OFF-ICE

Strength and Conditioning Program

REVISED 2/19

OBJECTIVES

- To understand the importance of athleticism
- To determine what activities can enhance performance
- To provide guidelines for a safe conditioning environment

INTRODUCTION

The purpose of this strength and conditioning chapter is to introduce a wide variety of fundamental exercises and drills that athletes and coaches can implement in all phases of their training. The game of hockey presents the athlete with great demands in muscular endurance, power, overall strength, core strength, flexibility and especially hockey specific strength. While attaining higher levels of the previously mentioned, your overall goals should include:

- developing a high level of athleticism
- performance enhancement
- prevention of injury

ATHLETICISM

All athletes should be striving for the development of total athleticism through participation in a variety of sports, no matter what age. The game of hockey requires great reflexes, balance, flexibility, lateral movement, acceleration, deceleration, and powerful movements, etc. All of these skills can be further developed through other sports to promote a high level of athleticism. Many of today's top players have not developed to their highest level of athleticism. It is never too late or too early to develop a strong athletic base. A great way to improve your weaknesses is to participate, mainly during the off-season, in recreational sports or summer leagues. Younger players should be encouraged to engage in many sports. Some examples of recreational or competitive activities that are specific to a hockey players' needs are: baseball, basketball, lacrosse, racquetball, soccer, street hockey and tennis. Through these sports, the many attributes of athleticism are touched upon:

- agility
- balance
- coordination
- core stability
- endurance
- flexibility
- power
- reaction/reflexes
- speed
- strength

PERFORMANCE ENHANCEMENT

Performance enhancement is the ultimate goal of strength and conditioning. The formula for one to develop to the next level and maintain that high level of performance is strength + speed + power + conditioning (aerobic and anaerobic) + athleticism + nutrition + recovery.

The following questions and answers touch upon the basics of conditioning for hockey.

Q1. Should hockey players be concerned with both the aerobic and anaerobic energy systems?

A1. Anaerobic. This is a question that brings up much discussion and debate. Some coaches are still spending late spring and early summer running laps around a track. Others are spending the majority of time performing sprint training. Is there an effective means of training the major energy systems required in this highly complex game?

The main focus should be on the predominant energy system being used. Means of conditioning that system should be as specific as possible. While a hockey player should be

concerned with both of the energy systems, it should be known that the bulk of conditioning should be anaerobic.

A good aerobic (with oxygen) base should be developed in order to aid in the recovery of the damage done by the anaerobic systems. However, this base can be built up through a high volume of anaerobic training with the occasional aerobic bout. Interval training is an excellent way of targeting both of the systems. Monitoring the work-to-rest intervals will determine what system will be working the most. A highly developed anaerobic system (without oxygen) will assist the hockey players in their shifts using the off time as a rest interval. Means of improving the anaerobic system include wind sprints, slide board sprints, racquetball, inline skating, intervals, and tempo runs. Concentrate on interval work (800's, 400's, 200's), slide boards, and different forms of tempos on football/soccer fields.

Q2. Does a hockey player need to work on muscular power more than muscular endurance?

A2. Yes. The definition of power is Power = Force x Velocity. Performance is usually determined by the amount of power he or she can produce. Remember that a powerful skater is better than a strong skater. A high force initiated on the ice at a high velocity will produce a significant amount of skating power. Muscular endurance is the ability to exert a sub-maximal force over a prolonged period of time. A hockey player needs a base such as performing leg circuits in the early off-season to endure what lies before him or her. The endurance level will also increase as anaerobic conditioning increases. The training programs for these components do vary. Muscular endurance can be attained by performing circuit and/or interval training. However, the path (aerobic/anaerobic) of training, will impact one's whole career. Power and strength should be the focus through weight training, plyometrics and sprints.

Q3. To stretch or not to stretch?

A3. Stretch!!! It is not a hard question to answer. Flexibility is defined as the ability to move a joint or a group of muscles through a specific range of motion without causing injury. Poor flexibility will impact speed, agility, power output and recovery time negatively. Being flexible will also reduce the chance of injury to joints and muscles as well.

There are many different basic stretching techniques that can be implemented; Static stretches, PNF, dynamic, mobility and ballistics. The areas to stress are:

- adductors
- abductors
- hamstrings
- core (low back/abdominals)
- shoulders
- internal/external hip rotators

Stretching should be done after an easy warm-up. A consistent stretching program will increase flexibility and reduce the chance of an injury. If time is not allowed for a proper stretching routine to take place, the focus should be placed on a continuous warm-up. This includes large total body movements that take the body through a wide variety of hockey specific motions. Stretching should be done before, during and after weight training, practice, games, sprints and plyometrics. Be sure to avoid over-stretching, which may lead to hyper-mobility of some joints (e.g. shoulders).

Q4. Is core strength and stability important to a hockey player?

A4. Major importance! Core strength is a key element that many youth players and coaches neglect. The core (low back, abdominals, hip, and obliques) obviously links the lower body to the upper body. But more importantly, a strong core allows a hockey player to transfer the power generated by the lower body to the upper body, absorb and generate impact and skate efficiently. When skating, the core/trunk area is in a constant state of isometric contraction, which allows the skater to better control his or her movements. There are many

different factors and motions that contribute to having a strong and stable core area. This area should be trained in a fashion that is multi-dimensional and multi-plane. Always train all of the muscles to avoid imbalances.

- flexion
- extension
- lateral flexion
- hyperextension
- rotation
- diagonal rotation
- stabilization (isometrics)

All of these motions must be targeted in order to prepare for the onslaught of checks (given and taken), shots on goal, falls, changes of direction, etc. Take caution when training the core and remember that we are trying to prevent injuries, not have them occur.

Q5. How does it all fit together?

A5. It all fits together in a well organized format known as periodization. Periodization is a changing and/or manipulating of the training stimulus over the course of a year. Load, intensity, tempo, recovery, mode of exercise, and focus on conditioning are structured to fit the proper time of the year. The factors that determine the cycles or phases are usually the competitions. However, hockey competitions can span a long period of time. The following chart (Chart 10-1) shows the periodization over a year for hockey.

