

TRANSITION/RECOVERY PHASE

The transition phase or active rest phase is critical to ensure adequate recovery after a season has finished. Players need to spend 2-4 weeks in this period emphasising recovery, recuperation and rehabilitation⁽²⁴⁾. It has been widely reported that the greatest risk factor for injury, is a previous injury^(14,20). Studies have shown that players who incurred injuries during a season were more likely to develop a subsequent injury in the following season^(14,20), possibly because the players were not rehabilitating their injuries adequately⁽¹⁴⁾. Therefore it follows that injuries which might have occurred during the season be assessed and musculoskeletal screening be completed by a proficient medical professional during the transition/recovery phase. The aim of musculoskeletal screening is to assess recovery from any previous injury and to assess the presence of proven or suspected risk factors for injury in the forthcoming season. After a full injury history has been taken, a rehabilitation program designed to rectify any weakness and to restore full function should be prescribed to ensure full recovery before the start of pre-season training.

Players who are not injured should refrain from any serious training to allow their bodies to recover fully. Only non-sport specific recreational activities performed at low volume and intensity should be performed during this period⁽³⁾.

AUTHOR'S BIOGRAPHY

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TABLE 1: DIVISION OF THE RUGBY YEAR INTO ITS RESPECTIVE MESOCYCLES

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT
Mesocycle (Period)	Off-Season Phase			Pre-Season Phase			In-Season Phase					Transition phase	
Resistance Training Emphasis (phase)	GP*	Hypertrophy		Strength	Power	Strength and Power Maintenance					Rest		
Fitness Conditioning Emphasis	Aerobic & anaerobic			Anaerobic & Aerobic			Fitness Maintenance					Rest	

T= Transition period; R = Rest; GP= General preparation

*This phase is dependent on current state of conditioning, it might not be necessary in advanced individuals.

During the off-season and pre-season phases the emphasis between aerobic and anaerobic fitness conditioning is depicted by font size.

TABLE 2: CLASSIFICATION OF PLAYERS ACCORDING GYM TRAINING EXPERIENCE

<i>Training Status</i>	<i>Training Age</i>
Beginner	< 8 weeks
Intermediate	> 8 weeks, and <12months
Advanced	>12months

Training age = Duration that a structured resistance training program has been followed.

SENIOR CONDITIONING PROGRAMS

The Periods of the rugby training year:

The Conditioning programs are divided into 4 periods as defined below;

1. Off-season; Defined as the period after the transition phase of the previous season and the pre-season structured team practice. In the programs outlined below 12 weeks of training have been assigned to this period.
2. Pre-season; Defined as the period between the first pre-season structured team practice and the first league match. The pre-season period may be divided into 2 phases, which may be separated by the first friendly or practice match. In the programs outlined below the 12 week pre-season period has been broken down into two 6 week phases. The first 6 week phase should emphasise strength and the next 6 week phase should emphasise power development.
3. In-season; Defined as the duration of the season, i.e. the period between the first and last league match.
4. Transition period/active rest period; Defined as the 2-4 weeks after the in-season period. No conditioning programs have been prescribed for this period, as players should give their bodies a break during this period. Players may stay active by participating in non sport-specific recreational activities performed at low volume and intensity, but no structured training is necessary. Where necessary, players should follow a rehabilitation program, to ensure recovery of injury between seasons.

Resistance training guidelines:

Resistance training sessions are prescribed for the length of the off-, pre- and in-season periods. Each specific workout is defined in the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section, and each exercise mentioned is described within the **EXERCISE DESCRIPTION** section.

Resistance training status (Beginner, Intermediate, Advanced):

Before the resistance training programs are assigned, players should be classified into either beginner, intermediate or advanced according to their resistance training experience (see Table 2). Once beginners have completed the 8 week preparatory period (i.e. 8 weeks of the beginner programs outlined for the off-season period), they may advance onto the intermediate program. A beginner starting resistance training in the pre- or in-season should always perform the first 8 weeks of the off-season period before starting the intermediate program. If this beginner off-season program is followed in the in-season players may eliminate the circuit and fitness conditioning.

No gym access alternatives:

Within each workout there are options for individuals without access to gym equipment;

1. No gym alternative workout; These workouts rely on resistance applied from a team-mate or training partner. This alternative is given within all beginner and intermediate programs. Due to the greater difficulty with variation of load, players should rather perform as many repetitions (reps) as possible, and only use the prescribed rep range when variable resistance is possible. Due to the difficulty applying variable resistance and the limited exercise selection no gym alternatives are given for the advanced section.
2. No training partner alternative; When there is no team mate or training partner available to train with players should perform this alternative. Players only require resistive tubing (i.e. bicycle tyre tube, theraband, toning tube etc.). Due to the greater difficulty with variation of load, players should rather perform as many reps as possible and only use the prescribed rep range when variable resistance is possible. Due to the difficulty applying variable resistance and the limited exercise selection only “no training partner alternatives” are given for the beginner program in the off-season phase. Players without gym access and without a training partner or team mate should thus remain performing these workouts.

Load (weight) selection:

The number of reps determines how heavy the weight lifted should be, i.e. if 12 reps are prescribed, a weight should be selected for which 12 reps may be performed with good form and technique. If it is possible to complete more reps a heavier weight should be used. A repetition maximum is the maximum amount of repetitions which can be performed with a certain weight. Weights should be selected according to the RM prescription.

General precautions:

1. When starting an exercise ensure one is sufficiently warm, complete a warm up set of 10 reps with the weight being 50% of the weight normally used. This warm-up set does not count as a working set.
2. Always ensure the correct breathing patterns are used. Always take a deep breath (inhale) while the specific muscle worked is being lengthened (eccentric muscle action), and breath out (exhale) while the weight is being pushed or pulled. Do not hold your breath while performing any exercise.
3. Never work with symptoms of pain; if a certain exercise cause's pain, the player should immediately decrease the amount of weight. If this is not successful, then leave out that specific exercise for one week. If the pain is still present after one week when retrying the exercise, then leave that specific exercise out of your routine and consult a proficient medical professional.
4. Always perform a 10 minute warm-up, followed by 5 minutes of stretching prior to a training session. Prior to an exercise session players should use dynamic stretches (joint movements where the range is gradually increased). After every session players should stretch, using static stretches (where a stretch is held for 20-30 seconds) for 5 minutes. Never stretch to the point of causing pain, one should only feel a pulling sensation.
5. Always use good form and technique as described in the **EXERCISE DESCRIPTION** section.
6. Always use a spotter when performing heavy lifts.
7. When picking up a weight off the floor, always bend your knees and keep your back straight.

Fitness conditioning guidelines:

Fitness conditioning during the off-season period is prescribed for players to follow by themselves to prepare themselves for the pre-season period. Depending on individual needs, players may choose to do less or more. Players needing to gain weight should cut one fitness conditioning session a week and players wanting to lose weight should perform an extra fitness conditioning session.

Fitness conditioning drills 1 to 4 (FC1, FC2, FC3, FC4) are prescribed for the off-season phase. There is a progressive shift from FC1 to FC4, FC1 is a low intensity aerobic workout, whereas FC4 is a very high intensity, predominantly anaerobic workout. Players needing to gain muscle mass should rather perform short duration high intensity anaerobic workouts, i.e. FC4, during the off-season period.

During the pre- and in-season, fitness conditioning is prescribed within the structured team practice (PRAC) sessions. Examples of team structured training sessions (PRAC) are provided for the 2 phases of

the pre-season, as well as the in-season period. These PRAC sessions may be used as an example to guide coaches, but may be altered depending on the needs of the team.

Each specific conditioning session is defined in the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section. Within the team PRAC sessions SAQ drills are prescribed, please see the **EXERCISE DESCRIPTION** section for examples of SAQ drills coaches might choose to use during this time.

Disclaimer:

Although all the exercises are clearly described, and photo's of correct technique are attached, players should consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the programs. BokSmart may not be held liable for any injury or harm incurred as a result of using this conditioning program.

OFF-SEASON CONDITIONING PROGRAM (WEEK 1-12):

		Beginner		Intermediate		Advanced		
		AM	PM	AM	PM	AM	PM	
Week 1	Monday	BEGINNER CYCLE 1	UBE	INTERMEDIATE CYCLE 1	UBE	ADVANCED CYCLE 1	AH1	
	Tuesday		FC1		LBE		AH2	FC3/GFD1*
	Wednesday		IWTC1		IWTC1			
	Thursday		LBE		FC1		AH3	
	Friday		FC2		UBE		AH1	FC4/GFD2*
	Saturday		IWTC2		LBE			
	Sunday		REST		IWTC2			AH2
Week 2	Monday	Repeat BEGINNER CYCLE 1 for 8 weeks		INTERMEDIATE CYCLE 1	FC2	ADVANCED CYCLE 1	AH2	FC3/GFD1*
	Tuesday							
	Wednesday				UBE		AH1	
	Thursday				LBE		AH2	FC4/GFD2*
	Friday				IWTC1			
	Saturday				FC1		AH3	
	Sunday							
Week 3	Monday	Once 8 weeks has been performed a player may advance to INTERMEDIATE CYCLE 2 program for the remaining weeks of the off-season period.		INTERMEDIATE CYCLE 2	IH1	Repeat ADVANCED CYCLE 1 for the duration of the off-season period.		
	Tuesday				IH2		FC1 or FC2	
	Wednesday							
	Thursday				IH3			
	Friday				IH1		FC3/GFD1*	
	Saturday							
	Sunday				IH2			
Week 4	Monday	Once 8 weeks has been performed a player may advance to INTERMEDIATE CYCLE 2 program for the remaining weeks of the off-season period.		INTERMEDIATE CYCLE 2	IH3	Repeat ADVANCED CYCLE 1 for the duration of the off-season period.		
	Tuesday							
	Wednesday				IH1			
	Thursday				IH2		FC4/GRM2*	
	Friday							
	Saturday				IH3			
	Sunday							
Week 5-12	Monday	Repeat INTERMEDIATE CYCLE 2 for the duration of the off-season period		INTERMEDIATE CYCLE 2		Repeat ADVANCED CYCLE 1 for the duration of the off-season period.		
	Tuesday							
	Wednesday							
	Thursday							
	Friday							
	Saturday							
	Sunday							
Week13: Rest 1 week before progressing to Strength Phase (Pre-season period)								

UBE=Upper Body Endurance

LBE=Lower Body Endurance

IWTC1 or IWTC2= Interval Weight Training Circuit 1 or 2

IH1, IH2 or IH3= Intermediate Hypertrophy Program 1, 2 or 3

AH1, AH2 or AH3= Advanced Hypertrophy program 1, 2 or 3

FC1, FC2, FC3 or FC4= Fitness Conditioning 1, 2, 3 or 4.

* You may choose to rather perform an on-field session GFD1 or GFD2 instead of FC3 and FC4 respectively, similar work:rest ratios should be used as described in FC3 and FC4.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

PRE-SEASON CONDITIONING PROGRAM - PHASE 1 (STRENGTH) (WEEK 1-6):

		Intermediate (INT)		Advanced (ADV)			
		AM	PM	AM	PM		
Week 1	Monday	INT STRENGTH CYCLE	IS1	PRAC	ADV STRENGTH CYCLE	AS1	PRAC
	Tuesday		IS2	PRAC		AS2	PRAC
	Wednesday		REST			REST	
	Thursday		IS3	PRAC		AS3	PRAC
	Friday		IS4			AS4	
	Saturday		REST			REST	
	Sunday		IS1			AS1	
	AS2		PRAC				
Week 2	Monday	INT STRENGTH CYCLE	IS2	PRAC	ADV STRENGTH CYCLE	AS2	PRAC
	Tuesday			PRAC			PRAC
	Wednesday		IS3			AS3	
	Thursday		IS4	PRAC		AS4	PRAC
	Friday		REST			REST	
	Saturday		REST			AS1	
	Sunday		REST			AS2	
							PRAC
Week 3	Monday	Repeat INT STRENGTH CYCLE for the duration of the strength phase (i.e. the cycle gets completed 3 times)			ADV STRENGTH CYCLE	AS3	PRAC
	Tuesday					AS4	
	Wednesday						PRAC
	Thursday					REST	
	Friday					REST	
	Saturday					REST	
	Sunday					REST	
Week 4-6					Repeat ADV STRENGTH CYCLE for the duration of the strength cycle (i.e. the cycle gets completed 2 times)		
Week 7: Rest 1 week before advancing to the Power Phase							

IS1, IS2, IS3 or IS4= Intermediate Strength Program 1, 2, 3 or 4

AS1, AS2, AS3 or AS4= Advanced Strength Program 1, 2, 3 or 4

PRAC= Team Practice session.

An example of a team **PRAC** specific to this period is described below

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

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TEAM PRACTICE (PRAC) SESSION EXAMPLE OUTLINE - PRE-SEASON (WEEK 1-6) (EXAMPLE):

Monday	17h30 - 18h00 18h00 - 18h30 18h30 - 18h35 18h35 - 18h55 18h55 - 19h00 19h00 - 19h20 19h20 - 19h25 19h30 - 19h50 19h50 - 20h00	Specific skill training (Kickers kicking, Hookers Throwing etc.) Warm-up & ball skills Water break General Fitness Conditioning Drill (e.g. GFD1 / GFD2) Water break General Fitness Conditioning Drill (e.g. GFD3) Water break General Fitness Conditioning Drill (e.g. GFD5) Static Stretching and rehydration
Tuesday	18h00 - 18h15 18h15 - 18h20 18h20 - 19h00 19h00 - 19h05 19h05 - 19h12 19h12 - 19h19 19h19 - 19h26 19h26 - 19h30	Warm-up Water break Ball Skills Water break Specific Fitness Drill Specific Fitness Drill Specific Fitness Drill Static Stretching and rehydration
		} Set up 3 Specific Fitness Drills and rotate stations every 7 minutes
Wednesday	REST DAY	
Thursday	18h00 - 18h30 18h30 - 18h35 18h35 - 18h55 18h55 - 19h00 19h00 - 19h20 19h20 - 19h25 19h25 - 19h45 19h45 - 19h55	Warm-up & ball skills Water break Selected SAQ Drills Water break General Fitness Conditioning Drill (e.g. GFD3) Water break General Fitness Conditioning Drill (e.g. GFD5) Static Stretching and rehydration
Friday	No Team Practice session	
Saturday	No Team Practice session	
Sunday	No Team Practice session / Social Touch Rugby Game	

This outline serves merely as an **EXAMPLE** for coaches and it remains up to the coach to alter the emphasis or goal of each practice session.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and on the drills mentioned above.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

PRE-SEASON CONDITIONING PROGRAM - PHASE 2 (POWER) (WEEK 7-13):

		Intermediate		Advanced	
		AM	PM	AM	PM
Week 8-13	Monday	IP1	PRAC	AP1	PRAC
	Tuesday	IP2	PRAC	AP2	PRAC
	Wednesday				
	Thursday	IP3	PRAC	AP3	PRAC
	Friday				
	Saturday	POSSIBLE FRIENDLY		POSSIBLE FRIENDLY	
	Sunday				
Rest 1 week (i.e. no resistance training) before the first league game commences.					

IP1, IP2 or IP3= Intermediate Power Program 1, 2 or 3

AP1, AP2 or AP3= Advanced Power Program 1, 2 or 3;

PRAC= Team Practice session.

An example of a team **PRAC** specific to this period is described below

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

TEAM PRACTICE (PRAC) SESSION EXAMPLE OUTLINE - PRE-SEASON (WEEK 7-13) (EXAMPLE):

Monday	17h30 - 18h00	Specific skill training (Kickers kicking, Hookers Throwing etc.)	} Set up 3 SFD Drills and rotate stations every 10 minutes, 2 minute water break between stations.
	18h00 - 18h15	Warm-up	
	18h15 - 18h20	Water break	
	18h20 - 18h30	Specific Fitness Drill (SFD)	
	19h32 - 18h42	Specific Fitness Drill	
	18h44 - 18h54	Specific Fitness Drill	
	19h00 - 19h10	General Fitness Drill (e.g. GFD3/GFD4)	
	19h10 - 19h20	Static Stretching and rehydration	
Tuesday	18h00 - 18h15	Warm-up	} Set up 3 SFD Drills and rotate stations every 7 minutes
	18h15 - 18h20	Water break	
	18h20 - 19h00	Ball Skills / Team Structure and organisational play	
	19h00 - 19h05	Water break	
	19h05 - 19h12	Specific Fitness Drill	
	19h12 - 19h19	Specific Fitness Drill	
	19h19 - 19h26	Specific Fitness Drill	
	OR 19h05 - 19h30	Specific skills training (Scrumming, line-outs, backline moves etc.)	
19h30 - 19h40	Static Stretching and rehydration		
Wednesday	REST DAY		
Thursday	18h00 - 18h20	Warm-up & ball skills	
	18h20 - 18h40	Selected SAQ drills	
	18h40 - 18h45	Water Break	
	18h45 - 19h10	Forwards and backs perform organisational training	
	19h10 - 19h20	Captains Run	
	19h20 - 19h30	Static Stretching and rehydration	
Friday	No Team Practice session		
Saturday	Possible Friendly Match		
Sunday	REST / Social Touch Rugby Game (when no Friendly match)		

This outline serves merely as an **EXAMPLE** for coaches and it remains up to the coach to alter the emphasis or goal of each practice session.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and on the drills mentioned above.

Examples of SAQ drills are given in the **EXERCISE DESCRIPTION** section, coaches should choose a combination of these drills to be included during the allocated SAQ time.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

IN-SEASON CONDITIONING PROGRAM:

		Intermediate		Advanced	
		AM	PM	AM	PM
Weekly with Saturday match	Monday	IIS1	PRAC	AIS1	PRAC
	Tuesday		PRAC		PRAC
	Wednesday	IIS2		AIS2	
	Thursday		PRAC		PRAC
	Friday				
	Saturday	LEAGUE MATCH		LEAGUE MATCH	
	Sunday				
Week with Midweek match	Monday	IIS2		AIS2	
	Tuesday		PRAC		PRAC
	Wednesday	LEAGUE MATCH		LEAGUE MATCH	
	Thursday		PRAC		PRAC
	Friday				
	Saturday	LEAGUE MATCH		LEAGUE MATCH	
	Sunday				
Week with no match	Monday	IIS2	PRAC	AIS2	PRAC
	Tuesday		PRAC		PRAC
	Wednesday	IIS1		AIS1	
	Thursday		PRAC		PRAC
	Friday	IIS2		AIS2	
	Saturday				
	Sunday				

IIS1 or IIS2 = Intermediate In-Season Program 1 or 2

AIS1 or AIS2 = Advanced In-Season Program 1 or 3

PRAC = Team Practice session.

