

AHEALI OFGANE

Striking The Right Balance Of Fitness, Rest & Nutrition Can Help You Excel On And Off The Ice





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GOOD

Eat A Balanced Dinner: Have More Energy

BAD

No Snack At Intermission: Back 1 Space

GOOD

Drink Sports Drink:

Take A Card



BAD

Imbalanced Diet: Back 2 **Spaces**



AHEAD OF THE



GOOD

Hit The Weights: Take A Card

BAD

Spend All Weekend Watching TV:











Lose A Turn







GOOD

Proper Warm-Up: Ahead 2 Spaces

BAD

Late Night Video Game **Session:**

Lose A Turn

GOOD

Play Other Sports: *Improve* Hand-Eye Coordination







MODERN MATURITY

Proper Diet And Exercise Are Key Ingredients To Players' Development At The NTDP

ver the course of his 16 years with USA Hockey's National Team Development Program, Darryl Nelson has worked with athletes of different shapes and sizes. One thing they all have in common is their skill on the ice. Still, Nelson is amazed by how many youth hockey players lag behind when it comes to their understanding of proper fitness and nutrition. And he's working with many of the top young players in the country.

"I've seen kids who eat two bowls of Frosted Flakes for breakfast and two peanut butter and jelly sandwiches for lunch," Nelson said.

"My advice to both kids and their parents is that if you want to be a world-class athlete, you shouldn't eat foods with cartoon characters on the box."

The Plymouth, Mich., based program annually welcomes 46 of the top young American players to develop their skills and prepare for the next level. And while all of them come to Plymouth with an impressive set of on-ice skills, Nelson finds that most need to become more aware of what it takes to make it to, and succeed, at the next level.

"We motivate our players, mostly through education, so that they understand why," Nelson said. "If the athletes know why they're doing what they're doing, they're going to buy in. If they don't understand the point, then it's going to be a really hard sell."

So, in addition to working with an experienced coaching staff on the ice, players are also introduced to the weight room, often for the first time, where they develop their bodies under Nelson's watchful eye.

An almost universal need for teenaged players is strength, which is best achieved in the weight room, not on the ice. And that's where Nelson takes over.

Too often he finds that players either come to the program with little experience in the weight room or have already established bad habits.

"It would be really nice if they were entering that window and they were already proficient in the weight room," Nelson said. "If they have already practiced sound technique and had experience with a wide variety of different exercises."

The best time to begin serious strength training is after the child's adolescent growth spurt, which is around age 16 for boys and around 15 for girls.

"Once that happens, that's really where they can develop strength and power and muscle mass and bone density most easily," Nelson says. "That's when they're the most trainable."

BEING MORE EXPLOSIVE ON THE ICE

→ Becoming a more explosive player on the ice starts in the weight room. That's the message Darryl Nelson has for the players who come to USA Hockey's National Team Development Program.

"We do lots of jumping and plyometric-type exercises, including the Eric Heiden (five-time Olympic gold-medal speed skater) jump, ladder and diagonal bounding off one foot. Things like box jumps and hurdle jumps and more conventional two-legged plyometrics are still okay," said Nelson, who has been with the program since its early days.

"For our strength training, we use more of the stuff that we're doing year-round. That would include Olympic-style lifts, single-leg squatting, using various kinds of resistance sprinting, whether it's like a partner resistance sprint with a band or it's using some kind of a bobsled or even some on-ice sleds. That's where we're getting most of our explosiveness and power."

VIDEO: Check out some of Darryl Nelson's favorite exercises at YouTube.com/ DarrylN75



THE BEST TIME TO BEGIN SERIOUS STRENGTH TRAINING IS AROUND AGE 16 FOR BOYS AND AROUND 15 FOR GIRLS.

Snooze You Can Use

THE THREE PILLARS OF HEALTH ARE DIET, EXERCISE AND SLEEP. Shortchange one of the three, and just like a stool with a bum leg, the entire structure is likely to topple over.

Sleep is a precious commodity over the long haul of any hockey season, especially at the NHL level. That's why the mantra for every hockey player remains the same—proper rest produces peak performance.

Columbus Blue Jackets defenseman and Team USA veteran Jack Johnson said the key to maintaining the proper rest comes through mental discipline.

