



High Performance Athlete Development

Strength and Conditioning Resource

We live this game.



NETBALL
NEW ZEALAND
POITARAWHITI AOTEAROA



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Overview

The purpose of this strength and conditioning resource is to provide athletes and coaches with the information necessary to enable them to develop and improve athlete physical competency through the implementation of a strength and conditioning programme. A strength and conditioning programme is crucial for a netball athlete for their ongoing athletic development; helping them to improve performance, decrease the risk of injury, and prepare them for a high performance environment.

Building on from the available NetballSmart resources, which focuses on the development of competent and efficient movement, this programme has been developed for the emerging high performance netball athlete and can be implemented by coaches or self-directed by the individual athlete. Physical testing benchmarks highlight the expectations of core physical competencies required to be met by all athletes this resource is targeted towards.

Netball New Zealand (NNZ) Physical Testing Benchmarks

The NZSS Benchmarks are part of the overall NNZ Physical Testing Benchmarks which are at the back of this booklet.

NETBALL STRENGTH AND CONDITIONING FRAMEWORK 2020 - NZSS SPECIFIC		
PHYSICAL QUALITY	ASSOCIATED TEST	NZSS
Maximal Strength	Parallel Squat	1.00 - 1.40xBW
	Uni Isometric Mid Thigh Pull	1.00 - 1.40xBW
	Bench Press	40-50kg
	Bench Pull	40-50kg
	OR	
	Chin Up	0.8BW-BW
Strength Speed	Power Clean and Jerk	0.50-1.0xBW
Power	Counter Movement Jump [CMJ]	30 - 50 w/kg
	Squad Jump	30 - 50 w/kg
	Unilateral CMJ	20w/kg - 35w/kg
	Bilateral Broad Jump	200 - 240cm
	Unilateral Broad Jump	190 - 210
	Vertical Jump	40 - 60cm
Acceleration, Speed and COD Ability	20m/20m Test	5m 1.00 - 1.08
		10m 1.70 - 1.85
		5-0-5 2.29 - 2.42
		20/20m 6.95 - 7.30
	Crucifix Test	5.65s - 6.05s
Aerobic Capacity and Aerobic Power	Yoyo	C 18.1-19.5
		WD 17.4-18.7
		WA 17.4-18.7
		GD 16.8-18.3
		GA 16.8-18.2
		GS 15.6-17.1
		GK 15.6-17.1
Aerobic Capacity and Aerobic Power	Bronco	C < 3.08s
		WD < 3.13s
		WA < 3.13s
		GD < 3.21s
		GA < 3.23s
		GS < 3.38s
		GK < 3.38s

Player Welfare and Load Management

What is Load?

In the sporting context, load is a source of pressure or forces to which the body is subjected to. During sporting games and training the human body is exposed to many external forces. These forces may be compressive (forces exposed to the bones on landing from a height) or tensile (forces exposed to muscles during a sprinting action). The human body is adaptive and responds with a progressive approach by added load. However, if a load is too great or applied to the body too quickly, the balance is tipped, and the body cannot adapt and may break down. Therefore, it is important to ensure that the weekly amount of load applied to the body is balanced and appropriate.

Overtraining

Overtraining happens when weekly load is not balance or is too high, and the body does not have adequate recovery time between training sessions. Overtraining can lead to decreases in performance and increase injury risk.

Managing training load in Netball

To help ensure young athletes are not over-loading and overtraining, Netball New Zealand have created Development Guidelines which outline the appropriate number of training sessions per week, including netball specific contacts and support activities, that athletes at each age should be involved in.

This resource has been developed specifically for Netball players, however it's important to consider the load from physical activity and other sports that the players are involved in outside of Netball. The total training load from all physical activity, not just Netball, must be considered with appropriate adjustments made to training if required. Please see the examples of how to structure training in a week under each programme section. Examples have been given if players are involved in another sport.

NNZ Player Development Guidelines

Follow this QR Code to the NNZ Player Development Guidelines, found on the NNZ website.



Training Programme Overview

The programmes in this resource are separated into seasons and phases of one Netball year.

Within each season and phase, you will find the appropriate programmes to follow. Included is a compendium of all exercises which you can refer to for instruction on how to complete an exercise, with a full checklist and image to ensure you are performing the movement correctly. It is most important that you are performing all training programmes with correct technique and form.

The strength and power programmes are created based on the progressions of the following key movements in both the vertical and horizontal direction:

1. LOWER BODY BILATERAL

Lower body bilateral training involves the use of both legs at the same time. Performing bilateral movements gives you greater stability and balance and movements require less coordination. This often means that you have the ability to lift more weight. Therefore, the benefits of lower body bilateral training include greater muscle recruitment and strength gains. In Netball lower body bilateral training can help to increase strength, muscle mass, power, and speed.

2. LOWER BODY UNILATERAL

Lower body unilateral training involves the use of only one side of your body (leg) at a time. Unilateral training requires balance and stability, activation of core muscles and coordination while performing a movement. Lower body unilateral movements are very important when training for Netball as often jumping, landing and stopping are all done on one leg. The benefits of lower body unilateral training include improve balance and stability and kinaesthetic awareness.

3. UPPER BODY PRESS

Upper body press involves your upper body muscles pressing or pushing weight in various directions away from the body. This movement is performed quite frequently in day-to-day tasks. In Netball a chest pass is an upper body press movement. Depending upon the exercise, pressing trains your chest, shoulders, and triceps muscles.

4. UPPER BODY PULL

Upper body pull involves movements where your upper body muscles pull weight towards you. These movements are often seen in a row or in a pull-up motion. As modern-day humans spend a lot of time seated during the day, the muscles used in pulling movements (known as the posterior chain) does not get a lot of use. The posterior chain is the primary mover for forward propulsion, including movements such as jumping, running, hopping and twisting. Therefore, the pull movement is an important movement to train. Depending on the exercise, pulling trains your neck, upper back and biceps.

5. JUMP AND LAND TECHNIQUE

Netball is a power-based sport involving various forms of jumping. Netball athletes need to be able to jump successfully for performance, but also need to know how to land safely to prevent injury.

Finding your Programme Starting Point

FOLLOW THE FLOW CHART BELOW TO FIND YOUR PROGRAMME STARTING POINT:

START: Essential Movement Programme. Ensure you can complete this programme with good form and technique before moving on.



1: Identify the season and phase of the yearly Netball cycle you are in [see **Periodised Plan**].



1: Identify what the physical and game focuses are for that phase [see **Individual Seasons**].



3: Create your weekly schedule based on the **NNZ Player Development Guidelines**. Use the examples of weekly schedules in each season outline to help you.



4: Start at **Programme One** of each programme. Continue each programme for **4-6 weeks** and move on when you are able to perform each exercise as per the exercise technique checklist.

Gym Programme Load

Use the load column in the programme to keep track of the weight [load] lifted. An indication on how heavy you should lift is written at the top of the programme. The intensity of each programme is shown as a percentage of one-repetition max [1RM]. A 1RM is the maximum amount of weight that can be possibly lifted for one repetition of a specific exercise. An example of how to safely find your 1RM [S&C Coach to supervise]:

If your back squat 1RM is 60kg, then 65% of this is $60 \times 0.65 = 39$ kg.

Use the table below as a guide to determine the weights for your programme.

PROTOCOL	BENCHMARK
100%	Max
85–90%	Very Heavy
75–80%	Heavy
65–70%	Medium
50%	Light
BW	Bodyweight

Essential Movement Programme

This is your starting point. You must be competent in each of the following exercises and be able to complete the following programme before moving on.

PROGRAMME	Essential Movement	FOCUS	Basic Movement and Strength
PHASE	Programme Start Point	LOAD	Bodyweight

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Dynamic Stretches	1	Squat	3	10	BW	30–60s	2:1:2
	2	Split Squat	3	8 /	BW	30–60s	2:1:2
	3	Hip Thrust	3	10	BW	30–60s	2:1:2
	4	SL Romanian Deadlift	3	8 /	BW	30–60s	2:1:2
	5	Calf raises	3	15	BW	30–60s	2:1:2
	6	Press Up	3	10	BW	30–60s	2:1:2
	7	Chest Supported Row	3	10	BW	30–60s	2:1:2
	8	Squat Jump	3	5	BW	60s	0
	9	Prone Hold / Bridge	3	30s	BW	30–60s	0
	10	Side Hold / Bridge	3	30s	BW	30–60s	0

COOL DOWN

Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.

NOTES: There are full descriptions of the exercises starting on page 39.

PROGRAMME ABBREVIATIONS

Use the following abbreviations for all gym programmes in this resource:

PROTOCOL	BENCHMARK
BW	Bodyweight
SA	Single Arm
SL	Single Leg
/	Both sides [leg, arm]
s	Seconds
O/H	Overhead
DB	Dumbbell
MB	Medicine Ball
BB	Barbell
SB	Swiss Ball
KB	Kettlebell
COD	Change of Direction

PERIODISED PLAN

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
SEASON	OFF-SEASON	PRE-SEASON		IN-SEASON				TRANSITION		OFF-SEASON			
PHASE	GENERAL PREPARATION	SPECIFIC PREPARATION	GAME SPECIFIC TRAINING		COMPETITIVE PLAY (MAINTENANCE)				ACTIVE REST & RECOVERY		GENERAL PREPARATION		
NETBALL	Some practice skills/ drills (Individual)	Increase skills/drills (Netball trials)	Emphasis on drills/ skills (specific Netball movements), regular coaching (Team)		Weekly team training and games. Regular skills/drills and coaching (jumping, landing, passing, turning in the air technique)				No netball		Some practice skills/ drills (Individual)		
AEROBIC	Increase endurance. 'Base' of fitness		Aerobic maintenance				Maintain low level endurance		Develop endurance. 'Base' of fitness				
ANAEROBIC	Anaerobic endurance		Anaerobic intervals		Anaerobic maintenance				Low level anaerobic maintenance				
STRENGTH	Muscular endurance	Muscular strength		Maximal strength maintenance				Rehab and prehab work. Focus on stability, mobility and movement patterns.		Train muscle stabilisers, create correct technique, and build a strength base. Muscle gain should be done here (hypertrophy).			
POWER			Increase muscular power	Some plyometrics (lower body) as well as explosive training (upper body). High intensity.		High intensity/lower volume. Maintenance of explosive power/ strength. Emphasis on skills/ drills therefore a decrease in resistance training volume.							
SPEED	Practice basic speed drills	Increase speed/change of direction drills		Speed & agility emphasised in game specific drills.			Speed/agility maintenance				Practice basic speed drills		
VOLUME													
INTENSITY													

Pre-season Programmes

Phase: *Specific preparation to Game specific training*

Physical Focus: *Anaerobic fitness and muscular strength are emphasised with the introduction of speed/change of direction and muscular power*

Game Focus: *Introduction of regular coaching and Netball specific movement and skills toward the end of pre-season.*

Training completed before the Netball season starts is considered as pre-season training.