An example of a team PRAC specific to this period is described below

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

TEAM PRACTICE (PRAC) SESSION EXAMPLE OUTLINE - IN-SEASON (EXAMPLE):

Monday	17h30 - 18h00	Specific skill training (Kickers kicking, Hookers Throwing etc.)
	18h00 - 18h15	Warm-up
	18h15 - 18h20	Water break
	18h20 - 18h50	Specific Fitness Drills (choose 1 or 2 drills to complete in 30 min)
	18h50 - 18h55	Water break
	18h55 - 19h20	Team Structure and organisational play
	19h20 - 19h30	Static Stretching and rehydration
Tuesday	18h00 - 18h15	Warm-up
	18h15 - 18h20	Water break
	18h20 - 18h50	Ball Skills / Team Structure and organisational play
	18h50 - 19h20	Specific skills training (Scrumming, line-outs, backline moves etc.)
	19h20 - 19h30	Static Stretching and rehydration
Wednesday	REST DAY	
Thursday	18h00 - 18h15	Warm-up & ball skills
	18h15 - 18h30	Selected SAQ drills
	18h30 - 18h45	Structured Runs
Friday	No Team Practice session	
Saturday	League Match	
Sunday	No Team Practice session / Social Touch Rugby Game	

This outline serves merely as an **EXAMPLE** for coaches and it remains up to the coach to alter the emphasis or goal of each practice session.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and on the drills mentioned above.

Examples of SAQ drills are given in the **EXERCISE DESCRIPTION** section, coaches should choose a combination of these drills to be included during the allocated SAQ time

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

YOUTH CONDITIONING PROGRAMS:

Youth Rugby Players over the age of 16 (i.e. U19 level) may start using the strength conditioning plan outlined above for senior players. If they have performed a similar program (introductory resistance training) to what is outlined below for U16 players and they have been following a structured resistance training program for more than 8 weeks, they may complete the senior program outlined for intermediates. If they have not followed a structured resistance training program for more than a year they should complete the beginners senior program outlined above.

Resistance training guidelines:

Players should follow the resistance training program given for their age group. Each age group workout is specifically and progressively designed to ease youth rugby players into full high intensity resistance training. Each specific workout within the age-group specific conditioning plan is defined in the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section, and each exercise mentioned is described within the **EXERCISE DESCRIPTION** section.

No gym access alternatives:

Band resistive exercises are prescribed as an alternative for all exercises which require conventional gym equipment. Due to the greater difficulty with variation of load, players should rather perform as many repetitions (reps) as possible

Load (weight) selection:

The number of reps determines how heavy the weight lifted should be, i.e. if 20 reps are prescribed, a weight should be selected for which 20 reps may be performed with good form and technique. If it is possible to complete more reps a heavier weight should be used.

General precautions:

1. When starting an exercise ensure one is sufficiently warm. When performing the U16 conditioning program, complete a warm up set of 10 reps with the weight being 50% of the weight normally used. This warm-up set does not count as a working set. When performing the circuit programs ensures the whole body is sufficiently warm before starting the circuit.
2. Always ensure the correct breathing patterns are used. Always take a deep breath (inhale) while the specific muscle worked is being lengthened (eccentric muscle action), and breath out (exhale) while the weight is being pushed or pulled. Do not hold your breath while performing any exercise.

3. Never work with symptoms of pain, if a certain exercise causes pain, the player should immediately decrease the amount of weight. If this is not successful, then leave out that specific exercise for one week. If the pain is still present after one week when retrying the exercise, then leave that specific exercise out of your routine and consult a proficient medical professional.
4. Always perform a 10 minute warm-up, followed by 5 minutes of stretching prior to a training session. Prior to an exercise session players should use dynamic stretches (joint movements where the range is gradually increased). After every session players should stretch, using static stretches (where a stretch is held for 20-30 seconds) for 5 minutes. Never stretch in pain, one should only feel a pulling sensation.
5. Always use good form and technique as described in the **EXERCISE DESCRIPTION** section.
6. Always use a spotter when performing heavy lifts.
7. When picking up a weight off the floor, always bend your knees and keep your back straight.

Fitness conditioning guidelines:

Due to youth rugby players commonly performing a summer sport, no specific off- or in-season fitness conditioning is prescribed. Youth team practice sessions (PRAC) are outlined below and include specific and general fitness drills which are further explained in the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section. Within the team PRAC sessions SAQ drills are prescribed, please see the **EXERCISE DESCRIPTION** section for examples of SAQ drills coaches might choose to use during this time.

Disclaimer:

Although all the exercises are clearly described, and photo's of correct technique are attached, players should consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used on all the programs. BokSmart may not be held liable for any injury or harm incurred as a result of using this conditioning program.

U16 YOUTH RUGBY CONDITIONING PROGRAM:

Period:		Off-/Pre-Season	Off-/Pre-Season	In-Season (rugby)
Other Activity:		YES	NO	NO
Typical week	Monday	U16S1	U16S1	U16S1
	Tuesday	Other sport practice		PRAC
	Wednesday	U16S2	U16S2	U16S2
	Thursday	Other sport practice		PRAC
	Friday		#U16S1	
	Saturday	Other sport MATCH		MATCH
	Sunday			

U16S1, U16S2 = U16 Strength training session 1 or 2.

Other sport practice includes any other sports participation; including cricket, waterpolo, athletics, tennis, golf etc.

PRAC refers to a team rugby practice; see **YOUTH TEAM PRACTICE OUTLINE** section for an example.

Once 3 months of the program has been completed, a third training session may be introduced. When performing 3 training sessions a week, alternate between session 1 (U16S1) and session 2 (U16S2).

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

U15 YOUTH RUGBY CONDITIONING PROGRAM:

Period:		Off-/Pre-Season	Off-/Pre-Season	In-Season (rugby)
Other Activity:		YES	NO	NO
Typical week	Monday	U15CC	U15CC	U15CC
	Tuesday	Other sport practice		PRAC
	Wednesday	U15CC	U15CC	U15CC
	Thursday	Other sport practice		PRAC
	Friday			
	Saturday	Other sport MATCH		MATCH
	Sunday			

U15CC = U15 Conditioning circuit.

Other sport Practice includes any other sports participation; including cricket, water polo, athletics, tennis, golf etc.

PRAC refers to a team rugby practice; See **YOUTH TEAM PRACTICE OUTLINE** section for an example.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

U14 YOUTH RUGBY CONDITIONING PROGRAM:

Period:		Off-/Pre-Season	Off-/Pre-Season	In-Season (rugby)
Other Activity:		YES	NO	NO
Typical week	Monday	U14CC	U14CC	U14CC
	Tuesday	Other sport practice		PRAC
	Wednesday	U14CC	U14CC	U14CC
	Thursday	Other sport practice		PRAC
	Friday			
	Saturday	Other sport MATCH		MATCH
	Sunday			

U14CC = U14 Conditioning Circuit.

Other sport practice includes any other sports participation; including cricket, waterpolo, athletics, tennis, golf etc.

PRAC refers to a team rugby practice; See **YOUTH TEAM PRACTICE OUTLINE** section for an example.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

U13 YOUTH RUGBY CONDITIONING PROGRAM:

Period:		Off-/Pre-Season	Off-/Pre-Season	In-Season (rugby)
Other Activity:		YES	NO	NO
Typical week	Monday	U13C1	U13C1	U13C1
	Tuesday	Other sport practice		PRAC
	Wednesday	U13C2	U13C2	U13C2
	Thursday	Other sport practice		PRAC
	Friday			
	Saturday	Other sport MATCH		MATCH
	Sunday			

U13C1 and U13C2 = U13 Conditioning Circuit 1 and 2.

Other sport practice includes any other sports participation; including cricket, waterpolo, athletics, tennis, golf etc.

PRAC refers to a team rugby practice; See **YOUTH TEAM PRACTICE OUTLINE** section for an example.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and outline of each session above.

Each exercise within the programs is detailed in the **EXERCISE DESCRIPTION** section.

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

YOUTH TEAM PRACTICE SESSION OUTLINE - IN-SEASON (EXAMPLE):

Monday	No Practice	
Tuesday	15h00-15h15	Warm-up
	15h15-15h20	Water break
	15h20-15h45	Specific Fitness Drill OR General Fitness Drill (choose 1 or 2 drills to complete in 15 min)
	15h45-15h50	Water break
	15h50-16h10	Ball skills / Specific Skills (rucking, mauling etc.)
	16h10-16h30	Team Structure and organisational play.
	16h30-16h40	Static Stretching and rehydration
Wednesday	No Practice	
Thursday	15h00-15h30	Warm-up and ball skills
	15h30-15h50	Selected SAQ drills
	15h50-15h55	Water break
	15h55-16h15	Specific skills training (Scrumming, line-outs, backline moves etc.)
	16h15-16h35	Team Pattern/Shadow Run
	16h40-16h45	Static Stretching and rehydration
Friday	No Team Practice session	
Saturday	League Match	
Sunday	No Team Practice session / Social Touch Rugby Game	

This outline serves merely as an **EXAMPLE** for coaches and it remains up to the coach to alter the emphasis or goal of each practice session.

Please see the **SPECIFIC WORKOUT AND CONDITIONING PROGRAMS** section for further details and on the drills mentioned above.

Examples of SAQ drills are given in the **EXERCISE DESCRIPTION** section, coaches should choose a combination of these drills to be included during the allocated SAQ time

PLEASE SEE DISCLAIMER BEFORE STARTING THE CONDITIONING PROGRAM.

SPECIFIC WORKOUT PROGRAMS:

1. Upper Body Endurance Program (UBE)
2. Lower Body Endurance Program(LBE)

3. Interval Weight Training Circuit 1 (IWTC1)
4. Interval Weight Training Circuit 2 (IWTC2)

5. Intermediate Hypertrophy Program 1 (IH1)
6. Intermediate Hypertrophy Program 2 (IH2)
7. Intermediate Hypertrophy Program 3 (IH3)
8. Intermediate Strength Program 1 (IS1)
9. Intermediate Strength Program 2 (IS2)
10. Intermediate Strength Program 3 (IS3)
11. Intermediate Strength Program 4 (IS4)
12. Intermediate Power Program 1 (IP1)
13. Intermediate Power Program 2 (IP2)
14. Intermediate Power Program 3 (IP3)
15. Intermediate In-Season Program 1 (IIS1)
16. Intermediate In-Season Program 2 (IIS2)

17. Advanced Hypertrophy Program 1 (AH1)
18. Advanced Hypertrophy Program 2 (AH2)
19. Advanced Hypertrophy Program 3 (AH3)
20. Advanced Strength Program 1 (AS1)
21. Advanced Strength Program 2 (AS2)
22. Advanced Strength Program 3 (AS3)
23. Advanced Strength Program 4 (AS4)
24. Advanced Power Program 1 (AP1)
25. Advanced Power Program 2 (AP2)
26. Advanced Power Program 3 (AP3)
27. Advanced In-Season Program 1 (AIS1)
28. Advanced In-Season Program 2 (AIS2)

- 29. Fitness Conditioning Program 1 (FC1)
- 30. Fitness Conditioning Program 2 (FC2)
- 31. Fitness Conditioning Program 3 (FC3)
- 32. Fitness Conditioning Program 4 (FC4)

- 33. Youth Programs; U16 Conditioning 1 (U16C1)
- 34. Youth Programs; U16 Conditioning 2 (U16C2)
- 35. Youth Programs; U15 Conditioning circuit (U15CC)
- 36. Youth Programs; U14 Conditioning circuit (U14CC)
- 37. Youth Programs; U13 Conditioning 1 (U13C1)
- 38. Youth Programs; U13 Conditioning 2 (U13C2)

- 39. General Fitness Drill 1 (GFD1)
- 40. General Fitness Drill 2 (GFD2)
- 41. General Fitness Drill 3 (GFD3)
- 42. General Fitness Drill 4 (GFD4)
- 43. General Fitness Drill 5 (GFD5)

- 44. Specific Fitness Drill 1 (SFD1)
- 45. Specific Fitness Drill 2 (SFD2)
- 46. Specific Fitness Drill 3 (SFD3)
- 47. Specific Fitness Drill 4 (SFD4)

1. Upper Body Endurance Program (UBE)						
Rest 90 seconds for the © (core) exercises Rest 45 seconds for all other exercises						
Exercise	OR No gym alternative exercise OR No training partner alternative	Sets	Reps*			
			Week1&2	Week3&4	Week5&6	Week7&8
Warm-up (any cardio machine or light jogging)		1	10 minutes			
Stretch (Back and Upper Body)		1	5 minutes			
Shoulder Step-ups		2	20,20	20,20	20,20	20,20
Push-ups		2	15,15	15,15	15,15	15,15
Flat Bench Press ©	OR Buddy resisted push-ups OR Band chest press	3	15,15,15	15,12,12	15,12,10	12,10,8
Bent-Over Row ©	OR Buddy resisted broomstick row OR Seated band 45° row	3	15,15,15	15,12,12	15,12,10	12,10,8
Dumbbell Shoulder Press ©	OR Buddy resisted broomstick press OR Band Shoulder press	3	15,15,15	15,12,12	15,12,10	12,10,8
Bicep Curl (straight bar)	OR Buddy resisted broomstick curl OR Band bicep curl	3	15,15,15	15,12,12	15,12,10	12,10,8
Standing Cable Tricep Extensions	OR Buddy resisted rope extensions OR Upright Band tricep extensions	3	15,15,15	15,12,12	15,12,10	12,10,8
Abdominal Crunch		3	20,20,20	25,25,25	30,30,30	35,35,35
Prone Neck Lifts		2	20-30	20-30	20-30	20-30
Cool-Down & Stretch		1	5 min.	5 min.	5 min.	5 min.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has 2 alternative exercises; 1) for individuals with a training partner (**no gym alternative**), and 2) for individuals without a training partner (**No training partner alternative**). For all the band exercises a theraband or tyre tubing may be used.

* Due to greater difficulty with variation of load, players using buddy resisted and band exercises should perform as many reps as possible and only use the specified rep range as a guide where variable

resistance is possible. When performing band exercises always do as many reps as possible and don't use the given reps as guidelines, try and progress each workout.

A weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

2. Lower Body Endurance Program (LBE)						
Rest 90 seconds for the © (core) exercises Rest 45 seconds for all other exercises						
Exercise	OR No gym alternative exercise OR No training partner alternative	Sets	Reps*			
			Week1&2	Week3&4	Week5&6	Week7&8
Warm-up (any cardio machine or light jogging)		1	10 minutes			
Stretch (Back and Upper Body)		1	5 minutes			
Prone Bridge Hold		2	20,20	20,20	20,20	20,20
Walking Lunges (No Added Weight)		2	15,15	15,15	15,15	15,15
Back Squat ©	OR Buddy resisted squat OR Band squat	3	15,15,15	15,12,12	15,12,10	12,10,8
Leg Press ©	OR Buddy resisted Leg Press OR One leg wall squat	3	15,15,15	15,12,12	15,12,10	12,10,8
Lying Leg Curl	OR Hamstring Raise	3	15,15,15	15,12,12	15,12,10	12,10,8
Standing Calf Raise	OR Buddy Donkey Calf raise OR single leg calf raises	3	15,15,15	15,12,12	15,12,10	12,10,8
Back Extensions	OR straight back Good Mornings	3	15,15,15	15,12,12	15,15,15	15,15,15
Knee Tucks On Swiss Ball	OR Abdominal Crunches	3	20,20,20	25,25,25	30,30,30	35,35,35
Prone Neck Lifts		2	20-30	20-30	20-30	20-30
Cool-Down & Stretch		1	5 min.			

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has 2 alternative exercises; 1) for individuals with a training partner (**no gym alternative**), and 2) for individuals without a training partner (**No training partner alternative**). For all the band exercises a theraband or tyre tubing may be used.

* Due to greater difficulty with variation of load, players using buddy resisted and band exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible. When performing band exercises always do as many reps as possible and don't use the given reps as guidelines, try and progress each workout.

A weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

3. Interval Weight Training Circuit 1 (IWTC1)			
Rest 15-30 seconds between exercises in the circuit Rest 3 minutes between sets			
Exercise		Sets	
OR No gym alternative			
Warm-up (any cardio machine)		1	10 minutes
OR Light Running			
Stretch		1	5 minutes
Weight training Circuit		3	(See below)
Weight training Circuit	Shoulder Press		max in 1 min
	OR Band shoulder press		
	Chin-ups		max in 1 min
	OR Seated 45 degree band row		
	Dumbbell Bench Press		max in 1 min
	OR Band chest press		
	Bent Over Reverse Flyes		max in 1 min
OR Bent over Band reverse flyes			
Abdominal Crunches		max in 1 min	
Lateral Raises		max in 1 min	
OR One Arm lateral raises with band			
Bike/Rowing/Step-ups/Running/ Boxing			3 min @ 90-95% of max
Cool-Down & Stretch			5 minutes

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

4. Interval Weight Training Circuit 2 (IWTC2)			
		Rest 15-30 seconds between exercises in the circuit Rest 3 minutes between sets	
Exercise		Sets	
OR No gym alternative			
Warm-up (any cardio machine)		1	10 minutes
OR Light Running			
Stretch		1	5 minutes
Weight Training Circuit		3	(See below)
Weight training Circuit One Set	Back Squats	max in 1 min	
	OR One leg wall squats(30s/leg)		
	Push-ups	max in 1 min	
	Step-ups	max in 1 min	
	OR Band squat		
	Abdominal Crunches	max in 1 min	
	BW Calf Raises	max in 1 min	
Lateral Raises	max in 1 min		
OR One Arm lateral raises with band			
Bike/Rowing/Step-ups/Running/Boxing		3 min @ 90-95% of max	
Cool-Down & Stretch		5 minutes	

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment

5. Intermediate Hypertrophy Program 1 (IH1)			
		Rest 2 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace 2-4s up, 2-4s down	
Exercise	OR No gym alternative**	Sets	Reps*
Warm-up (Cycling OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Back Squat /Incline Leg Press ©		5	6-12 RM see progression
	OR Buddy resisted back squat/ leg Press		
Dumbbell Step-Ups		3	10-12 RM per leg
	OR Buddy resisted step-ups		
Leg Extensions		4	10-12 RM
	OR One legged wall squats		
Lying Hamstring Curls		4	10-12 RM
	OR Hamstring Raise		
Standing Calf Raise		4	15-20 RM
	OR Buddy donkey Calf raise		
Abdominal Crunches		3	20-40
Knee Tucks on Swiss Ball		2	15
	OR Side to side crunches		
Prone Bridge Hold		2	40-60s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 12,12,12,12,12 RM			
Week 3 & 4: 12,10,10,8,8 RM			
Week 5 & 6: 12,8,6,6,6 RM			
Week 7 & 8: 12,12,12,12,12 RM			
Week 9 & 10: 12,10,10,8,8 RM			

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

* Due to greater difficulty with variation of load, players using buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

** When no training partner is available, perform the **no partner alternative workout** outlined in the Beginner cycle 1 of the off-season period.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

