

BY KIRK VICKERS

Where should we begin when we are told to improve speed and quickness?

First we must know what type of speed and quickness we are looking to improve. Is it linear speed (straight ahead speed); is it acceleration/deceleration (stop and go speed); do we need to improve lateral speed (side to side); first step (from a dead stop to high level speed, also called reaction time); do we need to develop angular or multidirectional speed (rotational or combinations of the previously mentioned types of speed).

Don't be afraid to ask the coach specifically what he or she is looking for when they are asking you to improve your speed. You want to be specific on the areas you need to work on

SPEED ASSESSMENT

All types of speed and agility are very important for hockey and other sports. But knowing the type of speed we need to improve is very important to setting up a program to achieve maximum speed and quickness.

It is not uncommon for an athlete to be fast or quick in one direction but deficient in another. A good example might be a forward who is extremely fast from blue line to blue line but doesn't go from circle to circle very well. In this case we would want to focus and incorporate more drills and exercises that involve more angular/multidirectional speed or lateral speed depending on which angle or direction we see the most deficiencies.

Before starting a program the athlete should be assessed for each type of speed to determine their strengths and weaknesses.

Here are some assessment tools/drills to use to identify strengths and weaknesses. I would first do these as off ice drills, but these drills could be progressed to on-ice drills with some minor modifications.

- 20 or 40 yard sprint (linear speed)

- Use lines or cones to do a side-to-side shuffle or shuttle run $10-15\ \text{yards}$ (lateral speed)

- Set up 2 cones 10 yards apart. Start at one cone - jump turn and sprint 10 yards to the other cone (first step)

- Set up 2 cones or lines 10 — 15 yards apart. Start at one cone/line then forward sprint to the second line or cone, then back-peddle to starting point (acceleration)

- Set up 3 cones in a diamond pattern 5 yards x 5 yards x 5 yards. Start at one cone and sprint to the next doing a 360 degree circle around the first cone then sprinting to the next cone doing the same until this is repeated for all 3 cones (angular/multidirectional).

Each of the drills should be timed and recorded as well as assessing form and technique. All of this information should be recorded and dated to create a baseline or starting point to bench mark improvement. These same drills can now be used as training techniques and exercises to improve speed and agility.

TECHNIQUE

We always say that "the shortest distance between two points is always a straight line." In order to go from Point A to Point B the fastest and quickest way is to eliminate any wasted motion or movement and keep the motion as true to form as we possibly can.

During our drills and exercises we want to watch for excessive motion or movement that could take us out of straight alignment. It is best to have someone else watch you or video tape yourself. Many times athletes feel they are doing our exercises or drills effectively and efficiently when in reality they are a mess. It helps to have someone tell you during a drill or exercise when you are out of position or alignment.

If you have difficulties correcting the flaw(s) during the exercise, then slow the exercise down to a level where you can gain mastery over the movement or drill. If you are still struggling break the movement down into even slower and smaller parts and do multiple repetitions (this is what I call "Patterning" the movement).

You may have to perform several hundred small movements over and over again until it feels natural; some would call this muscle memory. After you have "patterned" this area then you can start to add more speed and complexity to the movement or drill.

You will be amazed by how much speed and strength you will be able to develop by adopting this strategy. We tell athletes all the time that "you have to know how to go slow before you can go fast".

SPEED DEVELOPMENT DRILLS

Hopping — Single leg and double leg hops are great for speed development. Hopping promotes explosive power through the hips, knees, and feet/ankles.

Jumping — Forward, lateral, and angular jumps. These can be done single leg and double leg. Mix controlled jumps as well as quick repetitive jumps. Jumping can improve reaction time as well as explosive power.

Shuffle – This is quick side to side stepping. For variety add directional changes. Hops and jumps can also be added with shuffle drills.

Speed ladders – Can be beneficial for speed enhancement. Remember to change up the patterns of the drills, forward, lateral, and crossover.

Cone running — Allows an opportunity to work on most components of speed. Some beneficial drills are; figure 8's, zig-zag cone running, L-cone sprints, drop down pop-up sprints.

Hill sprints – Uphill and downhill (be careful to watch form and technique).