	STRENGTH	POWER	SPEED/PLYOS/ COORDINATION	METABOLIC TRAINING	FLEXIBILITY TRAINING
OFFSEASON Hypertrophy Active Rest - 3 weeks	High foundation of general, max and absolute strength	Moderate to low levels of power training	Low levels of speed and coordination training	Low-aerobic and anaerobic threshold	High
OFF SEASON Hypertrophy	High foundation of general, max, absolute and endurance training	Low levels of power training	Moderate levels of speed, coordination, plyos and agility training	Low Aerobic, Low Moderate Anaerobic	High
PRESEASON	Moderate-relative, endurance and specific strength training	Moderate to high levels of power training	Moderate levels of speed, coordination, agility and plyometric training	Low Aerobic, Moderate anaerobic threshold, max V02 and lactic threshold	High
PRESEASON Basic Strength to Strength and Power	High level of specific strength	High level of power training	High levels of speed, coordination, agility and plyometric training	Moderate to high levels of Anaerobic	Moderate training to maintenance
IN-SEASON Strength and Power to Peak	Maintain strength training and core lifts	Moderate to high levels of power training - complex and Olympic-style lifts	High levels of speed, coordination, agility and plyometric training	High Anaerobic	Maintenance
IN-SEASON PLAYOFFS Peak	Maintain - concentrate on specific strength training (core and Olympic-style lifts)	Maintain high levels of power training	Maintain levels of speed, coordination, agility and plyometric training	Maintain anaerobic intervals, primarily on ice	Maintenance

Chart 10-1. *Periodization for hockey.*

PREVENTION OF INJURY

Whether you are dry land training, on the field/court, or in the weight room, the ever present risk for injury is always looming. Hockey, at any level, has some amount of contact (body-to-body, body-to-ice, body-to-boards, body-to-puck, stick-to-puck). It is our goal through the proper training programs to prepare the body's joints, muscles, and bones to withstand the various positions a hockey player might engage during the game. In order to do this, the training must be multi-directional, functional to their needs, and performed through a safe and effective range of motion with adequate flexibility.

It is intended that all of these exercises and drills are to be monitored by a strength and conditioning specialist to ensure safety and proper form. As with all age levels, correct technique must be stressed and the proper form has to be mastered before going on to any weight-bearing exercise. Impatience with body weight and/or minimal resistance exercises at any age may lead to injury.

Although preventing an injury is not guaranteed, by performing a proper plyometric, agility, flexibility, and strength training program, the chances are decreased.

STRENGTH AND CONDITIONING GUIDELINES

Body Weight and Free Weight Exercises

A. Perfect form is a must. There are no excuses for performing an exercise or lifting weight without perfect form. Do not sacrifice for heavy weights. It typically leads to injury.
B. Perform in a slow and controlled manner (except Olympic lifts).
C. Focus on body alignment (knee tracking, lordotic curve, head neutral, weight distribution, etc.).
D. Avoid rounding the lower back.
E. Ask questions if you do not know how. If you don't, something will usually go wrong.
F. Progressive Overload - Start with a wide variety of body weight exercises. Then progress to light weights. Do not rush. A 2.5 pound increase per week over a year results in a total increase of 130 pounds.
G. Closed Chain vs. Open Chain Exercises - Hockey is played, for the most part, on one leg. Strength training should be as sport specific as possible. Closed chain exercises are those that are more functional towards the game involving more than one joint at a time. Having one foot or two feet in contact with the ground or apparatus is classified as a closed chain exercise. Open chain exercises usually involve only one joint or muscle group. These types of exercises are typically used at the earlier stages of rehab and are not as functional to a healthy athlete. Remember that the body is the ultimate free weight.
H. Overhead pressing movements are to be done with the knees bent, hips pushed back and head forward in order to reduce the strain on the lower back.
I. In any type of squat motion the knees must remain over the ankles as the hips move down and back so that the thigh bone is parallel to the floor/ice.
J. Once the body weight exercises have been mastered, vary the tempo by controlling the eccentric (lowering) and concentric (raising) speeds.

EXERCISE SELECTION (ALL LEVELS)

LOWER BODY

Squats / One Leg / Other

a. Double Leg Squatting
- Front (should precede back)
- Back

b. Single Leg
- One Leg Bench Squat
- One Leg Squat
- Step Ups
  - * *regular*
  - * *lateral*
  - * *lateral Crossover*
- Lateral Squat / Rocker
- Lunges
  - * *straight lunge*
  - * *lateral*
  - * *angle*

c. Other
- **Four Way Hip**
- **Flexion**
- **Extension**
- **Abduction**
- **Adduction**
- Glute Ham Raises
- Hyperextensions
  - * w/ twist
  - * w/o twist
  - * one Leg (more advanced)
  - * one Leg with twist
- Reverse Hyperextensions
  - * unloaded
  - * loaded (machine, SB, MB, PR)
- RDL/SLDL

UPPER BODY

Pressing / Pulling

a. Pressing
- Push Ups
  - * *regular*
  - * *modified*
  - * *on one or two MB's*
  - * *hands on box*
  - * *loaded*
  - * *narrow vs. wide*
- Dips/Bench Dips
  - * *loaded*
- Bench Press
  - * *flat*
  - * *incline*
  - * *dumbbells*
  - * *narrow vs. wide vs. neutral grip*
  - * *on physioball*
  - * *tempos*
  - * *negatives*
- Overhead
  - * *DB Military*
  - * *Standing Military*

b. Pulling
- Chin Ups
- Pull Ups
- Towel Grip, V Grip, Neutral Grip
- Inverted Row (close, wide, under, over, towel)
- DB Row
- Barbell Row
- Upright Row
- Shrugs

OTHER / PREHAB

a. Auxilary
- Shoulder FLB
- DB Hammer Curls
- Reverse Curls
- Wrist Rollers
- Lying DB Extensions
- Hyperextension
- Calves
- **Speed Trax** (Hockey specific machine)

b. Prehab
- Shoulder
  - * *internal rotation*
  - * *external rotation*
  - * *ab/adduction*
  - * *FLB prehab*
  - * *slideboard*
- Lower Body
  - * *one legged squats*
  - * *balance work*
  - * *MVP shuttle*
  - * *plyos*
  - * *bands*

OLYMPIC LIFTING

Olympic lifts are total body, multi-joint, explosive lifts that require the highest rate of force development. The development of explosive power is key in all sports from badminton to hockey. Recall the definition of power: Power = Force x Velocity. Within the definition, the two components are force and velocity. A greater velocity at which the nervous system fires in order to inflict a high amount of force on an object (body, barbell, floor) will result in increased power output. Increased power output leads to better athletic performance.