6. Intermediate Hypertrophy Program 2 (IH2)			
		Rest 2 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace 2-4s up, 2-4s down	
Exercise	OR No gym alternative**	Sets	Reps*
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Barbell Bench Presses ©	OR Buddy resisted push-ups	4	6-12 RM see progression
Bent Over Row ©	OR Buddy resisted broomstick row	4	6-12 RM see progression
Incline Dumbbell Press ©	OR Buddy resisted incline push-ups	4	6-12 RM see progression
Lat Pulldown	OR Buddy resisted rope row	4	10-12 RM
Cable Flyes	OR Rope Flyes	4	10-12 RM
One Arm Dumbbell Rows	OR Buddy resisted one arm rope row	3	10-12 RM
Serratus Press		2	12-15
Shoulder Step-Ups		3	20
Band Prone Neck Extension		1	10-15
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 12,12,12,12 RM			
Week 3 & 4: 12,10,8,8 RM			
Week 5 & 6: 12,8,6,6 RM			
Week 7 & 8: 12,12,12,12 RM			
Week 9 & 10: 12,10,8,8 RM			

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

* Due to greater difficulty with variation of load, players using buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

** When no training partner is available, perform the **no partner alternative workout** outlined in the Beginner cycle 1 of the off-season period.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises

7. Intermediate Hypertrophy Program 3 (IH3)			
		Rest 2 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace 2-4s up, 2-4s down	
Exercise	OR No gym alternative**	Sets	Reps*
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Dumbbell Shoulder Press ©	OR Buddy resisted broomstick press	4	6-12 RM see progression
Standing Bicep Curl	OR Buddy broomstick curls	3	10-12 RM
Close Grip Bench Press	OR Buddy resisted diamond push-up	4	10-12 RM
Standing Lateral Raises	OR Buddy resisted lateral raise	4	10-12 RM
Preacher Curls	OR Buddy resisted rope curl	4	10-12 RM
Lying Tricep Extensions	OR buddy resisted rope extension	3	10-12 RM
Bent Over Reverse Flyes	OR Buddy resisted reverse flyes	3	10-12 RM
Abdominal Crunches		3	20-40
Internal Shoulder Rotation (0°)		2	10
External Shoulder Rotation(0°)		2	10
Prone Bridge Hold		3	30s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 12,12,12,12 RM			
Week 3 & 4: 12,10,8,8 RM			
Week 5 & 6: 12,8,6,6 RM			
Week 7 & 8: 12,12,12,12 RM			
Week 9 & 10: 12,10,8,8 RM			

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

* Due to greater difficulty with variation of load, players using buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

8. Intermediate Strength Program 1 (IS1)			
Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace (2s up, 2s down)			
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Hanging High Pull ^T		2	6
Push-Press ^T		2	6
Flat Bench Press ©	OR Buddy resisted push-ups	4	6-12 RM see progression
Bent-Over Row ©	OR Buddy resisted broomstick row	4	6-12 RM see progression
Dumbbell-Shoulder Press ©	OR Buddy assisted hand stand press	4	6-12 RM see progression
Chin-Ups (BW*)	OR Buddy resisted rope row	3	Max
Dips (BW*)	OR Chair dips	3	Max
Dumbbell Shrugs	OR Buddy resisted shrug	3	8-12 RM
Alternating Bicep DB curl	OR Buddy resisted rope curl	3	8-12 RM
Cable Flyes	OR Door rope flyes	3	8-12 RM
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 12,10,8,6 RM			
Week 3 & 4: 8,6,6,6 RM			
Week 5 & 6: 10,8,8,8 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

† = Technique training, exercises should be performed with an Olympic bar with no added weight. Perform † exercises at a fast pace (1s up 1s down). Those players without gym access may leave these exercises out.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

**Due to greater difficulty with variation of load, players using buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

9. Intermediate Strength Program 2 (IS2)			
Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace (2s up, 2s down)			
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Jump Squat ^T	OR Bodyweight Jump Squat	2	6
Power Clean ^T		2	6
Back Squat ©	OR Buddy resisted squats	4	6-12 RM see progression
Incline Leg Press ©	OR Single leg wall squats	4	6-12 RM see progression
Walking Lunges	OR Buddy step-ups	3	16-24 steps
Lying Hamstring Curls	OR Hamstring Raise	3	8-12 RM
Side to Side Crunches		2	20-30
Prone Bridge Hold		2	60s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 12,10,8,6 RM			
Week 3 & 4: 8,6,6,6 RM			
Week 5 & 6: 10,8,8,8 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

^T = Technique training, exercises should be performed with an Olympic bar with no added weight. Perform ^T exercises at a fast pace (1s up 1s down). Those players without gym access may leave these exercises out.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

Due to greater difficulty with variation of load, players using **buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

10. Intermediate Strength Program 3 (IS3)			
		Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace (2s up, 2s down)	
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Lying Medicine Ball Throws	OR Medicine ball plyometric push-ups	2	6
Smith Machine Bench throws ^T	OR Clap push-ups	2	6
Incline Dumbbell Press ©	OR Buddy resisted incline push-ups	4	6-12 RM see progression
Pull-ups (BW*)	OR Buddy resisted broomstick row	3	Max
Arnold Dumbbell Press	OR Buddy resisted broomstick press	3	8-12 RM
Flat Dumbbell Flyes	OR Rope flyes	3	8-12 RM
Single Arm Dumbbell Row	OR Buddy resisted single arm row	3	8-12 RM
Dumbbell Lateral Raises	OR Buddy resisted lateral raise	3	8-12 RM
Knee Tucks on Swiss Ball	OR Buddy leg throws	3	25
Wrestlers Bridge		2	10s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 12,10,8,6 RM			
Week 3 & 4: 8,6,6,6 RM			
Week 5 & 6: 10,8,8,8 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

^T = Technique training, exercises should be performed with an Olympic bar with no added weight. Perform ^T exercises at a fast pace (1s up 1s down). Those players without gym access may leave these exercises out.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

Due to greater difficulty with variation of load, players using **buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

11. Intermediate Strength Program 4 (IS4)		Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace, (2-s up, 2s down) unless otherwise stated	
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Jump Squat ^T	OR Bodyweight Jump Squat	2	6
Power Clean ^T		2	6
Bent Leg Deadlift ©	OR Buddy resisted squats	4	6-12 RM see progression
Front Squat ©	OR Buddy resisted step-ups	4	6-12 RM see progression
Lying Hamstring Curls On Swiss Ball	OR Hamstring Raise	3	15
Alternate Leg Raise Bridge On Swiss Ball	OR Alternate leg raise bridge	3	10 each leg
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 12,10,8,6 RM			
Week 3 & 4: 8,6,6,6 RM			
Week 5 & 6: 10,8,8,8 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

^T = Technique training, exercises should be performed with an Olympic bar with no added weight. Perform ^T exercises at a fast pace (1s up 1s down). Those players without gym access may leave these exercises out.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

Due to greater difficulty with variation of load, players using **buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

12. Intermediate Power Program 1 (IP1)		Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2s up, 1-2s down), unless otherwise stated.	
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Push Press ^P	OR Squat thrusts	4	6
Cable Push-Pull ^P	OR Medicine ball plyometric push-ups	4	6
Flat Dumbbell Press ©	OR Buddy resisted push-ups	3	6-10 RM see progression
One-Arm Dumbbell Rows	OR Buddy resisted broomstick row	3	8-12 RM
Cable Flyes	OR Rope flyes	3	8-12 RM
Wide grip 30° lat pulldown	OR Buddy resisted rope row	3	8-12 RM
Prone Bridge Hold		2	60s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 6,6,6 RM			
Week 3 & 4: 6,4,4 RM			
Week 5 & 6: 6,4,3 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

Due to greater difficulty with variation of load, players using **buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

13. Intermediate Power Program 2 (IP2)		Rest 3 minutes for the © (core) and P (power exercises) Rest 1 minute for all other exercises Perform P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2s up, 1-2s down), unless otherwise stated.	
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Power Clean P	OR Clap push-ups	4	6
Jump Squat P	OR Single leg box jumps	4	6
Back Squat ©	OR Buddy resisted squats	3	6-10 RM see progression
Leg Press ©	OR Buddy resisted step-up	3	6-10 RM see progression
Lying Hamstring Curl	OR Hamstring Raise	3	8-12 RM
Abdominal Crunches		3	20-30
Prone Bridge Hold		2	60s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 6,6,6 RM			
Week 3 & 4: 6,4,4 RM			
Week 5 & 6: 6,4,3 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

Due to greater difficulty with variation of load, players using **buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

14. Intermediate Power Program 3 (IP3)		Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2s up, 1-2s down), unless otherwise stated.	
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Smith Machine Bench Throws ^P	OR Medicine ball plyometric push-ups	3	6
Jump Squat ^P	OR Squat thrust	3	6
Lying Medicine Ball Throws ^P	OR Clap push-ups	3	6
Incline Dumbbell Press ©	OR Buddy resisted incline push-ups	3	6-10 RM see progression
Dumbbell Shoulder Press ©	OR Buddy assisted hand stand press	3	6-10 RM see progression
Chin-ups (BW*)	OR Buddy resisted broomstick row	3	Max
Prone Bridge Hold		2	60s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1 & 2: 6,6,6 RM			
Week 3 & 4: 6,4,4 RM			
Week 5 & 6: 6,4,3 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Due to greater difficulty with variation of load, players using **buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

15. Intermediate In-season Program 1 (IIS1)		Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2s up, 1-2s down), unless otherwise stated.	
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Power Clean ^P	OR Medicine ball plyometric push-ups	2	6
Jump Squat ^P	OR Squat thrust	2	6
Back Squat ©	OR Buddy resisted back squat	3	6-10 RM see progression
Bent Leg Deadlift ©	OR Buddy resisted step-ups	3	6-10 RM see progression
Bench Press ©	OR Buddy resisted push-ups	3	6-10 RM see progression
Chin-ups (BW*)	OR Buddy resisted broomstick row	2	Max
Hamstring Raise		2	12
Prone Bridge Hold		2	60s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1: 10,10,10 RM			
Week 2: 10,8,8 RM			
Week 3: 8,6,6 RM			
Week 4: 6,4,4 RM			
Week 5: No gym			
Week 6: Repeat starting at Week 1			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

Each exercise which requires gym based equipment to be used has an alternative exercise (no gym alternative) for those players without gym equipment.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

**Due to greater difficulty with variation of load, players using buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the no partner alternative workouts outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

16. Intermediate In-season Program 2 (IIS2)		Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2 up, 1-2s down), unless otherwise stated.	
Exercise	OR No gym alternative***	Sets	Reps**
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Clean & Jerk ^P	OR Squat thrusts	3	6
Hang Pull (high) ^P	OR Medicine ball plyometric push-ups	3	6
Incline Dumbbell Press ©	OR Buddy resisted incline push-up	3	8-12 RM see progression
Dumbbell Shoulder Press ©	OR Buddy assisted hand stand press	3	8-12 RM see progression
Lat Pull-Downs	OR Buddy resisted broomstick row	2	10-12 RM
Dips (*BW)	OR Chair dips	2	Max
Single Arm Dumbbell Row	OR Buddy resisted one arm row	2	10-12 RM
Prone Bridge Hold		2	60s
Cool-Down & Stretch		1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1: 10,10,10 RM			
Week 2: 10,8,8 RM			
Week 3: 8,6,6 RM			
Week 4: 6,4,4 RM			
Week 5: No gym			
Week 6: Repeat starting at Week 1			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and maximal velocity.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Due to greater difficulty with variation of load, players using **buddy resisted exercises should perform as many reps as possible and only use the specified rep range as a guide where variable resistance is possible.

*** When no training partner is available, perform the **no partner alternative workouts** outlined in the Beginner cycle 1 of the off-season period.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper

17. Advanced Hypertrophy Program 1 (AH1)		Rest 2 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at slow to moderate pace (2-4s up, 2-4s down); unless otherwise stated.
Exercise	Sets	Reps
Warm-Up (Rowing OR Light Jogging)	1	10 minutes
Stretch	1	5 minutes
Back Squat ©	5	4-12 RM see progression
Incline Leg Press ©	5	4-12 RM see progression
Leg Extensions	4	6-12 RM
Walking Lunges	3	16-20 steps
Lying Hamstring Curls	4	6-12 RM
Standing Hamstring Curls	3	6-12 RM
Standing Calf Raise	4	6-12 RM
Abdominal Crunches	3	20-30
Knee Tucks On Swiss Ball	3	15-25
Prone Bridge Hold	2	60
Cool-Down & Stretch	1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:		
Week 1, 2 & 3: 12,10,10,8,8 RM		
Week 4, 5 & 6: 10,8,6,6,4 RM		
Week 7, 8 & 9: 12,10,10,8,8 RM		
Week 10, 11 & 12: 10,8,6,6,4 RM		

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

18. Advanced Hypertrophy Program 2 (AH2)	Rest 2 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a slow to moderate pace (2-4s up, 2-4s down); unless otherwise stated.	
Exercise	Sets	Reps
Warm-Up (Rowing OR Light Jogging)	1	10 minutes
Stretch	1	5 minutes
Barbell Bench Press ©	5	4-12 RM see progression
Incline Dumbbell Press ©	5	4-12 RM see progression
Flat Dumbbell Flyes	3	6-12 RM
Cable Flyes	3	6-12 RM
Standing Barbell Curls	4	6-12 RM
Seated Preacher Curls	3	6-12 RM
Alternate DB Curls	3	6-12 RM
Serratus Press	2	12-15
Shoulder Step Ups	2	20
Theraband Prone Neck Extension	3	10-15
Cool-Down & Stretch	1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:		
Week 1, 2 & 3: 12,10,10,8,8 RM		
Week 4, 5 & 6: 10,8,6,6,4 RM		
Week 7, 8 & 9: 12,10,10,8,8 RM		
Week 10, 11 & 12: 10,8,6,6,4 RM		

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

19. Advanced Hypertrophy Program 3 (AH3)		Rest 2 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at slow to moderate pace (2-4s up, 2-4s down); unless otherwise stated.	
Exercise	Sets	Reps	
Warm-Up (Rowing OR Light Jogging)	1	10 minutes	
Stretch	1	5 minutes	
Bent Over Row ©	4	4-12 RM see progression	
Lat Pulldown ©	4	4-12 RM see progression	
Dumbbell Shoulder Press ©	4	4-12 RM see progression	
Close Grip Bench Press ©	4	4-12 RM see progression	
45° Cable Row	3	6-12 RM	
Side Dumbbell Raise	3	6-12 RM	
Lying Tricep Extensions	3	6-12 RM	
Bent Over Reverse Flyes	3	6-12 RM	
Dips (BW*)	3	6-12 RM	
Internal Shoulder Rotation (0°)	2	10	
External Shoulder Rotation (0°)	2	10	
Cool-Down & Stretch	1	5 minutes	
PROGRESSION FOR © (CORE) EXERCISES:			
Week 1, 2 & 3: 12,10,10,8, RM			
Week 4, 5 & 6: 10,8,6,4 RM			
Week 7, 8 & 9: 12,10,10,8 RM			
Week 10, 11 & 12: 10,8,6,4 RM			

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

20. Advanced Strength Program 1 (AS1)		Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a moderate pace (2s up, 2s down); unless otherwise stated.	
Exercise	Sets	Reps	
Warm-Up (Rowing OR Light Jogging)	1	10 minutes	
Stretch	1	5 minutes	
Hanging High Pull [†]	2	6	
Push-Press [†]	2	6	
Flat Bench Press ©	4	2-8 see progression	
Bent-Over Row ©	4	2-8 see progression	
Dumbbell-Shoulder Press ©	4	2-8 see progression	
Chin- Ups (Bw*)	3	Max	
Dips (Bw*)	3	Max	
Dumbbell Shrugs	3	6-10 RM	
Alternating Bicep DB Curl	3	6-10 RM	
Cable Flyes	3	6-10 RM	
Internal Shoulder Rotation (90°)	2	10	
External Shoulder Rotation (90°)	2	10	
Cool-Down & Stretch	1	5 minutes	
PROGRESSION FOR © (CORE) EXERCISES:			
1st AS1 workout: 8,6,6,4 RM	4th AS1 workout: 8,6,6,4 RM		
2nd AS1 workout: 6,6,4,4 RM	5th AS1 workout: 6,6,4,4 RM		
3rd AS1 workout: 6,4,4,2 RM	6th AS1 workout: 6,4,4,2 RM		

[†] = Technique training, exercises should be performed with light loads to familiarise individuals with the exercise. Perform [†] exercises at a fast pace. (1s up 1s down). Start doing these exercises halfway through the strength phase.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

21. Advanced Strength Program 2 (AS2)		Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a moderate pace (2s up, 2s down); unless otherwise stated	
Exercise	Sets	Reps	
Warm-Up (Rowing OR Light Jogging)	1	10 minutes	
Stretch	1	5 minutes	
Jump Squat [†]	2	6	
Power Clean [†]	2	6	
Back Squat ©	4	2-8 see progression	
Incline Leg Press ©	4	2-8 see progression	
Walking Lunges	4	16-20 steps	
Lying Hamstring Curl	3	6-10 RM	
Side To Side Crunches	2	20-30	
Prone Bridge Hold	2	60s	
Cool-Down & Stretch	1	5 minutes	
PROGRESSION FOR © (CORE) EXERCISES:			
1st AS2 workout: 8,6,6,4 RM	4th AS2 workout: 8,6,6,4 RM		
2nd AS2 workout: 6,6,4,4 RM	5th AS2 workout: 6,6,4,4 RM		
3rd AS2 workout: 6,4,4,2 RM	6th AS2 workout: 6,4,4,2 RM		

[†] = Technique training, exercises should be performed with light loads to familiarise individuals with the exercise. Perform [†] exercises at a fast pace. (1s up 1s down). Start doing these exercises halfway through the strength phase.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

22. Advanced Strength Program 3 (AS3)		Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a moderate pace (2s up, 2s down); unless otherwise stated	
Exercise	Sets	Reps	
Warm-Up (Rowing OR Light Jogging)	1	10 minutes	
Stretch	1	5 minutes	
Lying Medicine Ball Throws	2	6	
Smith Machine Bench Throws [†]	2	6	
Incline Dumbbell Press ©	4	2-8 see progression	
Single Arm Dumbbell Row ©	4	2-8 see progression	
Pull-Ups (Bw*)	4	Max	
Arnold Shoulder Press	3	4-10RM	
Flat Dumbbell Flyes	3	6-10 RM	
Dumbbell Lateral Raise	3	6-10 RM	
Knee Tucks On Swiss Ball	3	25	
Wrestlers Bridge	2	10	
Cool-Down & Stretch	1	5 minutes	
<p>PROGRESSION FOR © (CORE) EXERCISES:</p> <p>1st AS3 workout: 8,6,6,4 RM 4th AS3 workout: 8,6,6,4 RM</p> <p>2nd AS3 workout: 6,6,4,4 RM 5th AS3 workout: 6,6,4,4 RM</p> <p>3rd AS3 workout: 6,4,4,2 RM 6th AS3 workout: 6,4,4,2 RM</p>			

