STRENGTH AND CONDITIONING FOR TRAMPOLINE GYMNASTICS

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Improvements and Updates Made to this Manual

When this manual was first created in 2010, the goal was to create a year-long periodized strength and conditioning program that followed the adrtistic gymnastics season, peaking athletes for competition occurring from January to May.

This manual was originally designed *prior* to the first series of province-wide FMS (Functional Movements Screens) that were performed in 2012 and again in 2014. These FMS's have been useful in highlighting the most typically sustained injuries and limitations of BC's competitive artistic and **trampoline** gymnasts.

In 2013, a "simpler" series of handouts titled "Functional Conditioning" were created for coaches that specifically addressed the limitations and anticipated injuries prevalent in competitive gymnasts (artistic and trampoline) based on the 2012 Provincial FMS. The goal of these handouts were to give timestrapped coaches the minimum exercises that could incorporated into their athletes' programming with the goals being injury prevention and development of a basic athletic base. The limitations of these handouts is that they are not "phased" specifically to the athletes competitive season, nor they do not include "performance conditioning"- i.e. (Strength, Power, Aerobic, Anaerobic development).

With this current updated edition of the original 2010 "Strength and Conditioning for Gymnastics", the goal is to update the annual periodized program with some of the "new" exercises developed as a result of the FMS, as well as to streamline/improve how the program is interpreted and delivered by coaches. The version you are reading now has been adapted specifically for trampoline gymnasts.

Even with these improvements, coaches may still find that they are too time starved or lack the confidence/knowledge to incorporate all elements and phases of the annual periodization, and they may choose to start incorporating Strength and Conditioning for their athletes by using the "Functional Conditioning" Handouts. Then, in subsequent years, they can aim to incorporate the entire (or [most] parts of the) annual plan. Either option is fine as long as you are honest with yourself as to which program you can have athletes do consistently with well taught instructions.

Deciding Between Complete Annual Periodization and "Functional Training" Handouts

To help coaches decide which option is appropriate for them, below are the advantages and limitations of each approach as well as some definitions to assist coaches in the overall understanding of the various approaches they can take to creating a "conditioning" program for their athletes.

**from this point forward "gymnasts" refers to trampoline gymnasts

Helpful Definitions (in the context used in this Manual)

Periodization: Periodization is the process of varying a training program at regular time intervals to bring about optimal gains in physical performance. Periodization is important for a competitive athlete since human physiology is limited to achievement of peak performance in only 1-2 areas at a time.

Eg. You can't significantly increase your aerobic capacity and expect to be super explosive at the same time.

Therefore, we create specific 4-8 wk phases leading up to the athletes' competitive season that each have specific outcome goals. We layer them on top of one another (i.e. Phase 1 movement patterns and injury prevention, Phase 2 build aerobic capacity, Phase 3 maintain aerobic, develop anaerobic capacity and strength etc.), so that hopefully by competitive season the athlete HAS improved in all areas.

Performance Based Conditioning: In the context of this manual "Performance Based Conditioning" refers to a **periodized** conditioning program that has progressed beyond the goals of injury prevention and basic movement patterns. For gymnasts, the outcome goals of "Performance Conditioning" include improved aerobic and anaerobic conditioning, greatly improved strength, and enhanced agility and power.

Skill based Conditioning (or "Coach" directed conditioning): Trampoline Gymnastics "skill" based conditioning includes such exercises as repeating ¼ or ½ routines, tumbling, etc. In the original manual, some minimal direction was given as to when/how to implement skill based conditioning (to artistic gymnast coaches). However, upon further reflection it was decided that since so much of the "regular" gymnastics and trampoline practice is "skill conditioning" such direction may be confusing to coaches, so in the updated manual, it has been omitted and assumed that coaches "know" best when and how to integrate this into their practice.

Functional Based Conditioning: Conditioning designed to prevent injury and to provide trampoline gymnasts with the skills and range of motion to perform fundamental movement patterns that are important for any type of athlete. Functional conditioning can be part of a **periodized** program, but functional conditioning itself is not periodized.

Components, Benefits and Challenges of a Periodized program:

Components: Dynamic Warm-up, Activation Exercises, (ideally) Post-training Conditioning (includes some or all of the following based on which Phase the athlete is in: functional conditioning, aerobic conditioning, anaerobic conditioning, strength development, power development, injury prevention flexibility/mobility)

Benefits:

- Progresses over the entire year of the gymnasts' competitive season, peaking them for competition
- Incorporates all elements of a comprehensive Strength and Conditioning Program (Functional Movement, Injury Prevention, Activation and Endurance, Strength, Power, Aerobic and Anaerobic development)

Challenges:

- Takes more time away from coaches' "traditional" gymnastics programming
- Helps tremendously if coaches have background in basic weight training technique and understanding of how to manipulate load and tempo to cause strength and power development in athletes
- Coaches need access to a variety of weights/equipment in order to load/challenge the athletes adequately to gain intended benefit
- When using heavier loads, athletes form must be excellent to minimize injury risk



Components, Benefits and Challenges of "Functional" Conditioning Program Handouts

Components: Injury prevention, Range of motion/Flexibility, Fundamental Athletic Movement Patterns

Benefits

- Not as time consuming for coaches to integrate into their planning
- Have been designed such that coaches can integrate the exercises into athletes' warm-ups, or anytime athletes are "waiting" for their turn and as a part of cool-down stretches

Limitations:

- No guidance on proper warm-up or pre-practice dynamic stretching
- No exercises for significant gains in strength or power
- In order to get all the exercises completed, the coach will need to rely on the athletes to perform the exercises independently in stations while waiting for the turn on the apparatus. Therefore, the coach will need to spend a good amount of time to teach proper technique and the athletes must be mature enough and motivated enough to do the exercises.
- Aerobic and Anaerobic conditioning is not a part of the program and is left up to the coach's discretion. (This is not necessarily a bad thing IF the coach understands how to introduce and progress each in the appropriate phase of the annual season.)

In the ideal world, the coach would run their athletes through the annual periodized program. This would be much easier for the coach to do if all the athletes they coach were approximately at the same level, maturity and trained the same number of hours/days in the week.

The following page gives you an overview of the tgymnastics season and annual periodization of strength and conditioning program for the competitive gymnast. If as a coach of a high level competitive athlete you choose not to use the entire annual program, make sure you are including all the elements (i.e. injury prevention, strength development, power development, aerobic, anaerobic training etc.) at the appropriate times of the season. The chart on the following page will give you a good guide of what elements should be focused on each month or phase leading up to the competitive season.

Overview of the Trampoline Season and Annual Periodization of Strength and Conditioning Program for the Competitive Athlete

Post-season	Early Off-Season	Late Off-Season	Pre-Season	In-Season
June	July- August	Sept-October	Nov – Dec	Jan – May
Phase 1	Phase 2	Phase 3	Phase 4	Phases 5 and 6
RECOVERY:	Aerobic base	Aerobic maint.(0-1)/ Anaerobic	Anaerobic Development	Anaerobic Maintenance
2 week vacation		Development(2x's/wk)	(3-5x/s/wk1 x not in routines, mostly within routine practice)	
Functional Conditioning	Functional Conditioning	Maximize Strength – begin loading	Strength Maint.	Strength Maint.
Teaching the basics/injury	(core endurance, agility, movement	Develop power	Maximize Power	Power Maint.
prevention	patterns) ankle pre- hab, core and			Enhance 1 Area
Ankle pre-hab, core endurance, flexibility	postural endurance, flex pre-hab (IT, HF, rec fem)			Recovery

"Functional Conditioning" for 5-6 Yr Olds or Semi-Competitive for the entire year

For most very young athletes, if they are just being introduced to "strength and conditioning," typically, we would work on "Functional Conditioning" for the entire first year of their training. (Functional Conditioning is the main focus in the Annual Periodization manual Phase 1 and Phase 2)

As a coach of these athletes, you have two options: 1) Follow just the first few phases of the annual periodized program OR 2) Use the "Functional Conditioning" Handouts as your main resource.

OPTION 1- Follow part of the Annual Periodization

You can have these athletes follow the "Annual Periodization" and progress very slowly through Phase 1 and do NOT progress them until they are performing each to perfection! Ignore the timelines suggested at pay attention to your athletes' capabilities instead.

If you are working with 5 and 6 year olds who are exceptionally physically and intellectually mature for their age(or with pre-comp athletes), and they perfect Phase 2, it would be appropriate to move to Phase 3.

The second year you integrate this program into their training, go back to Phase 1 and progress through the program based on the timeline suggested. Progress through the Phases only to the capabilities of your athletes. i.e. You may not complete all 6 phases even after the second year running through the program.

OPTION 2-Functional Conditioning Handouts

If you feel you are too time starved or lack the confidence/knowledge to incorporate all elements and phases of the annual periodization, you may choose to start incorporating Strength and Conditioning by using the "Functional Conditioning" Handouts. Then, in subsequent years, aim to incorporate the entire (or [most] parts of the) annual plan. Either option is fine as long as you are honest with yourself as to which program you can have athletes do consistently with well taught instructions.

If you fall into any of the following categories, then using the `Functional Conditioning` Handouts might be the best starting point for you.

- Coaches of young/immature/semi-competitive athletes
- Coaches who feel they do not have time to apply the entire Annual program
- Coaches who have their own conditioning plan that integrates aerobic, anaerobic, strength and power development as per Phases on pg. 5 but need functional conditioning exercises for their athletes (apply mainly in June-Sept)

The Handouts for the 3 Progressions of FUNCTIONAL CONDITIONING can be found on the Gymnastics BC Website

Applying ANNUAL Periodization

If you are choosing to integrate the annual plan into your coaching strategy, then what follows is an overview of the different components of the annual plan.

Incorporating a Comprehensive Strength and Conditioning into Gymnasts' Training Sessions: The many elements of "Strength and Conditioning"

- Dynamic warm-up
- Pre-training activation
- During training Pre-hab (while waiting for apparatus)
- Post training Conditioning

As you might expect, one element of the "Strength and Conditioning" program for your athletes will take place as a separate "work-out" for your athletes occurring 2x/wk (about 30-45min/session) post training session. On the chart below, that's referred to as "Performance Strength". In other instances, the "Strength and Conditioning" of your athletes means a slight tweak to the way you perform warm-up and stretches prior to a training session. It also means incorporating "activation" exercises for 2-5 minutes pre-training session, to prep the athletes' core and postural muscles, helping to prevent injury. Strength and Conditioning also refers to creating specific stations during practice to perform ankle "pre-habilitation." For athletes who will be competing full routines, it also means incorporating aerobic and anaerobic conditioning into their annual training plan to give the athletes the fitness to complete routines with minimal injury risk and maximum amplitude and explosiveness.

The chart below gives an overview of how you might schedule the many elements of your Strength and Conditioning into an existing training week. (based on a 5 day/wk training schedule) See Appendix 2 for options for a 3 and 4 day/wk training schedule.

	SUN	MON	TUES	WED	THUR	FRI	SAT
-		, , , , , , , , , , , , , , , , , , , ,	Dynamic warm- up, stretching		Dynamic warm-up, stretching	Dynamic warm-up, stretching	OFF
Activation	Core/ posture/Agility	Core/ Posture/Agility	Core/ Posture/Agility		Core/Posture/Agility	Core/Posture/Agility	
	TRAINING	TRAINING	TRAINING		TRAINING	TRAINING	
	Ankle pre-hab in btw turns				Ankle pre-hab in btw turns		
S+C post training			Performance Strength (30 min)			Performance Strength (30 min)	
Aerobic/		Aerobic base July/Aug			Aerobic base Jul/Aug		
Anaerobic		Anaerobic Sept-Dec			Anaerobic Sept-Dec		

Strength and Conditioning for Trampoline Gymnastics— Explanation of Program Fundamentals

A Better Warm-up

It is recommended that following four categories of warm-up should be included in the gymnastic warm-up. A proper warm-up will prepare the body both physiologically and psychologically for an event or practice. This process is also believed to reduce the chance of joint and muscle injury. The warm-up should be gradual and sufficient to increase muscle and core temperature without causing fatigue or reducing energy stores.

Four Categories:

- 1) **General Warm-up**: consists of exercises not directly related to gymnastics on a neurological level. This phase includes such exercises as slow jogging, skipping, easy dance steps that mimic choreography movements, stationary biking or even "tag games" for your younger athletes. This period allows for increases in:
 - heart rate
 - blood flow
 - respiration rate
 - viscosity of joint fluids
 - perspiration
 - deep muscle/core temperature
 - Time: 5-10 minutes
- 2) **Dynamic Flexibility**: exercises aimed at increasing core temperature while improving muscular flexibility in a safe manner during the warm-up. In addition, some of the movements in the dynamic warm-up are specifically designed to allow the body to achieve joint range required for certain movements in the strength and conditioning program. Athletes are to perform stretches through dynamic movement, holding each stretch for only 1-2 seconds (with the exception of the wrist stretches). Samples include:
 - Quad
 - Airplane into needle



- X-legged glute stretch
- Lunge and twist
- Inch worm into split
- Sumo Squat to stand
- Dynamic Shoulder circles with elastic
- Wrist stretch series (may be omitted for trampoline gymnasts)
- Ankle mobility exercises
- Do 6-10 stretches per side where applicable
- Refer to dynamic stretching sheet in appendix***

3) Activation Exercises

These are exercises designed to improve posture, movement efficiency, and power. In the first phase, activation will be very basic (see core activation below) then will progress in difficulty as basic core and postural activation become second nature to your athletes. The series of activation exercises; core activation, postural activation and agility, should only take a few minutes but are very valuable in setting up the athletes' physiology for a successful training session.

a) Core Activation

Throughout all training sessions, athletes should be cued to "set their core" which is a variation/improvement on more traditionally used gymnastic cues of "tight body", "suck and tuck" etc.

"Setting the core" refers to activating your stabilizers properly. This will improve structural support, make and athlete stronger and often reduce lower back pain. The core muscles work to link the upper and lower body together to help them function as a unit.