If Olympic lifting is a new concept for an athlete or coach, there are a few guidelines to follow:

1. Perfect form! If lifting technique is not mastered, injury can occur, the lift will be inefficient and the maximum amount of force may not be developed.
2. Start with a broom stick, hockey stick, or aluma-lite bar.
3. Do not rush the process. It takes time to perfect the technique.
4. Make sure to have a qualified coach to help you on your technique.
5. Everything is done from the power position.
   a. head is in a neutral position, eyes straight ahead
   b. chest is out and shoulders are squeezed together
   c. arms are long and relaxed, rotate elbows outward
   d. torso is rigid, contract abdominal muscles
   e. back is flat to arched (lordotic curve, lower back)
   f. knees are slightly bent with the hips propped back
   g. hands and/or bar are slightly above knees
   h. shoulders should be in line with the bar
   i. weight should be distributed over the heels to the middle of foot, avoid being on the toes or balls of your feet
   j. lower leg should be perpendicular to the floor to avoid forward flexion of the knees over the toes

OLYMPIC LIFTS - VARIATION AND PROGRESSIONS

Power Shrug	Push Jerk	Hang Snatch/ Over Head Squat
High Pull	Push Press	DB Snatch
Hang Clean	Split Jerk	DB Clean
Power Clean	Over Head Squat	DB Alternate Puch Jerk
Hang Snatch	HC or PC/Front Squat	DB Clean/Front Squat
Power Snatch	HC or PC/Jerk	HC/FS/Jerk

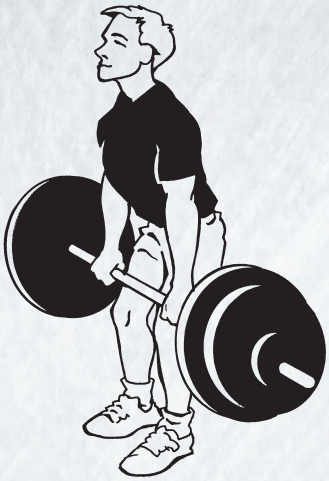
Chart 10-2. *Olympic lifts – variation and progressions.*

All Olympic lifts should be performed in a range of 1-6 repetitions and 2-4 sets. They should also be performed at the beginning of a program following proper warm-up, abdominals and plyometrics.

HANG CLEAN PROGRESSION

Starting Position

- athletic position
- chest out
- lower back straight
- shoulders over bar
- head up
- bar just above knees



Pull Position

- in a jumping action, extend the knees, hips and ankles.
- keep the shoulders over the bar as long as possible.
- once the bar clears the hip, pull with the elbows out.
- Keep the bar as close as possible to the body on the pull.

Catch Position

- Drop under the bar by rotating around and under the bar.
- Hyperextend the wrists as elbows move under the bar.
- Move the feet to a squat position and land flat footed.
- Rack the bar across the front of the shoulders.
- Keep the lower back and chest position rigid.
- Drop as low as necessary to handle the load.
- Keep the head up.
- Keep the elbows parallel to floor.
- Keep the lower back straight.

CORE STABILITY EXERCISES (ABDOMEN, LOW BACK, HIPS)

Abdominal and core work should be done before any heavy lifting to aid as a warm up and make sure it gets done. It won't get done at home! The goal, whether it is more muscular endurance or strength, will decide the reps, sets and intensities.

Total control of the torso is necessary to get the most benefit out of these exercises. A slow and controlled motion is required on all except the medicine ball twists and throws.

The Abdominals

1. Flexion (including lateral flexion)
   a. Crunches
      - regular
      - reverse
      - with plate
      - alternate hand toe
   b. Others
      - v ups
      - leg throw downs
   c. Lateral flexion
      - side stack crunch on medicine ball
      - overhead medicine ball lateral flexion
      - off bench obliques without twist
2. Rotation
   a. Lateral
      - Russian twist
      - lying trunk twist
      - medicine ball twists/throws
   b. Diagonal
      - alternate v twist
      - bicycles
      - off bench obliques with twist
      - medicine ball twists/throws (standing/sitting)

The Lower Back

1. Hyperextension/Extension
   a. Supermans
   b. Bird dogs
   c. Back extensions
      - with twist
      - weighted
2. Physioball Programs
   a. Hips
   b. Pelvic thrusts
   c. With the medicine ball
   d. thrust and hold
2. Medicine ball work
3. Hip extension off medicine ball

Other

1. Physioball/Swissball stabilization programs

MEDICINE BALL TORSO EXERCISES

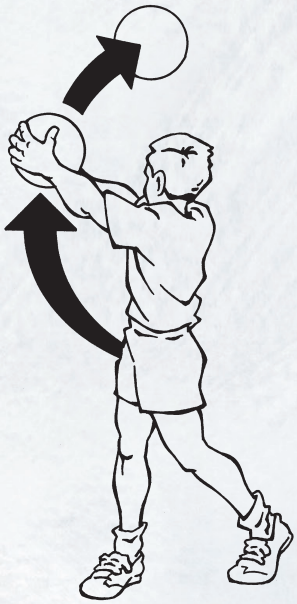
Hammer Throw

Starting Position: straddle stand position with the ball held waist high off of the hip and back to a partner.

Movement Description: Swing the ball from off the hip and throw it over the opposite shoulder to a partner or against a wall.

Rhythm/Speed: fast and explosive

Weight of Ball: 2 kg for beginner. 5 kg for advanced.