[†] = Technique training, exercises should be performed with light loads to familiarise individuals with the exercise. Perform [†] exercises at a fast pace. (1s up 1s down). Start doing these exercises halfway through the strength phase.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a **body weight exercise**; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

23. Advanced Strength Program 4 (AS4)		Rest 3 minutes for the © (core) exercises Rest 1 minute for all other exercises Perform exercises at a moderate pace (2s up, 2s down); unless otherwise stated.	
Exercise	Sets	Reps	
Warm-Up (Rowing OR Light Jogging)	1	10 minutes	
Stretch	1	5 minutes	
Jump Squat (Bw)	2	6	
Power Clean ^T	2	6	
Bent Leg Deadlift ©	4	2-8 see progression	
Front Squat ©	4	2-8 see progression	
Lying Hamstring Curls On Swiss Ball	3	15	
Alt Leg Raise Bridge On Swiss Ball	3	10 each leg	
Cool-Down & Stretch	1	5 minutes	
PROGRESSION FOR © (CORE) EXERCISES:			
1st AS4 workout: 8,6,6,4 RM		4th AS4 workout: 8,6,6,4 RM	
2nd AS4 workout: 6,6,4,4 RM		5th AS4 workout: 6,6,4,4 RM	
3rd AS4 workout: 6,4,4,2 RM		6th AS4 workout: 6,4,4,2 RM	

^T = Technique training, exercises should be performed with light loads to familiarise individuals with the exercise. Perform ^T exercises at a fast pace. (1s up 1s down). Start doing these exercises halfway through the strength phase.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

24. Advanced Power Program 1 (AP1)		Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2s up, 1-2s down), unless otherwise stated.	
Exercise	OR alternative exercise	Sets	Reps
Warm-up (rowing OR Light Jogging)		1	10 minutes
Stretch		1	5 minutes
Smith Machine Bench Throws ^P		3	6
	OR medicine ball plyometric push-ups		
Hanging High Pull ^P		3	6
Lying Medicine Ball Throws ^P		2	6
Incline Dumbbell Press ©		4	2-8 see progression
Dumbbell Shoulder Press ©		4	2-8 see progression
Chin-Ups (Bw*)		4	Max
Cable Push-Pull		4	6-10 RM
Wrestlers Bridge		3	10
Cool-Down & Stretch		1	5 minutes
<p>PROGRESSION FOR © (CORE) EXERCISES:</p> <p>Week 1: 6,6,6,4 RM Week 4: 6,6,6,4 RM</p> <p>Week 2: 6,4,4,4 RM Week 5: 6,4,4,4 RM</p> <p>Week 3: 6,4,2,2 RM Week 6: 6,4,2,2 RM</p>			

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

25. Advanced Power Program 2 (AP2)	Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2s up, 1-2s down), unless otherwise stated.	
Exercise	Sets	Reps
Warm-Up (Rowing OR Light Jogging)	1	10 minutes
Stretch	1	5 minutes
Power Clean ^P	2	6
Jump Squat ^P	2	6
Back Squat ©	4	2-8 see progression
Leg Press ©	4	2-8 see progression
Lying Hamstring Curls	4	6-10 RM
Abdominal Crunches	3	20-30
Prone Bridge Hold	2	60s
Cool-Down & Stretch	1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:		
Week 1: 6,6,6,4 RM	Week 4: 6,6,6,4 RM	
Week 2: 6,4,4,4 RM	Week 5: 6,4,4,4 RM	
Week 3: 6,4,2,2 RM	Week 6: 6,4,2,2 RM	

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

26. Advanced Power Program 3 (AP3)	Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1- 2-s up, 1-2 s down), unless otherwise stated.	
Exercise	Sets	Reps
Warm-Up (Rowing OR Light Jogging)	1	10 minutes
Stretch	1	5 minutes
Push-Press ^P	3	6
Hang Clean And Jerk ^P	3	6
Flat Dumbbell Press ©	4	2-8 see progression
Bent Over Rows ©	4	2-8 see progression
Cable Flyes	3	6-10 RM
Wide Grip 30° Lat Pulldowns	3	6-10 RM
Prone Bridge Hold	2	60s
Cool-Down & Stretch	1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:		
Week 1: 6,6,6,4 RM	Week 4: 6,6,6,4 RM	
Week 2: 6,4,4,4 RM	Week 5: 6,4,4,4 RM	
Week 3: 6,4,2,2 RM	Week 6: 6,4,2,2 RM	

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

27. Advanced In-season Program 1 (AIS1)	Rest 3 minutes for the © (core) and P (power exercises) Rest 1 minute for all other exercises Perform P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1-2s up, 1-2s down), unless otherwise stated.	
Exercise	Sets	Reps
Warm-Up (Rowing OR Light Jogging)	1	10 minutes
Stretch	1	5 minutes
Back Squat / Leg Press ©	4	2-8 see progression
Deadlift ©	4	2-8 see progression
Flat Bench Press ©	4	2-8 see progression
Chin-Ups (BW*)	3	Max
Hamstring Raise	3	10
Prone Bridge Hold	2	60s
Cool-Down & Stretch	1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:		
Week 1: 8,8,6,6 RM		
Week 2: 6,6,4,4 RM		
Week 3: 4,4,4,2 RM		
Week 4: 6,6,4,4 RM		
Week 5: 4,4,4,2 RM		
Week 6: 4,3,2,2 RM		
Week 7: NO GYM		
Week 8: Start week 1 again		

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a body weight exercise; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

28. Advanced In-season Program 2 (AIS2)	Rest 3 minutes for the © (core) and ^P (power exercises) Rest 1 minute for all other exercises Perform ^P exercises with maximal controlled acceleration Perform other exercises at a moderate-fast pace (1-2s up, 1-2s down), unless otherwise stated.	
Exercise	Sets	Reps
Warm-Up (Rowing OR Light Jogging)	1	10 minutes
Stretch	1	5 minutes
Power Clean ^P	3	6
Jump Squat ^P	2	6
Push-Press ^P	2	6
Incline Dumbbell Press ©	3	4-10 see progression
Dumbbell Shoulder Press ©	3	4-10 see progression
Lat Pull Downs	3	8-12 RM
Dips (BW*)	3	Max
Single Arm Dumbbell Row	2	8-12 RM
Prone Bridge Hold	2	60s
Cool-Down & Stretch	1	5 minutes
PROGRESSION FOR © (CORE) EXERCISES:		
Week 1: 10,10,10 RM		
Week 2: 8,8,6 RM		
Week 3: 6,6,4 RM		
Week 4: 10,10,10 RM		
Week 5: 8,8,6 RM		
Week 6: 6,6,4 RM		
Week 7: NO GYM		
Week 8: Start week 1 again		

^P = Power Exercise, these exercises should only be performed once technique guidance has been given by a suitable qualified person (e.g. a biokineticist) to ensure proper technique. Power exercises should be performed with 30-60% of 1RM and with maximal velocity.

RM denotes a repetition maximum, i.e. a weight should be selected for which no more than the prescribed number of reps can possibly be completed (with good form and technique), if the rep range is reached with ease, select a heavier weight.

BW* denotes a **body weight exercise**; once players become strong enough to complete more than 12 reps they may add weight to their bodies to make the exercise more challenging.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

29. Fitness Conditioning Program 1 (FC1)				
Exercise	Sets		Effort scale	
Any cardiovascular cross-training; Bike, Rowing, Treadmill, Road/ Field Running, Stairmaster, Elliptical, rowing etc.	1	30-40 minutes @ low-moderate intensity (60-70% maximal effort) (see below)	6	no exertion at all
			7	extremely light
			8	
			9	very light
			10	
			11	light
			12	
			13	somewhat hard
			14	
			15	hard (heavy)
			16	
		17	very hard	
		18		
		19	extremely hard	
		20	maximal exertion	
Cool-Down & Stretch	1	5 minutes		

Target effort level {

30. Fitness Conditioning Program 2 (FC2)

Total Duration: 30 minutes (excluding warm-up, cool-down & stretch)

Exercise	Sets	One repetition =	Effort scale
Any cardiovascular cross-training; Bike, Rowing, Treadmill, Road/ Field Running, Stairmaster, Elliptical, rowing etc.	15	1) 1 minute at 80-90% of maximal effort (see effort table) 2) 1 minute at 35-45% of maximal effort (see effort scale)	6 no exertion at all
			7 extremely light
			8
			9 very light
			10
			11 light
			12
			13 somewhat hard
			14
			15 hard (heavy)
			16
			17 very hard
			18
			19 extremely hard
			20 maximal exertion
		*No rest between sets or between reps.	
Cool-Down & Stretch	1	5 minutes	

31. Fitness Conditioning Program 3 (FC3)

Total Duration: 21 minutes (excluding cool-down & stretch)

Exercise	Sets	One repetition =	Effort scale
Any cardiovascular cross-training; Bike, Rowing, Treadmill, Road/ Field Running, Stairmaster, Elliptical, rowing etc.	7	2 minute 70-80% maximal effort (see effort scale) 1 minute REST	6 no exertion at all
			7 extremely light
			8
			9 very light
			10
			11 light
			12
			13 somewhat hard
			14
			15 hard (heavy)
			16
			17 very hard
			18
19 extremely hard			
20 maximal exertion			
*Complete all 7 sets in a row without a break			
Cool-Down & Stretch	1	5 minutes	

32. Fitness Conditioning Program 4 (FC4)

Total duration: 15 minutes (excluding cool-down & stretch)

Exercise	Sets	One repetition =	Effort scale
Any cardiovascular cross-training; Bike, Rowing, Treadmill, Road/ Field Running, Stairmaster, Elliptical, rowing etc.	3	1) 1minute 100% maximal effort	6 no exertion at all
			7 extremely light
		2) 20s REST	8
		3) 1 minute 90% maximal effort	9 very light
			10
		4) 40s rest	11 light
			12
		5) 1 minute 80% maximal effort	13 somewhat hard
			14
		6) 60s rest	15 hard (heavy)
			16 80%
			17 very hard
			18 90%
	19 extremely hard		
	20 100% maximal exertion		
*Complete 3 sets in a row without a break			
Cool-Down & Stretch	1	5 minutes	

33. U16 Conditioning 1 (U16C1)				
Rest 30-60 seconds between exercises				
Exercise OR No gym alternative	Sets	Reps		
		Week 1-2	Week 3-6	Week 7-9
Warm-up (any cardio machine)	1	10 minutes		
Stretch	1	5 minutes		
Bodyweight Lunges	2	10/ Side	10/ Side	10/ Side
Seated Leg Press/ Incline Leg Press OR Single leg wall squats	1-3	20	20,20	20,20,20
Push-ups	3	10	10	10
Machine Bench Press OR Band chest press	1-3	20	20,20	20,20,20
Standing Calf Raise (max 5kg) OR Single leg calf raise	1-2	20	20,20	20,20
Under Arm Chin-Ups # OR Lat Pulldowns * OR Seated 45° band row	1-3	1 X max	2 X max	3 X max
Incline Bicep Curls OR Band bicep curls	1-3	20	20,20	20,20,20
Straight Crunches	1-3	20	20,20	20,20,20
Side to Side Crunches	1-3	20	20,20	20,20,20
Touching Toes Crunches	1-3	20	20,20	20,20,20
Alternate Arm/Leg Raise	2-3	5,5	10,10	10,10,10
Cool-Down & Stretch	1	5 minutes		

Get a friend to hold your legs up in front if you are struggling to reach 5 reps.

* Complete these if you are not able to do any Under arm Chin-Ups.

Where applicable, a weight should be selected which enables the number of reps to be reached with good form and technique, if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

34. U16 Conditioning 2 (U16C2)

Rest 30-60 seconds between exercises

Exercise	Sets	Reps		
		Week 1-2	Week 3-6	Week 7-9
OR No gym alternative				
Warm-up (any cardio machine)	1	10 minutes		
Stretch	1	5 minutes		
Bridging	1-3	10	10, 10	10,10,10
Push-ups	2	10	10	10
Lat Pulldowns	1-3	15	15,15	15,15,15
OR Seated 45° band row				
One-Arm Dumbbell Row	1-3	15	15,15	15,15,15
OR Bent over band row				
Neck Holds (all 4 sides)	2	4 X 5s	4 X 5s	4 X 5s
Progression: Band Neck Extensions	2			10
Seated Dumbbell Shoulder Press	1-3	15	15,15	15,15,15
OR Band shoulder press				
Bench Tricep Dips	1-3	15	15,15	15,15,15
Lateral Raises	1-3	15	15,15	15,15,15
OR Band lateral raises				
Straight Crunches	1-3	20	20,20	20,20,20
Side to Side Crunches	1-3	20	20,20	20,20,20
Touching Toes Crunches	1-3	20	20,20	20,20,20
Cool-Down & Stretch	1	5 minutes		

Where applicable, a weight should be selected which enables the number of reps to be reached with good form and technique, if the rep range is reached with ease, select a heavier weight.

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has an alternative exercise (**no gym alternative**) for those players without gym equipment.

35. U15 Conditioning Circuit 1 (U15CC)		
	Work for 30 seconds at each station Rest for 20 seconds while moving to the next station	
Exercise	Time	Target repetition
Warm-Up (Running, Skipping, Playing A Game, Shuttles)	10 min	
Stretch		
1. Lunges	30s	
2. Speed Ladder Drills	30s	
3. Body-Weight Squat (2s Hold Just Before 90°)	30s	10
4. 20m Shuttles (Run Between 2 Cones 20m Apart)	30s	6
5. Push-Ups (Hands 5 Cm Apart, Hands 10cm Wider Than Shoulder Width & Shoulder Width)	30s	10,10,10
6. Skipping	30s	60
7. Illinois Agility Run (See Exercises Section)	30s	2
8. Alternate Arm/Leg Raise (On Swiss Ball/ Ground) Hold Each Side 5s	30s	3
9. Treadmill Running On Ground (Alternate Legs In Push-Up Position)	30s	45 steps
10. Stomach Crunches (Straight, Side To Side, Touch Toes)	30s	10,10,10
11. 5m Shuttles (GFD5)	30s	Complete shuttle
12. Bridging (On Ground/Ball)	30s	3 each side
13. Squat Thrusts (Burpees)	30s	15
Additional Exercises		
Abdominal Prone Bridge Hold	30s	Hold for 30s
Running On The Swiss Ball	30s	50
Prone Knee-Tucks	30s	15
Push-Ups With Knees On Ball	30s	25
Push-Up With Feet Elevated	30s	25
One Leg Quarter Squat With Stabilisation (15 S Each Leg)	30s	10,10
Diagonals On Swiss Ball With Medicine Ball (15 S Each Side)	30s	10,10
Chair Or Bench Dips	30s	25
Cool-Down & Stretch	1	5 minutes

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

36. U14 Conditioning Circuit (U14CC)

Work for 30 seconds at each station
Rest for 20 seconds while moving to the next station

Exercise	Time	Target repetition
Warm-Up (Running, Skipping, Playing A Game, Shuttles)	10 min	
Stretch		
1. Inclined Seated Row With Band	30s	20
2. Skipping (If Players Cant Skip They Should Hop For 30s)	30s	50
3. Alternate Arm/Leg Raise (On Swiss Ball/ Ground) Hold Each Side	30s	10
5s		
4. Straight Stomach Crunches	30s	6
5. 5m Shuttles (Only Mark Out Till The 15m Mark)	30s	15m mark
6. Bridging On Ground (5s On Each Leg)	30s	3
7. Neck Holds (4 X 6 S Holds) Forwards, Left, Right, Backwards	30s	4X6s
8. 15m Shuttles (Run Between 2 Cones 15m Apart)	30s	6
9. One Foot Balance On Balance Ball (15s Each Leg)	30s	
10. Stomach Crunches (Side To Side)	30s	20
11. Illinois Agility Run (Once From Right, Once From Left)	30s	2
12. Band Bicep Curls	30s	3 each side
13. Treadmill Running On Floor	30s	15
14. Lunges (Alternate Between Left And Right)	30s	15s each
15. Speed Ladder Drill	30s	
16. Push-Ups On Knees	30s	
17. Run Through Mini Hurdles	30s	
18. Bodyweight Squats (2s Hold Just Before 90°)	30s	10
19. Step Up Step Down On 20m Step (Very Fast Tempo)	30s	50
20. Tricep Bench/Chair Dips	30s	20
Cool-Down & Stretch	1	5 minutes

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

37. U13 Conditioning 1 (U13C1)		
Rest 30 seconds between sets and exercises		
Exercise	Sets	Reps
OR No gym alternative		
Warm-Up (Running, Skipping, Playing A Game, Shuttles)	10 min	
Stretch	5 min	
Lunges	2	10
Hip Flexion With Band	2	10
Chair Squats	3	12
Inner & Outer Thigh With Band	2	10
Push-Ups	3	10
Band Chest Press	3	12
Under Hand Chin Ups	3	MAX
OR seated band 45° row		
Squat Thrust	2	15
Standing Band Bicep Curl		
Stomach Crunches (Straight Crunches, Side to side & Touch toes)	1-3	10 of each
PROGRESSION; Week1 – 1 set, Week2 – 2 sets, week3 – 3 sets		
Alternate Arm & Leg Raise	2	10
PROGRESSION: After 3 weeks progress to a swiss ball		
Cool-Down & Stretch	1	5 minutes

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has an alternative exercise (no gym alternative) for those players without gym equipment.

38. U13 Conditioning 2 (U13C2)		
Rest 30 seconds between sets and exercises		
Exercise	Sets	Reps
OR NO gym alternative		
Warm-up (Running, Skipping, Playing a game, Shuttles)	10 min	
Stretch	5 min	
Bridging On Ground PROGRESSION: Bridging on ball	2	10
Push-ups	2	10
Upright Row With Band	2	10
Treadmill Running On Ground	3	30s
Overhand Pull Ups OR seated band 45° row	3	MAX
Neck Holds (Forwards And Sideways) PROGRESSION: (resisted neck flexion)	5 2	5s 10
Chair OR Bench Tricep Dips	3	10
Seated 45° Band Row	3	12
One Arm Lateral Raises With Band	3	12
Stomach Crunches (Straight Crunches, Side To Side & Touch Toes) PROGRESSION; Week1 – 1 set, Week2 – 2 sets, week3 – 3 sets	1-3	10 of each
Cool-Down & Stretch	1	5 minutes

Refer to the **EXERCISE DESCRIPTION** section for technique guidance. The **EXERCISE DESCRIPTION** is merely for descriptive purposes; consult with a suitable qualified person (e.g. a biokineticist) to ensure proper technique is used in all the exercises.

Each exercise which requires gym based equipment to be used has an alternative exercise (no gym alternative) for those players without gym equipment.