"I've learned that once the game's over, you've got to move

on immediately,"
Johnson said. "I'll
maybe think about the
game for an hour or
two, but after that, I
like to think I'm pretty
good at cleaning the
slate and getting ready

While studies say that most adults need seven to nine hours of sleep a night, athletes may need even more.

for the next one."

"Sleep should be considered as important as diet, regular practice and studying the game plan in advance of the game," said Dr. Erik K. St. Louis, associate professor of neurology and senior associate consultant at the Mayo Center for Sleep Medicine in Rochester, Minn.

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- DR. ERIK K. ST. LOUIS
- DR. GROCHATE CONSULTANT

- DR. ERIK K. ST. LUUIS
SENIOR ASSOCIATE CONSULTANT
AT THE MAYO CENTER FOR
SLEEP MEDICINE

"Feelings of tiredness or fatigue, poor energy or motivation levels; reduced exercise tolerance; poor workout and game performance; feeling sleepy; and persisting soreness after a workout are a few possible symptoms of insufficient sleep."

While a variety of elements impact a player's performance on the ice, sleep deprivation can slow down reaction time and reduce energy levels. It can also impact a player's decision-making process, which can directly affect your hockey sense.

Conversely, studies have found that athletes who increase their snooze time experience better performances with better reaction times, a quicker stride and a more accurate shot.

This is definitely snooze you can use.





Slow And Steady Loses This Race

 \rightarrow Several years ago strength and conditioning guru Mike Boyle wrote an article entitled, "Want to Stink This Winter? I Have the Answer."

In it Boyle said that the best way for a hockey player to have the worst possible season on the ice is to incorporate endurance running into his or her training.

"In a very simplistic sense, you get what you train for," Boyle said. "If you want to make somebody slow make them run slow for a long period of time."

To improve your speed on the ice, Boyle suggests an offseason workout program that includes a combination of strength and interval training that features short sprints of approximately 10 yards followed by tempo runs.

JACK JOHNSON

U.S. MEN'S

NATIONAL &

OLYMPIC TEAM



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→ DID YOU KNOW that approximately 60 percent of your body weight is water? That's why it's important for every athlete to stay hydrated before, during and after a practice or a game.

As you skate in a drill in practice or in a shift during the game, you lose fluid by sweating or breathing hard. Drinking plenty of fluids before you hit the ice, and periodically during an on-ice session, will help prevent dehydration and reduce the risk of injury.

Waiting to take a drink until you're thirsty may be too late. According to research from the U.S. Anti-Doping Agency, athletes who wait to replenish body fluids until they're feeing thirsty are already dehydrated. And drinking only enough to quench your thirst does not mean you're no longer dehydrated.

It's best to keep a bottle of fluids close by so you can take a drink in between drills or as you're waiting to return to the ice for another shift.



FOOD FOR THOUGHT

U.S. Women's Team Learn That Proper Diet Can Be The Key To Success On The Ice

By SIAN WILKERSON

s part of their yearly off-ice training camp in Colorado Springs, Colo., members of the U.S. Women's National Team took part in a nutrition session with sports dietician Carrie Arpik, who walked the team through the step-by-step process, addressing everything from knowing what ingredients to buy and how to prepare them to which tools to use and how to properly clean up once a meal is finished.

For U.S. team member and recent college graduate Emily Pfalzer, the hands-on training has been beneficial.

"I like to cook for myself, but I'm not very good at it," said Pfalzer, who graduated from Boston College last season. "So programs like this are really helpful. A lot of my teammates have lived on their own for a while, so they know how to cook and can teach me the way."

According to Arpik, who has been a registered dietician since 2009, nutrition is one of the most important aspects of an athlete's training, especially when paired with rest and recovery.

"What you're eating can influence inflammation in the body, blood flow and how sore you are,"

she explained. "Different products and different types of foods can help with those things.

"The timing of when you eat can also facilitate recovery faster or slower depending on if you're doing it right."

For the majority of players in the women's program, moving out on their own after college was the impetus to start learning how to cook after years of relying on their parents and campus dining halls.

"After college, once I got on my own, I started to learn how to cook," said Anne Schleper, who graduated from the University of Minnesota in 2012.

"It's a life skill that's very important to have and to know how to feed your body correctly because it definitely makes a difference. I can definitely tell, especially as I get older."