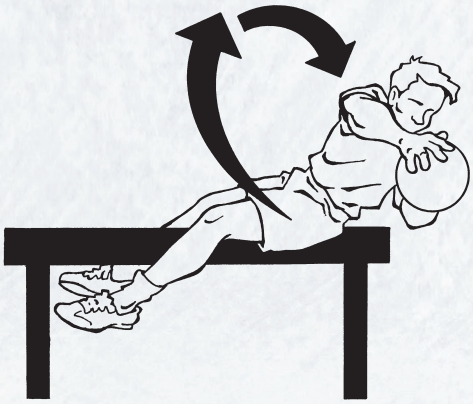
Russian Twist - Seated

Starting Position: From the straddle sit position with the knees bent and the body inclined back at 45 degrees, hold the ball extended from the chest with the feet hooked under a bench.

Movement Description: Keeping the legs and hips stationary and the arms extended, twist the torso around to the right and then to the left. Pause for one count in front of the body to begin each repetition.

Rhythm/Speed: moderate

Weight of Ball: 2 kg for beginner.
5 kg for advanced.



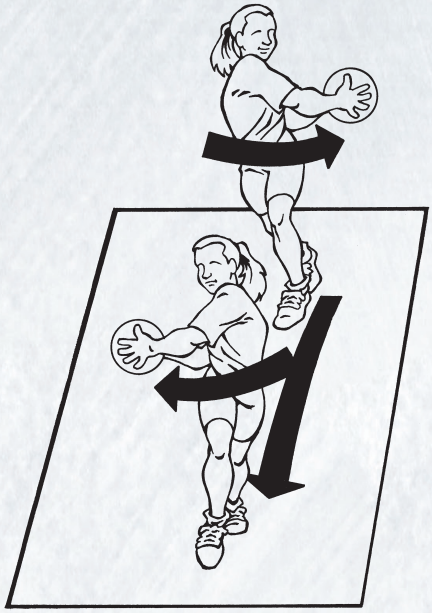
Russian Twist - Walking

Starting Position: stride stand position with the ball extended out from the chest.

Movement Description: Walk forward and swing the ball to the side of the front leg, alternating the ball with each step.

Rhythm/Speed: moderate

Weight of Ball: 3 kg for beginner.
5 kg for advanced.



Rocky Full Twist

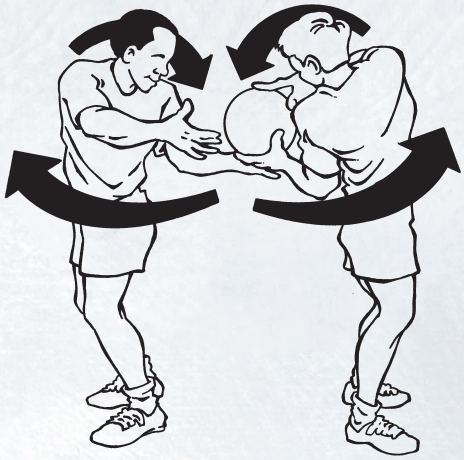
Starting Position: straddle stand position with back to the partner an arm's length away with the ball extended out from the chest.

Movement Description: Keeping the feet and hips stationary, twist the torso and pass the ball to the partner, who twists the opposite direction. The pass is executed right to right and left to left.

Rhythm/Speed: moderate to fast

Weight of Ball: 3 kg for beginner.
5 kg for advanced.

Variations: (a) kneeling; (b) seated.



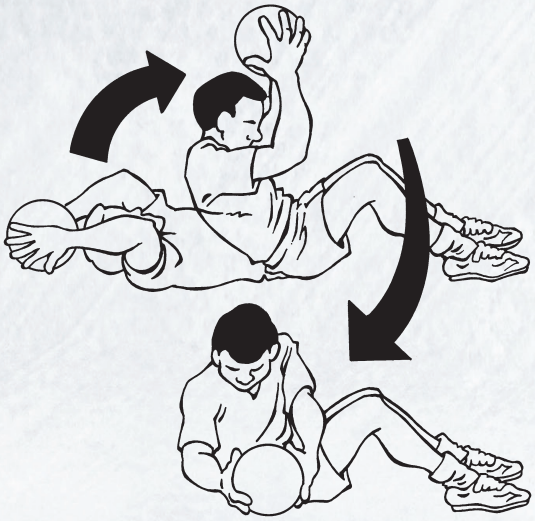
Medicine Ball Sit Up and Twist

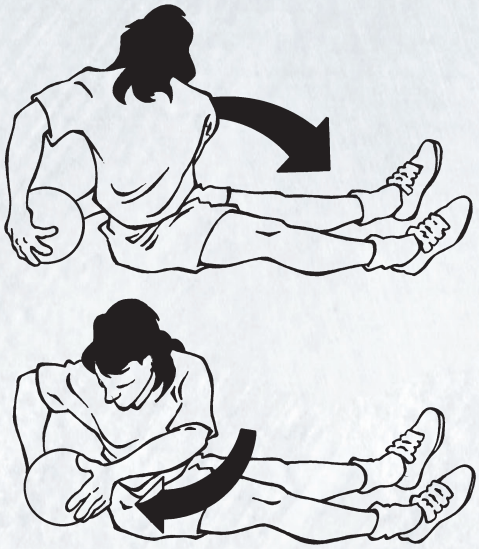
Starting Position: straddle sit position with knees bent at 45 degrees and ball extended overhead

Movement Description: Sit with the back to the ground. Maintain the ball in the extended overhead position. Sit up and twist, touching the ball to the right. Return to the starting position and repeat to the left.

Rhythm/Speed: moderate to fast

Weight of Ball: 2 kg for beginner.
5 kg for advanced.





Seated Solo Twist

Starting Position: straddle sit position with the ball on the ground behind the back

Movement Description: Reach back, grasp the ball and pass it around to the starting position. Repeat in same direction until the desired number of reps is achieved. Repeat the exercise turning the opposite direction.

Rhythm/Speed: fast

Weight of Ball: 3 kg for beginner.
5 kg for advanced.