Pre-season training consists of programmes designed to build a foundation of strength and fitness to make sure your body is in the best possible state to begin playing competitive Netball matches. This includes being ready to perform at your physical best as well as help reduce your risk of injury.

Although gym and conditioning exercises are specific to Netball, during this time game specific [technical/tactical] work is only emphasised towards the end of pre-season. It is important to ensure you are working on and applying correct technique during all training programmes. The volume of training remains high while the intensity of training begins to increase.

Weekly Structure

How to structure your pre-season training:

With reference to the NNZ Player Development Guidelines, the following are suggested weekly schedules of how you may fit your training within your normal weeks during the pre-season. Some important considerations are:

- If you are participating in a pre-season/summer Netball league
- Team training [Netball specific]
- Summer sport – This should be limited to one other sport as per the Player Development Guidelines

Refer to the weekly schedule examples over the page.

TRAINING PROGRAMME	NUMBER OF SESSIONS PER WEEK
Strength	2 to 3
Power	1
Anaerobic Endurance	1 to 2
Speed/Change of direction	1
Netball training	1 to 2
Rest day	1 to 2

Pre-season Strength **1**

Reminder: start at Programme One of each programme. Continue each programme for 4-6 weeks and move on when you are able to perform each exercise as per the exercise technique checklist.

PROGRAMME	Pre-season Strength One
PHASE	Specific Prep-Game Specific Training
FOCUS	Muscular strength
LOAD	65-70% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. Calf Raises x20 3. BW Squat x10 4. BW Good morning x10 5. Clams x15 / 6. Y-T-W Swiss Ball x10 Complete 2 sets of each exercise.	1	DB Goblet Squat	3	10		30-60s	2:01:02
	2	DB SL Romanian Deadlift	3	8 /		30-60s	2:01:02
	3	Bench Press	3	10		30-60s	2:01:02
	4	Seated Row	3	10		30-60s	2:01:02
	5	DB Shoulder Press	3	10		30-60s	2:01:02
	6	Prone Hold / Bridge	3	30-60s		30-60s	0
	7	Side Hold / Bridge	3	30-60s		30-60s	0
	8	Lying Leg Lowers	3	20		30-60s	2:01:02
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

Pre-season Strength 2

PROGRAMME	Pre-season Strength Two
PHASE	Specific Prep-Game Specific Training
FOCUS	Muscular strength
LOAD	75-80% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Calf Raises x20 / 3. BW Squat x10 4. BW Good morning x10 5. Clams x15 / 6. Y-T-W Swiss Ball x10 Complete 2 sets of each exercise.	1	Back Squat	3	8		60s	2:01:02
	2	KB Deadlift	3	8		60s	2:01:02
	3	Alt. Arm DB Bench Press	3	10 /		30-60s	2:01:02
	4	SA DB Row	3	10 /		30-60s	2:01:02
	5	Military Press	3	8		30-60s	2:01:02
	6	Assisted Pull Up	3	8		60s	2:01:02
	7	Bicycle Kicks	3	20 /		30-60s	0
	8	Reverse Crunch	3	20 /		30-60s	0
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

Pre-season Strength **3**

PROGRAMME	Pre-season Strength Three
PHASE	Specific Prep-Game Specific Training
FOCUS	Muscular strength
LOAD	75-80% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Calf Raises x20 / 3. BW Squat x10 4. BW Good morning x10 5. Clams x15 / 6. Y-T-W Swiss Ball x10 Complete 2 sets of each exercise.	1	Back Squat	3	6		60s	2:01:02
	2	BB Deadlift	3	6		60s	2:01:02
	3	DB Bench Press	3	8		30-60s	2:01:02
	4	BB Bent Over Row	3	8		30-60s	2:01:02
	5	Bicep Curl and Shoulder Press	3	8		30-60s	2:01:02
	6	Pull Up	3	8		60s	2:01:02
	7	Bicycle Kicks	3	20 /		30-60s	0
	8	Reverse Crunch	3	20 /		30-60s	0

COOL DOWN

Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.

NOTES:

Pre-season Power 1

PROGRAMME	Pre-season Power One
PHASE	Specific Prep-Game Specific Training
FOCUS	Muscular power (Jump and land technique)
LOAD	85-90% 1RM and Max Jumps

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. Calf Raises x20 3. BW Squat x10 4. BW Good morning x10 5. Lateral Band Walks x10/ 6. O/H Squat x10 Complete 2 sets of each exercise.	1	Front Squat (modified)	3	8		60s	2:01:02
	2	BW Lateral Lunge	3	10 /		60s	2:01:02
	3	Drop, Jump and Stick	3	5		60-90s	0
	4	Tuck Jump	3	5		60-90s	0
	5	Lying MB throw	3	10		60-90s	2:01:02
	6	Mountain Climbers	3	20 /		30-60s	0
	7	Oblique Twist	3	20 /		30-60s	0
	8	Superman	3	15		30-60s	2:01:02
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

Pre-season Power 2

PROGRAMME	Pre-season Power Two
PHASE	Specific Prep-Game Specific Training
FOCUS	Muscular power [Jump and land technique]
LOAD	85-90% 1RM and Max Jumps

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Calf Raises x20 / 3. BW Squat x10 4. BW Good morning x10 5. Lateral Band Walks x10 / 6. O/H Squat x10 Complete 2 sets of each exercise.	1	Front Squat	3	8		60s	2:01:02
	2	DB Lateral Lunge	3	8 /		60s	2:01:02
	3	Box Jump	3	5		60-90s	2:01:02
	4	Horizontal Jump	3	5 /		60-90s	2:01:02
	5	Lying MB throw	3	10		60-90s	2:01:02
	6	Mountain Climbers	3	20 /		30-60s	0
	7	Oblique Twist	3	20 /		30-60s	0
	8	Superman	3	10		30-60s	2:01:02
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

In-season Programmes

Phase: *Game specific training to competitive play (maintenance)*

Physical Focus: *Power and speed are emphasised with the maintenance of anaerobic fitness and maximal muscular power.*

Game Focus: *Weekly team training and games, with regular coaching*

There is a strong emphasis on game specific training during the in-season period. Training volume decreases, intensity of training increases and regular team training and weekly games occur. It is expected you will have at least one Netball game per week during this time. Team trainings will be set by your school or club coach.

Even though most of training during in-season will involve technical and tactical Netball training, it is important to maintain strength and fitness levels that were achieved in the pre-season. Therefore, gym work still needs to be an important part of your weekly schedule. As the intensity of training and games are high, recovery is also an important part of in-season Netball.

Weekly Structure

How to structure your in-season training:

With reference to the NNZ Player Development Guidelines, the following are suggested weekly schedules of how you may fit your training within your normal weeks during the in-season. Some important considerations are:

- The number of team trainings you have each week
- The number of games you are playing each week
- Programmes such as anaerobic fitness and speed/Change of Direction [COD] can be included in your team training sessions instead of a separate training session
- Other sport – This should be limited to one other sport as per Player Development Guidelines [not recommended during Netball in-season]

TRAINING PROGRAMME	NUMBER OF SESSIONS PER WEEK
Strength	2
Power	0 to 1
Anaerobic fitness	1 to 2
Speed/Change of direction	0 to 1
Netball training	1 to 2
Game	1 to 2
Rest day	1

In-season Strength **1**

Reminder: start at Programme One of each programme. Continue each programme for 4-6 weeks and move on when you are able to perform each exercise as per the exercise technique checklist.

PROGRAMME	In-season Strength One
PHASE	Game Specific Training and Competitive Play
FOCUS	Maximal muscular strength and maintenance
LOAD	75-80% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. Calf Raises x20 3. BW Squat and Good morning x10 4. Bird Dog x10 / 5. Clams x15 / 6. Y-T-W Swiss Ball x10 Complete 2 sets of each exercise.	1	DB Split Squat	4	6 /		60s	2:01:02
	2	SL Hip Thrust	4	8		60s	2:01:02
	3	Bench Press	3	8		60s	2:01:02
	4	Seated Row	3	8		60s	2:01:02
	5	DB Shoulder Press	4	6		60s	2:01:02
	6	High Prone Hold / Bridge	3	30-60s		30-60s	0
	7	High Side Hold / Bridge	3	30-60s		30-60s	0
	8	Full Sit Up	3	10		30-60s	2:01:02
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

In-season Strength 2

PROGRAMME	In-season Strength Two
PHASE	Game Specific Training and Competitive Play
FOCUS	Maximal muscular strength and maintenance
LOAD	85-90% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Calf Raises x20 / 3. BW Squat and Good morning x10 4. Bird Dog x10 / 5. Banded Clams x15 / 6. Y-T-W Swiss Ball x10 Complete 2 sets of each exercise.	1	DB Walking Lunge	4	4 /		60s	2:01:02
	2	SB Leg Curls	4	6 /		60s	2:01:02
	3	SL Squat to Box	4	6 /		60s	2:01:02
	4	Alt. Arm DB Bench Press	3	8 /		60s	2:01:02
	5	SA DB Row	3	8 /		60s	2:01:02
	6	Military Press	4	6		60s	2:01:02
	7	Assisted Pull Up	4	6		60s	2:01:02
	8	Full Sit Up	3	20		30-60s	2:01:02
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

In-season Strength **3**

PROGRAMME	In-season Strength Three
PHASE	Game Specific Training and Competitive Play
FOCUS	Maximal muscular strength and maintenance
LOAD	85-90% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Calf Raises x20 / 3. BW Squat and Good morning x10 4. Bird Dog x10 / 5. Banded Clams x15 / 6. Y-T-W Swiss Ball x10 Complete 2 sets of each exercise.	1	SL Squat to Box	4	6 /		60s	2:01:02
	2	DB (or BB) Step Up	4	4 /		60s	2:01:02
	3	BB Deadlift	4	5		60s	2:01:02
	4	DB Bench Press	3	8		60s	2:01:02
	5	BB Bent Over Row	3	8		60s	2:01:02
	6	Bicep Curl and Shoulder Press	4	6		60s	2:01:02
	7	Pull Up	4	6		60s	2:01:02
	8	Full Sit Up	3	20		30-60s	2:01:02

COOL DOWN

Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.