Jump rope — Can also increase speed and agility

Plyometric work — Most lower body plyometric drills will incorporate some form of jumping, or hopping; often times jumping or hopping on or off a box or a

bench. Some effective drills are: box depth jumps, repetitive box jumps on and off a box, lateral box jumps. I have found that high level box jumps are very taxing on the body and should not be overused as this can potentially cycle the athlete into injury or slow speed development. Form and technique are a MUST.

Skipping - overlooked by many coaches and athletes but very effective for speed development.

Sprints – It is hard to beat sprints for overall speed development.

REMEMBER

When designing speed and agility drills, form and technique are critical for maximal speed enhancement. Assess, date and record your starting speed so you can monitor your progress. Create variety within your program.

Recovery after a high intensity workout is important to prevent injury and allow for optimal speed development. Overtraining is one of the biggest mistakes we see when athletes design their speed and agility programs. Have someone watch you or video tape your workouts so you can effectively identify flaws in techniques. We recommend having an experienced coach or trainer help you put together a proper speed and agility program.

Kirk Vickers, the owner of TRIAD Health and Fitness, a high performance training facility in Farmington Hills, has been a respected figure in the Michigan sports community for more than two decades. Heearned a bachelor's degree in Athletic Training and Exercise Physiology from Central Michigan University and has worked with many high-level high school, collegiate, club and professional sports programs as well as individual athletes.

Dynamic warm-up prepares you for activity

BY DR. CHAD MOREAU

Most players and teams have a pre-game ritual that they go through in getting ready for a game.

For some players this might be riding a stationary bike followed by static stretching. For a lot of younger players the pre-game routine might be static stretching in the locker room before going out onto the ice. And for a lot of adult recreational players the pre-game warm-up might only be a couple of knee-bends before the first shift!

Recently there have been a few research studies that suggest that static stretching, such as simple toe touches, is not effective at decreasing injuries. More importantly they can actually be detrimental to hockey performance because they actually decrease the power output of the muscles.

Now, more and more I am seeing young teams using a dynamic warmup to get ready for a game or practice. A dynamic warm-up that gradually increases the athlete's body temperature, stimulates the central nervous system and prepares the muscles to generate the power needed for a dynamic activity like hockey.

The warm-up starts 45-90 minutes prior to the opening face-off. The dynamic warm-up consists of 30-foot skipping drills with arm circles, skipping with hip rotations, skipping with high knees, skipping with arm rotations, repetitive heel ups, a lunge walk, side-shuffles, carioca and back-pedal runs.

These exercises can be done in a hallway in the arena or even outside. A lot of the players will also do a few short sprints.

For the more sophisticated players we will then proceed to do a weight room warm up consisting of low loads and high velocity. An example would be power cleans for four sets of 3 repetitions at a light weight so that the bar is moving as quickly as possible. This workout will usually last 10-15 minutes and the player will usually feel "wired" afterwards and ready to play.

I have found that this type of workout decreases injuries and has an interesting performance enhancement effect.

Dr. Moreau is the Strength and Conditioning consultant for the NHL's Edmonton Oilers and a Certified Strength & Conditioning Specialist based in Lomita, California. Check out hockeyOT.com for more information.

24 Michigan Hockey Michigan Hockey Online.com



BY MICKEY TULETT, AT, CES, MS, BHK AND GWYNNE WATERS, PT, OMPT, PES

The pace of hockey demands top level conditioning with regards to strength, flexibility, and anaerobic conditioning.

Preparation to play is important both in season and offseason. Many injuries can be prevented with proper conditioning, warm up and cool down. Self treatment may suffice in some cases, while in other instances consultation with a sports medicine professional is imperative. Some knee and shoulder injuries, concussions, high ankle sprains, and lacerations fall into this category. These injuries are usually the result of contact with another player or with the boards.

MCL STRAIN

ıs/

Pain localized to the inside of the knee may be the result of an MCL strain. Treatment includes RICE (Rest, Ice, Compression, Elevation), but the player may also benefit from a brace to support the knee during daily activities and for use upon return to skating. Rehabilitation exercises will include strengthening and flexibility of hip and knee musculature.

ACL INJURY

A player may have experienced an ACL injury if a "pop" is heard and pain is felt deep in the knee, accompanied by swelling. The player may require surgery, bracing, and rehabilitation both prior to and following the surgery.

HIGH ANKLE SPRAIN

High ankle sprains occur as the result or twisting or torquing at the top of the skate. The player will need X-rays to make sure no fracture has occurred. Treatment will include RICE and rehabilitation with stretching and strengthening and dynamic balance activities for calf and leg muscles.