Standing Side to Side Passes

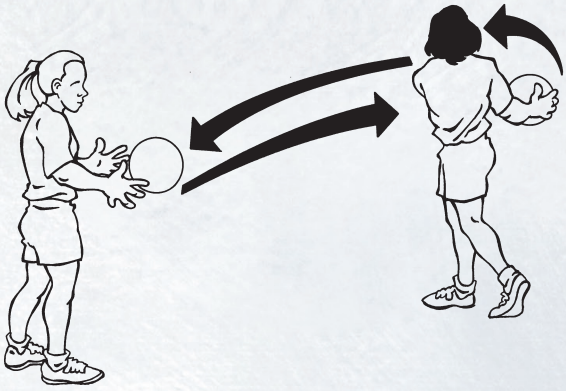
Starting Position: straddle stand position with the ball held waist high off the hip

Movement Description: Pass the ball to the outside of the partner's opposite hip, forcing the partner to twist to that side upon catching the ball. Throw it back to the same side from which the throw originated.

Rhythm/Speed: controlled

Weight of Ball: 3 kg for beginner.
5 kg for advanced.

Variations: (a) kneeling; (b) against a wall without a partner



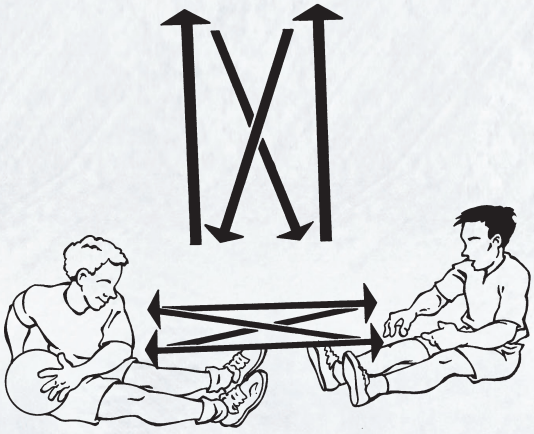
Partner Straddle Sit Passes

Starting Position: straddle sit position facing a partner sitting in the same position with a ball held at the side just off the hip.

Movement Description: Partner A passes ball down the side to partner B. Partner B passes the ball diagonally across to partner A's opposite side. Partner A then passes to B down this side and B returns ball diagonally to A at the starting point. Repeat for the desired number of repetitions and switch the pattern so that each partner is doing the opposite action.

Rhythm/Speed: moderate, emphasizing the stretch upon catching the ball

Weight of Ball: 3 kg for beginner.
5 kg for advanced.



TRUNK ROTATION AND TWISTING

Rocky Half Twist

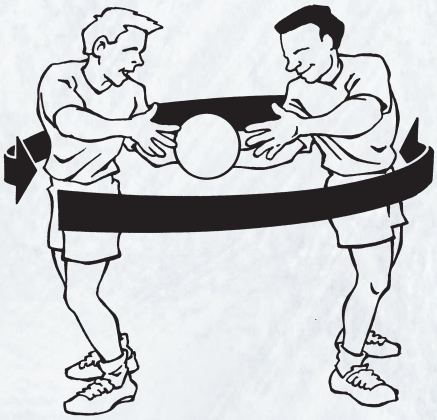
Starting Position: stand in the straddle position. Put the back to your partner an arm's length away with the ball held extended out from the chest.

Movement Description: Keeping the feet and hips stationary, twist the torso and pass the ball to a partner who twists in the same direction. The pass is executed right to left and left to right.

Rhythm/Speed: moderate to fast

Weight of Ball: 3 kg for beginner.
5 kg for advanced.

Variations: (a) kneeling; (b) seated



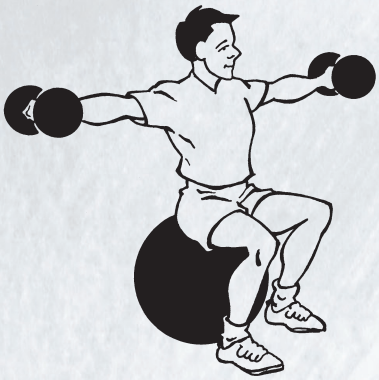
PHYSIO/SWISS BALL EXERCISES

Swiss Ball - Dumbbell - Military

- Sit tall.
- Press the dumb bell overhead.

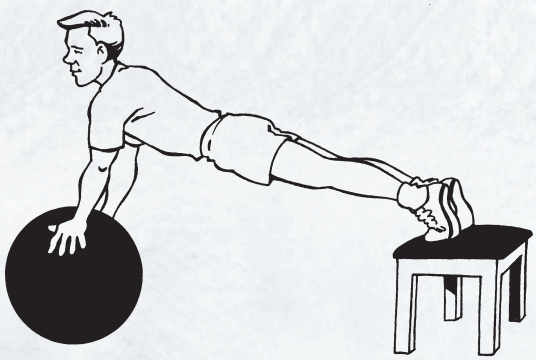
Swiss Ball - Dumbbell Lateral - Raise

- Sitting on the ball, stay tight.
- Raise both arms up and down.



Swiss Ball - Push Up

- With your feet on a bench, perform a push up.
- Keep your hands on the ball.

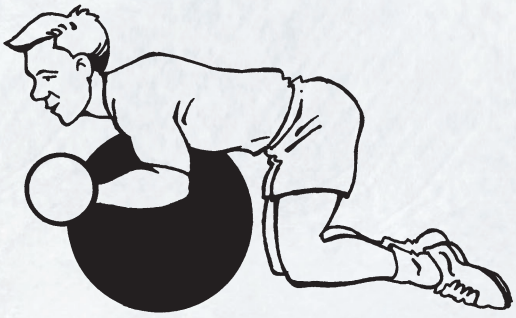


Swiss Ball - Prone External Rotation

- Stabilize the shoulders and externally rotate (top and side view).
- Lie face down with the ball on your chest and the arms flexed at 90 degrees.

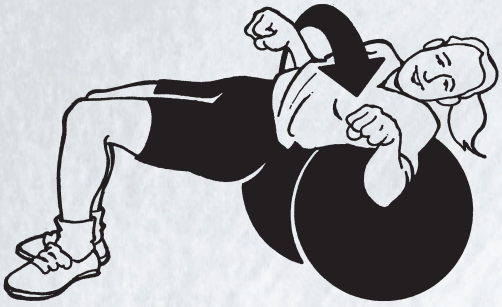
Supine Low Crawler - 2 Balls

- Roll laterally to one side as the opposite side goes into shoulder flexion.
- Hold that position and alternate shoulder presses.