NOTES:

In-season Power **1**

PROGRAMME	In-season Power One
PHASE	Game Specific Training and Competitive Play
FOCUS	Muscular power [Jump and land technique]
LOAD	85–90% 1RM and Max Jumps

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Bosu Balance x30s / 3. BW Squat and Good morning x10 4. Bridge Squeeze x10 5. Lateral Band Walks x10 / 6. O/H Squat x10 Complete 2 sets of each exercise.	1	Front Squat [modified]	4	6		60s	2:01:02
	2	Box jump	4	3		60–90s	0
	3	Drop, Jump and Stick	4	5		60–90s	0
	4	Horizontal Jump	4	5		60–90s	0
	5	Plyo Press Up [modified]	4	5		60–90s	0
	6	MB Rotation Wall Throw	3	5 /		60–90s	0
	7	SB Back Extension	3	10		30–60s	2:01:02
	8	Full Sit Up	3	20		30–60s	2:01:02
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

In-season Power **2**

PROGRAMME	In-season Power Two
PHASE	Game Specific Training and Competitive Play
FOCUS	Muscular power [Jump and land technique]
LOAD	85–90% 1RM and Max Jumps

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Bosu Balance x30s / 3. BW Squat and Good morning x10 4. Bridge Squeeze x10 5. Lateral Band Walks x10 / 6. O/H Squat x10 Complete 2 sets of each exercise.	1	Front Squat	4	6		60s	2:01:02
	2	Box jump	4	3		60–90s	0
	3	SL Drop, Jump and Stick	4	3 /		60–90s	0
	4	SL Horizontal Jump	4	3 /		60–90s	0
	5	Plyo Press Up	4	5		60–90s	0
	6	MB Rotation Wall Throw	3	5 /		60–90s	0
	7	SB Back Extension	3	10		30–60s	2:01:02
	8	Full Sit Up	3	20		30–60s	2:01:02
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

Off-season Programmes

Phase: *General preparation following active rest and recovery*

Physical Focus: *Aerobic endurance and muscular endurance and strength [muscle gain, rehab and prehab] are emphasised*

Game Focus: *No game focus*

Off-season is the time to give your body a rest from Netball. It does not mean that you stop all physical activity. During this time is important to continue and develop your strength work and build a base of fitness after some rest and recovery following the busy Netball season. During the off-season it is encouraged to participate in different training activities you would not normally do during the Netball season, for example trail/beach running, swimming, and other outdoor activities. You may also like to participate in another sport. Off-season training is high in volume and low intensity.

Weekly Structure

How to structure your off-season training:

With reference to the NNZ Player Development Guidelines, the following are suggested weekly schedules of how you may fit your training within your normal weeks during the off-season. Some important considerations are:

- If you are involved in training/sports outside of Netball
- If you are participating in a pre-season/summer Netball league
- Summer sport – This should be limited to one other sport as per Player Development Guidelines
- It is beneficial to play different sports in the off-season.

TRAINING PROGRAMME	NUMBER OF SESSIONS PER WEEK
Strength	2 to 3
Power	0
Aerobic fitness	2
Speed [technique]	0 to 1
Netball training	0
Rest day	1 to 2
Other sport/training	1 to 2

Off-season Strength 1

Reminder: start at Programme One of each programme. Continue each programme for 4-6 weeks and move on when you are able to perform each exercise as per the exercise technique checklist.

PROGRAMME	Off-season Strength One
PHASE	General Preparation
FOCUS	Muscular endurance and basic strength
LOAD	55-65% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Bosu Balance x30s / 3. Calf Raises x20 4. O/H Squat x10 Complete 2 sets of each exercise.	1	DB Goblet Squat	3	15		30-60s	2:01:02
	1b	Clams	3	20 /		30-60s	0
	2a	Press Up	3	20		30-60s	2:01:02
	2b	Y-T-W Swiss Ball	3	10		30-60s	0
	3a	SL Romanian Deadlift	3	10 /		30-60s	2:01:02
	3b	Bridge Squeeze	3	15		30-60s	2:01:02
	4	Seated Row	3	15		30-60s	2:01:02
	5	Drop, Jump and Stick	3	5		30-60s	0
	6	Prone Hold / Bridge	3	60-90s		30-60s	0
7	Side Hold / Bridge	3	60-90s /		30-60s	0	
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

Off-season Strength 2

PROGRAMME	Off-season Strength Two
PHASE	General Preparation
FOCUS	Muscular endurance and basic strength
LOAD	65-70%

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Bosu Balance x30s / 3. SL Calf Raises x20 / 4. O/H Squat x10 Complete 2 sets of each exercise.	1	Back Squat	3	12		30-60s	2:01:02
	1b	Clams	3	20 /		30-60s	0
	2a	Bench Press	3	12		30-60s	2:01:02
	2b	Y-T-W Swiss Ball	3	10		30-60s	0
	3a	KB Deadlift	3	12		30-60s	2:01:02
	3b	Bridge Squeeze	3	15		30-60s	2:01:02
	4	SA DB Row	3	12 /		30-60s	2:01:02
	5	SL Drop, Jump and Stick	3	3 /		30-60s	0
	6	Prone Hold / Bridge	3	60-90s		30-60s	0
7	Side Hold / Bridge	3	60-90s /		30-60s	0	
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

Off-season Strength 3

PROGRAMME	Off-season Strength Three
PHASE	General Preparation
FOCUS	Muscular endurance and basic strength
LOAD	65-70% 1RM

WARM UP	ORDER	EXERCISE	SETS	REPS	LOAD	REST	TEMPO
Foam Roll and Stretch, then: 1. Ankle Mobility x20 / 2. SL Bosu Balance x30s / 3. SL Calf Raises x20 / 4. O/H Squat x10 Complete 2 sets of each exercise.	1	Back Squat	3	12		30-60s	2:01:02
	1b	Banded Clams	3	20 /		30-60s	0
	2a	DB Bench Press	3	12		30-60s	2:01:02
	2b	Y-T-W Swiss Ball	3	10		30-60s	0
	3a	BB Deadlift	3	12		30-60s	2:01:02
	3b	Bridge Squeeze	3	15		30-60s	2:01:02
	4	BB Bent Over Row	3	12		30-60s	2:01:02
	5	SL Horizontal Jump	3	3 /		30-60s	0
	6	Prone Hold / Bridge	3	90-120s		30-60s	0
7	Side Hold / Bridge	3	90-120s		30-60s	0	
COOL DOWN	Stretch, trigger point and foam roll. Complete any individual rehab/prehab as prescribed by your physio.						

NOTES:

Conditioning Programmes

Aerobic Endurance Programme Options

- **Option 1: Steady State Running:** 45–90mins steady state run. Try to change running surfaces e.g. beach run, bush track/trail/grass run.
- **Option 2: Fartlek Running:**
 - » Steady State: 45–90 minutes over hilly terrain. 1:5 high intensity running: steady state running. e.g. 1 minute high intensity followed by 5 minute steady state.
 - » Interval Based Fartlek: 10s, 20s, 30s – Sprint for time on the minute with jog between. e.g. sprint 10s, jog 50s, sprint 30s, jog 30s continuous pattern for time specified.
- **Option 3: Continuous Out and Back:** Run steady state for 25 – 40 minutes, turn around and return in 10% less time. e.g. 40 minutes out, 36 minutes return.

Anaerobic Endurance & Interval Training Options

Option 1: Timed Intervals

SHUTTLE DISTANCE	MAX TIME	RECOVERY	SETS
20m x5	25 seconds	90 seconds	Complete x5
15m x5	20 seconds	90 seconds	Complete x5
10m x5	15 seconds	90 seconds	Complete x5

Option 2: Court-based Intervals

EXERCISE 1	<ul style="list-style-type: none"> • Sprint down the side-line length of the court and walk across the baseline and sprint side-line and walk baseline etc. • Complete 5 laps of the court [10 sprints total]. • 2 minute rest.
EXERCISE 2	<ul style="list-style-type: none"> • Sprint out to halfway on court, walk through to the end of the court, sprint back to halfway, walk through to the end of the court etc. • Complete 20 lengths of the court. • 2 minute rest.
EXERCISE 3	<ul style="list-style-type: none"> • Sprint out to 1st transverse line and back, jog length of court as recovery, repeat. • Complete 10 lengths of the court. • 2 minute rest.
EXERCISE 4	<ul style="list-style-type: none"> • Sprint diagonally across court from corner to corner and walk/jog along baseline to opposite corner, repeat diagonal sprint across court and walk/jog along baseline to starting corner. • Complete 5 laps of the court [10 sprints total]. • 2 minute rest.

· **Option 3: A-D - Timed Intervals, Court-based**

These are individual sessions, only complete one.

EXERCISE A	<ul style="list-style-type: none">· 3 court lengths (Target 20s) with 10s rest. Repeat x8.· Rest 3min.· Complete x4 sets.
EXERCISE B	<ul style="list-style-type: none">· 15m x3 (in 15s), 15s rest x10.· Rest 3min.· Complete x4 sets.
EXERCISE C	<ul style="list-style-type: none">· 20m-10m-20m, every 30s, x12 (Start sprinting at 0s..30s..60s..90s..etc).· Rest 3min.· Complete x4 set.
EXERCISE D	<ul style="list-style-type: none">· Run forward 10m – Backpedal 10m. Run forward 20m – Backpedal 10m. Run forward 20m – Turn and run 30m back to base line. Target 20s, 10s Rest. Repeat x8.· Rest 3min.· Complete x4 sets.

Speed

· **Speed Technique Drills:** To be used as warm up before every sprint session.

SLOW JOG	2min slow jog with progressive intensity.
ANKLING	Bouncing on the balls of your feet, alternating left and right, with a slightly bent leg and slowly moving forward. Keep your toes pointed up!
STRAIGHT LEG SHUFFLE	Moving forward on the balls of your feet, flicking your feet (toes pointed up) out in front of you. Knee stays straight.
A-SKIP	Marching high knee drive. Land on a ball of your foot while the other leg drives the knee up. Focus on sharp quick movement between leg.
B-SKIP	Like A-Skip but as you drive the knee up you kick out your foot in front and then pull your leg down to the ground and scuff your foot directly beneath your body as your other foot cycles up.
HIGH KNEE - BUTT FLICK COMBO	Perform a high knee movement with your knees out in front however bring your heel up at the same time and get it to touch your buttocks.

Note: Perform all drills for 2x 20m. With each drill make sure your upper body is nice and tall with strong posture. Between each drill perform a dynamic stretch i.e. Walking lunges, leg swing walks, hamstrings sweeps, side squats, quads pulls, calf pumps.

· **Sprint Interval Training:** Sprint Interval Build Your Own Options: Mix and match options to complete a session of 1200m -1500m total distance. Always rest 2m30s between sets. The key to these sessions is maximum effort!

- »10x 100m Sprints on a 60 second turnaround (1000m)
- »12x 80m Sprints on a 50 second turnaround (960m)
- »15x 60m Sprints on a 40 second turnaround (900m)
- »20x 50m Sprints on a 30 second turnaround (1000m)
- »15x 40m Sprints on a 25 second turnaround (600m)
- »15x 30m Sprints on a 20 second turnaround (450m)
- »20x 20m Sprints on a 15 second turnaround (400m)
- »20x 5-0-5m Sprints on a 20 second turnaround (200m)
- »15x 5-10-5m Sprints on a 30 second turnaround (300m)

- **Sprint Interval Training Progression:** The key to these sessions is maximum effort!