CONCUSSION

m

om

Head or neck injuries may result in a concussion. A concussion is a change in mental status caused by trauma or shock and is accompanied by confusion, loss of memory, and sometimes loss of consciousness.

Eighty percent of all concussions are sport related. Concussions can be a very difficult injury to deal with, which makes it important to choose the proper professional for treatment and management. The healthcare professional should have experience in testing different aspects of a concussion such as cognitive (i.e. reaction time), physical (i.e. loss of consciousness), somatic (i.e. headaches) and emotional (i.e. anger or sadness).

A neuropsychologist can provide the proper balance of all these aspects along with a variety of tests designed to identify even the smallest deficits which help determining readiness in returning an athlete to play.

SHOULDER INJURIES

A shoulder subluxation or dislocation occurs when the ball (humerus bone) comes partially or completely out of the shoulder socket. The shoulder must be put back into place by a medical professional and is considered a medical emergency.

A shoulder separation, which occurs at the acromioclavicular joint on top of the shoulder, occurs when the end of the collar bone becomes partially or completely separated from the shoulder bone. For both of these conditions, the player will be placed into a sling, and may or may not require surgery and subsequent rehabilitation.

LACERATIONS

Lacerations may occur to the face, wrists, legs and even the throat. When a laceration occurs, the skin is not the only structure that can be injured.

Underlying tissue such as muscles, tendons, ligaments and nerves may also be damaged. Even though an emergency room doctor can treat these injuries, a plastic surgeon may be another option, especially for injuries to the wrist and hand area. A plastic surgeon will pay attention to smallest details which is necessary for ideal healing and return to function.

If damage to muscles, ligaments, or nerves occurs, physical or occupational therapy may also be recommended to facilitate the healing process and assist in the player's return to full function, which will aid in prevention of improper movement patterns and future injuries.

Some injuries will respond to the RICE formula with progression to gentle stretching, strengthening, and gradual return to play. If symptoms persist beyond 1-2 weeks, the player should seek advice from a sports medicine professional.

GROIN PULLS

Groin pulls, or adductor strains, are one of the most common injuries experienced by hockey players. Pain along the inside of the leg into the groin may come on gradually or result from a contact injury. Treatment includes ice, gentle stretching of hip adductors and flexors, with strengthening of adductors and core muscles.

SPORTS HERNIA

Some groin pulls seem to linger, with the pain and aching extending up into the lower abdomen. This may be indicative of pubalgia, or a sports hernia. A sports hernia is different than a regular hernia. It may occur as a result of a muscle imbalance between the stronger inner thigh muscles and the weaker lower abdominal muscles.

A physician may order an ultrasound or an MRI to help diagnose this condition. A physical therapist can assess and prescribe stretching and strengthening exercises for muscle imbalances. If conservative treatment fails, the patient may be referred for surgical intervention.

The DMC's Sports Medicine Program and Rehabilitation Institute of Michigan, can help you get back in the game. The DMC Sports Medicine Program is staffed with the same orthopaedic specialists and physical therapists treating Detroit's best pro athletes, and they're ready to treat you like a pro, too. If you or a member of your family has a sports injury and you are not sure what to do, for immediate attention or to schedule an appointment, call (313) 910-9328 to get in touch with DMC Sports Medicine physician 24/7 regarding your injury.



BY JIM KIELBASO, MS, CSCS

Concussions in sports, and long-term brain damage, have been all over the news lately. Sports organizations are trying to figure out the best policies for dealing with concussions and product manufacturers are spending millions of dollars to come up with the best equipment to save our brains.

 $Unfortunately, training to prevent these injuries is rarely talked about. \ New research out of Elon College is showing that training the neck can actually help save your brain.$

The monster hits that knock people out are devastating, but research the NFL is conducting has shown that the build-up of sub-concussive blows is the shadow-lingering menace that is responsible for much of the long-term brain damage.

It seems that every person is able to sustain a certain number of sub-concussive blows before long-term damage occurs. Unfortunately, nobody knows what their "number of hits threshold" is before damage occurs.

CRASH TESTS

Fortunately, the automotive industry has demonstrated for years that during crash tests when the head is sitting on top of a larger and stronger cylinder (i.e. your neck) the brain encounters lower G-forces at impact. The stronger neck also helps protect an athlete from devastating spinal cord injuries.