To perform a core activation:

- Kegel perform a contraction as if you were trying to stop yourself from taking a pee
- Pull your belly button into the spine
- Perform these contractions simultaneously
- Ultimately, you should be able to breathe while holding these contractions. Therefore once these
 athletes have a grasp of how to activate their core muscles it may be helpful to cue your athletes
 NOT to tense these muscles at a "10" but rather more like a "6" on a 1-10 scale

A great way to practice the basic core activation is to lie face down and perform the Kegel first and then pull in your belly button – you should feel your stomach pull up and away from the floor. Hold the contraction for 10 seconds, relax and repeat 5 times. Then try the same thing lying on your back with your knees bent. Feel the front of your hip bones with 2 fingers and then go down and towards the middle about 2 cm. As you perform the core contraction, you should feel the muscles under your



fingers tighten, but make sure your stomach doesn't flex or pop up as if you were doing a crunch. Compare the core contraction to turning on a light switch; it's turned on, but not forceful.

Prone Core Activation

• Do 5 reps of a 10 count hold



Supine Core Activation



• Do 5 reps of a 10 count hold

b) Postural Activation

Good posture is important for everyone. However, it is especially important to gymnasts not only because of the aesthetic demands of the sport, but also because of posture's effect on shoulder girdle strength. Strength and stability in a gymnasts shoulder are essential for all events. In the simplest terms, posture refers to the body's position during the entire range of any movement from start to finish. Postural activation exercises help the athlete to be able to maintain ideal posture – and often focus on the ideal curvature of the spine and position of the shoulders relative to the spine. Below is a sample postural exercise that you will see in

Phase 1.

Floor Flatteners

- Lie on the ground with knees bent, low back pressed into the ground
- Place arms in line with shoulders at 90 degrees, with forearms and wrists in contact with the ground
- Set the shoulders "down and back"
- Maintaining forearm ground contact, slide the elbows up and down along the ground aiming to touch
 the thumbs to the shoulders without lifting the wrists or low back off the ground



c) Plyometrics/Agility

The maximum force that a muscle can develop is attained during a rapid eccentric contraction. However, it should be realised that muscles seldom perform one type of contraction in isolation during athletic movements. When a concentric contraction (muscle shortening) occurs immediately following an eccentric contraction (muscle lengthening) then the force generated can be dramatically increased. If a muscle is stretched, much of the energy required to stretch it is lost as heat, but some of this energy can be stored by the *elastic* components of the muscle. This stored energy is available to the muscle only during a subsequent contraction. It is important to realize that this energy boost is lost if the eccentric contraction is not followed immediately by a concentric effort. To express this greater force the muscle must contract within the shortest time possible. This whole process is frequently called the stretch shortening cycle and is the underlying mechanism of plyometric training.

So much of gymnastics performance is reliant on this plyometric or explosive action of muscle. Tumbling, vault, certain bar work and beam tumbling/choreography all use this type of muscle action. Research has shown the body can perform more explosively if the nervous system is "primed" up with simple, easy to recover from, plyometric activation exercises. In the field of Strength and Conditioning, this type of activation exercise is referred to as agility.

Refer to each phase for specific agility exercises.

OVERVIEW OF HOW TO USE THIS MANUAL

What follows is a set of 6 Phases of Strength and Conditioning guidelines to help guide coaches as to what elements of strength and conditioning they should incorporate into their athletes' days and weeks depending on the time of season.

The GENERAL WARM-UP and DYNAMIC STRETCHES the athletes perform before each practice can be at the coach's discretion (but based on the recommendations in the previous section) and do not need vary too much from phase to phase in the athletes' season. Refer to the appendix for an updated Dynamic Stretching guide.

Post-season	Early Off-Season	Late Off-Season	Pre-Season	In-Season
June	July- August	Sept-October	Nov – Dec	Jan – May
Phase 1	Phase 2	Phase 3	Phase 4	Phases 5 and 6

In this manual *for each of the above phases*, coaches will find an all-encompassing Strength and Conditioning guideline that provides direction for the following:

- 1) Two different options for the ACTIVATION stage of their athletes' warm-up (core, postural and plyometric activation)
- 2) Day-by-day guideline of what Strength and Conditioning exercises should be included within each of the gymnasts training sessions or post-training session, balancing each of the following:
 - a. Injury preventative exercise routines (core, posture, ankle "pre-hab") and preparatory "Functional Conditioning" routines to establish good movement patterns and to ready athletes to handle the loads in later phases/parts of the season
 - b. Injury preventative flexibility exercises often overlooked in typical gymnastics programming

In later phases coaches can find direction of when to incorporate:

- c. Aerobic and anaerobic conditioning
- d. Strength and Power training
- e. Recovery exercises

*****REFER TO APPENDIX 2 FOR THE "MONTH AND WEEK GUIDELINES FOR EACH PHASE" TO PLAN HOW TO INCOPORATE THE RECCOMMENDATIONS INTO WEEKLY LESSON PLANS.

PHASE 1-Post Season (June) Functional Conditioning

- 2 wk Recovery recommended Post-Competitive Season....then:
- Ankle, low back pre-hab
- Core and postural activation and endurance
- Injury specific flexibility

****Refer to Appendix 2 for weekly overview of Phase 1

PHASE 1-Post Season (June) Functional Conditioning

Activation Phase 1- (Pre-Training Session ~ 5min) **Option 1-** Perform 1 set each **BEFORE** training session, following dynamic warm-up

dynamic warm-up	
EXERCISE	DESCRIPTION
Face up Kegels	 Contract the pelvic floor muscles as if trying to "stop the flow" during urination Draw belly button in and up towards the spine Perform normal breathing during movements Do 10 sets x 10 count hold
Floor Flatteners	 Lie on the ground with knees bent, low back pressed into the ground Place arms in line with shoulders at 90 degrees, with forearms and wrists in contact with the ground Set the shoulders "down and back" Maintaining forearm ground contact, slide the elbows up and down along the ground aiming to touch the thumbs to the shoulders without lifting the wrists or low back off the ground
Double Leg Hamstring curls	 Lay on back with feet up on top of ball. Set core (kegel and belly button in) Lift hips off ground. Maintaining hip height, roll the ball towards the bum using hamstrings Repeat 20 reps

Pen Penny Arch creation

5x 10 sec each foot

- Have athlete stand on floor with penny or quarter under the pad of their big toe and the tip of a pen slid just into the arch of their foot
- Instruct the athlete to maintain pressure on the coin while lifting the arch just high enough to clear the pen.
- Keep pressure off the pen for 10 sec and repeat 5x, then repeat on the opposite foot







Activation Phase 1 (Pre training Session~ 5min) – Option 2- Perform 1 set of each BEFORE training session			
EXERCISE	DESCRIPTION		
Prone Kegels	 Lie face down and contract the pelvic floor muscles as if trying to "stop the flow" during urination Draw belly button in and up towards the spine Perform normal breathing during movements Do 5 reps of a 10 count hold 		
Push-up Plus	 Begin on all fours with hands directly under shoulders, fingers pointing forwards, elbows firm but not locked out, elbow "pits" facing one another Allow the shoulder blades to "collapse" together, then pushing out of the hands, "spread" the shoulder blades apart and hold for a count of 3 (this end position is the "proper" position for push-ups and any planking form. Perform 10-20 reps To progress, perform exercise from a full push-up position 		

Lay face down on ball, chest off ball slightly. T's and Y's Set shoulders down and back. Maintaining shoulder "set" and with straight arms, lift arms up in line with shoulders. Repeat 20 reps and then repeat entire set of 20 with thumbs positioned down. Lie face down on the ball with shoulder blades retracted and core activated With thumbs up and straight arms extended in a "Y" position, perform small pulses up and down, moving from the shoulder joint Repeat 20 reps Set core and bridge the hips off the ground. Single Leg Heel Maintaining hip height and hips level with Bridge one another, lift one foot off the ground. Replace the foot keeping pressure through the heel. Alternate feet and repeat 20 times

Ankle Pre-Hab DURING Training Session: (2-3 days/wk)

In between turns, have athletes "walk" each of these movements over 15 meters or for about 30 steps each. Once athletes have completed one set of each "walk" instruct athletes to skip rope for a total of 100reps. (30 reps both feet, 60 reps alternated foot and 10 double-unders). Complete by stretching and foam/ball rolling the calves and use the stick for all your shin muscles and the foam. If this program is used for rehabilitation purposes, your trainer/coach will tell you which movements to avoid at the beginning.



Toes curled up



Toes curled down



Tip toes



On the heels



Toes in



Toes out



Inversion (outside of feet)



Eversion (Inside of feet)



Toe flex to toe point (in the air)





Power foot slap





Step and ankle roll



Skip



Stretch & stick/active release

Phase 1: Functional Conditioning – 2 days/wk –POST TRAINING Session

Perform 2-3 sets of each exercise in circuit style (A,B,C,D,E,F,G etc., then repeat 1-2x's)

EXERCISE

DESCRIPTION

A. Sumo/Frog squat with arm reach over head

3-6 reps

- Athlete "frog" squats down, dropping hips as low as possible, with chest up and flat back, shoulders pulled "down and back"
- Athlete can use elbows to keep knees tracking in line with toes which should be straight ahead or with only a slight turn out
- Aiming to maintain lower body position, slowly raise one arm above head and slightly to the side. Return arm back to start position and repeat on other side
- With good posture, stand back up, then return to "frog" and repeat movement starting with other side.
- If body position can be well maintained, to progress, Raise one, then the other arm above head then stand up.













Then stand back up with good posture and repeat sequence

B. Hand Release Push-ups

8-12 reps

- Set shoulders and core, then perform a typical "push-up"
- Lower the body right down to the floor
- Squeeze the shoulder blades, lift the hands off the floor and hold for 2-3 sec





Replace hands, reset core and push back up into start position Lean up against a wall and bend knees C. Wall flattener slightly, such that the back is 2-3 x 20 reps completely flat against wall Put the arms in a "stick em up" position and flatten the forearms and wrists against the wall Without letting the back arch and keeping arms/wrists pressed against the wall, slide the arms up and down in Easier option: Floor Flatteners as big a range of motion possible Repeat 20 reps If athlete unable to perform with good form, do floor flatteners instead Begin in a split stance, feet shoulder width D. Lunge apart, weight loaded through front heel Lunge straight down maintain upright posture until back knee is 0-5cm of the ground Repeat 12-20 reps each leg

E. External Shoulder Rotations 15-20 reps	 Hold tube in hands with palms up, elbows close to sides Set shoulders down and back. Initiating the movement from between the shoulders, externally rotate the arm such that the hands reach back in line with the sides of the body. 	Plyoplation
H. Seated heel raise (soleus) 10-15x's 2 sec hold	Find a seat that allows athlete to sit with thighs parallel to ground. Raise heels as high as possible ensuring straight path and hold at top for 2 seconds Repeat 10-15x's	
G. 2 leg heel raise (calves) 15-20 reps	 Athlete stands on an elevated surface (i.e. beam) with heels extended off where they are able to lean against an object for balance assistance Athlete slowly raises as high as possible, keeping heel in line with second toes (not letting ankles collapse in or out) Repeat 15-20x 	

H. Superwoman Athlete starts on all fours, with hands under shoulders, knees under hips, and flat back Athlete draws belly button in, performs Kegel then lifts opposite arm and leg and holds for count of 3. Lower, release Kegel, reset Kegel, then repeat on opposite side repeat 10 reps Bridge hips off the ground and extend one I. Single Leg Hip leg such that knees are side by side Drop Drop the hip of the extended leg slightly, then return to the start position 20 reps Repeat 20 small hip drops Athlete should feel the back of the supporting leg working, but not the low back ****If athlete feels low back, simplify exercise such that athlete bridges with single leg extended and holds that position for 5 secs (no hip drop) then alternates leg. When they can perform 10/side they can try the single leg hip drop again

Injury Prevention Flexibility/Recovery Phase 1 2 days/wk - Post Training Session + suggest giving to athletes as HW sheet to do independently all stretches they can do at home

Thomas Stretch 2-3 sets each leg 1 min each

- Place a light ankle weight (2-4lbs) on one ankle
- Lie on back with the tailbone at the edge of a firm elevated platform with one knee bent to the chest and the other leg (with the ankle weight) dangling down
- If necessary have a coach or partner push the dangling knee inward such that it is in line with the hip (out flaring foot indicates tight IT bands)
- Hold the mild stretch for 1 min, making sure the low back stays in contact with the platform at all times
- Alternate and repeat 2-3x's/leg

Thomas Stretch



Quad and IT band rolls on foam roller

1-3 min each leg

- Using a foam roller, lie on the side of leg, supporting body weight with the arm, keeping the core tight
- Roll vertically up and down the foam in 10cm sections along the IT band (side of the leg)
- Within each 10 cm section, also do small horizontal rolls (or cross "fibreing") across the side of the leg.
- Option to also repeat the rolls across the front of the thigh
- Roll along the entire length of the muscle stopping just above the knee joint
- Should feel like a deep tissue massage, i.e.
 "a good hurt"











Calf and soleus Calf stretches Calf stretches stretch There are many calf stretching options. Choose 1-2 of your favorites and stretch for 30-60 sec each leg. Some options are shown to the right. 30-60 sec each Soleus stretch Place hands on wall for support and stagger Soleus stretch legs. Keeping heel on the ground, bend the back knee until a pain-free stretch is felt along the back of lower leg. Press into the wall shifting resistance into the back leg to increase stretch. Hold 30-60 sec each leg Key points: Lying quadriceps Have athlete lie in fetal position before stretch grabbing top leg into stretch to ensure back stays neutral Keep knee in line with the hip. Lie on back with one foot up against the Lying wall, and the opposite ankle crossed over glute/piriformis the knee Stretch Push the knee away from the body until feel a comfortable stretch in the hip (piriformis) To increase the stretch, move bum closer to wall, but always ensure the hips are in contact with the ground. To stretch the gluteals, pull the top knee toward the body. Move closer to the wall if necessary.