39. General Fitness Drill 1 (GFD1)

Pyramid Run (Endurance)

*Sufficient Warm Up Essential

Starting on the try line, run at maximal intensity to the 22m and back, the halfway line and back, the opposite 22m and back and then the opposite try line and back. Total distance; 500m

Time the total duration of the run and try not to increase the time of completion through the drill

Target Time:

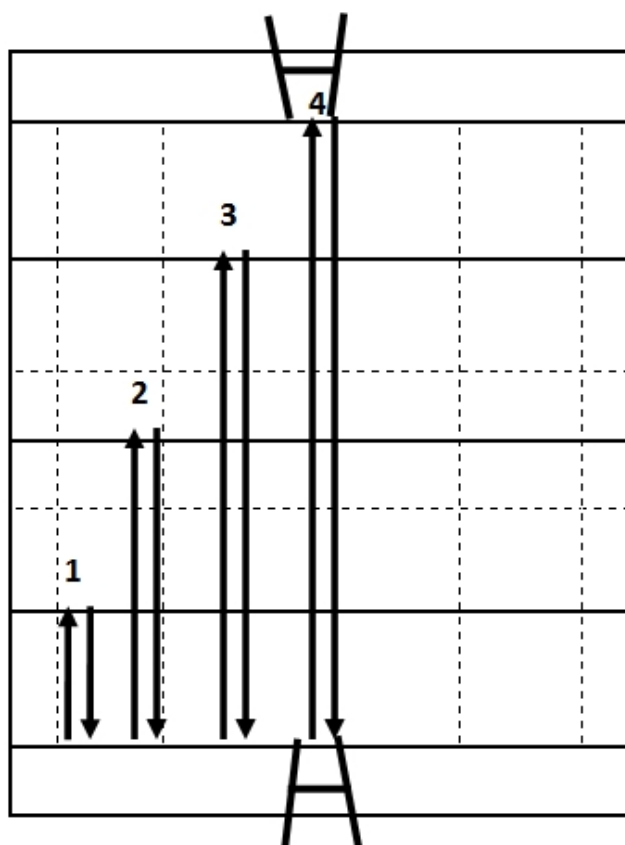
Tight Forwards: 95* seconds

Loose forwards and backs: 80* seconds

*These times may be reduced as the individual gets fitter

Sets 2-4*; 2-4 minute rest between sets

*Perform the desired number of sets, depending on the other conditioning drills in the specific session and the desired volume of the training session.



Cool-Down & Stretch

10 minutes

40. General Fitness Drill 2 (GFD2)

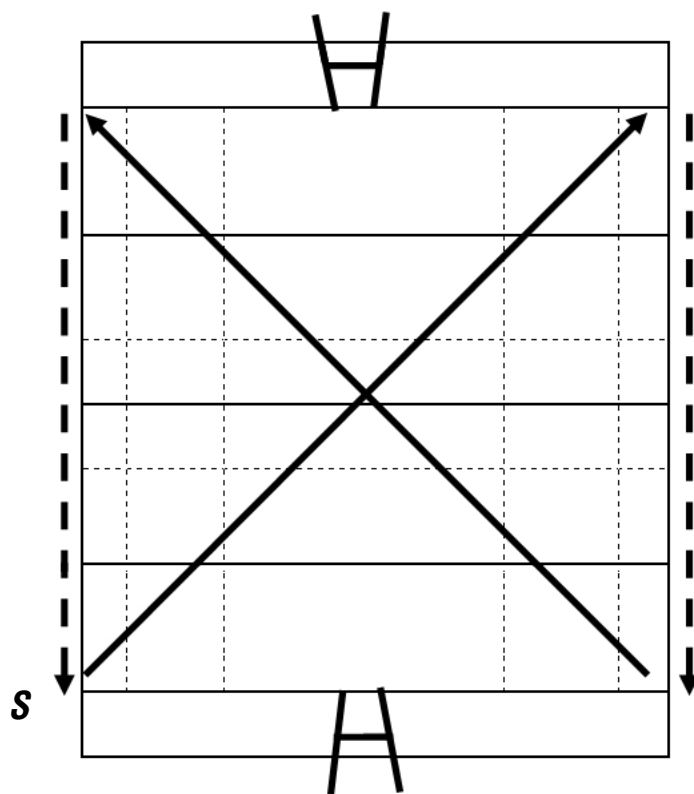
Figure 8 Run (Mixed Intensity Endurance)

*Sufficient Warm Up Essential

Starting in the corner between the try-line and the touchline sprint a diagonal across the field (70% of max), then jog (40% of max) down the touchline till you reach the corner flag and once again sprint a diagonal and jog back to the start position.

Perform this 2-5 times with a 1 minute rest period between each set.

S = Starting and end point.



Cool-Down & Stretch

10 minutes

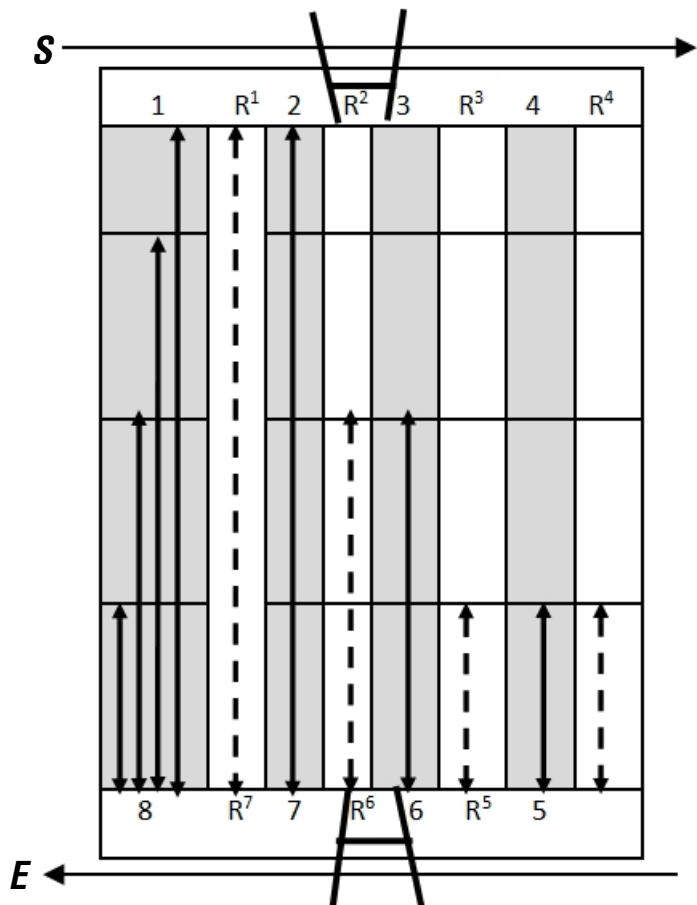
**41. General Fitness Drill 3 (GFD3)
Fartlek Run (Mixed Speed & Intensity)**

*Sufficient Warm Up Essential

Starting on the try-line perform the following;

- 1-** A maximal intensity pyramid (see Pyramid Run – GFD1)
- R1- Recovery – slow jog to the opposite try line and back.
- 2-** A maximal sprint to the opposite try line and back.
- R2- Recovery – slow jog to the half way line and back.
- 3-** A maximal run to the half way line and back.
- R3- Recovery – slow jog to the 22m line and back.
- 4-** A maximal sprint to the 22m line and back.
- R4- Recovery – slow jog to the 22m line and back.
- 5-** Same as 4.
- R5- Same as R4.
- 6-** Same as 3.
- R6- Same as R2.
- 7-** Same as 2.
- R7- Same as R1.
- 8-** Same as 1.

Players start on the bottom of the figure; **S** (starting point) and **E** (end point) assists in following 1- 8.



The complete drill = 1 Set: Perform 1-3* sets per session; 3-5 minute rest between sets

*Perform the desired number of sets, depending on the other conditioning drills in the specific session and the desired volume of the training session.

Cool-Down & Stretch

10 minutes

42. General Fitness Drill 4 (GFD4)

Snake Run (Speed Endurance)

*Sufficient Warm Up Essential

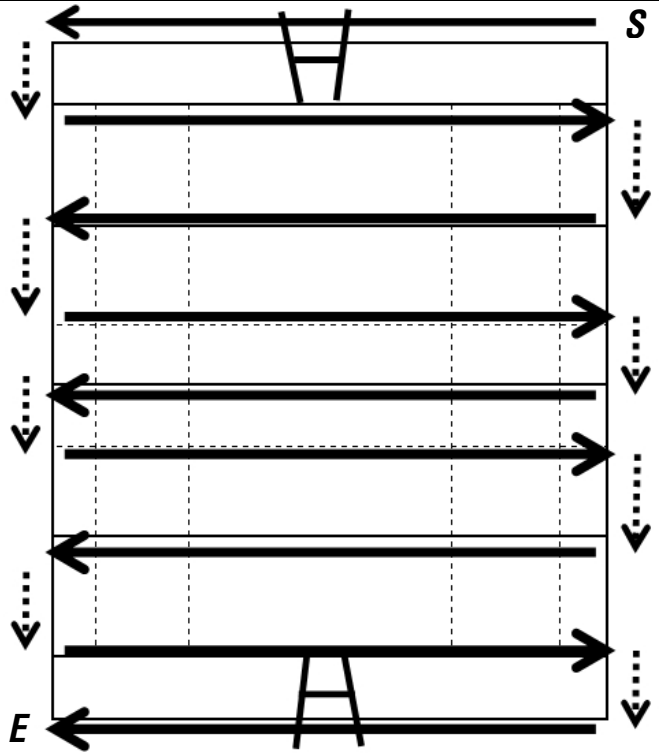
Starting on the corner of the Deadball line and the touch line sprint at 90% along the deadball line, at the opposite touch line rest for 15 seconds while slowly walking to the try line, complete this sprint walk/recover cycle till you get to the far corner of the touch and deadball lines.

Key:

Solid arrows: Sprint 90% should be completed between 10-15 seconds
Dashed arrows: walk/recover for 15 seconds

Sets 2-5*; 2-3 minute rest between sets

*Perform the desired number of sets, depending on the other conditioning drills in the specific session and desired volume of training.



S= Starting point

E= End point

Cool-Down & Stretch

10 minutes

43. General Fitness Drill 5 (GFD5)

25m Shuttles (Interval Match Specific Training)

*Sufficient Warm Up Essential

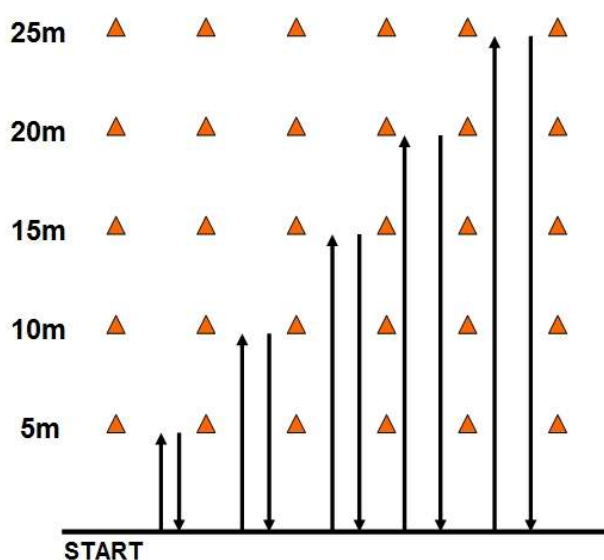
Mark out 5m intervals up to 25m (as shown in the diagram) with cones.

Run at 90% of maximal pace to the 5m and back, the 10m and back, the 15m and back, the 20m and back and lastly the 25m and back.

The Drill should be completed in 30 seconds

Rest for 40 seconds before starting the next rep.

Number of repetitions may range from 2-10 depending on the required workload.



Cool-Down & Stretch

10 minutes

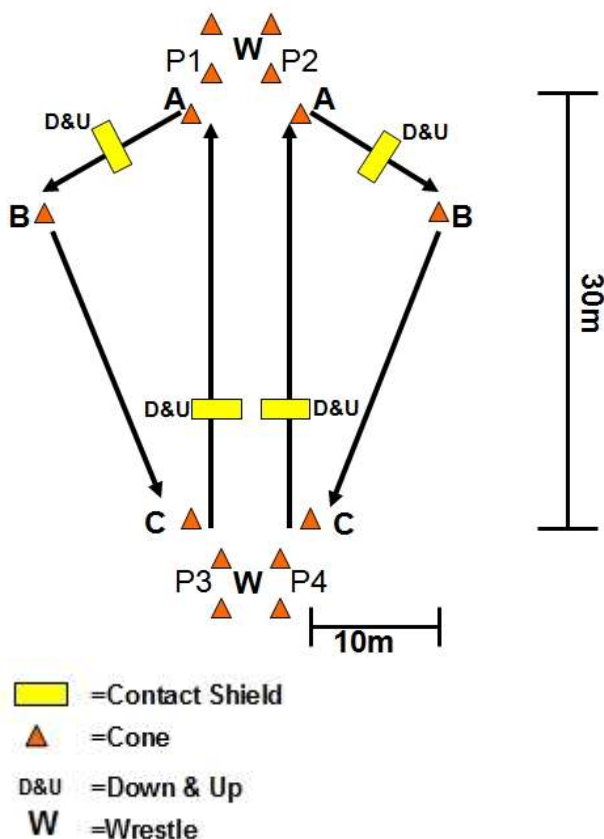
44. Specific Fitness Drill 1 (SFD1)

Triangle Wrestle, Drive and Run (Match Specific Conditioning)

*Sufficient Warm Up Essential

One station as set out on the right is designed to accommodate 8 players. Two players should start at the top W square (P1 and P2) and 2 players at the bottom W square (P3 and P4). 4 players should grab contact shields at the positions indicated.

The 4 players (P1,P2,P3 and P4) in the 2 W grids start by wrestling each other (see exercises section for variations) continuously for 15s, then get up and sprint the triangle in the direction indicated by the arrows. At every contact shield the players should hit the shield and perform a 2m leg drive, drop to the floor, get up (Down & Up) and continue until the player reaches the square he started in, where he will either complete another rep by starting to wrestle, rest and complete another rep or swap with a player holding a contact shield.



Cool-Down & Stretch

10 minutes

45. Specific Fitness Drill 2 (SFD2)

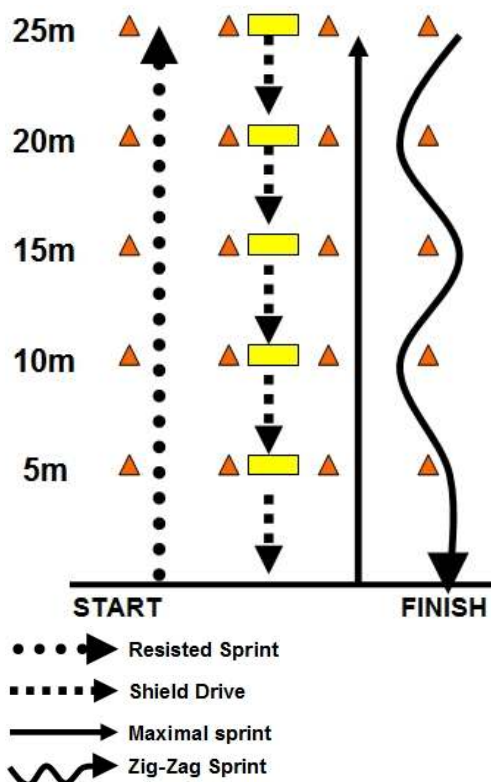
Rattlesnake sprint and clear (Match Specific Conditioning)

*Sufficient Warm Up Essential

The Station as set out on the right is designed to accommodate 15 players, 5 on contact shields, 5 applying resistance for the resisted sprint and 5 performing the full drill.

Start by performing a resisted sprint (see exercises section), then turn around and perform 5 X5m contact shield drives. Then turn around and perform a maximal intensity 25m sprint followed by a maximal effort sprint while side-stepping through the cones as laid out in the diagram.

Players should continually be active; they rest while they are holding the shields. After players have resisted 2 sprints they should grab a contact shield and hold it for 2 drives before starting to perform the drill again



Cool-Down & Stretch

10 minutes

46. Specific Fitness Drill 3 (SFD3)

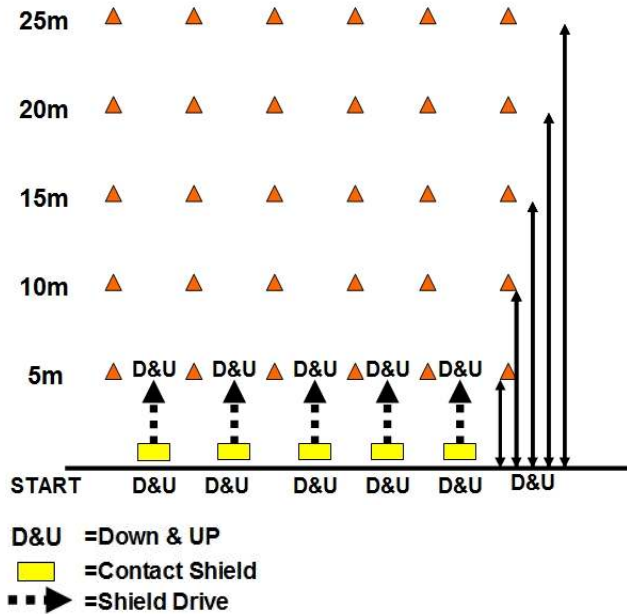
Down & Up Repeat clears (Match Specific Conditioning)

*Sufficient Warm Up Essential

This station can accommodate as many players as the teams number of contact shields allow.

Start by driving a team mate holding a contact shield 5m, perform a Down & Up, then run backwards to the start line and perform another Down & Up. Continue driving the same contact shield 5 times.

After completing 5 drives, run a progressive 5m shuttle run at maximal intensity, performing a Down & Up every time the start line is touched.



Cool-Down & Stretch

10 minutes

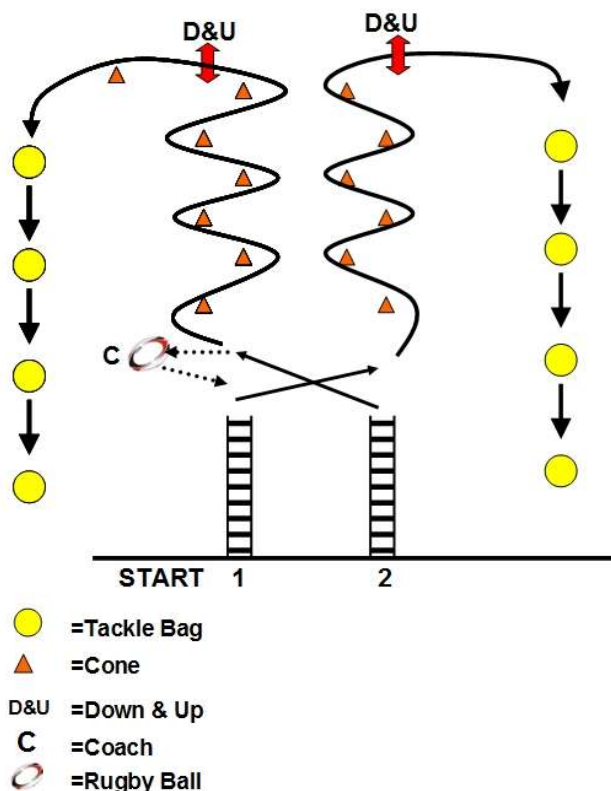
47. Specific Fitness Drill 4 (SFD4)

SSS {Step, Switch, Swerve} (Match Specific Conditioning)

*Sufficient Warm Up Essential

The station as depicted on the right is designed for 16 players. 8 players holding the tackle bags and 4 behind each of the step ladders.