What this means to you is that, through training, you can actually increase the size and strength of your neck which will reduce the G-forces your brain encounters on every jarring hit. Over the course of time, lowering those forces can raise your

"number of hits threshold" and save you from long-term damage.

NECK TRAINING

It would be great if everyone had high-tech neck training equipment, but most people don't have access to this kind of technology. The Elon College research uses a seven-exercise protocol for complete development, but performing the following three exercises is an excellent place to start if you have limited resources. These three exercises can be done with minimal equipment, but it's important to do them correctly.

Manual Resistance Neck Flexion — Sit on the floor with your hands behind you to support yourself. Have a partner/spotter stand behind you with his knee placed between your shoulder blades. His hands will be placed on your forehead. Start by tilting your head backwards slightly. The spotter will apply a little pressure to your forehead as you slowly pull your chin to your chest. Pause, then have the spotter apply more pressure as you slowly return to the starting position, resisting his pressure. As you fatigue, the spotter will use less and less pressure. Perform 10-15 repetitions.

Manual Resistance Neck Extension — Lay face down on a bench or get on all fours on the ground. Start with your chin tucked until the back of your head is slightly below parallel to the ground. Have a spotter place his hands on the back of your head and apply pressure as you raise your head as though you're looking up at the sky. Hold at the top, have the spotter apply more pressure, and slowly lower

back to the starting position as you resist the pressure. Perform 10-15 repetitions.

Shrugs – Hold a weight in each hand at your sides. Shrug your shoulders up toward your ears as high as you can, hold for one second, and slowly lower. Repeat for 10-15 repetitions using a heavy enough weight to make this challenging.

Perform these exercises 2-3 times a week. As you get used to the workout, you can gradually increase the intensity and number of sets you perform. If you feel any pain during these exercises, stop immediately. A greater range of motion is not good for the neck, so keep the movements relatively small for safety.

Perform the manual resistance exercises with slow, controlled movements with constant tension through the range of motion. You'll notice the muscles in your neck respond quickly and get stronger, which will help you prevent concussions and neck injuries.

If doing these exercises a few minutes a week may help prevent concussions and neck injuries, what reason do you have for not doing them? Start training your neck so you can save your brain.

Jim Kielbaso, MS, CSCS, is the Director at Total Performance Training Center in Wixom. You can learn more about his training systems at: Total Sports Complex.com or get more training related information at: Ultimate Stregth And Conditioning.com.

Train harder and more often: the Top 10 Tips for optimal recovery

hydrations bangto

Athletes are often faced with the challenge of eating for high performance while on a limited budget.

Coupled with time constraints, the many temptations of fast food outlets, convenience stores, and even the grocery store can interfere with achieving optimal

But with a little planning you can help you make training a nutrition success.

SHOPPING TIPS

Bottled water alternative — Instead of expensive bottled water, use tap water. If you want to avoid chlorine, let your tap water sit open overnight in the fridge before putting the lid on. An alternate is to buy a water-filter pitcher. For a different fresh taste, add slices of lemon or cucumber to your water bottle

On special — Purchase discounted items! Buy fresh produce, poultry, lean beef, fish, and seafood according to what is on sale. This will also create variety in your diet. Watch for online coupons for additional savings.

Buy bulk — Items such as canned goods, frozen vegetables, rice, pasta, cereal, and other dry goods. See below list for staple, budget conscious food items to bulk up on.

Bag it — Take advantage when meats are on sale. Buy large quantities and then freeze in smaller individual portions.

Cheaper cuts — Cheaper cuts of beef can be cooked at lower temperatures and for longer periods of time for an inexpensive alternative in stews, soups, and crockpot meals.

Budget proteins — Look for recipes that use canned meats and beans for a

Buy only what you can eat — When purchasing fresh produce only buy what you will eat in a few days so you don't waste any due to spoilage. Alternatively, purchase produce that has a long shelf life in your fridge (when kept in plastic bags), such as carrots, cabbage, celery, potatoes, apples and oranges.

Skip Pre-Prepared foods — Choose regular rice and oats instead of the guick cook varieties; the more processed the greater the cost. Choose whole foods and spend the extra time to prepare as the savings add up.