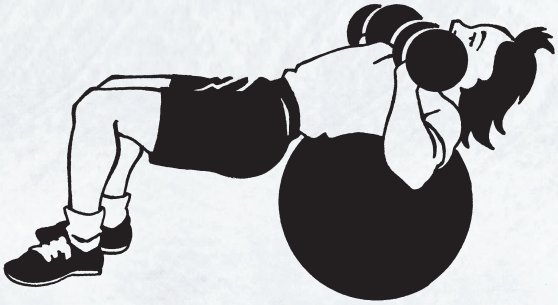
Swiss Ball - Ab Crunch

- Keep the lower back in contact with the ball and crunch up.
- Keep your weight on the upper chest.



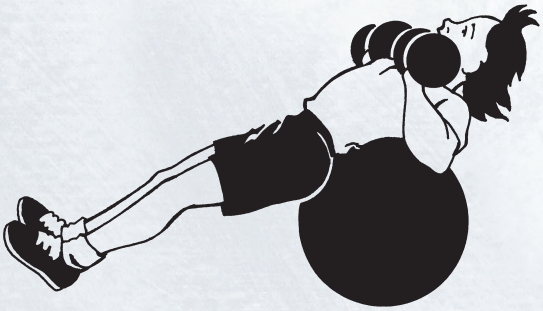
Swiss Ball - Dumbbell Bench Press

- Keep the hips up.
- Keep the ball on your upper shoulders.



Swiss Ball - Incline Dumbbell Press

- Put the hips down around the ball.
- Press the dumbbell up and back.



Prone Ball Roll

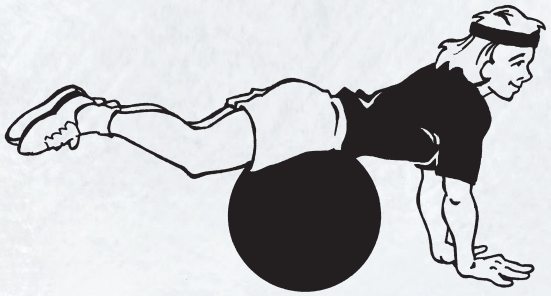
- Keep the legs straight.
- Roll to one side and back (left or right).
- Keep your form.
- Cross Crunch with Counter Kick – roll to the side until the ball gets close to your armpit, then cross crunch by bringing your leg up on an angle toward the elbow.

Prone Hip & Leg Extension (reverse hyper)

- Roll out onto the ball. Find a balance point with the hands on the floor. Raise the upper body and lower body together. Hold for three seconds and lower. Drape your body over the ball and repeat.
- To make this more difficult, take your weight off of the hands, but leave them in contact with the floor.
- Roll forward and position the elbows on the floor. Hold that position for 10 seconds, then slowly come down.

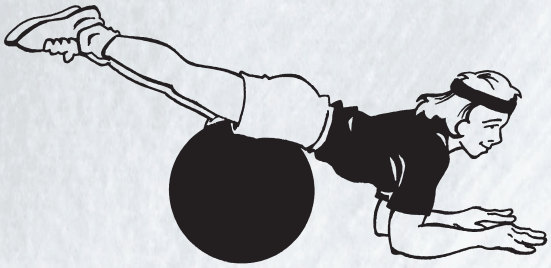
Prone Forward Ball Roll

- Kneel in front of the ball with your forearm resting on top and roll forward.
- Do not arch the body. Stay tight and don't let the belly drop.
- As you get better, stand with the hands closer to you so that as you roll, the ball gets farther away, increasing the load on the abs.
- Start on your toes in pushup style position.



Swiss Ball - Lower Ab Tuck

- Lower the abs.
- Don't roll so far back that you increase the lumbar curve.
- You should feel no pressure in the spine.
- One leg at a time.



Supine Hip Extension

- Lie on the ball until the head and shoulders rest on the ball.
- Use your hamstrings, glutes and hips.
- Raise the hips up and hold for three counts then lower.
- If you roll forward (knees over toes), you emphasize your quadriceps, not your hamstrings. Therefore keep the lower leg straight.
- Focus on tightening the glutes and even it out.
- One leg at a time with your arms out.

Supine Lateral Roll

- Use your hamstrings, glutes, abdominals, back and shoulder.
- Place your head and shoulders on the ball with your arms spread.
- Start by rolling from side to side (6-10 inches).
- Go farther.
- Keep the pelvis up. Do not let it drop down.

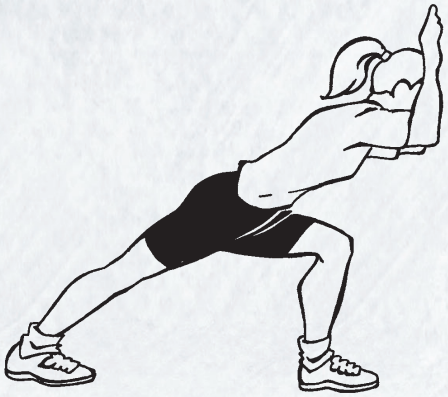
LOWER BODY STRETCHES – THIGH, GROIN, HAMSTRING, GLUTES & CALVES

Lower Body Stretch #1

Standing an arms length from a wall, bend one leg forward and lean against the wall without losing the straight line of your head, neck, spine, pelvis, rear leg and ankle.

Keep your rear foot down and parallel to your hips. Bend your arms and shift your weight toward the wall.

Exhale and contract the quadriceps of your rear leg without jamming or locking the knee.

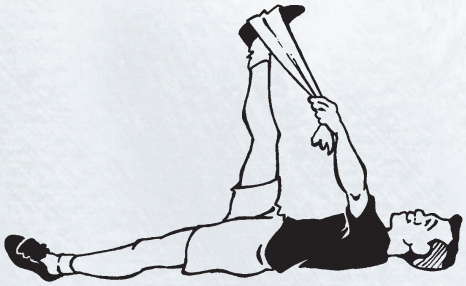


Lower Body Stretch #2

Lying on your back, wrap a folded towel around the instep of one foot, inhale and extend the leg upward.

Exhale and pull the raised leg toward your face, keeping the leg straight.

Also, if you have a bad back, flex the extended leg and slowly lower it to the floor.