Perform a foot stepping drill (see **EXERCISES** section). The player on ladder no.1 receives a ball passed by the coach and performs a switch with his team mate on ladder 2. Player on ladder no.2 then passes the ball back to the coach after receiving the ball on a switch from player 1. Both players perform a maximal sprint with side-stepping through the cones, after the last cone they perform a Down & Up and then continue at maximal intensity to tackle 4 tackle bags before crossing the start line.



Cool-Down & Stretch

10 minutes

EXERCISE DESCRIPTION

Chest Muscle Exercises:

1. Flat Bench Press
2. Flat Dumbbell Press
3. Incline Barbell Press
4. Incline Dumbbell Press
5. Flat Dumbbell Flyes
6. Cable Flyes
7. Push-Ups
8. Incline Push-ups (Swiss ball + Bench)
9. Band Chest Press
10. Buddy Resisted Push-ups
11. Buddy Resisted Incline Push-ups
12. Rope Flyes
13. Push-ups On Knees

Back Muscle Exercises:

1. Bent Over Row
2. Wide-Grip Pull-up
3. Underhand Chin-Up
4. Lat Pulldown
5. 30° Lat Pulldown
6. 45° Row
7. Low Pulley Row
8. One-Arm Dumbbell Row
9. Back Extension
10. Buddy Resisted Broomstick Row
11. Buddy Resisted Rope Row
12. Buddy Resisted One Arm Row
13. Seated 45° Band Row
14. Bent Over Band Row
15. Alternate Arm/Leg Raise (on Swiss ball)
16. Straight Back Good Mornings

Shoulder Exercises:

1. Dumbbell Shoulder Press
2. Arnold Shoulder Press
3. Dumbbell Lateral Raise
4. Bent Over Reverse Fly
5. Dumbbell Shrug
6. One Arm Lateral Raises with Band
7. Band Shoulder Press
8. Band Reverse Flyes
9. Upright Row with Band
10. Buddy Assisted Hand Stand Press
11. Buddy Resisted Broomstick Press
12. Buddy Resisted Lateral Raises
13. Buddy Resisted Shrugs
14. Buddy Resisted Rope Reverse Fly

Arm Exercises (Bicep and Tricep):

1. Straight Bar Bicep Curl
2. Standing Cable Tricep Extensions
3. Close Grip Bench Press
4. Preacher Curls
5. Lying Tricep Extensions
6. Alternating Bicep DB curl
7. Dips
8. Bench/Chair Tricep Dips
9. Incline Bicep Curls
10. Band Bicep Curls
11. Lying Band Tricep Extensions
12. Buddy Resisted Diamond Push-ups
13. Buddy Resisted Broomstick Curls
14. Buddy Resisted Rope (Hammer) Curls
15. Buddy Resisted Rope Extensions
16. Upright Band Tricep Extensions

Leg Exercises (Quadriceps, Hamstrings and calves):

1. Bent Leg Deadlift
2. Back Squat
3. Walking Lunges
4. Front Squat
5. Leg Press
6. Lying Leg Curl
7. Standing Calf Raise
8. Single Leg Calf Raises
9. Lying Hamstring Curls (on Swiss Ball)
10. Dumbbell Step-Ups
11. Leg Extensions
12. Hamstring Raise
13. Standing Hamstring Curls
14. Lunges
15. Seated Leg Press
16. One Leg Quarter Squat with Stabilisation
17. Body Weight Squats
18. Chair Squats
19. Inner & Outer Thigh with Band
20. Hip Flexion with Band
21. Buddy Resisted Squats
22. Buddy Resisted Step Ups
23. Buddy Donkey Calf Raises
24. One Leg Wall Squats
25. Buddy Resisted Leg Press
26. Band Squat

Abdominal Exercises:

1. Abdominal Crunch (straight)
2. Side to Side Crunches
3. Touching Toes Crunches
4. Knee Tucks on Swiss Ball
5. Prone Bridge Hold
6. Prone Hold on Swiss Ball
7. Diagonals on Swiss Ball with Medicine Ball

Rehabilitation and Prevention Exercises:

1. Shoulder Step-ups
2. Prone Neck Lifts
3. Serratus Press
4. Band Prone Neck Extension
5. Internal and External Shoulder Rotation
6. Wrestler's Bridge
7. Alt Leg Raise Bridge on Ground or Swiss Ball
8. Neck Holds
9. One Foot Balance on Balance Ball

Power Exercises:

1. Power Clean
2. Hanging High Pull
3. Hang Clean & Jerk
4. Jump Squat (BW or Weighted)
5. Single Leg Box Jumps
6. Smith Machine Bench Throws
7. Push-Press
8. Lying Medicine Ball Throws
9. Cable Push Pull
10. Squat Thrusts
11. Clap Push-ups
12. Medicine Ball Plyometric Push-ups

SAQ Exercises (Speed, Agility and Quickness):

1. Speed Ladder 1
2. Speed Ladder 2
3. Speed Ladder 3
4. Speed Ladder 4
5. Speed Ladder 5
6. Illinois Agility Run
7. Run Through Mini Hurdles
8. Body Lean Accelerations
9. Hollow Sprints
10. Sprints
11. Rolling Sprints

CHEST MUSCLE EXERCISES:

1. Flat Bench Press:

- Lie on a flat bench with eyes in line with the support arms of the bench.
- Grip should be slightly wider than shoulder width.
- Take the bar off the supports and move it so that it is in line with the chest (start position).
- Lower the bar to the chest at approximately nipple level (Midpoint).
- From the Midpoint push the bar back up to the start position.
- DO NOT arch the back or move your feet during the lift.

START:



MIDPOINT:



2. Flat Dumbbell Press:

- Same movement as the bench press just performed with dumbbells.
- If needed, ask a spotter to assist in getting the dumbbells off your chest into the start position.
- Lower the dumbbells to in line with the nipples (Midpoint).
- Push the dumbbells back up to the start position.
- Do not arch your back, or move your feet during the lift.

START:



MIDPOINT:



3. Incline Barbell Press:

- Same movement as the bench press, just performed on an incline bench

START:



MIDPOINT:



4. Incline Dumbbell Press:

- If needed, ask a spotter to assist in getting the dumbbells off your chest into the start position.
- Lower the dumbbells to in line with the nipples (Midpoint).
- Push the dumbbells back up to the start position.
- Do not arch your back, or move your feet during the lift.

START:



MIDPOINT:



5. Flat Dumbbell Flyes:

- Grasp two dumbbells and assume the start position on a flat bench.
- Lower the dumbbells, keeping them parallel in a wide arc until they are in line with the chest or shoulders (Midpoint).
- From the Midpoint, contract the chest muscles to push the dumbbells back to the start position in a wide arc.

START:



MIDPOINT:



6. Cable Flyes:

- Take both handles from the Cable crossover machine and draw them together, assuming the start position.
- While keeping the rest of the body in exactly the same position move your hands outwards in a wide arc until the hands are in line with the chest (Midpoint).
- From the Midpoint, contract the chest muscles to push the hands back to the start position in a wide arc.
- Keep the same angle in the elbows throughout the movement.

START:



MIDPOINT:



7. Push-ups:

- Maintain a straight back and body throughout the exercise
- Do not hollow the back.
- From the start position push your body up to the midpoint and then return to the start position, without letting your chest touch the floor
- Your chest should stop 5 cm from the ground
- There are 3 possible hand positions see below.

Standard push-up:

START:



MIDPOINT:



Hands 5cm apart push-up:

START:



MIDPOINT:



Hands 10cm wider than normal push-up:

START:



MIDPOINT:



8. Incline Push-ups (Swiss ball + Bench)

- Maintain a straight back and body throughout the exercise.
- Do not hollow the back.
- From the start position push your body up to the midpoint and then return to the start position, without letting your chest touch the floor.
- Your chest should stop 5cm from the ground.
- The exercise may be performed with leg elevated either on a box/ chair/ bed/ exercise ball.



9. Band Chest Press

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tube under your body or under the bench you lying on and perform as if you are doing flat dumbbell press
- From the start position, lower the tubing to in line with the nipples (Midpoint)
- Push the band back up to the start position
- Do not arch your back, or move your feet during the movement

START:



MIDPOINT:



10. Buddy resisted push-ups

- Perform a push-up as demonstrated previously.
- A training partner applies resistance to your upper back, in line with your shoulders.
- Maintain a straight back and body throughout the exercise and avoid hollowing the back.
- The training partner should only apply enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.



11. Buddy resisted incline push-ups

- Perform a incline push-up as demonstrated above
- A training partner applies resistance to your upper back, in line with your shoulders.
- Maintain a straight back and body throughout the exercise and avoid hollowing the back.
- The training partner should only apply enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.



12. Rope Flies

- Attach a rope around a well secured pole or tree.
- Grip the rope as shown in the start position with chest muscle tightly squeezed.
- Lower your body with caution to a position where you will be able to push yourself back up to the start position.(Midpoint)
- At the midpoint push your body back up to the start position using your chest muscles
- Resistance may be varied by leaning further forward and by changing the distance ones feet are from the pole.

START:



MIDPOINT:



13. Push-ups on knees

- Perform in exactly the same way as a push-up, described earlier
- Only difference is that your knees, and not your feet make contact with the floor



BACK MUSCLE EXERCISES

1. Bent over row

- Assume a shoulder width stance and grip the bar with an overhand grip slightly wider than shoulder width.
- A deadlift technique (see deadlift) should be used to initially lift the weight off the floor into the start position.
- Ensure that the spine is straight.
- Pull the bar up towards the lower chest or upper abdomen using the back muscles while pointing the elbows upwards (Midpoint).
- Lower the weight back to the start position.
- Ensure that the torso, knees and back are kept in the same position throughout the lift.

START:



MIDPOINT:



2. Wide-Grip Pull-up

- Use a step to reach a Pull-up bar and grip it with a wide overhand grip (start position).
- From this hanging position pull your body upwards until your chin is in line with the bar (Midpoint).
- Lower yourself in a controlled manner back down to the start position with arms fully extended.
- Keep your body still throughout the exercise.
- Once the exercise becomes easy to perform it may be made more challenging through attaching additional weight (weight plate or dumbbell) to your waist.

START:



MIDPOINT:



3. Underhand Chin-Up

- Execution is exactly the same as the Wide-Grip Pull-up except that an underhand (palms facing body) close grip is used.
- Once the exercise becomes easy to perform it may be made more challenging through attaching additional weight (weight plate or dumbbell) to your waist.

START:



MIDPOINT:



4. Lat Pull down

- Grasp the lat Pull-Down bar with a overhand grip (start position) and position thighs under the thigh pads with feet flat on the ground and arms extended.
- Pull the bar towards the upper chest (Midpoint)
- Once at the midpoint allow the elbows to extend back to the start position in a controlled manner.
- Keep the torso in the same position throughout the movement; do not jerk the weight down.

START:



MIDPOINT:



5. 30° Lat Pulldown

- Execution is exactly the same as the pulldown, except that the body is leaned backwards by roughly 30° throughout the exercise.
- Keep the torso in the same position throughout the exercise and do not jerk the weight down.

START:



MIDPOINT:



6. 45° Row

- Use a high pulley with a close grip handle and lean the torso 45° backwards (start position).
- While maintaining a straight back pull the handle toward the lower chest or upper abdomen (Midpoint)
- Once at the midpoint allow the elbows to extend back to start position in a controlled manner.
- Keep the torso in the same position throughout the movement; do not jerk the weight down.

START:



MIDPOINT:



7. Low Pulley Row

- Use a low Pulley with a close grip handle, keep the back straight (start position).
- While maintaining a straight back pull the handle toward abdomen (Midpoint).
- Once at the midpoint allow the elbows to extend back to start position in a controlled manner.
- Keep a straight back and do not jerk.

START:



MIDPOINT:



8. One-Arm Dumbbell Row

- Using very similar technique to the low pulley row, grasp a dumbbell while maintaining a straight back (start position)
- Keeping the elbow close to the body, pull the dumbbell up in line with the abdomen. (Midpoint)
- Allow the elbow to extend back to the start position
- Maintain a straight spine throughout the lift.

START:



MIDPOINT:



9. Back Extension

- Maintain a straight body and spine at the start position
- Lower the trunk down through only bending at the hips; keep the back straight while bending forwards (Midpoint).
- Once at the midpoint position straighten the body back to the start position while keeping the back straight.
- Once the exercise becomes easy to perform it may be made more challenging through holding a weight plate against your chest.

START:



MIDPOINT:



10. Buddy resisted broomstick row

- Use a broomstick and rope as indicated in the picture below.
- The training partner grips the ropes firmly and only applies enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.
- Keep the back straight throughout the exercise.

START:



MIDPOINT:



11. Buddy resisted rope row

- Use a rope as indicated in the picture below.
- The training partner grips the ropes firmly and only applies enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.
- Keep the back straight throughout the exercise.

START:



MIDPOINT:



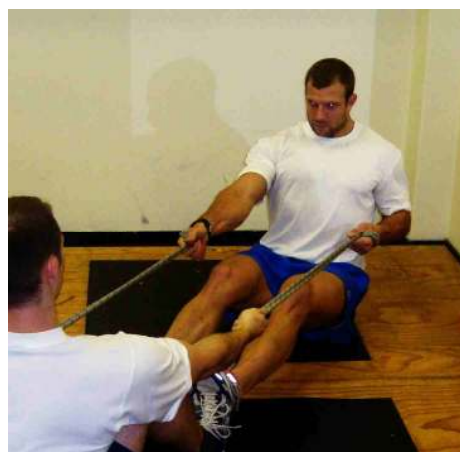
12. Buddy resisted one arm row

- Use a rope as indicated in the picture below.
- The training partner grips the ropes firmly and only applies enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.
- Pull one arm at a time as indicated below while the training partner applies resistance
- Keep the back straight throughout the exercise.

START:



MIDPOINT:



13. Seated 45° band row

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Tie the tubing around a secured pole or tree
- From the start position, pull the tube until the hands are in line with the bellybutton (Midpoint)
- From the midpoint release the tubing slowly back to the start position
- Keep the back straight throughout the exercise.

START:



MIDPOINT:



14. Bent over band row

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tubing under the feet and assume a bent over stance as shown below with back straight
- From the start position, pull the tube until the hands are in line with the bellybutton (Midpoint)
- From the midpoint release the tubing slowly back to the start position
- Keep the back straight throughout the exercise.

START:



MIDPOINT:



15. Alternate arm/leg raise (on Swiss ball)

- Lie in a Swiss ball as shown below.
- Alternate lifting the right arm and left leg (picture on left) and the left arm and right leg (picture on the right).



16. Straight back good mornings

- Assume a stance as shown below.
- Bend over keeping the back dead straight and knees slightly bent.(Midpoint).
- Return back to the start position.

START:



MIDPOINT:



SHOULDER EXERCISES:

1. Dumbbell Shoulder Press

- Sit on a vertical bench and raise the dumbbells to the start position.
- From the start position lower the dumbbells in a controlled manner until the hands are in line with the ears (Midpoint).
- From the midpoint push the dumbbells back up to the start position.
- Do not arch the back or rise off the seat.

START:



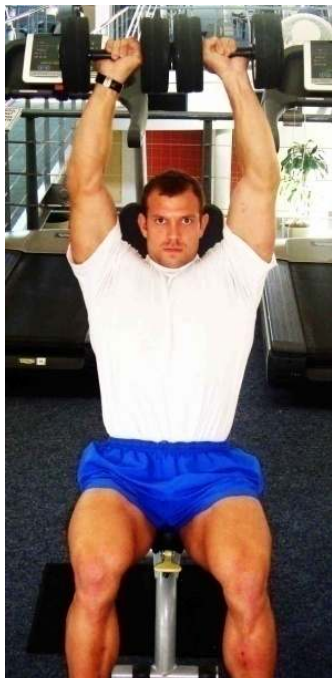
MIDPOINT:



2. Arnold Shoulder Press

- From exactly the same start position as the dumbbell shoulder press, lower the dumbbells while rotating the dumbbells externally until palms are facing the body in line with the chin (Midpoint position).
- Once at the midpoint position push the dumbbells upwards while rotating them internally back up to the start position.

START:



MIDPOINT:



3. Dumbbell Lateral Raise

- Grasp dumbbells and hold them in front of the body keeping the back straight and elbows slightly bent (start position).
- Raise the dumbbells upwards and sideways to in line with the shoulders (Midpoint).
- Lower the dumbbells back to the start position in a controlled manner.
- Do not jerk or bounce during any stage of the exercise.
- Keep a straight back throughout.

START:



MIDPOINT:



4. Bent Over Reverse Fly

- Grasp dumbbells and hold them in front of the body while bending 90° forwards and keeping the back straight (start position).
- Raise the dumbbells upwards and sideways to in line with the shoulders (Midpoint).
- Lower the dumbbells back to the start position in a controlled manner.
- Do not jerk or bounce during any stage of the exercise.
- Keep a straight back throughout.

START:



MIDPOINT:



5. Dumbbell Shrug

- Grasp dumbbells and hold them at the side of the body while keeping the back straight and arms extended (start position).
- Lift the shoulders upwards as far as possible (midpoint)
- Try and hold the shoulder at the midpoint position for a second or two before lowering them down to the start position.
- Do not jerk or bounce during any stage of the exercise.

START:



MIDPOINT:



6. One Arm Lateral Raises With Band

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tube under your foot and grip in your hand
- Raise your arm from the start position to the midpoint position without bending your arm
- From the midpoint lower the tubing slowly and controlled back to the start position

START:



MIDPOINT:



7. Band Shoulder Press

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tube under your feet and grip in your hands as shown in the start position below.
- Raise your arms from the start position to the midpoint position.
- From the midpoint lower the tubing slowly and controlled back to the start position

START:



MIDPOINT:



8. Band Reverse Flyes

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tube under your feet and grip in your hands as shown in the start position below.
- Raise your arms from the start position to the midpoint position without bending your arms
- From the midpoint lower the tubing slowly and controlled back to the start position

START:



MIDPOINT:



9. Upright Row With Band

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tube under your feet and grip in your hands as shown in the start position below.
- Raise your arms from the start position to the midpoint position.
- From the midpoint lower the tubing slowly and controlled back to the start position.

START:



MIDPOINT:



10. Buddy Assisted Hand Stand Press

- With assistance from a training partner assume a hand stand position with arms extended while your training partner is keeping you upright (Start)
- Your buddy should assist by lifting a portion of your bodyweight to make the exercise easier and to allow the prescribed number of repetitions to be performed.
- Bend your arms until your head touches the ground (Midpoint).
- From the midpoint position, press back to the start.