Pack your own lunch — It may be a bit more work initially to make your own sandwiches, soups or salads, but the effort will save you big bucks. In addition, nutritionally, you can control your meal ingredients.

Limit Pre-Packaged sport foods — Sport bars and beverages may be convenient and nutrient-dense, but they are expensive and can be easily made from scratch. Look online for low-fat energy bar recipes with mixed nuts, dry cereals, raisins and dried fruits.

IN THE KITCHEN

Organize - Knowing where supplies and equipment are located in your kitchen can save precious preparation time. Keep a "running" grocery list to limit the number of times you have to go to the grocery store.

Cook big - Cook in batches. Pasta and rice can be easily reheated by

pouring boiling water on top. One-pot dishes like stirfries, soups, stews, and casseroles are inexpensive meals that go a long way. Portion in freezer safe containers for quick reheated meals on the go. You can prepare a month's

worth of meals in one weekend.

Containers - Purchase quality, reusable food storage containers in different sizes and shapes. Packing leftovers the night before or making several lunches at once will save time and ensure your meals are portable.

KITCHEN MUST HAVES

Crockpot – arrive home to a hot meal by throwing in a few ingredients in the morning, such as veggies, beans, and cubes of meat, for quick one-dish meals.

Microwave – for quickly cooking potatoes, chicken, and fish in a flash.

Blender – for cost saving smoothies to refuel and rehydrate

Cookware – microwave egg cookers and vegetable steamers will save you time.

Good foods

Cupboard

Dry pasta Low fat whole wheat crackers

Pretzels

Canned tomatoes and sauce

Pizza sauce

Canned fish

Broth based soups

Peanut butter

Nuts (almonds, walnuts, etc.)

Sesame seeds Kidney beans, lentils, chickpeas

Dry cereals, low-fat granola

Raisins

Dried fruit

Bulk oatmeal

Brown or whole grain rice

Sweet potatoes, white potatoes

Popcorn

Honey

Refrigerator

Low-fat yogurt and milk Regular or light cheeses

Low-fat cottage cheese

Vegetable juice

Fresh fruits and vegetables

Freezer

Multigrain breads, buns

Whole grain bagels, English muffins, pitas, tortillas

Frozen vegetables (Stir fry mix)

Chicken portions

Lean beef cuts and ground Orange juice concentrate

Frozen yogurt

FLUIDS FOR ATHLETES

 $Fluids\,are\,important\,for\,athletes\,for\,many\,reasons, including\,to\,replace\,water\,lost$ during exercise, to avoid decreases in performance due to dehydration and to help maintain core body temperature within acceptable limits.

Fluids can also deliver carbohydrate during prolonged exercise (e.g., sport drink) and provide electrolytes (sodium and potassium) lost through sweat (e.g., sport drink).

Monitor your fluid loss

It's important to pay attention to your fluid loss to perform at your best:

- Ample, light colored urine means well hydrated.
- Dark, scant urine signals a need for more fluid.
- Weigh yourself before and immediately after exercise see "Fluids after exercise" below.

Fluids before exercise

Drink plenty of fluid daily to maintain weight and adequate urine output:

- Drink 13 20 ounces of fluid 2-3 hours before exercise.
- Drink 5 12 ounces about 15 minutes before exercise.

Try this when training, not in competition, to find how much fluid is comfortable. Also limit beverages that contain caffeine.

Fluids during exercise

Drink enough fluid to maintain fluid balance.

- Drink 5 12 ounces every 15 to 20 minutes.
- Test how much you can tolerate without discomfort.

Athletes rarely consume enough to maximize the absorption rate of the digestive system.

Fluids after exercise

• Replace fluid loss by 150% (about 22 fluid ounces per pound of weight loss). For example, if you have four-pound weight loss, drink about 88 ounces of fluid.

- · Include sodium with or in fluids consumed after exercise.
- Sodium helps maintain plasma electrolyte balance and the desire to drink

Important – away from home

Although tap water may be "safe" to drink, variations in the bacteria may cause gastro-intestinal upset. Adding ice to drinks is the same as adding tap water.

Acclimatize

If you expect to compete in a very hot environment, acclimatize yourself prior to competition by:

- Training in a similar environment prior to departure
- •Traveling to the competition site at least a week prior to competition and gradually increasing your training in those conditions.