T-spine ROM over ball 10 sec holds for 1-2 min	 Place a 10-20cm diameter ball (very firm, but some give to it) at shoulder blade level with bum resting on the ground, and hands supporting head, elbows flared Attempt to extend the thoracic spine back over the ball and hold position for 10 sec. Do not let athlete bend from lumbar spine by maintaining abdominal engagement Move the ball very slightly up or down and repeat the process. Have the athlete repeat 10 sec holds in different positions for 1-2 min.
Basic lat stretch (child's pose and reach) 30 sec in each of 3 positions	 Kneel with weight of bum stacked over heels Walk hands as far forward as possible until feel stretch in lats Keeping the hands stretched far, walk the finger tips over to one side and hold for 30 sec. Repeat on opposite side.

PHASE 2-Early Off Season (July-Aug.)Functional Conditioning 2

- Core and postural endurance, ankle pre-hab
- Hip, knee and back stability via lower body movement patterns
- Agility/Fast twitch development
- Aerobic base
 - ****Refer to Appendix 2 for weekly overview of Phase 2
- Injury specific flexibility

Activation: Phase 2 -(Pre-Training Session ~ 5min) Option 1			
Perform 1 set of each	Perform 1 set of each exercise BEFORE training session		
EXERCISE	DESCRIPTION		
Core activation with rib control with arm reach OH 5-10 reps	 Lie on back with knees bent, hands on lower ribcage, low back gently pressed into ground Take great big inhale, feeling ribs rise and "exhale belly button to spine," maintaining shoulders back Maintaining rib cage position and core activation, reach arms overhea R, L, lower R, L and then reverse. Repeat 5-10x 		
3-way-T's and Y's 15 reps each	 Lie face down on ball, lift chest off ball slightly. Set shoulders down and back. Maintaining shoulder "set" and with straight arms, lift arms up and down about 10 cm with thumbs up. Repeat 15 reps, relax arms, re-set position and then repeat entire set of 15 with thumbs positioned down. Relax arms, re-set shoulder position and repeat entire set of 15 with arms in Y position 		

Superwoman 10 holding for three count	 Athlete starts on all fours, with hands under shoulders, knees under hips, and flat back Athlete draws belly button in, performs Kegel then lifts opposite arm and leg and holds for count of 3. Lower, release kegel, reset kegel, then repeat on opposite side repeat 10 	
Agility- Front/back hops 20 secs x 2-3 sets with 45 sec recovery	 Stand at a line on the floor Staying on the balls of feet jump forwards and backwards over top of the line as quickly as possible, minimizing ground contact time Repeat 2-3 sets of 20 secs with 45 sec recovery in between Actively stretch calves/shins during rest period 	

Activation: Phase 2 (Pre training Session~ 5min) – Option 2
Perform 1 set of each of the following exercises BEFORE training session

EXERCISE DESCRIPTION

Prone Kegels

• Lie face down and contract the pelvic floor muscles as if trying to

"stop the flow" during urination

• Draw belly button in and up towards the spine

• Perform normal breathing during movements

Do 5 reps of a 10 count hold



Pen penny arch Get athletes into partners about 8-10 ft creation away from one another and ball toss to Have each athlete stand on floor with partner penny or quarter under the pad of their big toe and the tip of a pen slid just into the arch of their foot 10-20 tosses each Instruct the athletes to maintain pressure foot on the coin while lifting the arch just high enough to clear the pen. While concentrating on proper foot position, have athletes toss a ball back and forth to one another Repeat on each foot **Mountain Climber** Set up in push-up position on ball, kegel on Ball activated, belly button pulled up. Maintaining straight arms, drive the knee, 20 reps alternating followed by the toe to the ball. Roll the ball athlete must maintain neutral spine and core activation throughout movement Repeat 10 reps on each leg (20 total) Single Leg Heel Set core and bridge the hips off the ground. Bridge (repeating) Maintaining hip height and hips level with one another, lift one foot off the ground. 15-20 x each leg Replace the foot keeping weight through Repeat 15-20 times on one leg. Lower, hips, reset position by bridging back up, then repeat 15-20 times with alternate leg.

Agility- Side-Side hops

20 secs x 2-3 sets with 45 sec recovery

- Stand at a line on the floor
- Staying on the balls of feet jump forwards and backwards over top of the line as quickly as possible, minimizing ground contact time
- Repeat 2-3 sets of 20 secs with 45 sec recovery in between
- Actively stretch calves/shins during rest period





Ankle Pre-Hab DURING Training Session

In between turns, have athletes perform 1-2 sets of each of the following Ankle Pre-hab exercises **Athletes should have at least 1 min recovery after any of these before performing on the trampoline again.

EXERCISE	DESCRIPTION	
Ankle windshield wipers 10-15reps	 Sit on chair/block that allows knees to be bent at approx. 90deg Place fists side by side between knees Maintain heel contact and "windshield wipe" toes in and out Repeat 10-15x 	
Ankle pronator supinators 10-15 reps	 Same set up as above Roll weight to the outside border of the foot, then to the inside border of the foot without losing fist contact with knees Repeat 10-15x 	
Bent knee heel raise (soleus) (standing) 15-20 reps	 Stand in front of an object (i.e. beam) approximately chest height. Maintaining slight knee bend throughout movement, raise heels as high as possible ensuring straight path and hold at top for 2 seconds. Knees stay at a constant degree of bend throughout and focus of movement is at ankle joint. Repeat 15-20x's 	

1 leg heel raise (calves)

15-20 reps each

- Athlete stands on an elevated surface (i.e. beam) with heels extended off where they are able to lean against an object for balance assistance. Balance on one foot.
- Athlete slowly raises as high as possible, keeping heel in line with second toes (not letting ankles collapse in or out)
- Repeat 15-20x





Active release of calf area foam roll

1-2 min each calf

- Place the top of one calf on a foam roller and lift bum off ground, displacing weight to calf
- Roll vertically up and down the foam roller in small sections along the calf
- Within each section, also do small horizontal rolls (or cross "fibreing")
- Flexing and pointing ankle will also increase active release of area
- Should feel like a deep tissue massage. i.e. a "good hurt"









Advanced position





Phase 2 Functional Conditioning 2 POST TRAINING Session ~ 30-40min Ideally 2x's per week (not consecutive days)

Perform 2-3 sets of **12-20** reps of each exercise as indicated. The last 2-3 reps of each set should be quite challenging, but athlete should still be able to perform with good form. **Superset** exercises as indicated.(i.e. A1, dynamic stretch, A1, dynamic stretch, B1, B2, B1, B2, B1, B2, then move onto C1,C2,C1,C2,C1,C2....etc)

EXERCISE	DESCRIPTION	
A1. Drop Jumps (12 reps, dynamic stretch 1 min) x3	 From one foot, step or drop off a beam 2-3ft in height, landing on toes (keep heels off the ground). Keep knees hip distance apart and hold landing for 2-3 seconds. Repeat 12 reps Dynamic stretch for 1 min, then repeat set another 2 times 	
B1. Ball Push-ups	 Place hands on ball, with shoulders and core set. Maintaining flat back, bent elbows into push-up as far as athlete can maintain good form. Repeat 15-20 reps. 	Level 1 – hands on ball Level 2 – toes on ball Don't let lower back arch
B2. Hands behind head squat in front of wall (low back, ankle) 10-20 reps	 **Before placing athletes in front of wall, they should understand how to do a proper squat Have athletes stand 10cm-20 in front of wall with bench/box placed behind them. (closer is better and harder!) Have athletes "set their core" and interlock fingertips behind head Athletes sit down as low as possible aiming to sit down on box without touching the 	

	 wall or shifting to one side. Perform 10-20 reps of squats ensuring arch doesn't collapse, foot stays pointed forwards. Allow knees to drive outwards, but not to collapse in. 	
C1. Jack Knives 20 reps	 Start in a push-up position with toes on top of a Swiss ball. Raise hips up slightly Pull knees towards chest and return to start position. Do not let low back arch Finish with shoulder, hip, and knee in a straight line * to increase difficulty, extend plank position at bottom of movement and alternate jackknife with pike 	**into pike to increase difficulty
C2. Walking Lunges 20-30 alternating steps	 Stand tall with good posture Take one large step forward into a lunge, aiming to get back knee 0-5cm off the ground. Pause just long enough to make sure "chest is still tall," front knee is not collapsed and front foot is fully planted on the ground Simultaneously "pull" with the front leg and push off the back leg to step forward with the other foot Repeat, alternating steps until you have performed 20-30 reps 	

D1. Ham Curls with Hip Lift 20 reps	 Lay on back with feet up on top of ball. Set core (kegel and belly button in) Lift hips off ground. Maintaining hip height, roll the ball towards the bum using hamstrings. When the heels as close to the bum as possible, bridge the hips higher Slowly let hips drop as you straighten the legs Repeat for 20 reps 	
D2. Betty Boops 20 reps each	 Balance on a low beam on one leg keeping the opposite foot off the ground throughout exercise. Keeping the supporting knee straight, "hike" the opposite hip up, then drop the hip back in line with the other hip bone. Keep the movement in the vertical plane. The movement itself is quite small and if initiated properly, should be felt in the supporting hip muscle Perform 20 reps each leg 	
D3. Floor Flatteners 15-20 reps	 Lie on the ground with knees bent, low back pressed into the ground Place arms in line with shoulders at 90 degrees, with forearms and wrists in contact with the ground Set the shoulders "down and back" Maintaining forearm ground contact, slide the elbows up and down along the ground aiming to touch the thumbs to the shoulders without lifting the wrists or low back off the ground. If athlete finds too easy, feel free to progress to wall flattener 	





wall flattener option

Aerobic Base Phase 2 Post Training Session ~10-12 min – Aerobic Base – 2x's per week

DESCRIPTION

- Option 1
- Athletes do an easy jog 3 corners of floor mat then perform easy "tumbling pass" of coach's choice relative to athlete's skill x OR repeat long jumps 5
- 30 tucks jump on thick crash mat
- 20 med ball slams
- Athletes should feel as if they are working at a level 6-7 on a 1→10 scale
- Repeat for 10-12 min
- Option 2
- 12-20 min bike or jog at continuous pace
- Athletes should feel as if they are working at a level 6-7 on a 1->10 scale
- Should be able to carry on a conversation while they work but have an audible catch in their breath





Injury Prevention Flexibility/Recovery Phase 2 minimum 2 days/wk - Post Training Session + suggest giving to athletes as HW sheet to do independently all stretches they can do at home

Thomas Stretch 1-2 min

- 2-3 sets each leg
- Place a light ankle weight (2-4lbs) on one ankle
- Lie on back with the tailbone at the edge of a firm elevated platform with one knee bent to the chest and the other leg (with the ankle weight) dangling down
- If necessary have a coach or partner push the dangling knee inward such that it is in line with the hip (out flaring foot indicates tight IT bands)
- Hold the mild stretch for 1-2 min, making sure the low back stays in contact with the platform at all times
- Alternate and repeat 2-3x's/leg

Thomas Stretch



Lat active release lev 1 (standing)

- 1-2 min each side
- Straighten arm overhead and place soft-ball on an area of "stiff" lat tissue. Pressure your weight into ball to pin in place
- "Pressure wave" from side to side, bend and straighten arm and contract and relax the lat; each which will help to release the lat
- Spend some additional time pulling the top arm into a tricep stretch and holding for 15-30 sec





Basic lat stretch (child's pose and reach) 30 sec in each of 3 positions	 Kneel with weight of bum stacked over heels Walk hands as far forward as possible until feel stretch in lats Keeping the hands stretched far, walk the finger tips over to one side and hold for 30 sec. Repeat on opposite side.
IT band and Quad rolls on foam roller 1-3 min each leg	 Using a foam roller, lie on the side of leg, supporting body weight with the arm, keeping the core tight Roll vertically up and down the foam in 10cm sections along the IT band (side of the leg) Within each 10 cm section, also do small horizontal rolls (or cross "fibreing") across the side of the leg. Repeat the rolls across the front of the thigh (quads) Roll along the entire length of the muscle stopping just above the knee joint Likke a deep tissue massage, "a good hurt"
"Couch" stretch 30-60 sec each position	 Place one knee (on padded surface) as close to a wall as possible, with the shin extending up the wall, hands supporting you on the ground Bring the opposite leg forward into a kneeling position For 30 sec, keep hands on the ground and drop back hip towards the ground by squeezing the back glute, effectively stretching the hip flexor. For the next 30 sec, bring the hands up off the ground and place on front thigh, aiming to be as tall as possible, and contract the back glute again. Stretch should be felt in the back quad.

Lie on back with one foot up against the Lying wall, and the opposite ankle crossed over glute/piriformis the knee Gently push the knee away from the body Stretch until feel a comfortable stretch in the hip (piriformis muscle) To increase the stretch, move bum closer to 1 min each wall, but always ensure the hips are in contact with the ground. To stretch the gluteals, pull the top knee toward the body. Move closer to the wall if necessary. Seated twist Sit on a mat on the floor with one leg extended straight out in front of you and the other leg up crossed over the top of that outstretched leg. 5 breaths each side Sitting tall, weave the opposite elbow up and over the crossed leg aim and look straight back behind you. Use the elbow bracing against the knee to provide leverage into the stretch. Hold for 5 breaths, aiming to get taller on the inhale, and twist deeper if able on each Repeat with the opposite side. Seated spine Sit tall with both legs extended in front of extensor stretch you and hands behind head with slight chin tuck Roll down one vertebrae at a time aiming 5 deep breaths first to "touch nose to belly button", then gently guide the head down towards the thighs Return to start position, inhale and exhale as you repeat the stretch. Repeat 5 x's

Calf and soleus stretch

30-60 sec each

Calf stretches

There are many calf stretching options.
 Choose 1-2 of your favorites and stretch for 30-60 sec each leg. Some options are shown to the right.