START:



MIDPOINT:



11. Buddy Resisted Broomstick Press

- Use a broomstick as indicated in the picture below.
- The training partner grips the broomstick firmly and presses downwards, only enough resistance should be applied to restrict the maximum number of repetitions to the number prescribed in the workout.
- Lower the broomstick from the start position to the top of the head (midpoint), and then push back up to the start position.

START:



MIDPOINT:



12. Buddy Resisted Lateral Raises

- A training partner applies resistance to the elbow.
- Raise the arms from the start position to the midpoint position by pressing against the hands of the training partner applying resistance.
- The training partner remains applying pressure while the arms are lowered in a slow controlled movement back to the start position.

START:



MIDPOINT:



13. Buddy Resisted Shrugs

- Grip your training partner as indicated in the picture below under his armpits.
- The training partner should have his feet on the ground in front of him.
- Pull the shoulders upwards as far as possible (midpoint)
- Try and hold the shoulder at the midpoint position for a second or two before lowering them down to the start position.
- Do not jerk or bounce during any stage of the exercise
- Maintain a straight back throughout the exercise.

START:



MIDPOINT:



14. Buddy Resisted Rope Reverse Fly

- Grip the rope as shown in the pictures below.
- The training partner grips the ropes firmly and only applies enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.
- Raise the arm from the start position to the midpoint position and back down in a slow controlled movement.
- Keep the back straight throughout the exercise.

START:



MIDPOINT:



ARM EXERCISES (BICEP AND TRICEP MUSCLES):

1. Straight Bar Bicep Curl

- Grip a barbell with a straight back as indicated in the start position
- Curl the weight up to the midpoint position by only using the bicep muscle.
- Keep the torso in the same position throughout the movement, do not jerk the weight up.
- Ensure a straight back and slightly bent knees throughout the exercise.

START:



MIDPOINT:



2. Standing Cable Tricep Extensions

- Face high pulley and grasp cable attachment with overhand narrow grip as shown in the start position
- Extend the arm to the midpoint position while maintaining an upright posture
- From the midpoint position return to the start position in a slow controlled motion

START:



MIDPOINT:



3. Close Grip Bench Press

- Lie on a flat bench with eyes in line with the support arms of the bench.
- Grip the bar with hand shoulder width apart.
- Take the bar off the supports and move it so that it is in line with the chest (start position).
- Lower the bar to the chest at approximately nipple level (Midpoint).
- From the Midpoint push the bar back up to the start position.
- DO NOT arch the back or move your feet during the lift.

START:



MIDPOINT:



4. Preacher Curls

- Grip an EZ curl bar (as indicated in picture below) with the little fingers slightly lower than the thumbs, with arm extended (Start position)
- Curl the bar, using only the bicep muscles up to the midpoint position.
- From the midpoint position lower the weight back to the start position in a slow controlled movement.

START:



MIDPOINT:



5. Lying Tricep Extensions

- Grip an EZ bar and assume the position indicated in the start position with arms fully extended
- Lower the bar down slowly and stop it about 5cm's from the forehead (Midpoint)
- From the midpoint position press the weight back up to the start position.
- Do not arch the back or jerk the weight up.

START:



MIDPOINT:



6. Alternating Bicep DB Curl

- Grasp 2 dumbbells and assume the position indicated in the pictures below, sitting on a 90° bench.
- Alternate between performing a curl with the left and the right arm.
- Move the dumbbell up and down in a controlled motion
- Do not swing or jerk the weight up
- Maintain a straight back throughout the exercise.



7. Dips

- Assume the start position on a shoulder width dip bar.
- Lower the body from the start position to the midpoint position in a controlled motion.
- Press the body from the midpoint back up to the start position.
- Do not jerk or swing the body while performing the exercise

START:



MIDPOINT:



8. Bench/Chair Tricep Dips

- Bench/chair dips may be performed in the same way as normal dips, a chair or bench is just used instead of a dip bar

START:



MIDPOINT:



9. Incline Bicep Curls

- Grasp 2 dumbbells and assume the position indicated in the pictures below, sitting on a incline bench.
- Curl both dumbbells from the start position up to the midpoint position.
- Once at the midpoint position lower the weight down in a slow controlled motion down to the start position.
- Do not swing or jerk the weight up
- Maintain a straight back throughout the exercise.

START:



MIDPOINT:



10. Band Bicep Curls

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tube under your feet and grip in your hands as shown in the start position below.
- Curl the resistive tubing from the start position to the midpoint position.
- From the midpoint lower the tubing slowly and controlled back to the start position
- Maintain a straight upright back throughout the movement.

START:



MIDPOINT:



11. Lying Band Tricep Extensions

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Place the tube under your body or under the bench as indicated in the start position
- Lower the hands down to the midpoint position, keeping the elbows in the same position.
- From the midpoint position straighten the arms back to the start position

START:



MIDPOINT:



12. Buddy Resisted Diamond Push-Ups

- Perform a push-up with the hand together forming a diamond between the thumbs and index fingers.
- A training partner applies resistance to your upper back, in line with your shoulders.
- Maintain a straight back and body throughout the exercise and avoid hollowing the back.
- The training partner should only apply enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout

START:



MIDPOINT:



13. Buddy Resisted Broomstick Curls

- Use a broomstick as indicated in the picture below.
- The training partner grips the broomstick firmly and only applies enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.
- Keep the back straight throughout the exercise.
- Perform a bicep curl as previously explained.

START:



MIDPOINT:



14. Buddy Resisted Rope (Hammer) Curls

- Use a rope as indicated in the picture below.
- The training partner grips the rope firmly and only applies enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.
- Keep the back straight throughout the exercise.
- Perform a bicep curl as previously explained.

START:



MIDPOINT:



15. Buddy Resisted Rope Extensions

- Use a rope as indicated in the picture below.
- The training partner grips the rope firmly and only applies enough resistance to restrict the maximum number of repetitions to the number prescribed in the workout.
- Keep the back straight throughout the exercise.
- Perform a standing tricep extension as previously explained.

START:



MIDPOINT:



16. Upright Band Tricep Extensions

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Attach the tube around a secured object as shown below.
- Extend the arm from the start position to the midpoint position.
- From the midpoint bend the arms back to the start position. Keep the elbows in the same position throughout the exercise.
- Maintain a straight upright back throughout the movement.

START:



MIDPOINT:

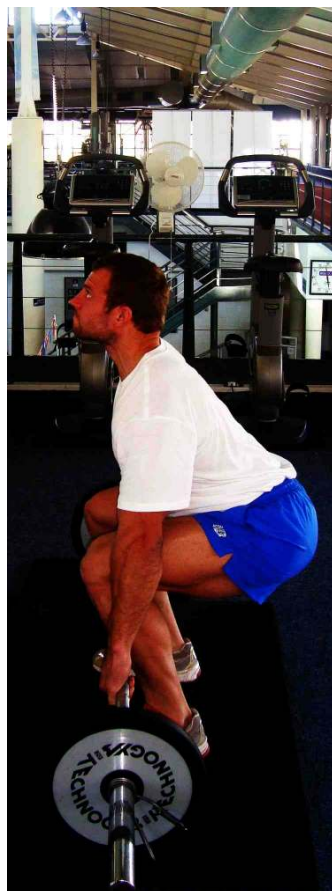


LEG EXERCISES (QUADRICEPS, HAMSTRINGS AND CALVES):

1. Bent Leg Deadlift

- Stand with feet flat on the ground and placed between hip and shoulder width apart with toes pointed slightly outward.
- Grasp the bar with a closed alternated grip (one hand over and one hand under) slightly wider than shoulder width while keeping the shoulders above the hips and back straight and as upright as possible. (start position)
- In the start position the torso should be as upright as possible to avoid putting strain on the back.
- From the start position lift the bar off the floor by extending the hips and knees. Keep the bar as close to the body as possible and pull the weight until the body is erect. (Midpoint)
- From the midpoint, lower the weight down slowly in a controlled manner with exactly the same body position used to lift the weight.
- Maintain a flat back body position with chest up and out throughout the exercise.

START:



MIDPOINT:



2. Back Squat

- Grasp the bar behind the neck with a closed grip
- Lift the elbows up slightly to create a shelf for the bar with the upper back and shoulder muscles
- Tilt the head upwards slightly
- Position the feet shoulder width apart with toes pointed slightly outwards (start position)
- Tilt the pelvis forward (i.e. press the bum out) and allow the hips and knees to slowly bend, lower the weight while keeping the back flat and head and elbows up. Do not round the back at any stage.
- Continue flexing the hips and knees until the thighs are parallel to the floor (Midpoint)
- From the midpoint, extend the hips and knees while maintaining the same body position as when lowering the weight, with back flat, head and elbows up.
- Continue extending the hips and knees until the start position is reached.
- Never bend the back while performing a squat.
- If you are not able to maintain a straight back when squatting all the way down (thigh parallel), only go as low as you can with your back straight.

START:



MIDPOINT:



3. Walking Lunges

- Walking lunges may be performed with or without weights
- If weighted lunges are performed grasp the bar with a closed grip behind the neck as when performing a squat (start)
- Step forward and lower the knee of the back leg until it is 5cm from the ground (midpoint)
- Forcefully drive upwards and forwards with both legs and return to the start position.
- Repeat as explained above for the opposite leg.

START:



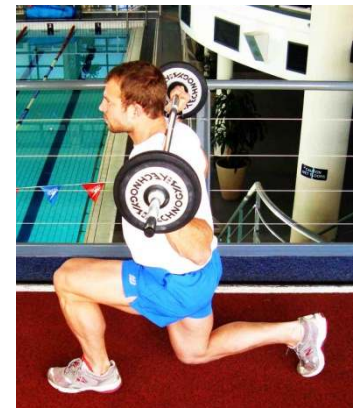
MIDPOINT: R LEG



START:



MIDPOINT: L LEG



4. Front Squat

- As opposed to the back squat the bar rests on the top of the shoulders and clavicle in front of the head.
- The bar may either be gripped with arms crossed or with a normal shoulder width grip.
- Maintain elbows high with upper arms parallel to the ground.
- Position the feet shoulder width apart with toes pointed slightly outwards (start)
- Tilt the pelvis forward (i.e. press the bum out) and allow the hips and knees to slowly bend, lower the weight while keeping the back flat and head and elbows up. Do not round the back at any stage.
- Continue flexing the hips and knees until the thighs are parallel to the floor (Midpoint)
- From the midpoint, extend the hips and knees while maintaining the same body position as when lowering the weight, with back flat, head and elbows up.
- Continue extending the hips and knees until the start position is reached.
- Never bend the back while performing a squat.
- If you are not able to maintain a straight back when squatting all the way down (thigh parallel), only go as low as you can with your back straight.

START:



MIDPOINT:



5. Leg Press

- Sit in the machine with lower back, hips and buttocks pressed into the machine
- Place feet on the platform hip width apart. (Start position)
- Remove the catches from the foot platform and lower the weight in a slow controlled motion until the upper thigh and lower leg is at a 90° angle. (Midpoint)
- Once at the midpoint drive the weight back up to the start position.
- Ensure that the back remains in firm contact with the back rest.

START:



MIDPOINT:



6. Lying Leg Curl

- Assume the position as indicated in the start position on the lying hamstring curl machine.
- Maintain a slight bend in the knee at the start position.
- Curl the lever upwards as far as you can (Midpoint), and then lower it again in a slow controlled manner until the start point is reached.

START:



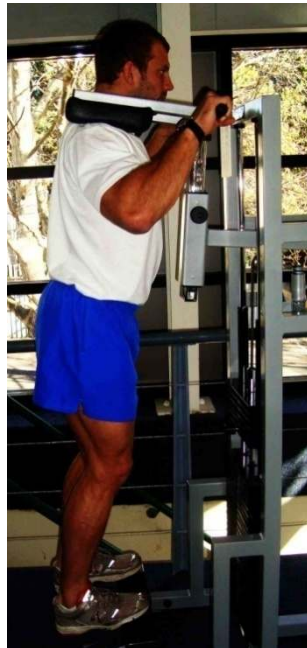
MIDPOINT:



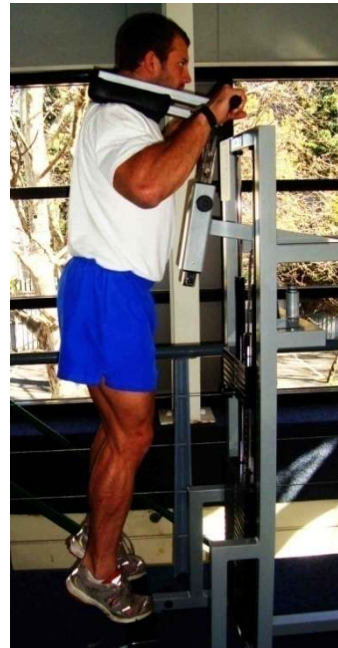
7. Standing Calf Raise

- Assume the position as indicated in the start position on the standing calf raise machine.
- Maintain a slight bend in the knee and a straight back throughout the exercise.
- Lift the weight from the position where the calf is fully extended, i.e. heel lower than the ankle (Start position) to a position where the calf muscle is fully flexed (Midpoint)
- Once at the midpoint, lower back down to the start position in a slow controlled movement.

START:



MIDPOINT:



8. Single Leg Calf Raises

- As opposed to the standing calf raise, perform only one leg at a time, using your bodyweight as resistance. No machine is required.
- Place the ball of the foot on the edge of a step with heel lower than the ankle (Start position)
- Lift the body upwards by flexing the calf muscle.
- Once at the midpoint, lower back down to the start position in a slow controlled movement.

START:



MIDPOINT:



9. Lying Hamstring Curls (On Swiss Ball)

- Assume the start position as indicated below, with feet in a swiss ball, body in a straight line and only the shoulders making contact with the ground
- While keeping hips off the ground pull the feet on the ball towards the buttock (Midpoint).
- From the midpoint position, straighten the legs back to the start position in a slow controlled movement.

START:



MIDPOINT:



10. Dumbbell Step-Ups

- Grasp dumbbells in either hand and place one leg on a step or bench roughly 45cm high (Start)
- Drive off the leg on the step by extending the hip and knee. Only use the leg on the step to generate the force required to perform the step-up.
- Once at the midpoint, lower back down to the start position in a controlled movement.
- Perform the same amount of repetitions for each leg.

START:



MIDPOINT:



11. Leg Extensions

- Assume the position as indicated in the start position on the leg extension machine.
- Straighten the legs until they are fully extended (Midpoint)
- Once at the midpoint, lower back down to the start position.

START:



MIDPOINT:



12. Hamstring Raise

- Assume the start position as indicated below, with one foot on a step or chair
- Raise the body using the foot on the chair until the body is in a straight line. (Midpoint)
- From the midpoint position lower the body back down to that start position in a slow controlled movement.
- Perform the same number of repetitions with each leg

START:



MIDPOINT:



13. Standing Hamstring Curls

- Assume the position as indicated in the start position on the standing leg curl machine.
- Curl the legs up towards the buttock until full flexion is reached (Midpoint)
- Once at the midpoint, lower back down to the start position in a slow controlled movement

START:



MIDPOINT:



14. Lunges

- Start in an upright body position as indicated in the start position below .
- Step forward and lower the knee of the back leg until it is 5cm from the ground. (midpoint)
- Forcefully drive upwards and backwards with the front leg until the start position is reached,
- Perform the same movement with the other leg.
- Completing both legs is one repetition.

START:



MIDPOINT: L



START:



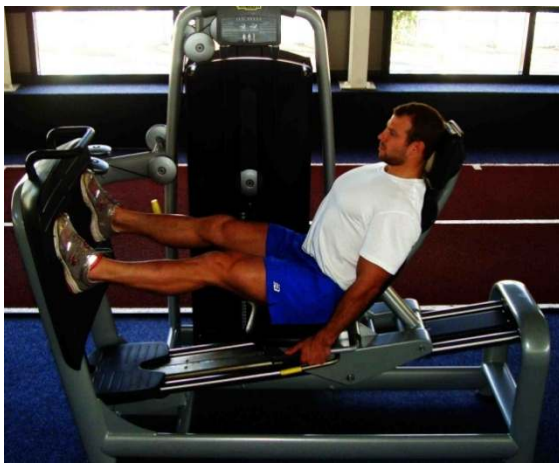
MIDPOINT: R



15. Seated Leg Press

- Sit in the machine with lower back, hips and buttocks pressed into the machine
- Place feet on the platform hip width apart. (Start position)
- Remove the catches from the foot platform and lower the weight in a slow controlled motion until the upper thigh and lower leg is at a 90° angle. (Midpoint)
- Once at the midpoint drive the weight back up to the start position.
- Ensure that the back remains in firm contact with the back rest.

START:



MIDPOINT:



16. One Leg Quarter Squat With Stabilisation

- Stand on one leg and perform a squat, concentrating on keeping your balance
- Squat down as far as possible while maintaining balance (midpoint)
- Perform the same number of reps on each leg

START:



MIDPOINT:



17. Body Weight Squats

- Stand with feet shoulder width apart and squat down until a 90° at the knee joint is reached.
- If one is not able to keep ones balance, place the arms straight out in front of the body to counter balance

START:



MIDPOINT:



18. Chair Squats

- Perform in exactly the same way as the body weight squat.
- Only difference is that a bench or chair is placed under the buttocks
- The buttocks should touch the bench or chair at every repetition

START:



MIDPOINT:



19. Inner & Outer Thigh With Band

- Attach resistant tubing (i.e. bicycle tyre, theraband, toning tube etc.) to a secure object
- For the outer thigh, pull the resistant tubing away from the body (see below)
- For the inner thigh, pull the resistant tubing towards the body (see below)

Outer thigh:

START:



MIDPOINT:



Inner thigh:

START:



MIDPOINT:



20. Hip Flexion With Band

- Attach resistant tubing (i.e. bicycle tyre, theraband, toning tube etc.) to a secure object
- Pull the resistant tubing forwards and upwards by flexing the hip as shown in the picture below

START:



MIDPOINT:



21. Buddy Resisted Squats

- A training partner applies resistance by climbing onto the back of the person performing the exercise as shown in the picture below.
- Perform a squat as previously described
- When no more repetitions are possible, signal to the training partner to dismount.

START:



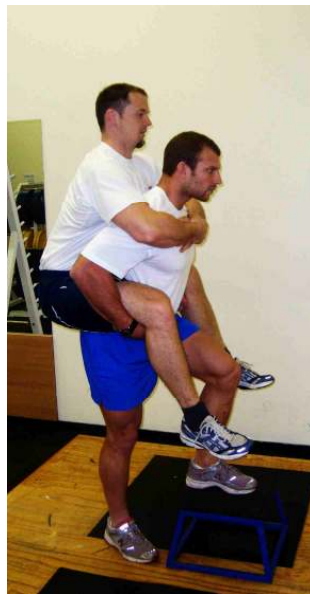
MIDPOINT:



22. Buddy Resisted Step Ups

- A training partner applies resistance by climbing onto the back of the person performing the exercise as shown in the picture below.
- Perform a step-up as previously described. Use a smaller step (roughly 15cm) due to the difficulty in performing a step up with a training partner.
- When no more repetitions are possible, signal to the training partner to dismount.