Lower Body Stretch #3

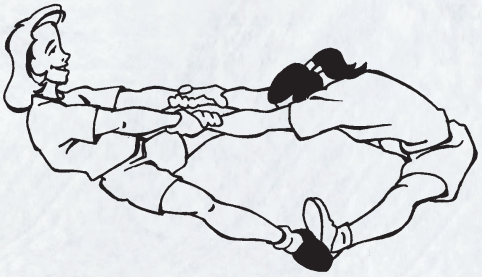
Lie on your back with your left leg crossed over your right knee.

Exhale and flex your right knee, lifting your right foot off of the floor, and let it slowly push your left foot toward your face, keeping your head, shoulders and back flat on the floor.

Lower Body Stretch #4

Sit on the floor with your legs spread. Your partner assumes the same position with his or her feet braced against yours. Lean forward and grasp each other's wrists.

Exhale. Keeping your legs straight, extend your upper torso and bend forward at the hips as your partner leans backward and pulls on your wrists.



Lower Body Stretch #5

Stand with the balls of your feet balanced on an edge or step.

Exhale and lower your heels to the floor.

NOTE: If necessary, place one hand against a wall for balance and support.

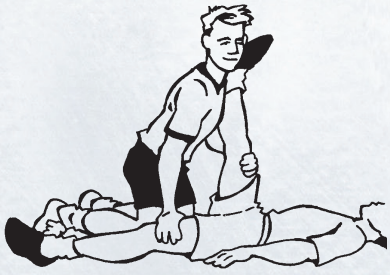
Lower Body Stretch #6

Lie on your back and raise one leg, keeping your hips square.

Your partner anchors your leg on the ground and grasps your raised leg.

Exhale as your partner raises your leg upward.

NOTE: Remember to keep both legs straight and your hips squared. **Your partner should avoid grasping the heel because the leverage may result in straining the knee.**

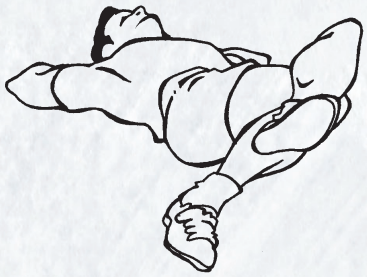


Lower Body Stretch #7

Lie on your back with the knees flexed and hands interlocked under head.

Lift your left leg and hook it on your right leg.

Exhale and use your left leg to force the inside of your right leg the floor, keeping your elbows, head and shoulders flat on the floor.



Lower Body Stretch #8

Lie on your side, flex one knee and raise your heel toward your buttocks.

Exhale, grasp your raised ankle and pull your heel toward your buttocks without overcompressing the knee.

NOTE: To maximize the stretch, make sure the medial sides of your legs touch each other and your pelvis rotates backward (visualize pulling your tailbone between your legs). **Do not arch your lower back or twist your pelvis.**

UPPER BODY STRETCHES – CHEST SHOULDERS, ARMS & UPPER BACK

Upper Body Stretch #1

Sit or stand with one arm across your chest and grasp the elbow with your opposite hand.

Exhale and pull your elbow toward the opposite shoulder.

Upper Body Stretch #2

Sit or stand with one arm flexed behind your back and grasp the elbow from behind with your opposite hand.

Exhale and pull your elbow across the midline of your back. Grasp your wrist if you are unable to reach your elbow.

Upper Body Stretch #3

Sit or stand, flex your right arm and raise your elbow to chest height.

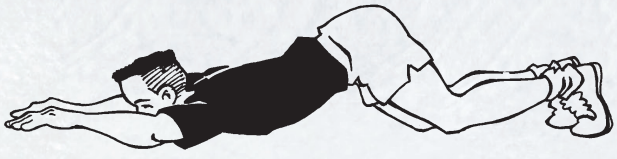
Flex and raise your left arm so that its elbow can support your right elbow. Intertwine your forearms so that your left hand grasps your right wrist.

Exhale and pull your wrist outward and downward.

Upper Body Stretch #4

Kneel on all fours, extend your arms forward and lower your chest to the floor.

Exhale and extend your shoulders. Press on the floor with your arms to arch your back.



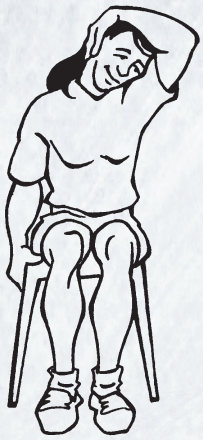
Upper Body Stretch #5

Sit on a chair with your right hand grasping the lowest part of the chair frame to stabilize your right shoulder.

Place your left hand on the upper right side of your head.

Exhale and pull the left side of your head onto your left shoulder.

NOTE: The stretch will be dissipated upon release of the chair.

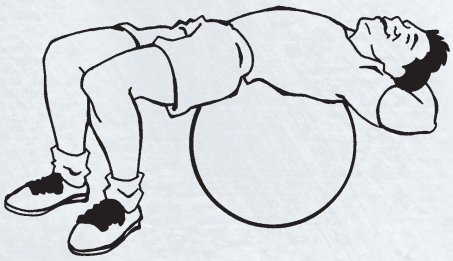


Upper Body Stretch #6

Sit on the floor with a large Swiss ball against your lower back and your hands interlocked behind your head, elbows facing forward.

Inhale, extend your thighs and raise your buttocks off the floor. Roll the ball and achieve a neutral position. The ball should be under your shoulder blades (scapula), with your lumbar spine flat, your knees flexed at 90 degrees and your elbows abducted.

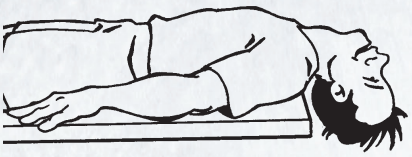
NOTE: You should feel the stretch in the upper chest area.



Upper Body Stretch #7

Lie on your back on a table with your head hanging over the edge.