Soleus stretch

- Place hands on wall for support and stagger legs. Keeping heel on the ground, bend the back knee until a pain free stretch is felt along the back of lower leg. Press into the wall shifting resistance into the back leg to increase stretch.
- Hold 30-60 sec each leg

Calf stretches







Soleus stretch





PHASE 3-Late Off Season (Sept-Oct)Performance Conditioning

- Maximize strength
- Power development
- Anaerobic system development
- Aerobic Maintenance
- Injury prevention flexibility
- Athlete specific flexibility (as dictated by coach)

****Refer to Appendix for weekly overview of Phase 3

Activation Phase 3 -(Pre training Session~ 5min) - Option 1				
Warm-up, Dynamic St	Warm-up, Dynamic Stretch followed By:			
EXERCISE	DESCRIPTION (elastic Prep -hip and shoulder stability)			
Inner Thigh/Hamstring and Core Twists on ball 10 reps (there and back =1)	 Lie on back with feet on top of ball Open legs and grip ball (1/4-1/3) of the way down with calves Bridge hips up making sure knees ALWAYS point up to the ceiling, slowly twist back and forth initiating the movement with core and hips 			
F2. Crab Walks 20 "stomp walks" each direction	 Place small tube/band around ankles. Slightly pigeon toe in and load weight through the heels Keeping knees in line with the hips perform 20 lateral "baby stomps" (crab walks) in one direction Perform 20 reps walking in the opposite direction Exercise should be felt in the upper and lateral bum muscles (glute medius) 			
Pen penny arch and twist reach to touch wall	Have athlete stand on floor with penny or quarter under the pad of their big toe and the tip of a pen slid just into the arch of their foot and back about 10 cm away from wall			



10 touches each foot • Instruct the athlete to maintain pressure on the coin while lifting the arch off the pen, standing on a single leg Keep pressure off the pen and twist upper body and reach one arm at a time to touch the wall behind you. Perform 10 wall touches on each foot Using chalk or tape, make 4 visible markers **Agility 4 Square** on the floor in a square pattern Clocks start on one marker and as quickly as possible jump on each marker in the square 10 "squares" pattern. Goal is to move as quickly as possible, minimizing ground contact time, staying on the balls of the feet. Keep core in tight and complete 10 full "squares" To increase difficulty, change directions upon the "completion" of each square

Activation: Phase 3 (Pre training Session~ 5min) – Option 2

Warm-up, Dynamic Stretch followed by one set each of:

EXERCISE

DESCRIPTION

Perform a "mountain climber" (push-up position, knee touch, toe touch to the ball), then pivot 90 degrees on supporting foot and kick the leg forwards.

Pivot back to the start position and alternate sides

Prepeat 10-20reps



Keep the athlete back to the basic "mountain climber" if they cannot maintain form throughout the movement Butterfly Lie face down on the ball With the hands by the hips, lift the upper back off the ball and "open through the 15-20 reps shoulders" Set the shoulders down and back and sweep the arms in a full circle, then let the chest drop back down to the ball. The movement should look like the butterfly stroke in swimming Repeat 15-20 reps using chalk or tape, make 3 marks on the Front/Back Side/side floor about a foot apart, making an "L" on "L" hop the floor Minimizing ground contact time and staying on the balls of the feet jump "front, back, (10 "L" jumps each side, side" in the L pattern Repeat movement pattern 10x, then repeat direction, dynamic in the opposite direction stretch calves 30-45 dynamic stretch calves for 30-45 sec, then repeat sec) x2



Ankle Pre-Hab Phase 3 POST or DURING Training Session

Have athletes perform 1-2 sets of each of the following Ankle Pre-hab exercises. If athletes are performing these during training session, make sure they have at least 1 min recovery prior to their turn on the trampoline.

Level 1 Seated resisted dorsiflexion, **Eversion/Inversion**

10-15 reps each

movement

Level 1 - Seated

Sit with foot elevated on foam roll with elastic attached to foot so resistance is in line with leg. Pull the toes towards face. Resistance should be tight enough so 10-15 reps is challenging. (Dorsiflexion)

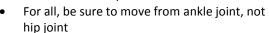
Seated dorsiflexion

Seated

eversion

Seated inversion

- Change positions so elastic tension is perpendicular to leg and attached to foot furthest away from resistance. Attempt to "turn" ankle so bottom of foot faces out. (eversion). Perform 10-15 reps
- Stay in same position but switch band to inside ankle. Attempt to turn ankle so bottom of foot faces other leg. (Inversion). Perform 10-15 reps



Repeat entire sequence on opposite ankle.





Standing eversion

Level 2 Standing resisted

**Choose ether Lev 1 OR

eversion/ **Inversion**

Lev 2

10-15 reps/leg

- Perform the eversion/Inversion exercises as above but
- Perform standing, balancing on one leg. Leg with the resistance tube is the nonstanding leg.
- 10-15 reps/leg

Level 2- Standing

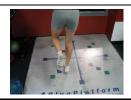




Standing inversion

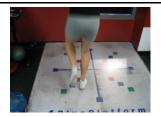
Single leg square cover hops

- Make a single small chalk or tape mark on the floor
- staying on a single leg perform small little jumps, aiming to stay directly on the square





goal is accuracy and control of landing not speed repeat on opposite leg dynamic stretch calves for 30-45 secs and repeat



Performance Conditioning Phase 3 (Maximize strength, develop power)

- Post Training Session 20-30min 2x's per week (not consecutive days)
- Perform 2-3 sets of **12 reps** of each exercise unless otherwise indicated. Last 2-3 reps of each set should be quite challenging, but athlete should still be able to perform with good form. Superset exercises as indicated.(i.e. A1, A2, A1, A2, B1, B2, B1, B2, B1, B2, then move onto C1,C2,C1,C2,C1,C2....etc)

EXERCISE	DESCRIPTION	
A1. Drop Jump into vertical Jump 2 x12 reps	 From one foot, step or drop off a beam 2-3ft in height, land and rebound into a vertical jump. Goal is to minimize ground contact and rebound as quickly and high as possible 	
A2. Ball Slams 2x12 reps	 Using a bouncy 4-8lb medicine ball, lift ball up over top of head and slam it down onto the ground using equal parts, arms, legs and core. Repeat slams 20x aiming for consistent and powerful rhythm. 	

B1. Single Leg Squat 3x12 reps

- Balance on a single leg and keeping a flat back, push hips backward to "sit" until thighs are parallel to the ground
- Do not let knee of supporting leg push past toe and do not let knee collapse inward (keep knee in line with hip)
- Repeat 12 times on one leg, then switch a repeat reps



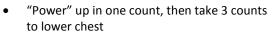
B2. Push-up plus (8 reps) followed by position rocks

a) BOSU flat side

Rocking 10-20 sec

each side of BOSU

- b) BOSU squishy side
- Place hands at edges or on top of BOSU (flat side up)
- Pushing out of the hands with straight elbows, "spread" the shoulders blades apart and hold positioning through exercise.
- Perform an push-up, dropping chest ideally right down to the BOSU.



- Perform 8 reps
- After the 8 reps, gently rock the BOSU forward/back and side to side for 10-20 sec.











C1i. Dumbbell Squat 3x12reps

**Consider Goblet

Squat Option (see

below)

- With good posture, hold dumbbells at side of body
- Keeping weight through the heels, chest up and knees behind toes, sit backwards as if sitting in a chair until thighs are parallel to the ground.
- Perform the movement 2 counts down and 2 counts up.
- Be sure not to let the knees collapse inwards
- Choose a weight heavy enough so that the athlete is very challenged within the last few





	reps of the set, but such that good form can be maintained throughout the set ****To change up exercise OR if you do not have heavy enough weights do Goblet Squat option
C1.ii Goblet Squat Option	 Grasp single dumbbell at sternum level (breast bone) holding tight against bottom Set shoulders down and back, engage core Maintaining dumbbell position, sit hips back into as deep a squat as possible, keeping knees behind toes Take 2-3 seconds down and 2 seconds to come back up
C2. Pikes 3x12 reps	 Start in a push-up position with toes on top of a Swiss ball with a flat back Using the lats (muscles under arms) and core, with straight legs pull the toes towards the hands and lift the bum up Return to start position with shoulder, hip, and knee in a straight line Repeat 12x taking 2 counts up, and 2 counts down * To increase difficulty, add shoulder push-up at top of movement

D1. Single Leg Hamstring Curl 3x12reps	 Lay on back with feet up on top of ball. Set core (kegel and belly button in) Lift hips off ground and kick one leg in the air Maintaining hip height, roll the ball towards the bum using hamstring. Repeat for 12 reps then alternate to opposite leg **Slow tempo on extension if 12 reps too easy (2-3 counts in, 2-3 counts out)
D2. Pull-up 3x 8-10-reps	 Hang off the bar and set the shoulders down and back Perform a chin-up Use band assistance if required
E1. Wall flattener 2-3 x 20 reps	 Lean up against a wall and bend knees slightly, such that the back is completely flat against wall Put the arms in a "stick em up" position and flatten the forearms and wrists against the wall Without letting the back arch and keeping arms/wrists pressed against the wall, slide the arms up and down in as big a range of motion possible Repeat 20 reps
E2.Core activation with rib control with arm reach overhead and legs extended 2-3 x 5-10 reps	 Lie on back with knees bent, hands on lower ribcage, low back gently pressed into ground Take great big inhale, feeling ribs rise and "exhale belly button to spine," maintaining shoulders back Maintaining rib cage position and core activation and reach arms overhead R, L, then extend R leg, L leg and one by one return limbs back to start position. Repeat 5-10x



E3. Cobra Hold 2-3 x 60 sec hold	 Lie face down with toes pointed, legs slightly spread and belly button pulled off the ground Keeping the eyes down, "lift and lengthen" the upper spine and pull the arms back with thumbs rotated towards the sky Hold for 60 secs Have athletes try to focus on thoracic extension more that lumbar extension 	

Anaerobic Development Phase 3: Post Training Session ~10-12 min 2x/ week (not consecutive days)					
DESCRIPTION					
Option 1 –11- 14min Bike Sprints- **during work		Time	Resistance	Intensity on 1→10 scale	RPM
intervals keep resistance such	Warm-up	2min	light	5-6	70-80
that athlete can keep RPM's	Work interval 1	1min	moderate- hard	9	90-100
between 90-100.	Recovery	1min	light	5-6	70-80
	Work interval 2	1min30	Moderate-hard	9-10	90-100
WK-1-3– 3 Work intervals	Recovery	1min30	light	5-6	70-80
	Work interval 3	1min	moderate- hard	9-10	90-100
WK 4-8 – 4 Work intervals	Recovery	1min	light	5-6	70-80
	Work interval 4 (wks 4-8 only)	2min	moderate-hard	9-10	90-100
	Recovery/Cool-	3 min		4-6	65-80



Option 2 –

Shuttle run on floor mat

-Jog warm-up 2-3 min around outside of floor mat

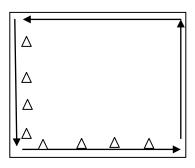
-Have athletes run/sprint at an intensity they can maintain for 45 sec in the pattern shown in diagrams A and B (i.e. sprint corner to corner, down one side of the floor, then shuttle around 4-5 cones. Repeat again in alternate direction)

-Intensity during the 45 sec should be a 9-10 on A $1 \rightarrow 10$ scale.

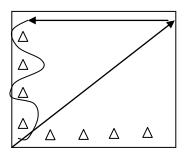
-walk/jog recovery easy around the outside of the floor mat for 90 sec (diagram C)

-Repeat entire sequence 3 x's

-*****After 3rd week, increase sprint/shuttle interval to 60 sec -****At week 5 increase sprint shuttle interval to 75sec A A A A A A



В



С

Jog recovery around outside of floor. Have athletes change direction after each lap.



Aerobic maintenance Phase 3 Post Training Session ~10-12 min – Aerobic maintenance 1x/ week

DESCRIPTION

Option 1

- Athletes do an easy jog 3 corners of floor mat then perform easy "tumbling pass" of coach's choice relative to athlete's skill x 5 OR repeat long jumps across the mat
- 30 tucks jump on thick crash mat
- 20 med ball slams
- Athletes should feel as if they are working at a level 6-7 on a 1→10 scale
- Repeat for 10-12 min







Option 2

- 12-20 min bike or jog at continuous pace
- athletes should feel as if they are working at a level 6-7 on a 1->10 scale
- should be able to carry on a conversation while they work but have an audible catch in their breath

Injury Prevention Flexibility/Recovery Phase 3 minimum 2 days/wk - Post Training Session + suggest giving to athletes as HW sheet to do independently all stretches they can do at home

Hip distraction hip flexor stretch

Attach a wide very strong resistance band to a pole about 2ft off ground.

30-90 sec each side

- Step through the band with one leg and pull the band as high as possible up the thigh, resting just below the glute muscle.
- Step back into a kneeling lunge stretch position, so a fair bit of tension is felt from the band.
- Slightly posteriorly tilt the pelvis to increase the hip flexor/quad stretch and to prevent hyperextension of the back.
- Hold for 30-90 sec then switch sides.





"Couch" stretch

30-60 sec each position

- Place one knee (on padded surface) as close to a wall as possible, with the shin extending up the wall, hands supporting you on the ground
- Bring the opposite leg forward into a kneeling position
- For 30 sec, keep hands on the ground and drop back hip towards the ground by squeezing the back glute, effectively stretching the hip flexor.
- For the next 30 sec, bring the hands up off the ground and place on front thigh, aiming to be as tall as possible, and contract the back glute again. Stretch should be felt in the back quad.





Lat active release lev 1 (standing)

1-2 min each side

- Straighten arm overhead and place soft-ball on an area of "stiff" lat tissue. Pressure your weight into ball to pin in place
- "Pressure wave" from side to side, bend and straighten arm and contract and relax the lat; each which will help to release the lat
- Spend some additional time pulling the top arm into a tricep stretch and holding for 15-30 sec



Basic lat stretch (child's pose and reach)

30 sec in each of 3 positions

Kneel with weight of bum stacked over heels

- Walk hands as far forward as possible until feel stretch in lats
- Keeping the hands stretched far, walk the finger tips over to one side and hold for 30 sec. Repeat on opposite side.





