

THE PHILOSOPHY OF TRAINING A GOALTENDER

When I was with the Buffalo Sabres, Doug McKenney, the Sabres Strength and Conditioning Coach was largely responsible for this description of our opinions involving training goaltenders, primarily during the off-season, to prepare for the upcoming season.

While each pro player receives a specific program developed from a series of on-going tests, the outline below describes areas which need to be addressed.

Goaltenders have, in the past, always stayed away from a lot of conventional Dry-Land Conditioning and Strength Training. As well they should because most of the advice provided was incorrect. Upper body strength is not a primary concern and most standard hockey drills don't mimic position specific movement patterns for goaltenders. A proper conditioning program should try to develop a better athlete, not a better weight lifter. The points of concern for properly conditioning goaltenders are listed by priority:

AGILITY/QUICKNESS: One's ability to start, stop and/or change direction, while staying balanced and under control, is what sets great athletes apart. Such agility, often termed "athleticism", as well as speed are, two athletic characteristics that were thought to be only "God given" and impossible to coach. As Strength and Conditioning techniques have progressed, such characteristics have become coachable. Since goaltenders never wander far from the net, skating speed is never much of an issue. However, quickness and agility are. Typically, great goaltenders are some of the best athletes on the team. By replicating patterns commonly used while performing one's athletic position, a player can improve his athleticism.

LOWER BODY POWER: Typically, goaltenders have the best vertical jump on the team. This comes from explosive Lower Body Power, which should be a major concern. Training such power should be approached from two angles. One, should be overall maximum force development. This type of force development carries over onto the ice in a variety of ways. An example would be making a low diagonal half butterfly pad save on the far side (pushing and dropping). Another way to approach power development is transitional. This can be executed by performing multiple response plyometric drills that will always transition into a sprint or other movements. An example would be a low stick save on the glove side, followed by a knee drop (V), followed by a shuffle right,

then followed by a high glove save left. Typically, the first save, or skating move isn't always what sets goaltenders apart, but rather their ability to regroup, recover, and make multiple saves or multiple skating moves (on ice goalie transition). The quicker and more physically efficient one can make that save while staying in a proper, balanced position, the more successful they will be.

ABDOMINAL/TORSO STRENGTH: This is a very important area for goaltenders, as well as all hockey players, and should not be neglected in any conditioning program. The Abdominal/Torso area is the center of gravity for the body and related to all athletic and goaltenders movements. Again, the quicker and more physically efficient goaltender can be making saves, while staying in a proper, balanced position, the more successful he will be.

FOOT QUICKNESS: A combination of foot quickness and dexterity drills coupled with movement patterns and transitional drills should be incorporated into any off-season program. The goal here would be to improve the athletes ability to move their feet as well as transition from one direction movement to another. Foot quickness plays a pivotal role in virtually all positions.

FLEXIBILITY: Flexibility is always a primary concern. Injuries often occur in extended and/or awkward positions. Proper flexibility will improve one's strength through a greater range of motion, as well, as decrease one's chance of injury. Greater flexibility will also improve a goaltenders ability to scramble, close holes, and to cover a greater area in front of the net in a quicker and more balanced fashion. One can never be too flexibility but surprisingly, flexibility is an area which is often overlooked. Strength coaches, like Mark Nemish in Nashville, actually "stretches" the players to help them increase range and the ability to contort. These two-person flexibility exercises seem to really help.

HAND/EYE COORDINATION: The bulk of all athletic performances lies here-the coordination of the limbs (arms and legs) with the eye. This is critical to a goalkeeper who must use a four-inch stick paddle or an 11-inch skate blade to stop a three-inch puck traveling up to 80 miles per hour.

USA Hockey, and others, have published a lot on dryland training as it relates to hand/eye coordination, Here are

a few ideas:

- 1) Dribbling one or two tennis balls while squat - hopping
- 2) Playing handball against a wall with one or two tennis balls
- 3) Dribbling a tennis ball on the paddle of a goal stick

Blind reaction drills are another way of increasing hand/eye coordination. Facing a wall eight to ten feet away, have the goalkeeper do a variety of things with a ball which is tossed from different angles over the player's shoulder and off the wall.

- 1) Have the goalkeeper clearly catch the ball, alternating hands.
- 2) Use a rapid fire tossing at the goalkeeper using the palms to deflect the ball off to the sides.
- 3) With hands behind the goalkeeper's back, move laterally and stop the ball with the chest or stomach.
- 4) With hands behind the back, again, the goalkeeper must use only the legs to stop the ball.
- 5) With goal gloves and stick (wrist weights can be added to increase the challenge), isolate the glove hand, stick hand and stick paddle.

CONDITIONING: Conditioning should also be approached from two different angles. First, is a base or aerobic conditioning. This would improve overall fitness by building a base to help athlete recover quicker from intense bouts of exercise. As the season approaches, an emphasis would also be placed on position specific "anaerobic conditioning" where the athlete performs drills that mimic their movements on the ice. This would allow the goaltender to adapt to short, intense bouts of performance while still maintaining the proper level of play required to be successful. Such a proper conditioning program will also help to reduce body fat, making movements quicker and more efficient.

UPPER BODY STRENGTH: Although goaltenders aren't involved in as much physical contact as member of the team, Upper Body Strength is still important in helping to maintain a strength base throughout a long and physically demanding hockey season. Emphasis should not be put on common weight training movements always using heavier poundages with lower repetitions (6-8), but rather on functional, explosive techniques that help improve goaltender movement using lighter weights with higher repetitions (10-15). Light weight training can also improve muscle coordination and quickness by continually training the neuromuscular pathways used when performing a goaltending move and also strengthens joints through a great range of motion.

Goalkeepers up to the appx. 14 years of age should not be

too concerned with strength training, other than the traditional push-ups, squeezing of a tennis ball, etc. At the age of 14, though, goalkeepers should begin to develop a program. Every young developing athlete is different, so programs will vary. The objective, though, is the same: To strengthen and properly tone the body without adding excessive bulk or eliminating flexibility.

Today, unlike 10 years ago, there are a great number of "clubs" or "gyms" that can provide a custom, supervised well developed program without risk, and with someone there providing the incentive.

At home, some strength training exercises involving the stick arm and wrist without the use of anything special are for example:

- 1) Take a stick at the butt end and do the following:
 - A) Shoulder height, with locked elbows using the stick hand, hold the goal stick directly in front of you at the butt end.
 - B) Essentially do the same as above, but hold the stick out to the side.

(*Note: The length of time and the number of repetitions should be determined by each participant.)

SKILL DEVELOPMENT This concept is nothing more than taking specific skills (poke checking, clearing the puck, paddle saves, etc.) and using off-ice drills as if they were on-ice. Goalkeepers playing street hockey is a fine avenue to skill development. Practicing clearing/shooting the puck in the driveway is great.

SUMMARY: In summary, any sport must be dissected in order to insure that the training program the athletes perform maximizes their ability to play the game. Strength and Conditioning athletes goes far beyond lifting weights and riding a stationary bike or skating numerous laps after practice. There should also be a great deal of emphasis placed on variety. The reason for this it two fold. First, the more variety of stimulus in the training program the more progression and adaptation occurs. And secondly, and maybe equally important, the more variety, the fresher the approach and subsequently the better chance in motivating even the least enthusiastic athletes to participate. Typically goaltenders have been very poor when it came to conditioning. Such an attitude is not only old fashion, but just plain lazy. There is simply no reason for not trying to improve. Currently, some of the hardest working and best conditioned athletes at the col-



Working on, and testing flexibility, is important.

the game of hockey