Factors that encourage fluid consumption

- · Easy access to the beverage
- · Chilled drinks (about 50 degrees F)
- · Flavored fluids
- Sodium added

Carbohydrate - energy for endurance

If exercising more than one hour, consume carbohydrate with your fluids.

- Commercial sport drinks containing 4% to 8% carbohydrate are a suitable choice.
- Test sport drinks in training, not in competition.

Recovery after exercise

- Drink 22 ounces of fluid for every pound of weight lost during
- Consume high carbohydrate foods and drinks.
- · Consume foods containing sodium (tomato or vegetable juice, pretzels, commercial soup, low fat cheese, salted nuts) and foods containing potassium (vegetables, fruit, milk, legumes, or meat) to replace electrolytes.

Remember to drink beyond thirst because exercise dulls the thirst mechanism.

Source: Sports Nutrition Advisory Committee/Coaching Association of Canada (coach.ca)

MichiganHockeyOnline.com Michigan Hockey

Top 10 fundamentals of off-ice training

BY RICHARD TREMBLAY, CPT, SSC, USAW

Most hockey players want to play at the next level and as you advance the competition becomes more demanding both physically and mentally. It is important to understand that it takes a certain work ethic and focus, on and office, to keep playing. To achieve these goals, it's important to perform off-ice strength and conditioning.

- 1. Dynamic warm-up: Essential to prepare your mind, body and nervous system for the demands of off-ice training. It will help warm up muscle tissue and lubricate joints. This should take 10-15 minutes and should include a variety of sprinting, kicking, bending, jumping, twisting and lunging exercises.
- 2. Hockey movements, not isolation: An athletic body functions as a whole by utilizing muscles, joints and the central nervous system. Therefore it's important to strength train with the same technique using your entire body. The objective is hockey function, not strict isolated movements. Utilizing multi-joint movements (squats, deadlifts, lunges, pull-ups, etc.) and avoiding isolation movements (leg curls/extensions, bicep curls, chest flies, etc.) will help you become and stay hockey strong.
- 3. Ground-based movements: The principal of applying force into the ground with your feet starts most athletic movements and is demonstrated in hockey during skating. Exercises and agility drills that focus on ground-based force will help with your first three steps and remaining strong on your skates. These include plyometrics, squats (single and double leg), Olympic movements (hang cleans, snatches and jerk). Performing exercises lying or seated is not as beneficial for a hockey player. Remember to train how you play!
- 4. Unilateral movements: Eighty percent of a game is played on one leg. Skating involves explosively pushing off with one leg and then quickly with the other. This single leg explosiveness is improved by performing exercises on one foot at a time. Unilateral exercises include single leg squats, hockey lunges, single leg deadlifts, along with plyometrics that involve unilateral takeoffs.

- 5. The Hockey Core: Core strength and endurance is important for effective movement and to decrease the risk of injury. The core is where the initiation of all movement begins and contains all the stabilization muscles that support the spine. To build a strong hockey core perform planks, side planks, medicine ball twists and resistance exercises with bands.
- **6. Become unstable:** Once you've mastered the fundamentals of strength training you can start performing exercises on an unstable surface. This type of training should only be used to focus on stabilization muscles and not take the place of your primary strength exercises. You should consider using less weight and concentrate on lateral stabilization. Swiss balls, balance boards and air disks are just some of the tools that you can use to create an unstable surface. For example, instead of performing the split squat on the floor, which is stable, put your front foot on an air disk to create instability.
- **7. Include variation:** Variation in your workout will help keep from hitting a plateau and becoming bored. It's important to constantly change your training variables: volume (the amount of reps and sets performed), lifting tempo (speed of reps), rest (between sets), intensity and difficulty. These should be adjusted depending on your goals, strength and weaknesses and training phases. Try to change at least one of these training variables every 2-3 weeks. For example, perform the double leg squat for two weeks, then switch to the single leg squat for two weeks, and then to a split squat.
- 8. Proper energy system: Hockey involves short bursts of energy followed by long rest periods. You challenge the anaerobic system (meaning without oxygen) while skating during a shift and use the aerobic system (meaning with oxygen) while sitting on the bench. To train these systems you can perform interval training (sprinting, jump rope, biking, skating) which involves short (0-15 sec), medium (16-45 sec) and long intervals (46-90 sec).



An off-ice strength and conditioning program is an important part of becoming faster, stronger and a better player.