IT band and Quad rolls on foam roller

1-3 min each leg

- Lie on the side of leg, supporting body weight with the arm, keeping the core tight
- Roll vertically up and down the foam in 10cm sections along the side of the leg
- Within each 10 cm section, also do small horizontal rolls (or cross "fibreing") across the side of the leg.
- Repeat the rolls across the front of the thigh (quads)
- Roll along the entire length of the muscle stopping just above the knee joint
- Should feel like a deep tissue massage, i.e.







	"a good hurt"	
Lying glute/piriformis Stretch 1 min each	 Lie on back with one foot up against the wall, and the opposite ankle crossed over the knee Gently push the knee away from the body until feel a comfortable stretch in the hip (piriformis muscle) To increase the stretch, move bum closer to wall, but always ensure the hips are in contact with the ground. To stretch the gluteals, pull the top knee toward the body. Move closer to the wall if necessary. 	
Seated twist 5 breaths each side	 Sit on a mat on the floor with one leg extended straight out in front of you and the other leg up crossed over the top of that outstretched leg. Sitting tall, weave the opposite elbow up and over the crossed leg aim and look straight back behind you. Use the elbow bracing against the knee to provide leverage into the stretch. Hold for 5 breaths, aiming to get taller on the inhale, and twist deeper if able on each exhale. Repeat with the opposite side. 	

Seated spine Sit tall with both legs extended in front of extensor stretch you and hands behind head with slight chin 5 deep breaths Roll down one vertebrae at a time aiming first to "touch nose to belly button", then gently guide the head down towards the thighs Return to start position, inhale and exhale as you repeat the stretch. Repeat 5 x's Calf and soleus Calf stretches Calf stretches stretch There are many calf stretching options. Choose 1-2 of your favorites and stretch for 30-60 sec each leg. Some options are shown to the right. 30-60 sec each Soleus stretch Place hands on wall for support and stagger Soleus stretch legs. Keeping heel on the ground, bend the back knee until a pain free stretch is felt along the back of lower leg. Press into the wall shifting resistance into the back leg to increase stretch. Hold 30-60 sec each leg

PHASE 4 Pre-Season (Nov-Dec)Performance Conditioning Transition Phase

- Maximize power
- Strength maintenance
- Anaerobic Training through routines 3-5 days/wk, 1x/wk non-routine specific

****Refer to Appendix for weekly overview of Phase 4

Activation Phase 4 (Pre training Session~ 5min) – Option 1 Warm-up, Dynamic Stretch followed by 1 set each of:			
EXERCISE EXERCISE	DESCRIPTION		
Partner Adduction/ Squeeze holds 10 x 10 sec holds (5- 10 sec recovery)	 Partner 2 athletes and have them face one another sitting on even height balance beams that are placed close enough to one another so athletes lower legs can interlock Have one athlete (A) place her ankle on the outside of her partners legs For 10sec holds, with straight legs, athlete (A) tries to squeeze her legs together (adduction) while the other athlete tries to pull her own legs apart. repeat 10x 		
Partner Abduction Squeeze holds 10 x 10 sec holds (5- 10 sec recovery)	 Partner athletes up as above, but have athletes change positions so now athlete (A) is trying to pry her legs apart (abduction) Perform 10 reps of 10 sec holds 		
Overhead Bench squat (in front of wall for progression) 10-20 reps	 Have athletes stand in front of low bench/box "Set core" and extend arms overhead Sit down as low as possible aiming to sit down on box without touching the wall or shifting to one side. Perform 10-20 reps of squat ensuring arch doesn't collapse; foot stays pointed forwards and weight evenly distributed through foot. Allow knees to drive outwards, but not to collapse in. 		
	Progress to performing the same movement in front of the wall as close to		



	wall as possible	
Single Leg Heel Kick on Ball 10-15 reps alternating legs	 Lay on back with feet up on top of ball. Set core (kegel and belly button in) Lift hips off ground. Maintaining hip height and straight legs, kick one foot off the ball. Alternate kicks until 10-15 kicks per leg are performed If flexibility allows, gently "kick" into spit position, but do not use momentum to get there 	
Agility Ladder in- outs/x-overs And Two foot jumps 2-3 sets each movement pattern	 Athletes move through the ladder performing 2-3 sets of in-outs and x-overs demonstrating low position and on toes Athletes perform two foot jumps through the ladder focusing on proper landing position with arch engaged, knees and toes tracking forwards 	PERFORMANCE

Activation Phase 4 (Pre training Session~ 5min) – Option 2				
Warm-up, Dynamic St	retch followed by 1 set each of:			
EXERCISE	DESCRIPTION			
Glute med JUMPS (difficult to show in pictures!) 20 reps	 Place fairly strong resistance tube small tube/band around ankles. Slightly pigeon toe in and load weight through the heels Keeping knees in line with the hips perform 20 small "out in" hops, trying to "stomp" feet with each jump. Keep knees pushing outwards (no collapsing) and maintain full foot contact. 	Exercise should be felt predominantly in the upper and lateral bum muscles		
Straight Arm Roll- out 20 slow reps	 Set up in push-up position on the ball with shoulders and core set Keeping straight arms, roll the ball forward only as far as athlete can maintain neutral spine Repeat 20 reps 			
Wall External Shoulder Rotations 20 rpes	 Stand against a wall, with knees slightly bent, shoulders back and low back pressed against the wall Maintaining elbows close to sides, from the back of the shoulders, rotate the upper arm backwards such that the thumbs touch the wall Repeat 20 reps 	CANADR		
Hip Drop 20 reps each	 Bridge hips off the ground and extend one leg such that knees are side by side With control, drop the hip of the extended leg slightly, then return to the start position Repeat 20 small hip drops Athlete should feel the back of the supporting leg working, but not low back 			



Pen penny arch creation and single leg dead-lift

 Have athlete stand on floor with penny or quarter under the pad of their big toe and the tip of a pen lid just into the arch of their foot and back about 10 cm away from wall

12-15 reps each leg

- Instruct the athlete to maintain pressure on the coin while lifting the arch off the pen, standing on a single leg
- Hinge forward at hips reaching arms forward, maintaining straight spine,
- Simultaneously reach back through the heel of the lifted leg
- Squeeze the glutes/hamstrings of the support leg to return to start position









Ankle Pre-Hab DURING Training Session (1-2x/wk)

In between turns, have athletes perform 1-2 sets of each of the following Ankle Pre-hab exercises. **Make sure athletes have at least 1 min recovery following an exercise before taking their turn on the trampoline.

Level 2 Standing resisted eversion/ Inversion

10-15 reps/leg

- Perform the eversion/Inversion exercises as in Phase 3
- Perform standing, balancing on one leg.
 Leg with the resistance tube is the nonstanding leg.
- 10-15 reps/leg





Standing eversion





Standing inversion



Active release of calf area foam roll

1-2 min each calf

- Place the top of one calf on a foam roller and lift bum off ground, displacing weight to calf
- Roll vertically up and down the foam roller in small sections along the calf
- Within each section, also do small horizontal rolls (or cross "fibreing")
- Flexing and pointing ankle will also increase active release of area
- Should feel like a deep tissue massage. i.e. a "good hurt"





Advanced position bum off ground





Performance Conditioning Phase 4 (Maintain Strength, develop power) Post training ~ 20-30min 2x's per week (not consecutive days)

Perform 2 sets of **8-12** reps of exercises unless otherwise indicated. Last 2-3 reps of each set should be quite challenging, but athlete should still be able to perform with good form. Superset exercises as indicated.(i.e. A1, *dynamic stretch*, A1, dynamic stretch, A1, dynamic stretch, B1, B2, B1, B2, B1, B2, then move onto C1,C2,C1,C2,C1,C2....etc) **Pay special attention to any instructions that give direction on manipulating the tempo of exercises**. This is how you will develop power in your athletes.

EXERCISE	DESCRIPTION	
A1. Hurdle Jumps(6) into long jump -5 reps/dynamic stretch then repeat	 Place six 30-40 cm hurdles approx ½ a metre apart Aiming to minimize ground contact time and maximize height over the hurdles have the athlete jump over hurdles Over the last hurdle have the athletes long jump as far as possible Have a competition between athletes to see who can perform the longest long jump Perform 5 reps, dynamic stretch recover for 90 sec, then repeat 1-2 times 	Have athletes choose their dynamic stretch and encourage them to do the ones they feel most difficult to do.
B1. Horizontal jump into med ball toss 8-10x	 Hold a 4-8lb medicine ball at chest level with elbows out Squat down and simultaneously long jump forward and explosively chest pass med ball towards partner or against wall Repeat 8-10 reps jumping and throwing as explosively as possible 	

Holding a medicine ball (approx 4-10lbs) or B2. Wave squat 2 dumbbells at the side of the body (7-12lbs (triple extension) each), lower into a squat, then **explosively** stand up, extending through knees, hips and up onto toes 10-12 reps Hold on the toes for 2 seconds, then slowly lower back into squat Repeat 10-12 reps Once the athlete can do this with good form, increase the load using at least the weight used in phase 3 for the squat If there are no weights challenging enough, perform goblet squat option, but make sure athlete does not feel strain in low back Sit with tall posture, neutral spine, core C2. Seated row/or activated, shoulders set and knees slightly Single Arm Row on Initiating movement from between the bench shoulder blades, pull the handle back Tempo: towards the chest Keep shoulders "pulled back" throughout Row explosively to movement chest, then 3 counts Choose a weight that will feel quite challenging by the last 2-3 reps of the set to release Perform 10-12 reps 8-12 reps If no access to seated row, perform Single arm dumbbell row instead Kneel on bench supporting self with one knee and one arm such that body makes a "table top" Single Arm Row When holding the dumbbell in the right Option hand, the right foot is on the ground Initiating movement from between the shoulder blades and keeping shoulders 8-12 reps pulled back, pull the weight towards chest Choose a weight that will feel quite challenging by the last 2-3 reps of the set



Perform 8-12 reps

C2. Single leg squat into back lunge (with load) 8 reps each leg	 With good posture, hold dumbbells at the side of the body, balancing on one leg Perform a single leg squat aiming to sit down such that thigh parallel to the ground Return to start position Without touching foot to ground, step into a back lunge Return to start position and repeat sequence 8 x, then switch legs Once form perfected, aim to drop slowly into SL squat or lunge, but "explode" back up into start position
D1. Back extension over ball 12-20 reps	 Lie face down on the ball with legs slightly spread and feet braced, and hands at forehead Activate the core, squeeze the glutes and lift the upper body off the ball Perform 12-20 reps If 20 reps can be performed with ease, hold a 5-10 plate at chest
D2. Shoulder Push Press	 Hold 7-15lb dumbbells on the shoulders with elbows in tight to the body Lower into a ¼ squat and using momentum from the legs "pop" the weights over the head without arching back Slowly lower weights back to shoulder Repeat 12 reps Start with lighter weight until form perfected, then choose a weight that the athlete finds quite challenging in the last 2-3 reps



E1. Jack-knife Pike, side leg, side leg, side leg	 Start in a push-up position with toes on top of a Swiss ball. Do not let low back arch Pull the knees towards the chest (jackknife(Using the lats (muscles under arms) and core, with straight legs pull the toes towards the hands and lift the bum up in the air (pike) Return to start position with shoulder, hip, and knee in a straight line Keeping hips level, kick one leg to the side, return foot to ball, then repeat on the other side –keep the movement small (side leg, side leg) Repeat entire sequence of movements 10-15 times, stopping when athlete can no longer hold core or good form To increase difficulty add a push-up into the movement sequence, aiming to get chest right down to the ground, and "powering" up from push-up
E2. Single Leg Hamstring Curl into hip bridge 12-15 reps each	 Lay on back with feet up on top of ball. Set core (kegel and belly button in) Lift hips off ground and kick one leg in the air Maintaining hip height, roll the ball towards the bum using hamstrings. When the heel is as close to the bum as possible, powerfully, bridge the hips higher Slowly let hips drop slightly as you straighten the legs Repeat for 12-15 reps then switch legs
F1. Loaded T's	 Hold 1-5lb dumbbells in hands Lie face down on ball, lift chest off ball slightly. Set shoulders down and back. Maintaining shoulder "set" and with straight arms, lift arms up about 10 cm with thumbs up. Repeat 20 reps and then repeat entire set of 20 with thumbs positioned down.



DESCRIPTION						
Option 1 –11-		Time	Resistance	Intensity on	RPM	
Bike Sprints-				1→10 scale		
	Warm-up	2min	Light	5-6	70-80	
WK-1-3– 3 Work	A1. Sprint	1min (10 sec on	moderate- hard	10	100-140	
intervals	Repeats 1-	10 off for 1min)				
	3/ or 4 wk					
WK 4-8 – 4 Work	4-8					
intervals	A2.	2 min between	Light	5-6	70-80	
	Recovery	each 1 min set of				
***always only 1 long		3 ten sec sprints				
interval, increase in	B1.Long	1min 30	Moderate-hard	9-10	90-100	
volume in short	Interval					
intervals only	Recovery/	3-5min	Light	5-6	70-80	
	Cool down					
Option 2		٠	—			
Repeat Shuttle Sprints	ΑΔ		В			
2 x 6 sprints						
i.e.						
		^		Δ Δ Δ	Δ	
-6x sprint corners and						
around cones/recovery	 Have athletes sprint as hard as they can in the pattern indicated in diagrams A (i.e. sprint corner to corner, do 					
jog around mat,				one side of the floor, then shuttle around 4-5 cones. Jog once easy around the gym floor. (diagram C)		
-Dynamic stretch for			Repeat the sprint again in same formation, but in the			
2min				ection (diagram B)		
-Repeat entire				•	ate direction from t	
sequence:		^ ^	recovery jog arrows)	diagram C but go.	opposite direction	to
12 total sprints	' / \	<u> </u>	Repeat sequ	ence until the athle	etes have performe	ed 6



Injury Prevention Flexibility/Recovery Phase 4 minimum 2 days/wk - Post Training Session + suggest giving to athletes as HW sheet to do independently all stretches they can do at home

"IT band" roll on softball

Using a softball (indoor or outdoor), lie on the side of leg, supporting body weight with the arm, keeping the core tight

1-3 min each leg

- Roll vertically up and down the foam in small sections along the IT band (side of the leg)
- Within section, also do small horizontal rolls (or cross "fibreing") across the side of the leg.
- Repeat the rolls across the front of the thigh
- Roll along the entire length of the muscle stopping just above the knee joint
- Should feel like a deep tissue massage, i.e. "a good hurt"



Hip distraction hip flexor stretch

30-90 sec each side

- Attach a wide very strong resistance band to a pole about 2ft off ground.
- Step through the band with one leg and pull the band as high as possible up the thigh, resting just below the glute muscle.
- Step back into a kneeling lunge stretch position, so a fair bit of tension is felt from the band.
- Slightly posteriorly tilt the pelvis to increase the hip flexor/quad stretch and to prevent hyperextension of the back.
- Hold for 30-90 sec then switch sides.