» **Week 1**

1. 12x 50m SPRINT on a 30 second turnaround [x2 sets] 1200m [15 min]
20-10-20m shuttle / Rest 3 minutes between sets
2. 12x 40m SPRINT on a 25 second turnaround [2 sets] 960m [13 min]
15-10-15m shuttle / Rest 3 minutes between sets

» **Week 2**

1. 12x 50m SPRINT on a 30 second turnaround [x2 sets] 1200m [15 min]
20-10-20m shuttle / Rest 3 minutes between sets
2. 12x 40m SPRINT on a 25 second turnaround [2 sets] 960m [13 min]
15-10-15m shuttle / Rest 3 minutes between sets
3. 12x 20m SPRINT on a 20 second turnaround [2 sets] 480m [10 min]
Alternate 10m out and back, 4x 5m out and back / Rest 2 minutes between sets

» **Week 3**

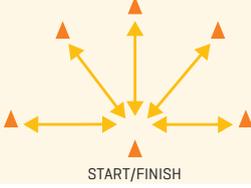
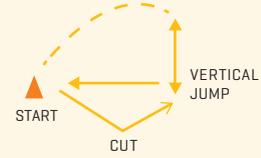
1. 15x 50m SPRINT on a 30 second turnaround [x2 sets] 1200m [18 min]
20-10-20m shuttle / Rest 3 minutes between sets
2. 15x 40m SPRINT on a 25 second turnaround [2 sets] 960m [15 min]
15-10-15m shuttle / Rest 3 minutes between sets
3. 15x 20m SPRINT on a 20 second turnaround [2 sets] 480m [12 min]
Alternate 10m out and back, 4x 5m out and back / Rest 2 minutes between sets

Speed and Change of Direction

- **Session 1:** Warm up with speed technique drills:

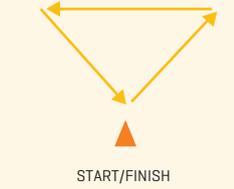
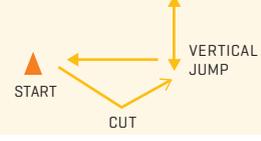
4X 10M PARTNER CHASE SPRINTS	<ul style="list-style-type: none"> · Your partner is in front of you and decides when to sprint and you react. · 90 second rest between each sprint [2x lead, 2x chase].
6X 10M PARTNER LEAN SPRINTS	<ul style="list-style-type: none"> · You lean forward and your partner supports you with hands on shoulders, your partner lets go at any time and sprints forward 10m and you react and chase. · 90 second rest between each sprint [3x hold, 3x chase]. · The sprint should be swerved NOT straight.
4X 5-5-5 PARTNER RACE	<ul style="list-style-type: none"> · Next to your partner on the "go" you both run out 5m, run back to the start line and then out 5m to finish. · 90 second rest between each sprint.
Finish with 1 set of a court-based timed interval session.	

· **Session 2:** Warm up with speed technique drills:

<p>CROWS FOOT SMALL PASSES 4X 1 MINUTE EACH</p>	<ul style="list-style-type: none"> Run out in each direction [3–5m] and return, upon return you will receive a pass from your partner which you have to get back to them as fast as possible. The pass from the partner will be varied [small, high, to either side etc]. Perform 4 sets of 1 minute each. Your rest will be when you are the passer. 	
<p>ACCELERATIONS + CUT + JUMP CATCH 4X 1 MINUTE (2X LEFT, 2X RIGHT)</p>	<ul style="list-style-type: none"> Accelerate 3m, cut, accelerate another 3m and receive a high pass, land, throw it back to the passer and accelerate back towards them to receive a small pass. Perform continuously for 1 min, your rest will be when you are the passer. 	
<p>CUT AND DRIVE PASS 4X 1 MINUTE LEFT AND RIGHT</p>	<ul style="list-style-type: none"> Accelerate on a 45° angle 5m, cut, and drive for a lateral bounding catch. Once you catch the ball pass it back to your partner and get back to the start position as fast as possible following the same way you came. Then repeat this action in the other direction. Perform continuously for 1 minute. Your rest will be when you are the passer. The drive must be explosive with no step violation. 	

Finish with 1 set of a court-based timed interval session.

· **Session 3:** Warm up with speed technique drills:

<p>AGILITY TRIANGLE 4X LEFT AND RIGHT</p>	<ul style="list-style-type: none"> Accelerate on a 45° angle 5m, shuffle sideways 5m, then back pedal 5m on an angle back to the start. This should mimic a triangle shape. Perform 4 going to the right and 4 going to the left. Rest 1 minute between triangles. These must be explosive. 	
<p>ACCELERATIONS + CUT 6X 5M + 5M (LEFT AND RIGHT)</p>	<ul style="list-style-type: none"> Accelerate 5m, cut, accelerate another 5m perform a maximum vertical jump, land, then turn and accelerate back to the start cone. Perform 3 going left and 3 going right. 1 minute rest between runs. 	
<p>FACING FORWARD 5-0-5 4X LEFT AND RIGHT</p>	<ul style="list-style-type: none"> Measure out 5m. From a flying start run forward 5m, place right foot over the line then angle your hips to the left and back pedal as fast as possible to the start line. Repeat this with your left foot. 1 minute rest between runs. 	
<p>FAST FEET WORK ACCELERATIONS 6X ACCELERATIONS</p>	<ul style="list-style-type: none"> Perform alternating fast foot on the spot. Once you get to 10 second accelerate out 10m. Slow walk back. Perform 2 facing forward, 2 facing left and 2 facing right. 	

Finish with 1 set of a court-based timed interval session.

Cycle Options: if you need to reduce your load or have an injury

OPTION 1 (30 MIN; 1 SET= 7MIN)

· 5 minute Warm Up

- »8x 20 seconds Max Effort (highest load you can maintain 120RPM for 20 seconds)
10 seconds easy / Recovery spin 3 minutes
- »8x 20 seconds Max Effort (highest load you can maintain 120RPM for 20 seconds)
10 seconds easy / Recovery spin 3 minutes
- »8x 20 seconds Max Effort (highest load you can maintain 120RPM for 20 seconds)
10 seconds easy / Recovery spin 3 minutes
- »2 minutes highest load you can maintain 90RPM/60 seconds easy spin x3

OPTION 2 (60 MIN/ REDUCE # OF SETS FOR SHORTER SESSION; 1 SET= 10MIN)

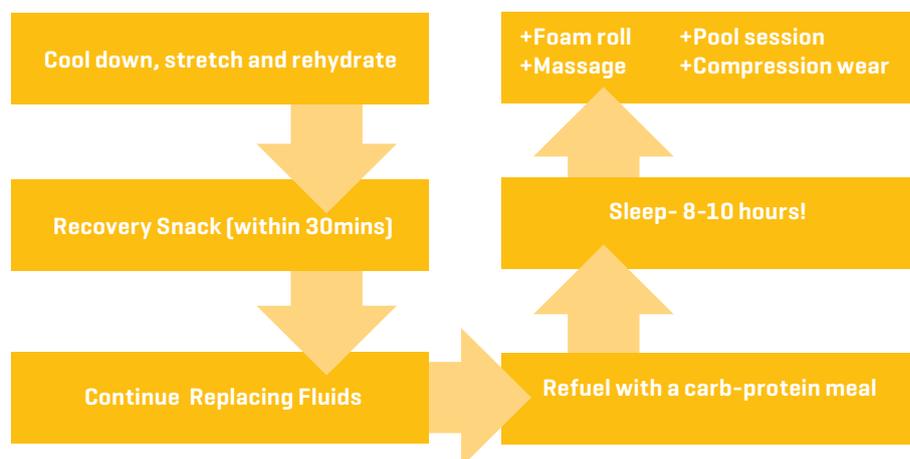
· 5 minute Warm Up

- »30 seconds maximum load you can maintain 90RPM/30 seconds easy spin
- »60 seconds maximum load you can maintain 90RPM/30 seconds easy spin
- »90 seconds maximum load you can maintain 90RPM/30 seconds easy spin
- »2 minutes maximum load you can maintain 90RPM/30 seconds easy spin
- »2m 30 seconds maximum load you can maintain 90RPM/30 seconds easy spin
- »Repeat x5

Recovery

When participating in sport, it is important to have a recovery plan. You need to take the steps necessary to ensure that your body repairs efficiently after training and games.

Use the following diagram and additional information to guide your recovery plan.



Definitions

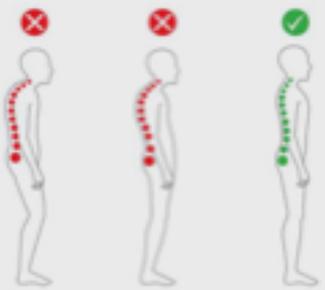
COMPONENTS OF FITNESS

AEROBIC ENDURANCE	The body's ability to withstand and tolerate prolonged moderate intensity activity or exercise, while resisting fatigue.
ANAEROBIC ENDURANCE	The body's ability to cope or withstand repeated short, high intensity activity or exercise.
MUSCULAR ENDURANCE	The ability of the muscles or a group of muscles to repeatedly produce force at a low to moderate intensity over a period, whilst resisting fatigue.
MUSCULAR STRENGTH	The amount of force the muscles can produce or exert against a resistance.
POWER	The ability of the body to produce force explosively, a combination of strength and speed, for one movement.
SPEED	The player's ability to move quickly, to accelerate or to be fast whilst putting the body or parts into motion.
AGILITY	The body's ability to change direction quickly and accurately at speed. A combination of speed, flexibility and balance.
PLYOMETRICS	Exercises that require muscles to exert maximum force in short intervals of time (e.g. jumping).
FLEXIBILITY	The ability of the muscles and joints to move through a full range of motion.
BALANCE AND CORE STABILITY	The ability of the body and internal muscles to maintain stability, strength and generate power while performing sporting movements and exercises. A combination of centre of gravity over base of support.
REST AND RECOVERY	An important part of enhancing player's performance by allowing adaptations of training to develop during the resting period.
REHABILITATION ["REHAB"]	An important part of training with exercises to help restore the body after injury.
PREHABILITATION ["PREHAB"]	The process of preparing the body to reduce injury risk.
VERTICAL	Straight [up and down].
HORIZONTAL	Straight [side to side, parallel to the horizon].

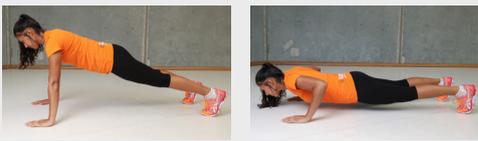
UNDERSTANDING YOUR TRAINING PROGRAMME:

REPS (REPETITIONS)	The number of times you perform each exercise.
SETS	A specific number of reps = 1 set.
REST	A short period of time between sets to allow the body to recover.
INTENSITY	How hard the body works during activity.
VOLUME	How much work you do during activity.
LOAD	The amount of weight lifted/moved.
TEMPO	The timing of an exercise.