- 9. Static stretching: Static stretching is an essential part of strength training and should be performed after you've finished training while the body is warm and loose. This will help your flexibility (which helps prevent injuries) and promotes muscle recovery by increasing fresh oxygenated blood flow. A 10-15 minute stretch of the muscle groups used during your workout should be your objective. Hold each stretch for 30 seconds per muscle. A great alternative to static stretching for a hockey player is performing yoga 2-3 times per week.
- 10. Nutrition: Providing the body with the proper foods and supplements at the correct times can make a world of difference to your training and performance on the ice. A carbohydrate to protein ratio of 3:1 should be consumed post training. Carbohydrates help replenish empty glycogen reserves and blood sugar and protein repairs damaged muscle tissue. Also, fluids should be replaced within 30-40 minutes after training and a multi-vitamin supplement should be considered daily.

Tremblay is the owner of Hockey Strength and Performance. Check out his website at hockeysp.com or contact him at rich@hockeysp.com.



Recharge, recommit and refocus for a productive summer

BY BRANDON NAURATO

Playing college hockey and two seasons of pro hockey has taught me a lot about the game on the ice as well as off of it. After experiencing so many ups and downs in the game, I have developed a passion for educating young players on how to prepare themselves for the next level.

With the winter season over and spring winding down there is one question that continually running through the minds of young players across the country as summer approaches. How do I prepare myself this summer for the upcoming season to be a better and more dominant player?

While trying to find the answer to this question I always refer back to the three R's: Recharge, Recommit and Refocus.

RECHARGE

First things first so recharge your hockey battery by taking some time off. Every player from youth hockey to the NHL level experiences numerous mental and physical battles throughout each grueling season.

Whether you experienced an injury, a lack of ice time, or are just burned out from playing games from last August or September, it is crucial to recharge your battery by taking some time away from the rink, trying out another sport and just enjoying life.

One thing that you want to keep in mind is that hockey is just a game and you need to keep it fun. When it's time to work out make sure you bring the intensity and get your work done on or off the ice. Then, enjoy life! Hang out with friends, go to movies, educate yourself and treat people the right way. There are plenty of life lessonsthat can be learned from hockey, such as developing a good work ethic, learning how to work with teammates, giving your best effort at all times and having fun.

These are just a few great lessons that you can use for the rest of your life that will make you a better player on the ice and more importantly a better person off the ice.

RECOMMIT

After you take some time away from the rink and gym, you need to recommit and set up a training plan for the rest of the summer. Some questions you should be asking yourself include: Where am I going to train? What supplements am I going to take?

What is my nutrition plan going to look like?

One huge part of hockey specific training is keeping track of your progress. It is crucial that you write everything down in a workout log sheet. How else are you going to know where you want to be if you don't know where you started from?

Each week you want to be improving on your strength and doing more and more. By writing it all down you are challenging yourself to lift more weight, run faster and continue to improve in all aspects of your training.

Not only should you be recording your workouts, but you should be writing down everything that you are putting into your body in a "nutrition journal." Looking back on my hockey career; the times that I have had the most success on the ice is when I am tracking how I feed my body off the ice.

Nutrition is 80% of training and if you are filling yourself with junk food after a workout, you are going to take one step forward and two steps back.

REFOCUS

The last point in your success guide for summer is to refocus. By refocusing on your hockey career, you are basically setting up goals for yourself for the summer and next season.

You need to analyze yourself as a player and write down three short-term goals for the summer and three long-term goals for the upcoming season.

What type of player are you? Think about all of your weaknesses as well as your strengths and set goals on what you can do to become a better all-around player.

Ask yourself, am I a player that needs to lose fat or gain lean muscle? Do I need to improve my foot speed, shot, or stride? These are just a few questions that you



Take some time to recharge your hockey battery by trying different sports and relaxing with friends and family.

can think about before you sit down to write out your goals.

Goal setting is huge for hockey players and in business. By getting into good habits now of setting goals, you are only preparing yourself to be ahead of the curve in the future when you step into the real world.

Naurato played college hockey at the University of Michigan and finished last season, his second as a pro, with the Dayton Gems of the Central Hockey League. Check out his hockey specific training and nutrition blog at: HockeyTrainingFromThePros.com/blog for more information on how you can be the best player you can this upcoming season.

Get ready for the next level!