Even the younger players in the program have learned that eating right is as vital a skill as skating or shooting. "The biggest part of training is your diet," said 22-year-old forward Dana Trivigno. "You can't out-train



- DANA TRIVIGNO U.S. WOMEN'S NATIONAL TEAM



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a bad diet." 🖈



AS A SPORTS DIETICIAN, Carrie Aprik has educated a lot of elite athletes with what they need to know about eating to perform at an elite level. Here are some of the takeaways she hopes every athlete will learn.

Fueling The Machine. Not all food is created equal, and it's important that athletes know how the food they're putting into their bodies affects their performance. Just as protein is necessary for muscle strength and endurance, carbohydrates are important to maintain energy levels.

Time To Eat. Just as athletes must have an idea of what to eat, they also need to know when to eat it. Most people know that it's important to stay hydrated after a hard workout session, but it's equally as important to refuel with a well-timed snack. "We want our athletes eating as soon as possible after they're done with a hard training session," Aprik says. "After 30 minutes at the most, you need to be getting at least 20 grams of protein in your system."

Hydration Is Key. "Athletes should be working to replace as much fluid as they lose, especially during training," she says. "It's especially important for hockey players, considering how much fluid they lose just sweating underneath all of the equipment." Rehydrate with water or sports drinks, which are helpful especially after a long workout or game.



SHOULD STILL PACK A PUNCH

nacking on the go can be a challenge for young athletes. It's easy to grab a quick

nacking on the go can be a challenge for young athletes. It's easy to grab a quick plate of nachos at the rink in a pinch, and although they're tasty, nachos won't help you out on the ice. Making the effort to bring simple, healthy snacks is key to keeping every athlete at peak performance. Here are five easy ideas for the next time you're searching for the right treat to pack in your hockey bag.

- **1. Popcorn.** You might be surprised to learn that popcorn can be a healthy snack. Without all of that extra butter and salt, popcorn is full of whole grains and fiber. It's also great on the go.
- **2. Trail Mix.** The beauty of this classic treat is its variety. Include everything from nuts and dried fruit to the occasional nibble of chocolate for a healthy and fun snack.
- **3. Yogurt-Covered Pretzels.** Adding yogurt to this snack, already high in fiber, is great for a delicious pick-me-up during an intermission or after a hard practice.
- **4. Chocolate Chip Oatmeal Cookies.** Though it may seem to defy convention, one of these cookies is high in carbs and a great snack for a busy athlete.
- **5. Apple Peanut Butter Smoothie.** This frozen delight, which includes fruit, milk and peanut butter, is high in calories and the perfect energy-boosting snack.

High Octane ONLY <<<

→ WHEN IT COMES TO CALORIES, here's a good rule of thumb to remember: focus on quality over quantity.

Most people seem to think that to be healthy, they need to cut their calories. But according to dietician Carrie Aprik, who works with the U.S. Women's National Team, it's what's in the calories that matters more than how many you consume.

Athletes need to consume plenty of

calories, especially
during training. The
recommended caloric
intake per day for
15 to 18-year-old
athletes is around
2,200 for women and
3,000 for men.

There are good calories, like whole grains, fruits and vegetables, and then there are bad calories, like nachos or pizza, which might be delicious but don't include the nutrients you need to perform at your best.

"The type of fuel you put in your body is important," Aprik says. "Heavier foods like a cheeseburger won't help your whole body in the long run."

However, sneaking in a cheat day every once in awhile isn't the end of the world, she says.

"My personal opinion is that athletes can't be strict about their diet all of the time," Aprik says. "It's important to be pretty cognizant of your diet during training, when it's crunch time.

"In the offseason, it's important for your mental health to be able to relax."



Quarter Sprints

Begin with a five-yard sprint and increase your distance by five yards after two sprints. Take a 15 second rest in between each sprint. This is a good exercise to work on your explosive starts.



TIME	REST
1 Sec.	15 Sec.
1 Sec.	15 Sec.
2 Sec.	15 Sec.
2 Sec.	15 Sec.
3 Sec.	15 Sec.
3 Sec.	15 Sec.
4 Sec.	15 Sec.
4 Sec.	15 Sec.
6 Sec.	15 Sec.
6 Sec.	15 Sec.
	1 Sec. 1 Sec. 2 Sec. 2 Sec. 3 Sec. 3 Sec. 4 Sec. 4 Sec. 6 Sec.