Compendium of Exercises: Instruction and Checklist

EXERCISE	INSTRUCTION	CHECKLIST
ESSENTIAL MOVEMENT		
<p>Neutral Spine/ Posture</p> 	<p>A healthy spine has 3 natural curves:</p> <ul style="list-style-type: none"> · Cervical [neck]: inward curve · Thoracic [mid back]: outward curve · Lumbar [lower back]: inward curve <p>Neutral spine is the natural position of the spine when all 3 curves are present and in good alignment. Neutral spine helps with cushioning the spine from excessive stress or strain.</p>	
<p>Squat</p> 	<ul style="list-style-type: none"> · Start standing tall, feet hip width apart. · Maintain neutral spine as you bend in hips and knees and push your hips backwards. · Keep your knees in line with your toes. · Push through your heels back to standing position without collapsing the upper body. 	<p>Head: Central looking forward Shoulders: Level Spine: Neutral, chest up Hips: Level Knees: In line with toes Ankle/feet: Feet forward, approximately hip width apart, not too wide Additional: Depth – Aim 90° so butt is in line with knees, but maintaining neutral spine.</p>

EXERCISE	INSTRUCTION	CHECKLIST
ESSENTIAL MOVEMENT <i>continued...</i>		
<p>Split Squat</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. Hands on hips. • Step forward on one leg. Toes pointing forward. • Bend front and back knee and lower body (do not move the body forward). Knee in line with foot, does not move in front of toes. Shin straight up and down. • Maintain neutral spine. • Push through feet to straighten knees and raise body up. • Repeat movement then push back to start position, change legs. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes, not in front of feet</p> <p>Ankle/feet: Feet forward, approximately hip width apart, not too narrow</p> <p>Additional:</p> <p>Depth – Front knee 90° so butt in line with front knee</p> <p>Balance – controlled</p>
<p>Hip Thrust (Bridge)</p> <p>1. Bilateral</p>  <p>2. Unilateral (Single Leg)</p> 	<ul style="list-style-type: none"> • Lie neutral spine on back, hands by sides with knees bent and feet flat on floor. • Feet under your knees. • Tighten core and glutes, raise hips up to create a straight line from your knees to shoulders. • Lower down and repeat 	<p>Head: Relaxed on floor</p> <p>Shoulders: Flat against floor</p> <p>Spine: Neutral</p> <p>Hips: High, straight line with knees</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward</p> <p>Additional: Balance – controlled</p>
<p>Single Leg Romanian Deadlift (RDL)</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. Stabilise on one leg. • Slightly bend front knee. Maintain neutral spine, with shoulder blades engaged. Bend forward/hinge at the hip. • Keep neutral spine position and leg lifts in sequence with movement. • Return to upright position. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not twisted to one side</p> <p>Knees: In line with toes, slightly bent [20°]</p> <p>Ankle/feet: Feet forward</p> <p>Additional: Balance – controlled</p>

EXERCISE	INSTRUCTION	CHECKLIST
ESSENTIAL MOVEMENT <i>continued...</i>		
<p>Calf Raise</p> <p>1. Bilateral 2. Unilateral (Single Leg)</p> 	<ul style="list-style-type: none"> Stand tall and hold on to a wall or sturdy object for balance. Toes point straight. Raise heels off the floor by contracting the calf muscles. Hold at the top and lower down. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward</p> <p>Additional:</p> <p>Range – push up as high as possible</p> <p>Balance – controlled</p>
<p>Push Up</p> <p>1. Full</p>  <p>2. Modified</p> 	<ul style="list-style-type: none"> Start in a prone position, hands firmly on the ground, directly under shoulder, balance on toes. Keep core tight and maintain neutral spine. Bend elbows at 45° angle and lower body until chest grazes floor. Push back to start position. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level, hands under shoulders, hands forward, elbows do not flare out to side</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward, hip width apart</p> <p>Additional: Depth – chest almost to floor</p>
<p>Chest Supported Row</p> 	<ul style="list-style-type: none"> Lean into an inclined bench, so your weight is supported. Hold a dumbbell in each hand (neutral grip) with arm straight. Bend elbows back and pull dumbbells to the side of chest, close to body, only arm moves. Contract muscles in back and shoulder blades. Lower weight, straighten arms to return to start position. 	<p>Head: Central, looking straight</p> <p>Shoulders: Level</p> <p>Spine: Neutral, body supported on bench</p> <p>Hips: Level</p> <p>Knees: Straight</p> <p>Ankle/feet: Balls of feet on floor to help stay balanced</p> <p>Additional: Depth – Elbows 90°</p>

EXERCISE	INSTRUCTION	CHECKLIST
ESSENTIAL MOVEMENT <i>continued...</i>		
<p>Squat Jump</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart. Squat down in a fast motion and jump straight back up in the air as high as possible. Swing your arms to help you get higher. Ensure a soft landing, bend knees, land in a correct squat position. 	<p>Head: Central looking forward</p> <p>Shoulders: Level, arms swing back and up</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes, bent on landing</p> <p>Ankle/feet: Feet forward or slightly turned out, approximately hip width apart. Soft (minimal noise) on landing</p> <p>Additional:</p> <p>Depth – 90° in preparation and landing so butt is in line with knees</p> <p>Height – jump as high as possible</p> <p>Balance – controlled</p>
<p>Prone Hold / Bridge</p> <p>1. Low</p>  <p>2. High</p> 	<ul style="list-style-type: none"> Lie with neutral spine face down, upper body supported on forearms or hands, directly under shoulders. Lift upper body, pelvis and legs to form a straight line from head to heel. Keep core tight and maintain neutral spine. Pull shoulder blades back and together. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level, hands under shoulders, hands forward</p> <p>Spine: Neutral, in-line from head to heels</p> <p>Hips: Level, not lifted too high</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward, hip width apart</p>
<p>Side Prone Hold / Bridge</p> <p>1. Low</p>  <p>2. High</p> 	<ul style="list-style-type: none"> Start on side, feet together, supported by forearm or hand directly under shoulder. Lift hips and form a straight line from head to heel. Keep core tight, do not tilt hips forward or back. 	<p>Head: Central, looking forward</p> <p>Shoulders: Level, hand under shoulders</p> <p>Spine: Neutral, in-line from head to heels</p> <p>Hips: Level, not tilted forward or back</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward, together</p>

EXERCISE**INSTRUCTION****CHECKLIST****LOWER BODY – BILATERAL MOVEMENT****Goblet Squat**

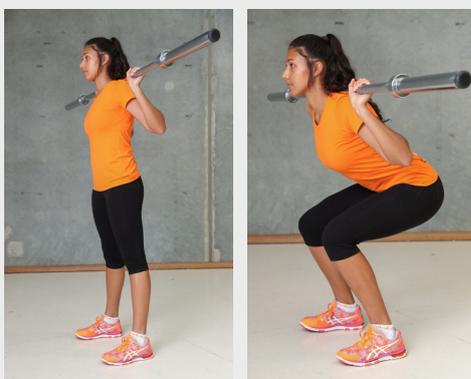
- Start standing tall, feet hip width apart. Hold the dumbbell like a “goblet” and keep close to the body.
- Perform the exercise as described in Squat.
- Keep the dumbbell close to the body through the entire exercise.

Head: Central looking forward
Shoulders: Level
Spine: Neutral
Hips: Level
Knees: In line with toes
Ankle/feet: Feet forward, approximately hip width apart, not too wide
Additional:
 Depth – 90° so butt is in line with knees while maintaining a neutral spine
 Dumbbell – keep weight close to body

Front Squat (Barbell)

- Start standing tall, feet hip width apart. Barbell should be centred and sit comfortably on front of your collar bone/ shoulders. Elbows parallel to the floor, bar resting in fingers.
- Perform the exercise as described in Squat.
- Ensure you keep chest up and core engaged so you do not collapse forward.

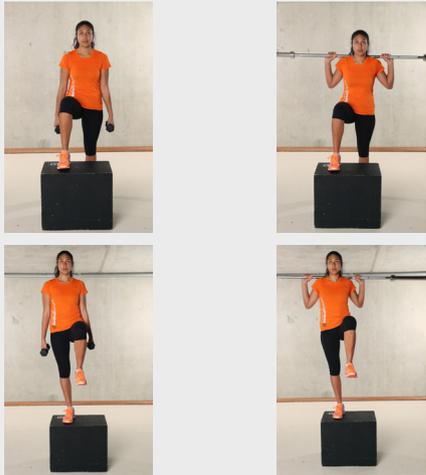
Head: Central looking forward
Shoulders: Level, elbows parallel to the floor
Spine: Neutral
Hips: Level
Knees: In line with toes
Ankle/feet: Feet forward, approximately hip width apart, not too wide
Additional:
 Depth – 90° so butt is in line with knee while maintaining a neutral spine
 Barbell – centred and sitting comfortably on collar bone/ shoulders, bar resting in fingers

Back Squat (Barbell)

- Start standing tall, feet hip width apart. Barbell should be centred and sit comfortably on top back [top of the trapezius muscles].
- Perform the exercise as described in Squat.
- Maintain neutral spine and keep core engaged so you do not collapse forward.

Head: Central looking forward
Shoulders: Level
Spine: Neutral
Hips: Level
Knees: In line with toes
Ankle/feet: Feet forward, approximately hip width apart, not too wide
Additional:
 Depth – 90° so butt is in line with knees while maintaining a neutral spine
 Barbell – centred and sitting comfortable on top back [top of the trapezius muscles]

EXERCISE	INSTRUCTION	CHECKLIST
LOWER BODY – BILATERAL MOVEMENT <i>continued...</i>		
<p>Deadlift (Kettlebell)</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart, or slightly wider. Kettlebell in both hands, shoulders pulled back. • Break at hips and bend knees to place Kettlebell between ankles. • Drive through legs to stand back up – do not pull weight with arms. • Ensure neutral spine is maintained throughout the movement. 	<p>Head: Central looking forward</p> <p>Shoulders: Level and back</p> <p>Spine: Neutral</p> <p>Hips: Level, pushed back</p> <p>Knees: In line with toes, not in front of feet</p> <p>Ankle/feet: Feet forward or slightly turned out</p> <p>Additional: Movement – through legs, do not pull with upper body</p>
<p>Deadlift (Barbell)</p> 	<ul style="list-style-type: none"> • Stand tall, feet hip width apart. Bar in close to shins, centred over feet. Grip the bar shoulder width apart. • Lower hips and bend knees until shins touch bar [start position]. • Maintain neutral spine, drive through heels to move bar upward. • Once bar has passed knees, pull shoulder blades together and drive hips forward into bar. • Bend hips and knees to lower the bar to floor – do not use your back. 	<p>Head: Central looking forward</p> <p>Shoulders: Level and back</p> <p>Spine: Neutral</p> <p>Hips: Level, pushed back</p> <p>Knees: In line with toes, not in front of feet</p> <p>Ankle/feet: Feet forward</p> <p>Additional: Movement – through legs, do not pull with upper body Barbell – keep close to body</p>
<p>Split Squat (Dumbbell)</p> 	<ul style="list-style-type: none"> • Hold a dumbbell in each hand. • Perform the exercise as described in Split Squat. • Maintain neutral spine. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes, not in front of feet</p> <p>Ankle/feet: Feet forward, approximately hip width apart, not too narrow</p> <p>Additional: Depth – Front knee 90° so butt in line with front knee Balance – controlled</p>