START:



MIDPOINT:



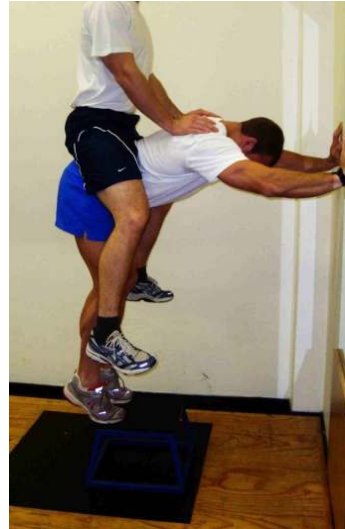
23. Buddy Donkey Calf Raises

- A training partner applies resistance by sitting on the back of the person performing the exercise as shown in the picture below.
- Perform a calf raise as previously described.
- When no more repetitions are possible, signal to the training partner to dismount.

START:



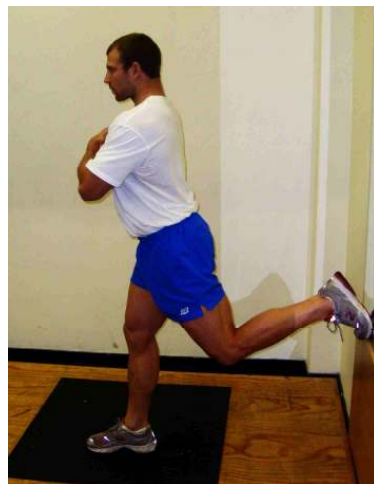
MIDPOINT:



24. One Leg Wall Squats

- Stand on one leg with the back leg against a wall
- Perform a squat on the grounded leg.
- Squat down until a 90° angle between the upper and lower leg is reached.(Midpoint)
- From the midpoint position extend the grounded leg until the start position is reached
- Perform the same number of repetitions on each leg

START:



MIDPOINT:



25. Buddy Resisted Leg Press

- Assume the start position as shown below, the training partner leans forward and his weight is supported by the person performing the leg press
- While maintaining contact with the floor lower the training partner until the angle between the thighs and lower leg is 90° (Midpoint)
- From the midpoint extend the legs at the hips and knees until the start position is reached
- If one is able to reach, hold the hands of the training partner to assist stability.

START:



MIDPOINT:



26. Band Squat

- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.)
- Hold the resistive tube as shown below and perform a squat as previously described

START:



MIDPOINT:



ABDOMINAL EXERCISES:

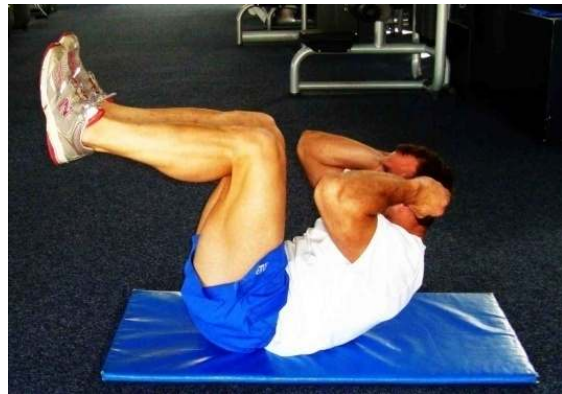
1. Abdominal Crunch (Straight)

- Assume the starting position as indicated below.
- Crunch upwards until the elbows touch the knees (Midpoint), briefly hold this position before returning to the start position.
- Do not jerk the arms to help start the exercise movement

START:



MIDPOINT:



2. Side To Side Crunches

- Assume the starting position as indicated below.
- Crunch upwards sideways until one elbow touches the opposite knee (Midpoint), briefly hold this position before returning to the start position.
- Once the movement is performed on each side one repetition is complete
- Do not jerk the arms to help start the exercise movement

START:



MIDPOINT: 1



MIDPOINT: 2



3. Touching Toes Crunches

- Assume the starting position as indicated below.
- Crunch upwards until the toes are reached (Midpoint), briefly hold this position before returning to the start position.
- Do not jerk the arms to help start the exercise movement.

START:



MIDPOINT:



4. Knee Tucks On Swiss Ball

- Assume the starting position either as indicated below or in a push-up position with arms straight.
- While keeping the body off the ground pull the knees towards the body.
- Once the midpoint is reached, return back to the start position in a slow controlled movement.
- Keep the back straight throughout the exercise.

START:



MIDPOINT:



5. Prone Bridge Hold

- Assume the position as shown below.
- Maintain this straight body position for the prescribed number of seconds.
- Maintain a straight back and body throughout the exercise.
- Ensure the feet hips and shoulders are in a straight line.
- Avoid hollowing the back.



6. Prone Hold On Swiss Ball

- Assume the position as shown below.
- Maintain this straight body position for the prescribed number of seconds.
- Maintain a straight back and body throughout the exercise.
- Ensure the feet hips and shoulders are in a straight line.
- Avoid hollowing the back.



7. Diagonals On Swiss Ball With Medicine Ball

- Assume the starting position as indicated below.
- Crunch upwards and sideways while lifting the medicine ball to the opposite side to the starting position (Midpoint).
- Repeat the same number of repetitions on each side.
- Do not jerk the arms to help start the exercise movement.

START:



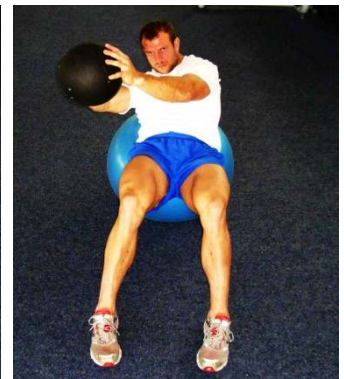
MIDPOINT:



START:



MIDPOINT:



REHABILITATION AND PREVENTION EXERCISES:

1. Shoulder Step-ups

- Assume a push-up position in front of a small step.
- Use the hands to step onto and down from the step.
- As indicated below perform left hand up, right hand up, left hand down, right hand down, this is one rep.
- Keep the body in a straight line throughout the movement and focus on keeping the shoulders forward and shoulder blades fixed.



2. Prone Neck Lifts

- Kneel on all fours as indicated below.
- Curl the head upwards and backwards.
- Hold briefly at the Midpoint position and then control back to the start position

START:



MIDPOINT:



3. Serratus Press

- Assume the start position on a flat bench.
- Push the shoulders upwards as far as possible and hold it there briefly, before dropping the shoulders back to the start position.
- If no dumbbells are available the same exercise may be performed on the ground in a push-up position.

START:



MIDPOINT:



4. Band Prone Neck Extension

- Kneel on all fours as indicated below.
- Use resistive tubing (i.e. bicycle tyre, theraband, toning tube etc.) as indicated below.
- Curl the head upwards and backwards.
- Hold briefly at the Midpoint position and then control back to the start position.

START:



MIDPOINT:



5. Internal And External Shoulder Rotation

External Rotation

- Use resistive tubing as shown.
- Pull the resistive tubing outwards.
- Keep a 90° angle in the elbow.
- Keep the rest of the body still.

START:



MIDPOINT:



Internal Rotation

- Use resistive tubing as shown.
- Pull the resistive tubing inwards.
- Keep a 90° angle in the elbow.
- Keep the rest of the body still.



6. Wrestler's Bridge

- Maintain and contract your neck muscles to support your body as shown below.
- Keep your chin tucked in at all times.
- Hold this bridge for the prescribed number of seconds before dropping back to a normal lying position. Repeat the prescribed number of times.
- Maintain a straight back and body throughout the exercise.



7. Alt Leg Raise Bridge On Ground Or Swiss Ball

- Lie either on your back or on a swiss ball.
- Lift your buttocks off the ground and assume a bridge position.
- Lift one leg at a time firstly straight up (with a bend at the knee), and then extend it, before returning to the start bridge position (see pictures below).
- Repeat the same prescribed number of reps with each leg.



8. Neck Holds

- Push lightly against each side of your head (only use 50% effort).
- Hold each side for 5 seconds.



9. One Foot Balance On Balance Ball

- Balance on a balance ball (or alternatively a tennis ball) for the prescribed number of seconds
- See below



POWER EXERCISES:

1. Power Clean

- This power exercise involves pulling the bar quickly and forcefully from the floor to the front of the shoulders.
- Ensure a straight back throughout the movement. Do not bend the back at any stage.
- Start the movement with feet parallel and at shoulders width. Place hands on the bar slightly wider than shoulder width and outside the knees.
- From this start position, pull the weight forcefully upwards and extend the hips and knees while plantar flexing the ankles.
- As the bar approaches shoulder height, bend the knees again to into a quarter squat position and “catch” the bar on the front of the shoulders.
- Extend the knees and hips again before lowering the bar gradually in a controlled descent onto the thighs and then squat down with straight back until the bar touches the floor.



2. Hanging High Pull

- This power exercise involves pulling the bar quickly and forcefully from a hanging position to a fully extended position with the bar at shoulder height.
- Ensure a straight back throughout the movement. Do not bend the back at any stage.
- Start the movement with feet parallel and at shoulders width. Place hands on the bar slightly wider than shoulder width.
- From the hanging start position, firstly dip down, and then pull the weight forcefully upwards as indicated while extending the hips and knees and plantar flexing the ankles.
- Lower the bar gradually in a controlled descent back to the start position.



3. Hang Clean & Jerk

- This power exercise involves pulling the bar quickly and forcefully from a hanging position to the front of the shoulders, and then in a separate movement jerking the bar to above the head with arms extended.
- Start the movement with feet parallel and at shoulders width. Place hands on the bar slightly wider than shoulder width.
- From the hanging start position, firstly dip down, and then pull the weight forcefully upwards while extending the hips and knees and plantar flexing the ankles.
- Catch the weight on the front of the shoulders with hips and knees flexed as explained in the power clean. Once the bar is on the shoulders extend the hips and knees again.
- From this position (bar on front of shoulders, hips and knees extended), firstly dip down into a quarter squat position again and then forcefully drive the weight upwards and catch it with arms extended and legs bent and in a split stance.
- Bring the legs together before lowering the bar gradually in a controlled descent onto the thighs and back into the hanging start position.



4. Jump Squat (BW Or Weighted)

- This exercise may be performed with or without weight. When using a weighted bar, extreme caution should be used and heavy weights should never be used.
- Hold the bar as if a normal squat is being performed with hips and knees extended.
- From the start position, squat down and then drive forcefully upwards and jump as high as possible.
- When landing ensure that your hips and knees absorb the impact by bending as your feet touch the ground.
- Very experienced lifters should only perform weighted Jump squats.
- Jump squats may also be performed in the same way without added resistance. i.e. using just your bodyweight.



5. Single Leg Box Jumps

- Place one leg on a step or chair as shown below
- Drive forcefully of the leg on the chair or bench and jump as high as possible
- Perform the same number of repetitions on each leg.



6. Smith Machine Bench Throws

- Assume the starting position with arms extended.
- Lower the bar onto the chest and then forcefully push the weight upwards and “throw” the bar at the top of the movement
- Catch the bar again while simultaneously decelerating it down and return to the start position.



7. Push-Press

- This power exercise involves pushing the bar as quickly and forcefully from the front of the shoulder to a fully extended position above the head.
- Start the movement with feet parallel and hip width apart. Place hands on the bar slightly wider than shoulder width.
- From this start position, forcefully extend the hips and knees and then the elbows to press the bar overhead.
- Lower the bar gradually in a controlled descent onto the front of the shoulders.



8. Lying Medicine Ball Throws

- Lie on your back and hold a medicine ball as shown
- Throw the medicine ball forcefully and quickly for maximum height.
- Catch the medicine ball again while simultaneously decelerating it back to the start position



9. Cable Push Pull

- Assuming the start position as shown below, simultaneously push and pull the two pulley cables of a two pulley machine as forcefully and quickly as possible while rotating the body.
- When the midpoint position is reached, slowly lower the weight back to the start position
- Repeat the same number of repetitions on each side.

START:



MIDPOINT:



10. Squat Thrusts

- Lie flat in your stomach
- While pushing down with the hands quickly pull the legs up towards the body and then jump as high as possible.
- Land softly and return to the start position.



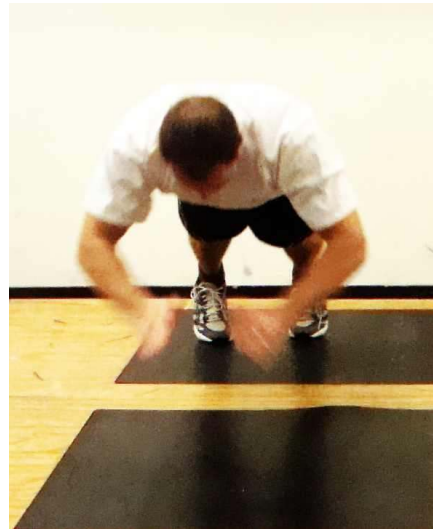
11. Clap Push-ups

- Perform an explosive push-up through pushing forcefully downwards
- At full extension of the arms, bring the hands together and clap before landing and decelerating back to the start position.

START:



MIDPOINT:



12. Medicine Ball Plyometric Push-Ups

- Perform an explosive push-up with one hand on a medicine or rugby ball.
- Push forcefully with both arms and cross over the medicine (or rugby) ball and “land” with opposite hand on the medicine (or rugby) ball.



SAQ EXERCISES (SPEED, AGILITY AND QUICKNESS):

Include a combination of these drills into the SAQ conditioning sessions prescribed during the team practice sessions:

1. Speed Ladder 1

- Start with feet together facing the speed ladder
- Perform one step in each block
- Run the length of the ladder, moving feet as fast as possible
- If no speed ladder is available conventional cones may be laid out and fast feet performed in the same manner as with the ladders



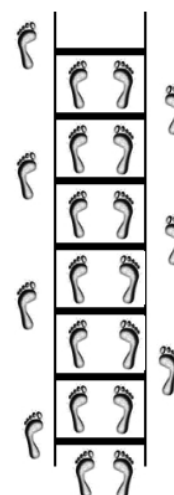
2. Speed Ladder 2

- Start with feet together facing the speed ladder
- Perform a left and a right step in each block
- Run the length of the ladder, moving feet as fast as possible
- If no speed ladder is available conventional cones may be laid out and fast feet performed in the same manner as with the ladders



3. Speed Ladder 3

- Start with feet together facing the speed ladder
- Side step into and out of each block as you move forward
- Run the length of the ladder, moving feet as fast as possible
- If no speed ladder is available conventional cones may be laid out and fast feet performed in the same manner as with the ladders



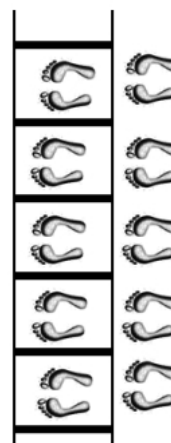
4. Speed Ladder 4

- Start with feet together with your side facing the speed ladder.
- Perform lateral stepping, both feet in each block.
- Run the length of the ladder, moving feet as fast as possible.
- If no speed ladder is available conventional cones may be laid out and fast feet performed in the same manner as with the ladders.



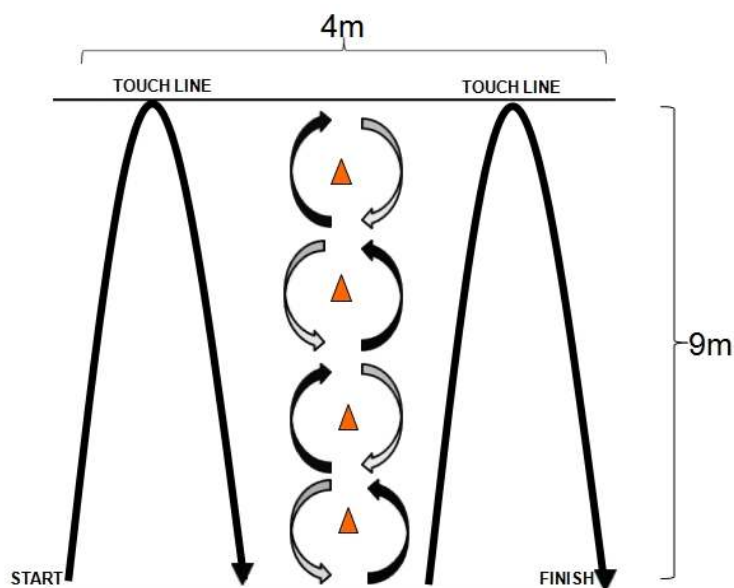
5. Speed Ladder 5

- Start with feet together, sideways in the first ladder space.
- Move laterally down the ladder, first placing stepping backward and then sideways.
- Move laterally while performing two feet in two feet out stepping in each block.
- Run the length of the ladder, moving feet as fast as possible
- If no speed ladder is available conventional cones may be laid out and fast feet performed in the same manner as with the ladders



6. Illinois Agility Run

- Lay out the drill as shown below.
- From the start position, firstly sprint to a line 9 meters away, touch it and sprint back.
- Then run through the cones to the opposite line through first following the black line and then return following the grey line.
- Complete another sprint to the opposite line and back before finishing.



7. Run Through Mini Hurdles

- Run with high knees over either mini hurdles, or if no mini hurdles are available, run with high knees over cones.
- Place the hurdles or cones roughly 50 cm apart and focus on high knees and quick feet.

8. Body Lean Accelerations

- Assume a pronounced lean against a partner (see below).
- When your partner stops resisting and steps out of the way, accelerate forwards for 5-10m, gradually slow down and return to the start position.



9. Hollow Sprints

- Position cones at 5m, 10m, 20m, 30m, 45, and 60m from a start line
- Jog to the first cone (5m jog)
- Sprint to the next cone (5m sprint)
- Jog to the next cone (10m jog)
- Sprint to the next cone (10m sprint)
- Jog to the next cone (15m jog)
- Sprint to the next cone (15m sprint)

10. Sprints

- Perform 10m and 20m sprints
- Vary the starting position may be varied; i.e. track start, 3 point start, lying down start etc.

11. Rolling Sprints

- Place 4 cones at 20 m intervals over a distance of 80m
- Drill1: Accelerate at maximum speed to the first cone (20m), explode and sprint at maximal intensity to cone 2 (40m), focus on pumping the arms and increasing the knee-lift height
- Drill 2: Accelerate at maximum speed to the first cone (20m), explode and sprint at maximal intensity to cone 3 (60m), focus on pumping the arms and increasing the knee-lift height
- Drill 3: Accelerate at maximum speed to the second cone (40m), explode and sprint at maximal intensity to cone 4 (80m), focus on pumping the arms and increasing the knee-lift height