"Couch" stretch Place one knee (on padded surface) as close to a wall as possible, with the shin extending up the wall, hands supporting 30-60 sec each you on the ground position Bring the opposite leg forward into a kneeling position For 30 sec, keep hands on the ground and drop back hip towards the ground by squeezing the back glute, effectively stretching the hip flexor. For the next 30 sec, bring the hands up off the ground and place on front thigh, aiming to be as tall as possible, and contract the back glute again. Stretch in the back quad. T-spine ROM over Place a 10-20cm diameter ball (very firm, ball but some give to it) at shoulder blade level with bum resting on the ground, and hands supporting head, elbows flared 10 sec holds for 1-2 Attempt to extend the thoracic spine back min over the ball and hold position for 10 sec. Do not let athlete bend from lumbar spine by maintaining abdominal engagement Move the ball very slightly up or down and repeat the process. Have the athlete repeat 10 sec holds in different positions for 1-2 min. Lat active release lev Straighten arm overhead and place soft-ball 1 (standing) on an area of "stiff" lat tissue. Pressure your weight into ball to pin in place 1-2 min each side "Pressure wave" from side to side, bend and straighten arm and contract and relax the lat; each which will help to release the Spend some additional time pulling the top arm into a tricep stretch and holding for 15-

Basic lat stretch (child's pose and reach) 30 sec in each of 3 positions	 Kneel with weight of bum stacked over heels Walk hands as far forward as possible until feel stretch in lats Keeping the hands stretched far, walk the finger tips over to one side and hold for 30 sec. Repeat on opposite side
Lying glute/piriformis Stretch 1 min each	 Lie on back with one foot up against the wall, and the opposite ankle crossed over the knee Gently push the knee away from the body until feel a comfortable stretch in the hip (piriformis muscle) To increase the stretch, move bum closer to wall, but always ensure the hips are in contact with the ground. To stretch the gluteals, pull the top knee toward the body. Move closer to the wall if necessary.
Seated twist 5 breaths each side	 Sit on a mat on the floor with one leg extended straight out in front of you and the other leg up crossed over the top of that outstretched leg. Sitting tall, weave the opposite elbow up and over the crossed leg aim and look straight back behind you. Use the elbow bracing against the knee to provide leverage into the stretch. Hold for 5 breaths, aiming to get taller on the inhale, and twist deeper if able on each exhale. Repeat with the opposite side.
Seated spine extensor stretch 5 deep breaths	 Sit tall with both legs extended in front of you and hands behind head, slight chin tuck Roll down one vertebrae at a time aiming first to "touch nose to belly button", then gently guide the head down towards the thighs Return to start position, inhale and exhale as you repeat the stretch. Repeat 5 x's

Calf and soleus stretch

Calf stretches

There are many calf stretching options. Choose 1-2 of your favorites and stretch for 30-60 sec each leg. Some options are shown to the right.

Calf stretches





30-60 sec each

Soleus stretch

Place hands on wall for support and stagger legs. Keeping heel on the ground, bend the back knee until a pain free stretch is felt along the back of leg. Press into the wall shifting resistance into the back leg to increase stretch. Hold 30-60 sec each leg

Soleus stretch





PHASE 5 Performance Conditioning In-Season 1 (Jan-Feb)

- Power Maintenance
- Strength maintenance
- Enhance 1 Area as directed by coach
- Skill specific strength and conditioning (through performance of routines)
- Injury prevention flexibility
- Athlete specific flexibility (as dictated by coach)

****Refer to Appendix for weekly overview of Phase 5

****During Competition weeks, continue doing activation, and injury prevention flexibility. Consider reducing Performance Conditioning to 1x/wk and if athletes showing signs of fatigue can also reduce volume (sets) of Performance Conditioning exercises.

Activation Phase 5 Op	Activation Phase 5 Option 1 (In Season~ 5min)					
EXERCISE	DESCRIPTION					
Core activation with rib control with arm reach overhead and legs extended 5-10 reps	 Lie on back with knees bent, hands on lower ribcage, low back gently pressed into ground Take great big inhale, feeling ribs rise and "exhale belly button to spine," maintaining shoulders back Maintaining rib cage position and core activation and reach arms overhead, R, L, then extend R leg, L leg and one by one return limbs back to start position. Repeat 5-10x 					
Hands behind head squat in front of wall (low back, ankle) 10-20 reps	 **Before placing athletes in front of wall, they should understand how to do a proper squat Have athletes stand 10cm-20 in front of wall with bench/box placed behind them. (closer is better and harder!) Have athletes "set their core" and interlock fingertips behind head Athletes sit down as low as possible aiming to sit down on box without touching the wall or shifting to one side. Perform 10-20 reps of squats ensuring arch doesn't collapse, foot stays pointed forwards. Allow knees to drive outwards, but not to collapse in. 					
Agility Ladder SL skater hops over ladder + Agility SL hops into ½-1/2 SL squat jumping fwd through ladder 2-3 sets each movement pattern	 Movement pattern 1 Jump laterally over top of the ladder aiming to land right beside every , or every other ladder wrung. Focus specifically on the landing ensuring strong arch, knee in line with second toe (not collapsed in). 	SPRIANCE				

Movement pattern 2

 Single foot jumps through the ladder focusing on proper landing position with arch engaged, knees and toes in line with second toe, hips pushed back, flat upper back.



Activation Phase 5 Op	Activation Phase 5 Option 2 (In Season~ 5min)					
EXERCISE	DESCRIPTION					
Hip External and Internal rotation 8-12 reps each leg	 Balance on one leg with arch of foot lifted, arms out to the side and chest parallel to the ground with square hips Rotate the hips open as far as possible, keeping upper body and extended leg parallel to ground Rotate the opposite direction and internally rotate the hips as far as possible, trying to maintain leg height Perform 8-12 reps per leg aiming for maximum range at the two extremes of the movement 					
Mountain Climber on Ball 20 reps (alternating)	 Set up in push-up position on ball, kegel activated, belly button pulled up. Maintaining straight arms, drive the knee, followed by the toe to the ball. Athlete must maintain neutral spine and core activation throughout movement Repeat 10 reps on each leg (20 total) 					
E2. Single Leg Hamstring Curl 12-15 reps each	 Lay on back with feet up on top of ball. Set core (kegel and belly button in) Lift hips off ground and kick one leg in the air Maintaining hip height, roll the ball towards the bum using hamstrings. Repeat for 12-15 reps then switch legs 					

Side-side roll-outs on ball

15-20 reps each side

- Establish good push-up position on the ball
- rotate hips to one side, and tuck one leg behind the other
- Keeping arms straight, roll the ball forward and backward about 10-15cm
- exercise should be felt in the obliques (side of torso). Repeat reps on other side.



Performance Strength and Conditioning Phase 5 (Power/Strength Maintenance) (2x/wk Post training)

Perform 3 sets of **6-10** reps of exercises unless otherwise indicated. Where indicated, it is important that the athlete performs the movements as **explosively and powerfully as possible.** Superset exercises as indicated.(i.e. A1,A2,A1,A2, A1,A2, B1, B2, B1, B2, B1, B2) ****To save time, if desired, you can do just two sets of the upper body movements.

EXERCISE	DESCRIPTION	
A1. Rebound box jump 6-10x	 Jump up onto box 2-3 feet in height, pausing on the top to establish "stuck" landing position Jump backwards off the box and rebound as quickly as possible off the ground to return to the top of the box to 'stick' landing again Repeat 6-10x 	
A2. Loaded Squat jumps 10 reps	 Holding a medicine ball (approx 4-20lbs) or 2 dumbbells at the side of the body (7-12lbs each), lower into a ¼ squat, then jump up as high as possible Absorb landing then repeat 10 reps 	

A3. Calf and soleus Place the top of one calf on a foam roller stretch and active and lift bum off ground, displacing weight release on foam roll to calf Roll vertically up and down the foam roller in small sections along the calf Within each section, also do small horizontal rolls (or cross "fibreing") Flexing and pointing ankle will also increase active release of area Should feel like a deep tissue massage. i.e. a "good hurt" Advanced position Because this is a recovery exercise between exercises, keep the rolling "active"...don't hold any one spot longer than 5 sec For a more intense active release, cross the Active release of calf opposite leg over the leg being worked on area foam roll and repeat above sequence 1 min each calf Balance on a single leg and keeping a flat **B1.Power Up Single** back, push hips backward to "sit" until **Leg Squat** thighs are parallel to the ground 3x8 reps Do not let knee of supporting leg push past toe and do not let knee collapse inward (keep knee in line with hip) Explode back up to start position Explode from a push-up position and aim to B1. Push-up pops "pop" off the ground Absorb and repeat movement aiming for 8-10 reps maximum explosiveness and height in movement and maximum depth In push-up Repeat 8-10 reps

B2. Horizontal Pullups (explosive up, control down)

8-10 reps

- Hang off low parallel bar with feet balanced on a stability ball
- Bridge hips up into a tight body position
- Explosively pull chest towards bar, maintaining body parallel to ground
- Repeat 8-10 reps



C1. Nordic Hamstring fall 12 reps

- Partner athletes up in pairs
- One athlete kneels on the ground while the other athlete braces their lower legs OR firmly brace the athlete's legs under a stable object
- As in a Swedish fall, the kneeling athlete drops into a push-up position, then pops back up to kneeling position
- ***Object of this exercise is to use the hamstrings to control the lowering of the movement and to pull the athlete back into kneeling position
- Repeat 12 reps, then switch partners





C2. Back extensions (explosive up, control down) Optional Y position with arms

- Perform over ball or in back extension machine
- Lie face down on the ball/machine feet braced, and hands across chest
- Activate the core, squeeze the glutes and explosively lift the upper body up
- Perform 8-10 reps

8-10 reps

 If movement can be performed explosively, perform movement with hands extended up over head in Y position





Injury Prevention Flexibility/Recovery Phase 5 minimum 2 days/wk - Post Training Session + suggest giving to athletes as HW sheet to do independently all stretches they can do at home

"IT band" roll on softball

Using a softball (indoor or outdoor), lie on the side of leg, supporting body weight with the arm, keeping the core tight

1-3 min each leg

- Roll vertically up and down the foam in small sections along the IT band (side of the leg)
- Within section, also do small horizontal rolls (or cross "fibreing") across the side of the leg.
- Repeat the rolls across the front of the thigh
- Roll along the entire length of the muscle stopping just above the knee joint
- Like a deep tissue massage, "a good hurt"



Hip distraction hip flexor stretch

30-90 sec each side

- Attach a wide very strong resistance band to a pole about 2ft off ground.
- Step through the band with one leg and pull the band as high as possible up the thigh, resting just below the glute muscle.
- Step back into a kneeling lunge stretch position, so a fair bit of tension is felt from the band.
- Slightly posteriorly tilt the pelvis to increase the hip flexor/quad stretch and to prevent hyperextension of the back.
- Hold for 30-90 sec then switch sides





"Couch" stretch Place one knee (on padded surface) as close to a wall as possible, with the shin extending up the wall, hands supporting 30-60 sec each you on the ground position Bring the opposite leg forward into a kneeling position For 30 sec, keep hands on the ground and drop back hip towards the ground by squeezing the back glute, effectively stretching the hip flexor. For the next 30 sec, bring the hands up off the ground and place on front thigh, aiming to be as tall as possible, and contract the back glute again. Stretch in the back quad. Lat active release Lying down with arm raised into overhead option 2 position a lacrosse ball in your armpit near (lying down) insertion of your lat and armpit Slowly roll onto ball side, "smashing" the underlying tissues 1-2 min each side As tolerable, pressure more weight into ball and slowly oscillated around armpit area Kneel with weight of bum stacked over Walk hands as far forward as possible until Finish with child's feel stretch in lats pose Keeping the hands stretched far, walk the finger tips over to one side and hold for 30 sec. Repeat on opposite side. 30 sec each position T-spine ROM over Place two tennis balls (that have been Balls placed in double tennis ball taped together) at shoulder blade level with horizontal position across Tbum resting on the ground, and hands supporting head, elbows flared 10 sec holds for 1-2 min Attempt to extend the thoracic spine back over the balls and hold position for 10 sec. Do not let athlete bend from lumbar spine by maintaining abdominal engagement Move the balls very slightly up or down and repeat the process. Have athlete repeat 10 sec holds in different positions for 1-2min

Anterior Shoulder/chest active release

45-90 sec each side

- Face down, position a softball on right pec minor and apply pressure. Pin right arm (arm with ball) behind back
- Push off the mat with left hand rotating the upper body "towards" the ball
- After finding a "stiff" spot, reach left hand behind back and gently pull the right arm up and across back





Lying glute/piriformis Stretch

1 min each

 Lie on back with one foot up against the wall, and the opposite ankle crossed over the knee

- Gently push the knee away from the body until feel a comfortable stretch in the hip (piriformis muscle)
- To increase the stretch, move bum closer to wall, but always ensure the hips are in contact with the ground.
- To stretch the gluteals, pull the top knee toward the body. Move closer to the wall if necessary.