EXERCISE	INSTRUCTION	CHECKLIST
LOWER BODY – BILATERAL MOVEMENT <i>continued...</i>		
<p>Walking Lunge (Dumbbell)</p> 	<ul style="list-style-type: none"> Perform the exercise as described in Split Squat steps 1-5. Back leg then swings through, steps forward, perform Bodyweight Lunge, continue in a 'walking lunge' motion for set repetitions. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes, not in front of feet</p> <p>Ankle/feet: Feet forward, approximately hip width apart, not too narrow</p> <p>Additional: Depth – Front knee 90° so butt in line with front knee Balance – controlled</p>
<p>Step Up</p> <p>1. Dumbbell 2. Barbell</p> 	<ul style="list-style-type: none"> Start standing tall in front of a box, neutral spine, holding either a dumbbell in each hand or a barbell centred and sitting comfortably on top back [top of the trapezius muscles]. Step one foot on the box, straighten the hip and knee, and drive through the heel to lift the rest of the body up. Swing the other leg through to with knee bent at 90° in front of the body. Step back down and repeat on other side. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward</p> <p>Additional: Swing front knee to 90° Balance – controlled</p>
<p>Lateral Lunge</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart. Hands clasped at the front. Step out to the side, bend the knee keeping hips level. Knee in line with toes. Maintain neutral spine. Push on outside leg back to start position. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes, not in front of feet</p> <p>Ankle/feet: Feet forward or slightly turned out</p> <p>Additional: Depth – Front knee 90° so butt in line with knees Balance – controlled</p>

EXERCISE	INSTRUCTION	CHECKLIST
LOWER BODY – BILATERAL MOVEMENT <i>continued...</i>		
<p>Lateral Lunge (Dumbbell)</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. Hold the DB like a “goblet” and keep close to the body. • Perform the exercise as described in Lateral Lunge • Maintain neutral spine. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes, not in front of feet</p> <p>Ankle/feet: Feet forward or slightly turned out</p> <p>Additional: Depth – front knee 90° so butt in line with knees Balance – controlled</p>
<p>Single Leg Squat (to box)</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. • Stabilise on one leg. Maintain neutral spine as you bend in hips and knees and push your hips back [*lower to box]. • Keep your knee in line with your toes and hips level. • Push through your heel back to standing position without collapsing the upper body. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes, and not in front of foot.</p> <p>Ankle/feet: Feet forward in line with knee</p> <p>Additional: Depth – Hip 30° off parallel, knee 90° bend [*use box as a guide] Hands – either clasped at front or on hips</p>
<p>Swiss Ball Leg Curls</p> 	<ul style="list-style-type: none"> • Lie neutral spine on back, hands by sides with knees extended and feet on top of the ball. • Weight on shoulders, raise hips off ground. • Bend knees, pull the ball in towards body, contracting hamstrings. • Pause and roll out to starting position. 	<p>Head: Relaxed on floor</p> <p>Shoulders: Flat against floor</p> <p>Spine: Neutral</p> <p>Hips: High, straight line with knees</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward, stable on ball</p> <p>Additional: Thighs – aligned Balance – controlled</p>

EXERCISE	INSTRUCTION	CHECKLIST
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LOWER BODY - HIP MOVEMENT

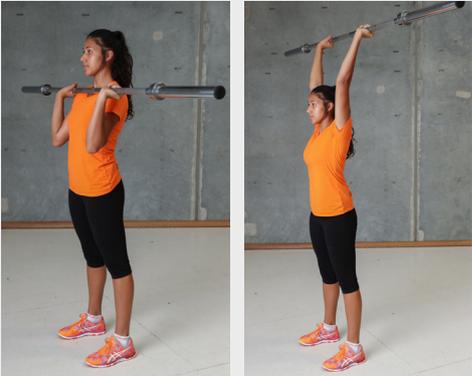
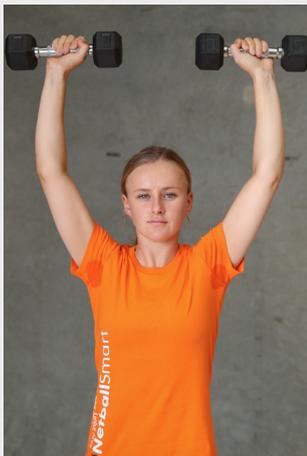
<p>Single Leg Romanian Deadlift (RDL) [Dumbbell]</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart. Stabilise on one leg. Slightly bend front knee. Maintain neutral spine, with shoulder blades engaged. Bend forward/hinge at the hip. Ensure neutral spine and leg lifts in sequence with movement. Return to upright position. 	<p>Head: Central looking forward Shoulders: Level Spine: Neutral Hips: Level, not twisted to one side Knees: In line with toes, slightly bent (20°) Ankle/feet: Feet forward Additional: Balance – controlled</p>
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UPPER BODY - PRESS

<p>Bench Press [Barbell]</p> 	<ul style="list-style-type: none"> Lie neutral spine on a bench holding a barbell [in racks] with hands shoulder width apart, elbows straight and palms facing away from you. Un-rack the bar so it is in line with your chest. Bend elbows to bring the bar down to your chest then push back up again. Once you have completed the set amount of reps, rack the bar. 	<p>Head: Central, relaxed on bench Shoulders: Level, arms in line with shoulders Spine: Neutral Hips: Level Knees: Bent Ankle/feet: Flat on surface Additional: Depth – Elbows 90°</p>
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<p>Alternate Arm Bench Press [Dumbbell]</p> 	<ul style="list-style-type: none"> Lie neutral spine on a bench. Hold a dumbbell in each hand in front of you in line with chest, shoulder width apart. Palms face away from you. Elbows straight. Bend one elbow to 90° bringing the dumbbell down to chest. Push dumbbell back up in a straight line to return to start position. Perform movement with the other arm. 	<p>Head: Central, relaxed on bench Shoulders: Level, arms in line with shoulders Spine: Neutral Hips: Level Knees: Bent Ankle/feet: Flat on surface Additional: Depth – Elbows 90°</p>
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EXERCISE	INSTRUCTION	CHECKLIST
UPPER BODY – PRESS <i>continued...</i>		
<p>Bench Press (Dumbbell)</p> 	<ul style="list-style-type: none"> • Lie neutral spine on a bench. Hold a dumbbell in each hand, shoulder width apart to side of chest, elbows at 90°, palms face away from you. • Push dumbbells up in a straight line, pause then return to start position. 	<p>Head: Central, relaxed on bench</p> <p>Shoulders: Level, arms in line with shoulders</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: Bent</p> <p>Ankle/feet: Flat on surface</p> <p>Additional: Depth – Elbows 90°</p>
<p>Lying Medicine Ball Throw</p> 	<ul style="list-style-type: none"> • Lie neutral spine, back on the floor, core tight. • Bend knees, feet hip width apart, flat on floor, pointing forwards. • Hold a medicine ball with both hands just above chest, elbows bent. • Explosively push the ball straight up into the air. Catch it as it comes back down. 	<p>Head: Central, relaxed on floor</p> <p>Shoulders: Level, arms in line with shoulders</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: Bent, in line with toes</p> <p>Ankle/feet: Feet forward, hip width apart</p> <p>Additional: Ball – in line with chest. Throw height as high as possible</p>
<p>Plyometric Press Up</p> 	<ul style="list-style-type: none"> • Start in a plank position hands firmly on the ground, directly under shoulder, balance on toes. • Perform the exercise as described in the Push Up. • Make the movement explosive when pushing back to starting position, enough to take hand off the floor. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level, arms under shoulders, hands forward, elbows do not flare out to side</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes</p> <p>Ankle/feet: Feet forward, hip width apart</p> <p>Additional: Depth – chest almost to floor Height – as high as possible</p>

EXERCISE	INSTRUCTION	CHECKLIST
UPPER BODY – PRESS <i>continued...</i>		
<p>Military Press</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. Grip the barbell with palms facing forward, hands slightly wider than shoulder grip. Bar sits gently on collar bone. • Press bar overhead, straighten elbows. • Lower bar back down to collarbone. 	<p>Head: Central, looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: Slight bend, not locked</p> <p>Ankle/feet: Feet forward, hip width apart</p>
<p>Shoulder Press (Dumbbell)</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. Hold a dumbbell in each hand with palms/forearms facing forward. Elbows bent, hold dumbbells in-line with shoulder. • At the same time, straighten elbows and press dumbbells up overhead. • Lower bar back down to shoulders. 	<p>Head: Central, looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: Slight bend, not locked</p> <p>Ankle/feet: Feet forward, hip width apart</p>
<p>Bicep Curl to Shoulder Press</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. Hold a dumbbell in each hand. Arms hang at sides, palms facing forward. • Bend elbows to curl the weight towards body. • Rotate arms as weight is pushed above head, elbows straighten in line with shoulders. • Reverse the movement to return to start position. 	<p>Head: Central, looking forward</p> <p>Shoulders: Level, chest up</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: Slight bend, not locked</p> <p>Ankle/feet: Feet forward, hip width apart</p> <p>Additional: Curl – only the arm moves in a controlled motion – do not use momentum.</p>

EXERCISE	INSTRUCTION	CHECKLIST
UPPER BODY - PULL		
<p>Seated Row</p> 	<ul style="list-style-type: none"> • You will need a seated cable row machine for this exercise. • Sit with legs out in front, knees slightly bent and feet flat against machine. • Hold the cable handle in both hands and sit with body at a 90° angle from legs. Maintain neutral spine. Arms straight out in front. • Keep body still, bend elbows and pull handle into body. Keep elbows close to body. • Contract back and shoulder blades. • Straighten arms and return to starting position. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: Slightly bent</p> <p>Ankle/feet: Flat</p> <p>Additional: Row – only the arms move in a controlled motion – do not use momentum</p>
<p>Single Arm Row (Dumbbell)</p> 	<ul style="list-style-type: none"> • Place one knee on a bench. Bend forward at hips until body is parallel to the floor, place same-side hand on bench for support. • Hold a dumbbell in the other hand, palm facing body, elbow extended. Maintain neutral spine. • Pull dumbbell to side of chest, close to body, only arm moves. • Contract muscles in back and shoulder blade. • Lower weight straight down to return to start position. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: Slight bend, not locked. Bent on bench in line with hip</p> <p>Ankle/feet: Flat on floor</p> <p>Additional: Row – Only the arm moves in a controlled motion – do not use momentum</p>
<p>Bent Over Row (Barbell)</p> 	<ul style="list-style-type: none"> • Start standing tall, feet hip width apart. Hold a barbell in front, hands shoulder width apart, palms facing body • Bend knees slightly, hinge at hips bringing upper body forward. Maintain neutral spine until upper body is almost parallel to floor. • Let bar hang directly in front of you. • Bend elbows back, pulling bar into body. Contract muscles in back and shoulder blade. • Lower bar straight down to return to start position. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes, slightly bent, not locked</p> <p>Ankle/feet: Feet forward</p> <p>Additional: Row – only the arm moves in a controlled motion – do not use momentum</p>