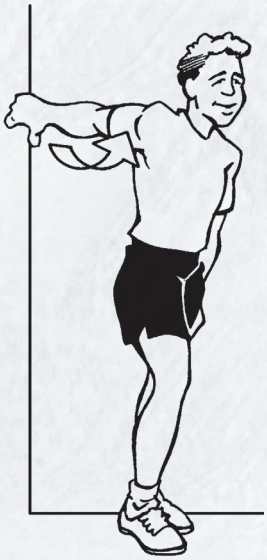
Hold the stretch and relax.



Upper Body Stretch #8

Stand with your back to a door frame.

Rest one hand against the door frame with your arm internally rotated at the shoulder, your forearm extended and your hand pronated with your thumb pointing down. Exhale and attempt to roll your biceps so that they face upward.



Upper Body Stretch #9
Sit with both of your arms flexed and your hands interlocked behind your head.

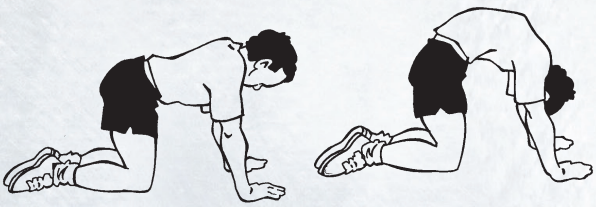
Your partner grasps both elbows and pulls them backward toward each other.

UPPER BODY STRETCHES – TORSO

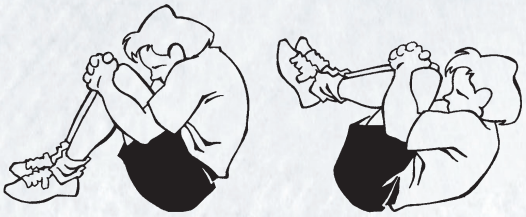
Upper Body Stretch #10
Kneel on all fours with your toes pointing backward.

Inhale, contract your abdominals and round your back.

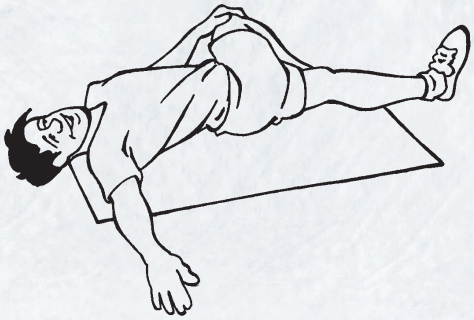
Exhale, relax your abdominals and return to the “flat back” position.



Upper Body Stretch #11
While sitting, curl into a ball and roll backward onto your back, keeping hold of your knees.



Upper Body Stretch #12
Lie on your back with the legs straight. Bring the leg toward the chest and pull it across your body to the floor. Keep he opposite arm and shoulder flat on the floor.

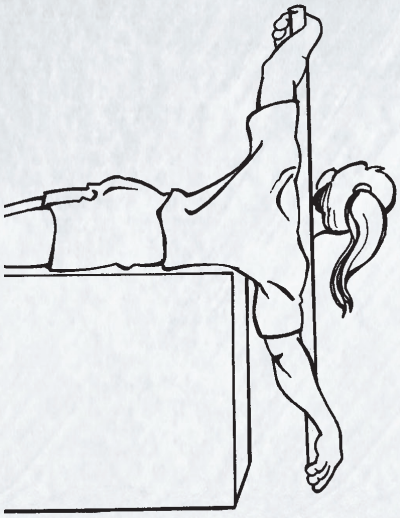


Upper Body Stretch #13

Lie face down on a table with your upper torso extended over the edge, grasping a stretching stick that rests across your shoulders.

Exhale as you slowly twist your upper torso as high as possible and return to the starting position.

NOTE: This stretch is great for the motion of shooting the puck.



Upper Body Stretch #14

Lie face down on the floor. Extend your arms and push your upper body up. Look upward to enhance stretch.

DYNAMIC MOBILITY EXERCISES

Ballet Dance

Start: Begin standing with your feet shoulder-width apart and the torso tight. Lift your left knee straight up to a parallel position, keeping the heel tucked under the hip.

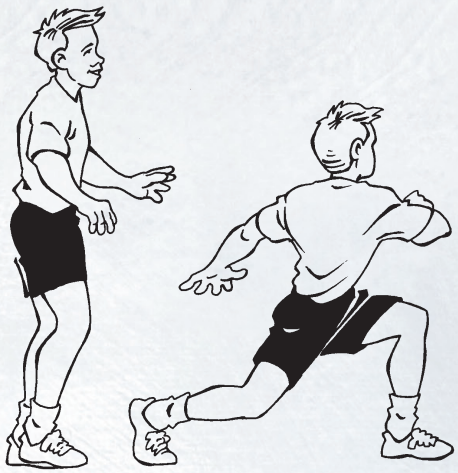
Middle: Keeping the right foot planted, rotate the left leg and hip 180 degrees to the left.

Finish: Keeping the chest and head up, plant the left foot in line with the right foot and squat down. Repeat 10 times on each leg.

Lunge & Twist

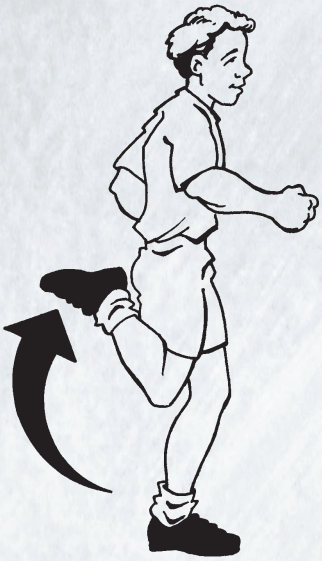
Start: Begin standing tall with your torso erect. Lunge forward with the left leg. Lunge to a 90 degree bend in your left knee. Making sure that your knee does not go past your ankle.

Finish: End by twisting your torso to the left side. Alternate and repeat.



Butt Kicker

Moving forward, try to kick your heels up as high as possible, making contact with the butt. Keep the torso tight and the ankles dorsi-flexed.



High Knee Pull

Walking forward, keep the torso erect and head up. Raise the knee as high as possible. Grab the knee and pull it to your chest. Alternate pulling the knees in.

LEARN MORE

Click on the following link(s) for more information on the topics covered in this chapter. *(Internet access is required).*

www.usahockey.com/page/show/1578029-dryland-training