Seated twist

5 breaths each side

- Sit on a mat on the floor with one leg extended straight out in front of you and the other leg up crossed over the top of that outstretched leg.
- Sitting tall, weave the opposite elbow up and over the crossed leg aim and look straight back behind you. Use the elbow bracing against the knee to provide leverage into the stretch.
- Hold for 5 breaths, aiming to get taller on the inhale, and twist deeper if able on each





	exhale. • Repeat with the opposite side.			
Seated spine extensor stretch 5 deep breaths	 Sit tall with both legs extended in front of you and hands behind head with slight chin tuck Roll down one vertebrae at a time aiming first to "touch nose to belly button", then gently guide the head down towards the thighs Return to start position, inhale and exhale as you repeat the stretch. Repeat 5 x's 			
Calf and soleus stretch 30-60 sec each	 There are many calf stretching options. Choose 1-2 of your favorites and stretch for 30-60 sec each leg. Some options are shown to the right. Soleus stretch Place hands on wall for support and stagger legs. Keeping heel on the ground, bend the 	alf stretches		
	back knee until a pain free stretch is felt along the back of leg. Press into the wall to increase stretch. Hold 30-60 sec each leg	Soleus Stretch		

PHASE 6 Performance Conditioning In-Season 2 (March-April)

- Power Maintenance
- Strength maintenance
- Enhance 1 Area as directed by coach
- Skill specific strength and conditioning (thru performance of routines)
- Injury prevention flexibility
- Athlete specific flexibility (as dictated by coach)

****Refer to Appendix for weekly overview of Phase 6

****During Competition weeks, continue doing activation, and injury prevention flexibility. Consider reducing Performance Conditioning to 1x/wk and if athletes showing signs of fatigue can also reduce volume (sets) of Performance Conditioning exercises.

Activation Phase 6 (In Season~ 5min) — Perform 1 set of each exercise before each training session following general warm-up and dynamic stretches

warm-up and dynamic	stretches	
EXERCISE	DESCRIPTION	
C2. Prone core activation and Y-lift 20 reps	 Lie face down on the ground with the belly button up to spine and hands extended over head in a Y position, thumbs up Set shoulders down and back, activate core with straight arms, and "lengthening and lifting" from the upper spine, lift the arms up and down off the ground 20 reps 	
Kick Thru 10-20 reps	 Perform a "mountain climber" (push-up position, knee touch, toe touch to the ball), then pivot 90 degrees on supporting foot and kick the leg forwards. Pivot back to the start position and alternate sides repeat 10-20reps Keep the athlete back to the basic "mountain climber" if they cannot maintain form throughout the movement 	
10m ankle walks toes up, toes curled	 Walk a 10m distance with just the toes pulled up off the ground Perform another 10m distance with the toes curled in 	

10m ankle walk, Inversion, eversion	 Walk a 10m distance on the outside border of the feet (inversion) Perform another 10m distance on the inside border of the feet (eversion)
20m ankle walks on tip toes with flex and point	 Walk a 20m distance on tip toes, and with every step point and flex foot that is in the air. Aim for maximum range of motion
20 m "Power Foot Slap"	 Plant your heel on the ground, then "powerfully" slap the ball of the foot down to the group to complete the step. Continue walking in this fashion until you've completed 20m

Activation Phase 6 Option 2 (In Season~ 5min)					
EXERCISE	DESCRIPTION				
Lat active release option 2 (lying down) 1-2 min each side	 Lying down with arm raised into overhead position a lacrosse ball in your armpit near insertion of your lat and armpit Slowly roll onto ball side, "smashing" the underlying tissues As tolerable, pressure more weight into ball and slowly oscillated around armpit area 				
OH Bench squat in front of wall (low back, ankle)	 Stand 10cm-20 in front of wall with bench/box placed behind them. (closer is better and harder!) Have athletes "set their core" and reach arms overhead, hands locked together 				
**before placing athletes in front of wall,	Athletes sit down as low as possible aiming				

they should understand how to do a proper squat 10-15 reps	to sit down on box without touching the wall or shifting to one side. Perform 10-15 reps of squats ensuring arch doesn't collapse, foot stays pointed forwards. Allow knees to drive outwards, but not to collapse in.	
Pen penny arch creation against wall and twist reach to touch wall 10 touches each foot	 Have athlete stand on floor with penny or quarter under the pad of their big toe and the tip of a pen slid just into the arch of their foot and back about 10 cm away from wall Instruct the athlete to maintain pressure on the coin while lifting the arch off the pen, standing on a single leg Keep pressure off the pen and twist upper body and reach one arm at a time to touch the wall behind you. Perform 10 wall touches on each foot 	
Agility- Front/back hops, then Side-Side hops (F/B 20 reps, rest 10- 20 sec, S/S 20 reps then 45 sec dynamic stretch) x 2	 Stand at a line on the floor Staying on the balls of feet jump forwards and backwards over top of the line as quickly as possible, minimizing ground contact time Perform 20 reps, rest 10-20 sec and then repeat but jump side-side over the line Actively stretch calves/shins during 45 sec rest period then repeat 	

Power Phase 6 Strength and Conditioning (Power/Strength maintenance) (1x/wk Post training) Perform 3 sets of each (1-2 sets during competition week)

Perform 3 sets of **6-10** reps of exercises unless otherwise indicated. Where indicated, it is important that the athlete performs the movements as **explosively and powerfully as possible.** Superset exercises as indicated.(i.e. A1,A2,A1,A2, A1,A2, B1, B2, B1, B2, B1, B2)

EXERCISE	DESCRIPTION	
A1. Loaded Box jumps 8 reps	 Holding 2 dumbbells (7-25lb e) at the side of the body, lower into a ¼ or ½ squat, then jump up onto a 30-45 cm box Absorb landing then step down off the box Repeat 8 reps 	GRADS
A2. Granny toss with med ball 10 reps	 Keeping core activated and flat back, perform a wide squat with a 5-10lb medicine ball lowered between legs Explosively extend through the hips, knees and ankles while tossing the medicine ball backwards over the head. Aim for a combo of height and distance with throw. Repeat 10 tosses Partner athletes up or have athletes toss the ball against the wall to minimize time between reps 	
A3. Calf and soleus stretch and active release on foam roll	 Place the top of one calf on a foam roller and lift bum off ground, displacing weight to calf Roll vertically up and down the foam roller in small sections along the calf Within each section, also do small horizontal rolls (or cross "fibreing") Flexing and pointing ankle will also increase 	

Active release of calf area foam roll 1 min each calf	 Should feel like a deep tissue massage. i.e. a "good hurt" Because this is a recovery exercise between exercises, keep the rolling "active"don't hold any one spot longer than 5 sec For a more intense active release, cross the opposite leg over the leg being worked on and repeat above sequence
B1. Explosive chin- up/pull-up 5-7 reps	 Hang off the bar and set the shoulders down and back Explosively, then slowly lower back down to start position. Perform 5-7 reps, maintaining explosiveness in each rep. Use tubing for assistance if necessary to achieve powerful tempo up
B1. Single Leg Squat and jump 6-8 reps	 Balance on a single leg and keeping a flat back, push hips backward to "sit" until thighs are parallel to the ground Do not let knee of supporting leg push past toe and do not let knee collapse inward (keep knee in line with hip) Explode back up to start position, aiming to jump as high as possible out of the bottom position and then land on the same leg before repeating
C1. Loaded Hip extension 10 reps ***if you do not	 Athlete lies with upper back and head resting on BOSU with padded, 45lb bar balanced across hips Set core, push off heels and explosively drive hips towards the ceiling

have the equipment for this, perform loaded back extension	 Slowly lower and repeat movement 10 reps **If the athlete can perform the movement explosively with ease, add weight to the bar starting with 10lbs a side. (Athletes can work up to a significant weight 45lbs + each side in this exercise)
OR C1. Loaded back extensions 8-10 reps	 Perform over ball or in back extension machine Lie face down on the ball/machine feet braced, and hands across chest Activate the core, squeeze the glutes and explosively lift the upper body up Perform 8-10 reps If movement can be performed explosively, without any hint of back pain and if exercise was loaded in last phase, hold 5-10lb plate at chest
C2. Push-up pops with hand clap or hip slap 8-10 reps	 Explode from a push-up position and aim to "pop" off the ground, gaining enough height to clap hands or slap hips in btw each rep absorb and repeat movement aiming for maximum explosiveness and height in movement and maximum depth In push-up repeat 8-10 reps

Injury Prevention Flexibility/Recovery Phase 6 minimum 2 days/wk - Post Training Session + suggest giving to athletes as HW sheet to do independently all stretches they can do at home

"IT band" roll on softball

Using a softball (indoor or outdoor), lie on the side of leg, supporting body weight with the arm, keeping the core tight

1-3 min each leg

- Roll vertically up and down the foam in small sections along the IT band (side of the leg)
- Within section, also do small horizontal rolls (or cross "fibreing") across the side of the leg.
- Repeat the rolls across the front of the thigh
- Roll along the entire length of the muscle stopping just above the knee joint
- Like a deep tissue massage, "a good hurt"



Hip distraction hip flexor stretch

30-90 sec each side

- Attach a wide very strong resistance band to a pole about 2ft off ground.
- Step through the band with one leg and pull the band as high as possible up the thigh, resting just below the glute muscle.
- Step back into a kneeling lunge stretch position, so a fair bit of tension is felt from the band.
- Slightly posteriorly tilt the pelvis to increase the hip flexor/quad stretch and to prevent hyperextension of the back.
- Hold for 30-90 sec then switch sides.





"Couch" stretch Place one knee (on padded surface) as close to a wall as possible, with the shin extending up the wall, hands supporting 30-60 sec each you on the ground position Bring the opposite leg forward into a kneeling position For 30 sec, keep hands on the ground and drop back hip towards the ground by squeezing the back glute, effectively stretching the hip flexor. For the next 30 sec, bring the hands up off the ground and place on front thigh, aiming to be as tall as possible, and contract the back glute again. Stretch in the back quad. Lat active release Lying down with arm raised into overhead option 2 position a lacrosse ball in your armpit near (lying down) insertion of your lat and armpit Slowly roll onto ball side, "smashing" the underlying tissues 1-2 min each side As tolerable, pressure more weight into ball and slowly oscillated around armpit area Kneel on floor with bum on heels and 3-way Cat stretch on straight arms stretched over top of a ball stability ball Drop the chest towards the floor to feel a 2x 30 sec in each of 3 stretch under the arms and across the positions upper back Hold for 30 sec Roll the ball to one side such that the stretch moves down the side and into the low back. Hold 30 sec. Repeat on the other side Repeat entire sequence one more time

Weighted T-spine mobilization ROM over foam roll

10 sec holds for 1-2 min

- Place foam roller or 3-4" PVC pipe at shoulder blade level with bum resting on the ground, with a light dumbbell in hands reaching overhead and back.
- Attempt to extend the thoracic spine back over the roller allowing the weight to increase the stretch and hold position for 10 sec. Do not let athlete bend from lumbar spine by maintaining abdominal engagement
- Move the foam roller very slightly up or down and repeat the process. Have the athlete repeat 10 sec holds in different positions for 1-2 min





Anterior Shoulder/chest active release

45-90 sec each side

- Face down, position a softball on right pec minor and apply pressure. Pin right arm (arm with ball) behind back
- Push off the mat with left hand rotating the upper body "towards" the ball
- After finding a "stiff" spot, reach left hand behind back and gently pull the right arm up and across back





Lying glute/piriformis Stretch

1 min each

- Lie on back with one foot up against the wall, and the opposite ankle crossed over the knee
- Gently push the knee away from the body until feel a comfortable stretch in the hip (piriformis muscle)
- To increase the stretch, move bum closer to wall, but always ensure the hips are in contact with the ground.
- To stretch the gluteals, pull top knee toward the body.



Seated twist

5 breaths each side

- Sit on a mat on the floor with one leg extended straight out in front of you and the other leg up crossed over the top of that outstretched leg.
- Sitting tall, weave the opposite elbow up and over the crossed leg aim and look straight back behind you. Use the elbow bracing against the knee to provide leverage into the stretch.
- Hold for 5 breaths, aiming to get taller on the inhale, and twist deeper if able on each exhale.
- Repeat with the opposite side.







Seated spine extensor stretch

5 deep breaths

- Sit tall with both legs extended in front of you and hands behind head with slight chin tuck
- Roll down one vertebrae at a time aiming first to "touch nose to belly button", then gently guide the head down towards the thighs
- Return to start position, inhale and exhale as you repeat the stretch. Repeat 5 x's



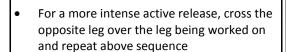




Calf and soleus stretch and active release on foam roll

1-2 min each calf

- Place the top of one calf on a foam roller and lift bum off ground, displacing weight to calf
- Roll vertically up and down the foam roller in small sections along the calf
- Within each section, also do small horizontal rolls (or cross "fibreing")
- Flexing and pointing ankle will also increase active release of area
- Should feel like a deep tissue massage. i.e. a "good hurt"

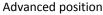
















APPENDIX 1

Dynamic Stretching Sheet



Dynamic Stretches

Athletes are to perform stretches through dynamic movement, holding each stretch for only 1-2 seconds. Perform 5-10 reps each.