Anti-Rotation Press

When people think of core training they think of different types of sit-ups and crunches or twisting exercises. The anti-rotation presses and side raises are excellent core exercises. The whole idea of flexing and extending or twisting the lumbar spine is entirely wrong. The function of the core is to maintain spinal neutral – in other words the function of the core is "anti," as in anti-flexion and anti-rotation. This is the very reason there are so many people with back pain...no spinal stability and way too much spinal mobility.

Start in a tall kneeling position (not sitting on your heels) so you are facing perpendicular to the bungee cord's direction of pull. Press your hands straight forward while holding the bungee handles. You will have to contract your oblique muscles and shoulder musculature to keep your torso straight while the cord is pulling them sideways. In other words, you should try to stay straight while the cord is trying to rotate them. That is how we get the name "anti-rotation press."

The Body Saw

Here is an anterior core (or six-pack muscle) exercise called the Body Saw. Imagine a hand saw cutting through a 2 by 4. The blade goes forward and backward to cut the wood. However, the blade must remain rigid or stable in order for the blade to cut. If the blade flexes or twists it will bind and stop cutting.

Keep your spine stable while your feet slide up and down the slideboard and your shoulders push and pull your body forward and back. ★





One way to know if you're dehydrated is to check the color of your urine. The lighter it is, the more hydrated you are.



indicates you're well hydrated.

Light Yellow

Light yellow and transparent is normal and indicates ideal hydration status.

Pale Honey

A pale honey, transparent color indicates normal hydration but may mean you need to hydrate soon.

Yellow

Yellow, more cloudy color means your body needs water.

Dark Yellow

Dark yellow, amber color isn't healthy. Your body needs water.

Orange Yellow

Orangish yellow and darker means you're severely dehydrated. Contact your doctor immediately.



IT'S A STRETCH: A PROPER WARM UP GOES A LONG WAY

By HARRY THOMPSON

t's a familiar sight at the start of most practices and games. Players jump over the boards, take a lap or two around the rink and then plop down on the ice and start to stretch. Then they'll switch positions and stretch some more.

The only problem, as strength and conditioning guru Mike Boyle sees it, is that

they are most likely stretching the same muscles. The key, he says, is to employ a variety of stretches followed by a dynamic warm up.

"The problem with hockey players is they tend to stretch the same muscles over and over again," Boyle says. "You need to stretch your hamstrings, hip flexors, groin and IT'S IMPORTANT TO EMPLOY A VARIETY OF STRETCHES THAT WORK MULTIPLE MUSCLE GROUPS BEFORE STARTING A PROPER WARMUP ROUTINE.

abductor muscles and your hip rotators. We like to get in one stretch for each one of those groups when we're stretching."

After stretching it's time to warm up with some dynamic stretches such as lunges, leg swings and kicks while gradually increasing the pace.

"I think one of the reasons that people pull muscles is they don't have that ramp-up period," Boyle says. "You need to do some things to get the joints positioned correctly (stretch) followed by getting the muscles working correctly (dynamic warmup) followed by a gradual increase in speed so we're not jumping right into puck-race type drills."

Boyle says it's important to start slowly and then increase the pace of the skating over a 10 or 15-minute period.

"I'm amazed when I see people start blowing whistles and having guys sprint from blue line to blue line. I think with anything there needs to be a gradual increase in the speed in skating up to a point where you're sprinting."



→ The fact that Americans spent \$5.5 billion on sports drinks last year would come as no surprise to anyone who hangs around a rink. It's hard to navigate through a crowded lobby or enter a locker room without seeing bottles of fluorescent colored liquids.

But when it comes to quenching your thirst and replenishing lost fluids are they any better than a big glass of water?

Most nutritionists say that youth hockey players who are skating in a 50-minute practice or playing in a game will do just fine by drinking water. But if you're exercising for more than 60 minutes or sweating excessively, a sports drink can help provide important nutrients.

"If you're a goalie who is sweating buckets under all those pads and can't take a drink as often as the guys on the bench, we can make a case that you might have to take some more strategic precautions," said sports nutritionist and Level 5 hockey coach Dave Ellis.

Ellis recommends low calorie versions of sports drinks because they have less sugar than most sports drinks, but they still have the electrolytes, salt and potassium that are being lost in the sweat.