EXERCISE	INSTRUCTION	CHECKLIST
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UPPER BODY - PULL *continued...*

<p>Pull Up (Overhand Grip)</p> 	<ul style="list-style-type: none"> • Hold bar palms facing forward, arms extended at chosen grip width. • Pull your body up, chest first, drawing shoulders and upper arms down and back. • Touch bar with chest then slowly lower back down. 	<p>Head: Central, looking forward Shoulders: Level Spine: Neutral Hips: Level Knees: Can be bent Ankle/feet: Ankles can be crossed Additional: Chest to bar</p>
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CORE

<p>Mountain Climbers</p> 	<ul style="list-style-type: none"> • Start in a High Prone Hold position. • Bring one knee towards chest without lifting hips. • Keep hands directly under shoulders. • Return to start position and alternate legs. 	<p>Head: Central, eyes looking slightly forward Shoulders: Level, hands under shoulders, hands forward Spine: Neutral, in-line from head to heels Hips: Level, not lifted too high Knees: In line with toes Ankle/feet: Feet forward, hip width apart Additional: Knees as close to chest as possible</p>
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<p>Full Sit Up</p> 	<ul style="list-style-type: none"> • Lie neutral spine, back on the floor. Knees bent, feet hip width apart flat on floor. • Make fists, palms down and rest on top of thighs. • Bring upper body off floor, contracting core, pushing fists towards knees. • Lower upper body back to the floor 	<p>Head: Central, looking forward Shoulders: Level Spine: Neutral Hips: Level Knees: In line with toes Ankle/feet: Feet forward, hip width apart Additional: Push fists towards knees</p>
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EXERCISE	INSTRUCTION	CHECKLIST
CORE <i>continued...</i>		
<p>Reverse Crunch</p> 	<ul style="list-style-type: none"> • Lie neutral spine, back on the floor, legs fully extended, arms at the side of body, palms flat on the floor. • Contract core and keep lower back on the floor, raise feet towards body. • Roll pelvis backwards, raise hips off the floor and push feet towards ceiling. • Pause and then reverse movement. • Feet stay off floor between repetitions. 	<p>Head: Central, relaxed on floor Shoulders: Level, flat on floor Spine: Neutral Hips: Level Knees: extended Ankle/feet: Feet forward, together Additional: Feet – push straight up towards ceiling, not behind head</p>
<p>Lying Leg Lowers</p> 	<ul style="list-style-type: none"> • Lie neutral spine, back on the floor, hips at 90° to body, legs fully extended, arms at the side of body, palms flat on the floor. • Lower feet to floor, stop before lower back arches. • Contract core and bring straight legs back to hips. • If needed, place hands in small of back to ensure lower back does not arch. 	<p>Head: Central, relaxed on floor Shoulders: Level, flat on floor Spine: Neutral Hips: Level Knees: extended Ankle/feet: Feet forward, together Additional: Do not let lower arch/ come off floor. Or if too challenging lower one leg at a time</p>
<p>Oblique Twist</p> <p>1. Bodyweight</p> <p>2. Medicine Ball</p> 	<ul style="list-style-type: none"> • Sit on floor, neutral spine, knees bent. • Feet flat on floor [easy], feet raised off floor [harder]. • Contract core and sit at a 45° angle • Clasp hands or hold medicine ball with both hands in front of you. • Twist slowly from core and touch hands or ball on floor beside hip. • Return to centre and repeat on other side. 	<p>Head: Central, looking forwards Shoulders: Level Spine: Neutral Hips: Level Knees: Slightly bent Ankle/feet: Feet forward, together Additional: Do not sink into lower back</p>

EXERCISE	INSTRUCTION	CHECKLIST
CORE <i>continued...</i>		
<p>Bicycle Kicks</p> 	<ul style="list-style-type: none"> • Lie neutral spine, back on the floor. Place hands behind head. • Lift shoulders into sit up position. Raise legs off floor, bring one knee into chest [perpendicular to the floor], other leg extended parallel to floor. • With control, “pedal” legs, kick forward right leg and bring in knee of left leg. Bring right elbow across body close to left knee. • Repeat on opposite side and continue alternating. 	<p>Head: Central, looking forward</p> <p>Shoulders: Level, hands behind head</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes, extended or bent</p> <p>Ankle/feet: Feet forward</p>
<p>Back Extension (Superman)</p> 	<ul style="list-style-type: none"> • Lie neutral spine face down on floor, legs extended, feet hip width apart, hands under chin. • Contract into lower back and raise upper body off the floor. Keep feet on floor. • Pause and lower back to start position. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes</p> <p>Ankle/feet: On floor, hip width apart</p> <p>Additional: Contract into lower back</p>
<p>Back Extension (Swiss Ball)</p> 	<ul style="list-style-type: none"> • Lie neutral spine face down on Swiss ball, legs extended [against a wall for stability], feet hip width apart, hands behind head. • Contract into lower back and squeeze glutes. Raise upper body off the ball until your body forms a straight line. • Pause and lower back to start position. 	<p>Head: Central, eyes looking slightly forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes</p> <p>Ankle/feet: On floor, hip width apart</p> <p>Additional: Contract into lower back</p>

EXERCISE	INSTRUCTION	CHECKLIST
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CORE *continued...*

<p>Medicine Ball Rotation Wall Throw</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart. Stand ~ 2m away from a wall. Hold medicine ball with both hands at waist. Rotate shoulders away from wall in preparation to throw. Immediately reverse direction, turning shoulders and hips towards wall and releasing the ball against the wall as fast as you can (chest height). Bend knees to pick ball up to reset and repeat. 	<p>Head: Central, looking forward Shoulders: Level Spine: Neutral Hips: Level Knees: In line with toes Ankle/feet: In line with toes, twist to adjust to movement Additional: Core – keep tight Medicine Ball – bend knees to pick up ball Throw – fast and explosive</p>
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WARM UP AND ADDITIONAL EXERCISES

<p>Ankle Mobility (Band Resisted)</p> <p>1. Plantarflexion (Forwards)</p>  <p>2. Dorsiflexion (Backwards)</p> 	<ul style="list-style-type: none"> Place band around forefoot, holding ends of bands. Gently push ankle down as far as possible against band, return to start position. Place band around forefoot. Tie ends around a fixed object (or get someone to hold it). Start with foot relaxed pointing down, pull ankle as far as possible against band, return to start position. 	<p>Knees: Extended in front Ankle/feet: In line with toes</p>
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<p>Ankle Mobility (Band Resisted)</p> <p>1. Inversion (Foot in)</p>  <p>2. Eversion (Foot out)</p> 	<ul style="list-style-type: none"> Place band around forefoot, holding ends of bands. Release the inside grip so foot is pulled outwards relaxed. Gently push ankle against resistance inwards, return to start position. Place band around forefoot, holding ends of bands. Release the outside grip so foot is pulled inwards relaxed. Gently push ankle against resistance outwards, return to start position. 	<p>Knees: Extended in front Ankle/feet: In line with toes</p>
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EXERCISE	INSTRUCTION	CHECKLIST
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WARM UP AND ADDITIONAL EXERCISES *continued...*

Bosu Balance
*A balance/ wobble board/ foam can be used as an alternative.

1. Double Leg **2. Single Leg**



- Stand on a bosu ball (or alternative), feet hip width apart [either side of centre]. Keep core tight and balance.
- Place one foot in centre of bosu ball, toes forward. Lift other leg off and away from the stabilised leg. Keep core tight and balance.

Head: Central, looking forward
Shoulders: Level
Spine: Neutral
Hips: Level
Knees: In line with toes
Ankle/feet: In line with toes
Additional: Keep core tight

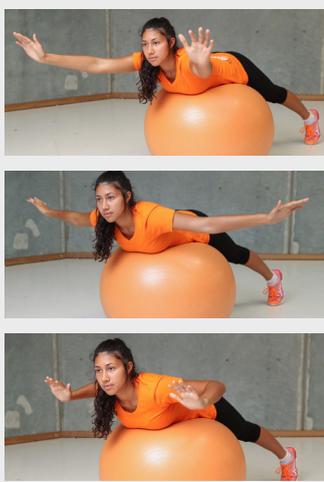
Bird Dog



- Start kneeling, knees directly under hips, and hands on floor, directly under shoulders.
- Maintain neutral spine.
- Keep core tight, raise right arm and reach forward, in line with body. At the same time kick left leg backwards, straight in line with body.
- Move in one motion.
- Pause and slowly return arm/ leg back to the floor. Repeat with opposite arm/leg.

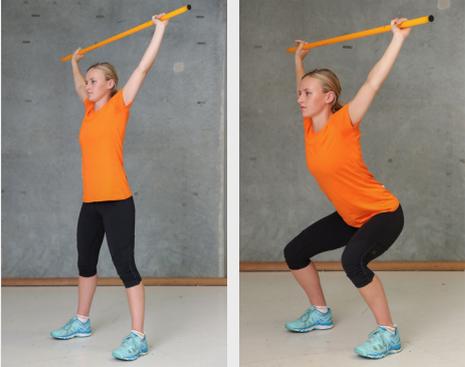
Knees: Extended in front
Ankle/feet: In line with toes
Head: Central, eyes looking slightly forward
Shoulders: Level, hands under shoulders
Spine: Neutral
Hips: Level
Knees: Under Hips
Ankle/feet: Toes face down, push heel to back
Additional: Shoulders and hips stay parallel. Lifted arms and legs stay in line with the body, do not go higher.

Y-T-W [Swiss ball]



- Lie neutral spine face down on a Swiss ball. Extend arms in front of you.
- Form the letter "I" with thumbs towards the ceiling. Squeeze shoulder blades together.
- Form the letter "Y" with movement from shoulder blades. Keep thumbs up towards ceiling.
- Form letter "T" with palms towards the floor.
- Form letter "W" with palms towards the floor.
- Repeat from "I" position.