(Wrist stretch series is the exception and each position can be held 5-10sec)





Quad Stretch and Reach





Dynamic Glute/Piriformis Stretch



Do 10 "marches" from a pushup/front support position, aiming to feel stretch in the ankle/calves



Do 10 "marches" from down-dog position, aiming to feel stretch in the ankle/calves



"Backwards Inchworm" From push-up position walk hands backwards into down-dog. Baby step backwards back into push-up and repeat 5-10x







Sumo Squat to Stand



Lunge and Reach











Palms down

Palms up

Fingers In

Fingers out

ngers forward and shoulder lean

"Wrist Stretch Series" Hold each position once for 5-10sec then repeat entire sequence another 1-3x's. To increase intensity of stretch (only if pain free!) perform from knee plank or full plank position











Airplane into Split

Deep Lunge and Twist



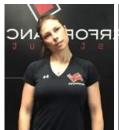








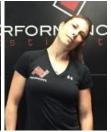
Perform front support in "toe point" and at top of "toe point" down dog hold 2-3 secs to feel stretch then replace one foot at a time into "regular" down dog. Shift back into push-up position with "toe point" and repeat 5-10x's











Neck Rolls















Forwards and Backwards Dynamic Shoulder/Chest Stretch with Elastic



APPENDIX 2

Month and Week Guidelines for each Phase

- Integrating the different elements of Strength and Conditioning into trampoline gymnasts' training
- Based on a 5 days/wk training plan
- Suggestions included for 4 and 3 day/wk training plan



	elines PHASE 1- Mid-N							
Season:		Calendar Month		S+C Ph	ase		Conditioning Goals	
Post-Season		Mid May-June		Phase 1		Ankle Prehab	Ankle Prehab	
		6wks		Functional Conditioning 1		Core and Postural Activation and		
							endurance	
							Injury Prevention Flexib	oility
	T		1			T	Skill Specific Conditionin	ng
	SUN	MON	TUES		WED	THUR	FRI	SAT
Warm-up Activation	Dynamic warm-up, stretching	Dynamic warm-up, stretching	Dynamic warm-up, stretching		OFF	Dynamic warm-up, stretching	Dynamic warm-up, stretching	OFF
(Core/Posture)	Activation 1	Activation 2	Activation 1			Activation 2	Activation 1	
During Training	Ankle Pre-hab		Ankle Pre-hab			Ankle Pre-hab		
	(see manual)		(see manual)			(see manual)		
S+C post training		FUNCTIONAL CONDITIONING: -Postural activation -core activation -(see manual)					FUNCTIONAL CONDITIONING: -postural activation -core activation -(see manual)	
Post training flexibility	-Inj Prevention Flex/Recovery (see manual)	-Gymnast or Skill specific Flexibility (dictated by coach)	-Inj Prevention Flex/Recovery (see manual)			-Inj Prevention Flex/Recovery (see manual)	-Gymnast or Skill specific Flexibility (dictated by coach)	



Weekly Guideline	s PHASE 2- July-A	ugust		Г				
Season:		Calendar Month		S+C Phase			Conditioning Goals	
Early Off-Season		July-August	Phase 2			Core and Postural Endura	nce	
				Functional	Conditionir	ng 2	Hip, knee, low back stability via lower body movement patterns	
							Agility/Fast twitch develo	pment
							Aerobic base development	
							Coach directed skill specific conditioning/flexibility	
	SUN	MON	TUES		WED	THUR	FRI	SAT
Warm-up Dynamic warm-up, stretching		Dynamic warm-up, stretching	Dynamic warm-u stretching	p,	OFF	Dynamic warm-up, stretching	Dynamic warm-up, stretching	OFF
(Core/Posture/Agility)	Activation 1	Activation 2	Activation 1			Activation 2	Activation 1	
During Training	Ankle Pre-hab (see manual)		Ankle Pre-hab (see manual)					
S+C post training		FUNCTIONAL CONDITIONING 2					FUNCTIONAL CONDITIONING2	
Aerobic (post training)	Aerobic base					Aerobic base		
Post Training Flexibility	-Inj Prevention Flex/Recovery	-Gymnast or Skill specific Flexibility (dictated by coach)	-Inj Prevention Flex/Recovery			-Inj Prevention Flex/Recovery	-Gymnast or Skill specific Flexibility (dictated by coach)	



Weekly Guidelines PHASE 3-Sept-Oct

Season:	Season: Calendar Month		:h	S+C Phase		Conditioning Goals			
		Sept-Oct		Phase 3 Athletic development phase		Maximize Strength (begin loading beyond body weight) Power development Anaerobic Development Maintain Aerobic base Coach directed skill specific conditioning			
	SUN		MON	TUES	WED	THUR	FRI	SAT	
Warm-up Activation (Core/Posture/Agility)	Dynamic stretching Activation	3	Dynamic warm-up, stretching Activation 2	Dynamic warm-up, stretching Activation 1	OFF	Dynamic warm-up, stretching Activation 2	Dynamic warm-up, stretching Activation 1	OFF	
During Training	Ankle Pre-hab (see manual)			Ankle Pre-hab (see manual)					
S+C post training			PERFORMANCE CONDITIONING: (maximize strength, develop power)				PERFORMANCE CONDITIONING: (maximize strength, develop power)		
Anaerobic (post training 2x/wk)	Anaerobic Training					Anaerobic Training			
Aerobic (1x/wk)	bic (1x/wk)			Aerobic Base					
Post Training Flexibility	-Inj Prevention Flex/Recovery		-Gymnast or Skill specific Flexibility (dictated by coach)	-Inj Prevention Flex/Recovery		-Inj Prevention Flex/Recovery	-Gymnast or Skill specific Flexibility (dictated by coach)		



Weekly Guideline	s PHASE 4	l-Nov-Dec		,				
Season: Calendar Mont		nth S+C Phase			Conditioning Goals			
Pre-Season Nov-Dec		Nov-Dec		Phase 4 Transition Phase		Maximize Power Strength maintenance Routine specific anaerobic fitness		
	SUN MON TUES WED		WED	THUR	FRI	SAT		
Warm-up Activation (Core/Posture/Agility)	Dynamic warm-up, stretching Activation 1		Dynamic warm-up, stretching Activation 2	Dynamic warm-up, stretching Activation 1	OFF	Dynamic warm-up, stretching Activation 2	Dynamic warm-up, stretching Activation 1	OFF
During Training				Ankle Pre-hab (see manual)				
S+C post training			PERFORMANCE CONDITIONING: (maximize power, maintain strength)				PERFORMANCE CONDITIONING: (maximize power, maintain strength)	
Anaerobic development	Anaerobic (see manu	•	-routine specific	-routine specific		-routine specific	-routine specific	
Post Training Flexibility	-Inj Prever Flex/Recov		-Gymnast or Skill specific Flexibility (dictated by coach)	-Inj Prevention Flex/Recovery		-Inj Prevention Flex/Recovery	-Gymnast or Skill specific Flexibility (dictated by coach)	



Weekly Guidelines PHASE 5- Jan-Feb****During Competition weeks, continue doing activation, and injury prevention flexibility. Consider reducing Performance Conditioning to 1x/wk. and if athletes showing signs of fatigue can also reduce volume (sets) of Performance Conditioning exercises.

Season:		Calendar M	onth	S+C Phase	S+C Dhace		Conditioning Goals			
In-Season 1 Jan-Feb		onui	Phase 5	Phase 5		Power maintenance Strength maintenance Enhance 1 area as directed by coach-athlete specific Recovery				
	SUN		MON	TUES		WED	THUR	FRI	SAT	
Warm-up	Dynamic warr stretching Activation 1	n-up,	Dynamic warm-up, stretching	Dynamic war stretching Activation 1	m-up,	OFF	Dynamic warm-up, stretching	Dynamic warm-up, stretching Activation 1	OFF	
S+C post training	Activation 1		PERF. CONDITIONING: (maintain strength/power)	ACTIVATION 1			Activation 2	PERFORMANCE CONDITIONING: (maintain strength/power)		
Anaerobic development	-routine specific		-routine specific	-routine spec	ific		routine specific	-routine specific		
Post Training Flexibility	-Inj Preventio Flex/Recovery		-Gymnast or Skill specific Flexibility (dictated by coach)	-Inj Preventio Flex/Recover			-Inj Prevention Flex/Recovery	-Gymnast or Skill specific Flexibility (dictated by coach)		



Weekly Guidelines PHASE 6- March-April ****During Competition weeks, continue doing activation, and injury prevention flexibility. Consider reducing Performance Conditioning to 1x/wk and if athletes showing signs of fatigue can also reduce volume (sets) of Performance Conditioning exercises.

Season:	son: Calendar Month		onth	S+C Phase	S+C Phase		Conditioning Goals		
		March-April		Competition Phase 6		Power maintenance Strength maintenance Enhance 1 area as directed by coach-athlete specific Recovery			
	SUN		MON	TUES	WED	THUR	FRI	SAT	
Warm-up	Dynamic warr stretching Activation 1	hing stretching		Dynamic warm-up, stretching Activation 1		Dynamic warm-up, stretching Activation 2	Dynamic warm-up, stretching Activation 1	OFF	
S+C post training		PERFORMANCE CONDITIONING: (maintain strength/power)					PERFORMANCE CONDITIONING: (maintain strength/power)		
Anaerobic development	-routine speci	ific	-routine specific	-routine specific		routine specific	-routine specific		
Post Training Flexibility	-Inj Preventio Flex/Recovery		-Gymnast or Skill specific Flexibility (dictated by coach)	-Inj Prevention Flex/Recovery		-Inj Prevention Flex/Recovery	-Gymnast or Skill specific Flexibility (dictated by coach)		



ADAPTING THIS MANUAL FOR 3 and 4 day a week schedules:

If you are coaching athletes who only train 3 and 4 days/wk, the elements that you would integrate into your athlete's plans would still be the same. The only thing that would differ would be the recommended days/wk each element is performed. Below are some suggestions on how to integrate this program into a shorter training schedule. (****Keep in mind that if you are working with older, more mature and capable athletes, and if they have access to a fitness facility, you might consider teaching them elements of the programs to do independently. This would allow them to perform them more often)

4 day/wk training schedule:

PHASES 1

- -Pre-Training: Alternate Activation 1 and Activation 2 days each training session
- -Ankle pre-hab Day 2 days/wk:
- -Post Training Session 2 days/wk: Functional Conditioning ****If time is very limited, you could alternate between doing this 2x's and 1x/wk and repeat this strategy for Phases 1-4)
- Post Training Session 2-3 days/wk: Injury Prevention Flexibility

PHASES 2

- -Alternate Activation 1 and Activation 2 days each training session
- -Ankle pre-hab Day 2 days/wk



- -Post Training Session 1-2 days/wk: Functional Conditioning
- -Post Training Aerobic Base Training 2 days/wk
- -Post Training Session 2-3 days/wk: Injury Prevention Flexibility

PHASE 3

- -Alternate Activation 1 and Activation 2 days each training session
- -Post Training Session 1-2 days/wk: Performance Conditioning
- -Ankle pre-hab Day 2 days/wk
- -Post Training Aerobic Base Training 0-1 days/wk (alternate every other week)
- -Post Training Anaerobic Base Training 1-2 days/wk (on the weeks you do not do aerobic training, do 2 days anaerobic training)
- -Post Training Session 2-3 days/wk: Injury Prevention Flexibility

PHASE 4

- -Alternate Activation 1 and Activation 2 days each training session
- -Post Training Session 1-2 days/wk: Performance Conditioning
- -Ankle pre-hab Day 1 days/wk



- -Post Training Anaerobic Base Training 1 days/wk
- -Post Training Session 2 days/wk: Injury Prevention Flexibility

PHASE 5 and 6

- -Alternate Activation 1 and Activation 2 days each training session
- -Post Training Session 2 day/wk: Performance Conditioning (if necessary due to time restrictions, reduce to 2 sets of some/all exercises)
- -Post Training Session 2-3 days/wk: Injury Prevention Flexibility



Use the chart below to schedule when you are going to integrate all elements of the Strength and Conditioning program into your athletes' week. **Try not to schedule the same element on consecutive days.**

TRAINING:	_ days/wk	
For older/more r	mature athletes: INDEPENDENT SES	SSIONS days/wk

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Warm-up							
Activation							
TRAMPOLINE							
GYMNASTICS							
TRAINING							
S+C post training							
Aerobic							
Acrobic							
(Aerobic base							
July/Aug)							
Anaerobic (Anaerobic							
base Sept-Dec)							
(Post)							
Flexiblity/Recovery							



3 day/wk schedule:

PHASES 1

- -Pre-Training: Alternate *Activation 1* and *Activation 2* days each training session (Consider doing Week 1: Act 1, Act 2, Act 1 then the following Week2: Act 2, Act 1, Act 1) and repeat this strategy for ALL Phases
- -Ankle pre-hab Day 2 days/wk
- -Post Training Session 1 day/wk: Functional Conditioning
- -Post Training Session 2 days/wk: Injury Prevention Flexibility

PHASES 2

- -Alternate Activation 1 and Activation 2 days each training session
- -Ankle pre-hab Day 2 days/wk
- -Post Training Session 1 days/wk: Functional Conditioning
- -Post Training Aerobic Base Training 1 days/wk
- -Post Training Session 2 days/wk: Injury Prevention Flexibility



PHASE 3

- -Alternate Activation 1 and Activation 2 days each training session
- -Post Training Session 1 days/wk: Performance Conditioning
- -Ankle pre-hab 2 days/wk
- -Post Training Anaerobic Base Training 1-2 days/wk
- -Post Training Session 2 days/wk: Injury Prevention Flexibility

PHASE 4

- -Alternate Activation 1 and Activation 2 days each training session
- -Post Training Session 1 days/wk: Performance Conditioning
- -Ankle pre-hab Day 1 day/wk
- -Post Training Anaerobic Base Training 1 day/wk
- -Post Training Session 2 days/wk: *Injury Prevention Flexibility*



PHASE 5 and 6

- -Alternate Activation 1 and Activation 2 days each training session
- -Post Training Session 2 days/wk: Performance Conditioning (if necessary due to time restrictions, reduce to 2 sets of some/all exercises)
- -Post Training Session 2 days/wk: *Injury Prevention Flexibility*