Head: Central, looking forward
Shoulders: Level, squeeze into shoulder blades
Spine: Neutral
Hips: Level
Knees: Extended for balance
Ankle/feet: Hip width apart, on toes for balance

EXERCISE	INSTRUCTION	CHECKLIST
WARM UP AND ADDITIONAL EXERCISES <i>continued...</i>		
<p>Overhead Squat</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart. Dowel/Bar should be in line with spine, behind head, hands wider than shoulder width. Perform the exercise as described in the Bodyweight Squat. Ensure you keep chest up and core engaged so you do not collapse forward. 	<p>Head: Central looking forward Shoulders: Level Spine: Neutral Hips: Level Knees: In line with toes Ankle/feet: Feet forward, approximately hip width apart, not too wide. Additional: Depth – 90° so butt is in line with knees Dowel/barbell – in line with spine, behind the head, hands wider than shoulder width</p>
<p>Body Weight Good Morning</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart. Place your hands on your hips or behind your head. Slightly bend your knees. Maintain neutral spine, with shoulder blades engaged. Move your weight into your heels and bend forward/hinge at the hip, pushing your hips backwards. Do not bend from your waist. Ensure neutral spine to maintain a “flat back”. Hinge forwards until you feel a stretch in your hamstrings. Return to upright position. 	<p>Head: Central looking forward Shoulders: Level, elbows out wide Spine: Neutral Hips: Level, moving backwards Knees: In line with toes, slightly bent [20°] Ankle/feet: Feet forward Additional: Movement comes from hips moving backwards. Do not arch the back or neck- keep a “flat back”</p>
<p>Bridge Squeeze</p> 	<ul style="list-style-type: none"> Lie neutral spine on back, hands by sides with knees bent and feet flat on floor. Place object between knees. Perform the exercise as described in Standard Bridge, squeezing object between knees as you raise hips. Lower down and repeat. 	<p>Head: Relaxed on floor Shoulders: Flat against floor Spine: Neutral Hips: High, straight line with knees Knees: In line with toes Ankle/feet: Feet forward Additional: Thighs – aligned</p>

EXERCISE	INSTRUCTION	CHECKLIST
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WARM UP AND ADDITIONAL EXERCISES *continued...*

Clams

1. Bodyweight



2. Band resisted



- Lie neutral spine on side with head supported in arm.
- Bend hips to 45° and knees between 45–90° so heels are in straight line with spine. Legs are directly on top of one another.
- Abduct/open the top leg, keep hips stable. Feet stay together.
- Hold and then return.

- Head:** Supported in arm
Shoulders:
Spine: Neutral
Hips: Level, do not move forward/back, bent to 45°
Knees: Together, bent 45–90°
Ankle/feet: Heels together, in line with spine
Additional: Balance – controlled

Lateral Band Walks



- Position a band above your knees.
- Slightly bend knees and hips, feet hip width apart, toes forward.
- Keep head and chest up.
- In this position, step to the side slowly, resisting the band. Stay low and follow with other leg.
- Keep feet hip width apart to keep tension on band.

- Head:** Central looking forward
Shoulders: Level, chest up
Spine: Neutral
Hips: Level
Knees: In line with toes
Ankle/feet: Feet forward
Additional:
 Resistance – keep tension on band
 Stay level and low – do not bob up and down

JUMP AND LAND

Drop, Jump and Stick (from box)



- Start standing tall, feet hip width apart, on top of box.
- Step off the box.
- As soon as you touch the ground, perform a Squat Jump, landing on two feet.
- Ensure a soft landing, bend knees, land in a correct Squat position in front of the box.

- Head:** Central looking forward
Shoulders: Level
Spine: Neutral
Hips: Level
Knees: In line with toes, bent on landing
Ankle/feet: Feet forward or slightly turned out, approximately hip width apart. Soft (minimal noise) on landing.
Additional: Depth – 45° – 90° in preparation and landing so butt is in line with knees

EXERCISE	INSTRUCTION	CHECKLIST
JUMP AND LAND <i>continued...</i>		
<p>Drop, Jump and Stick: Single Leg (from box)</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart, on top of box. Step off the box As soon as you touch the ground, perform a Squat Jump, landing on one foot. Ensure a soft landing, bend knees, land in a correct Single Leg Squat position in front of the box. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level, not dipped to one side</p> <p>Knees: In line with toes, bent on landing</p> <p>Ankle/feet: Feet forward or slightly turned out. Soft (minimal noise) on landing.</p> <p>Additional: Depth – Hip 30° off parallel Knee – 45° - 90° bend</p>
<p>Tuck Jump</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart. Hold your hands in front, palms down, fingers together at chest height. Squat down in a fast motion and jump upwards driving your knees towards your chest, trying to touch the palms of your hands. Keep chest up. Ensure a soft landing, bend knees, land in a correct Squat position. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes, bent on landing, towards chest during jump.</p> <p>Ankle/feet: Feet forward or slightly turned out, approximately hip width apart. Soft (minimal noise) on landing.</p> <p>Additional: Depth- 45° - 90° bend in knees in preparation and landing Height- Knees as high as possible.</p>
<p>Box Jump</p> 	<ul style="list-style-type: none"> Start standing tall, feet hip width apart, behind a box. Perform a Squat Jump landing on the box. Ensure a soft landing, bend knees, land in a correct Squat position on top of the box. Step off the box and re-set. 	<p>Head: Central looking forward</p> <p>Shoulders: Level</p> <p>Spine: Neutral</p> <p>Hips: Level</p> <p>Knees: In line with toes, bent on landing</p> <p>Ankle/feet: Feet forward or slightly turned out, approximately hip width apart. Soft (minimal noise) on landing.</p> <p>Additional: Depth – 90° in preparation and landing so butt is in line with knees</p>



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NETBALL STRENGTH AND CONDITIONING FRAMEWORK 2020

Purpose: To provide structure enabling the physical preparation of netballers in a holistic fashion for the positional demands of training and competition ultimately enabling individuals to perform to the best of their ability at their given level of competition.

PHYSICAL QUALITY		SPORTS SPECIFIC APPLICATION AND SIGNIFICANCE					GOLD MEDAL INTERNATIONAL TARGETS	
ASSOCIATED TEST		NZSS	BEKO	ANZ	ACCEPTABLE INTERNATIONAL RANGE			
MAXIMAL STRENGTH	Parallel Squat	Enhanced deceleration, change of direction ability, acceleration, landing mechanics and injury prevention. Minimise match induced fatigue	1.00 - 1.40xBW	1.00 - 1.50xBW	1.25 - 1.75xBW	1.5 - 1.75xBW	>1.75xBW	
	Uni Iso Mid Thigh Pull	Enhanced deceleration and change of direction ability	1.00 - 1.40xBW	1.15 - 1.50xBW	1.35 - 1.75xBW	1.60 - 1.90xBW	>1.90xBW	
	Bench Press	Strength on rebound, ability to withstand and win collision, speed of pass, injury incidence reduction	40 - 50kg	40 - 60kg	50 - 70kg	60 - 70kg	>70kg	
	Bench Pull	Strength on rebound, ability to withstand and win collision, Posterior/Anterior balance, injury incidence reduction	40 - 50kg	40 - 60kg	50 - 70kg	60 - 70kg	>70kg	
	Or							
	Chin Up	Strength on rebound, ability to withstand and win collision, Posterior/Anterior balance, injury incidence reduction	0.8 BW - BW	0.8 BW - BW	BW	BW + 5kg - +15kg	>BW + 15kg	
	Power Clean and Jerk	Enhanced power production and functional athleticism, deceleration, change of direction ability, acceleration	0.50 - 1.0xBW	0.60 - 1.0xBW	0.70 - 1.0xBW	0.8 - 1.0xBW	>BW	
	Counter Movement Jump	Enhanced acceleration, change of direction ability, horizontal and vertical jump ability	30 - 50w/kg	35 - 50w/kg	45 - 50w/kg	50 - 60w/kg	>60w/kg	
	Squat Jump	Enhanced acceleration, change of direction ability, horizontal and vertical jump ability, Along with CMJ, determine stretch/shorten contribution to assist in programming.	30 - 50w/kg	35 - 50w/kg	45 - 50w/kg	50 - 60w/kg	>60w/kg	
	Unilateral CMJ	Enhanced acceleration, change of direction ability, 1 leg horizontal and vertical hop ability	20w/kg - 35w/kg	20w/kg - 35w/kg	25w/kg - 35w/kg	30w/kg - 40w/kg	>40w/kg	
ACCELERATION, SPEED AND COD ABILITY	Bi Broad Jump	Enhanced acceleration, change of direction ability, horizontal jump ability, and deceleration/landing	200 - 240cm	200 - 250cm	220 - 250cm	235 - 250cm	>250cm	
	Uni Broad Jump	Enhanced acceleration, change of direction ability, horizontal jump ability, and deceleration/landing	190 - 210	190 - 220	200 - 220	210 - 220	>220	
	Vertical Jump	Rebound ability, contested high ball ability, acceleration	40 - 60cm	45 - 65cm	50 - 65cm	55 - 65cm	>65cm	
	20m/20m Test	Acceleration and top end speed, high velocity change of direction and re acceleration enhancing ability to get free	5m 1.00 - 1.08 10m 1.70 - 1.85 5-0-5 2.29 - 2.42 20/20m 6.95 - 7.30	5m 1.00 - 1.08 10m 1.70 - 1.85 5-0-5 2.29 - 2.42 20/20m 6.95 - 7.30	5m 1.00 - 1.08 10m 1.70 - 1.85 5-0-5 2.29 - 2.42 20/20m 6.95 - 7.30	5m 1.00 - 1.05 10m 1.70 - 1.80 5-0-5 2.29 - 2.35 20/20m 6.95 - 7.15	<1.00 <1.70 <2.29 <6.95	
	Crucifix Test	Close Quarter Change of Direction Ability	5.65s - 6.05s	5.65s - 6.05s	5.65s - 5.95s	5.65s - 5.85s	<5.65s	
	YoYo	Enhance the ability to cope with specific positional matchplay and training demands over the course of a single match, tournament and season. Increases time to exhaustion, enhances recovery from both acute and chronic bouts of exercise	18.1-19.5 17.4-18.7	18.6-19.6 17.8-18.8	19.3-20.1 18.3-19.2	19.5-20.1 18.6-19.2	C20.1 WD19.2	
	AEROBIC CAPACITY AND AEROBIC POWER			17.4-18.7	17.8-18.8	18.2-19.1	18.4-19.1	WA19.1
				16.8-18.3	17.4-18.4	17.7-18.5	18.1-18.5	GD18.5
				16.8-18.2	17.3-18.3	17.5-18.2	17.7-18.2	GA18.2
				15.6-17.1	16.3-17.1	16.7-17.3	17.1-17.3	GS17.3
15.6-17.1				16.3-17.1	16.7-17.3	17.1-17.3	GS17.3	
C < 3.08s				C < 3.08s	C < 3.05s	C < 3.02s	C < 2.58s	
WD < 3.13s				WD < 3.13s	WD < 3.10s	WD < 3.08s	WD < 3.05s	
WD < 3.13s				WD < 3.13s	WD < 3.10s	WD < 3.08s	WD < 3.05s	
GD < 3.21s				GD < 3.21s	GD < 3.18s	GD < 3.15s	GD < 3.13s	
GA < 3.23s				GA < 3.23s	GA < 3.20s	GA < 3.18s	GA < 3.15s	
GS < 3.38s	GS < 3.38s	GS < 3.35s	GS < 3.32s	GS < 3.29s				
GS < 3.38s	GS < 3.38s	GS < 3.35s	GS < 3.32s	GS < 3.29s				
AEROBIC CAPACITY AND AEROBIC POWER	Bronco	Enhance the ability to cope with specific positional matchplay and training demands over the course of a single match, tournament and season. Increases time to exhaustion, enhances recovery from both acute and chronic bouts of exercise	C < 3.08s	C < 3.08s	C < 3.05s	C < 3.02s	C < 2.58s	
			WD < 3.13s	WD < 3.13s	WD < 3.10s	WD < 3.08s	WD < 3.05s	



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