KEEPING YOUR ATHLETE IN THE GAME

MVP PARENT

WINTER 2020

$4.95

Your Child's Helmet

DOES IT FIT?

WHAT TO DO

CORONAVIRUS

VAPING

& How it Affects Athletes

Nutrition

Supporting Wellness in Student Athletes

Youth Overuse Injuries & What We Can Do

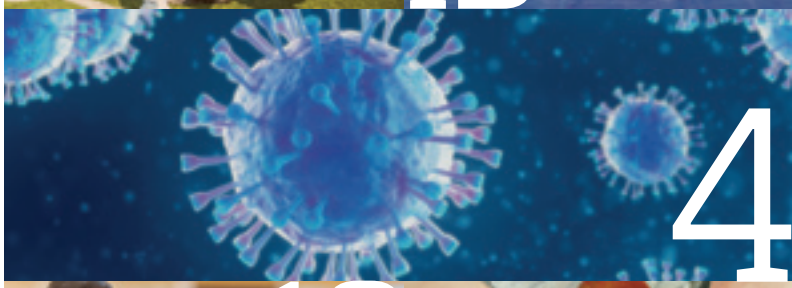
...and more!

IN THIS *Issue*

KEEPING YOUR ATHLETE IN THE GAME

MVP PARENT

WINTER 2020



Mission

MVP PARENT is committed to providing a credible resource that educates and supports the parents of youth athletes. **MVP PARENT** gives parents the information they need to keep youth athletes performing at the highest level physically, mentally, and emotionally. **MVP PARENT** takes a holistic and evidence-based approach to injury prevention, skill development, nutrition, and sports psychology.

Subscriptions may be obtained for $25 domestic and $50 international by writing to: **MVP Parent, 41 State Street, Suite 604-16, Albany, NY 12207**. POSTMASTER: Please send address changes to MVP PARENT, 41 State Street, Suite 604-16, Albany, NY 12207

MVP PARENT, 41 State Street, Suite 604-16
Albany, NY 12207

FROM THE PUBLISHER

BY RICHARD B. DUBIN

Welcome to the second installment of MVP PARENT, which has seen a slight delay in publication as the world is suddenly focused on basic hygiene. Sports teams of all sizes are broadening their traditional focus on injury prevention to include everyday infection prevention for both the players and the spectators. The publication delay has been caused, of course, by the worldwide spread of the novel coronavirus which causes COVID-19, a potentially fatal respiratory disease. The effect this pandemic has had on our sports community is something I have never witnessed in my lifetime: March Madness first planned on restricting fan access, but was then forced to cancel altogether, same with the National Basketball Association, and Major League Baseball has suspended spring training and delayed Opening Day. During these unique times, it is imperative that we pay attention to the facts and the experts whose job is to keep our health and safety front of mind. MVP PARENT is about the facts and we'll bring you the advice from experts like the Centers for Disease Control and Prevention, the nation's primary source for such information. Our goal is to help readers stay informed, be safe, and recognize what you can do to help. With the current world pandemic, it is necessary to be even more mindful of basic hygiene practices (see page 15).

I am very excited to share that by the time this issue comes out, I will have appeared on sportsdoctorradio.com with nutrition expert, founder of fuelingchanpions.com and one of our contributors, Jill Lane. Jill authored a piece on nutrition that you will find incredibly helpful for your youth athlete and maybe even yourself. A very special acknowledgment goes out to Dr. Bob Weil, author of *#Hey Sports Parents* and founder of sportsdoctorradio.com. Bob has been an incredible support to MVP PARENT and has introduced me to dozens of individuals making a difference in youth sports around the world. I have had conversations with experts at all levels of youth sports from coaches, parents, psychologists, nutritionists, and safety advocates. We have all witnessed and have stories of parents and coaches not putting kids' well-being first. But that's why MVP PARENT is here.

This issue also presents some incredible content that is sure to inform and educate on how to keep your youth athlete healthy and at the top of his or her game. Personal trainer Jay Vincent and founder of Biofitny.com has written about slow repetitive weight training and its importance as a tool for injury prevention. An article on helmet safety will be of interest, particularly to parents of football and hockey players. In addition, we have addressed the very important topic of vaping and its effect on athletic performance. Dr. Bob Weil discusses the ever-important topic of sports specialization (spoiler alert: don't do it!).

There is definitely a shift in the paradigm around youth sports—and it's affecting coaching, parenting, safety, training, performance, nutrition, and overall health. Parents want and need to be educated about how to help young athletes. We can do more together than we can do individually and while many are doing their part to change a system that is broken, there is only so much improvement that can be made within a silo. Collaboration is key and MVP PARENT is at the forefront of this movement, bringing together the specialists needed to provide the most credible and evidence-based information that parents can trust. In this and every issue, you will discover new tools and new approaches to help your youth athlete be stronger, healthier, and safer.

It certainly takes a village...but it is also true that if we all work together, we can accomplish anything. I am very appreciative and extremely grateful for the support from the youth sports community that MVP PARENT has received. There are countless advocates and experts around the globe willing to share their guidance and advice and MVP PARENT'S goal is to help spread the word so that young athletes can play the sports they love without fear of injury. ■

CORONAVIRUS

WHAT TO DO FOR YOU, YOUR ATHLETE, AND YOUR HOME

Guidance from the Centers for Disease Control and Prevention Compiled by the Editors at MVP PARENT

Coronavirus disease (COVID-19) is relatively new to the world, but has taken center stage in American life in a way that is unprecedented for many sports parents. Isolation and quarantine can be frightening, but many Baby Boomers may remember a time before the advent of vaccines when similar steps were taken to stem the spread of polio, diphtheria (whooping cough), and measles. The very survival of some members of the population who are now geriatric is evidence that public health measures work!

Today, unlike during those earlier quarantine times, there are countless Internet websites that can be scoured for information. We encourage you to look to the Centers for Disease Control and Prevention (CDC), the arm of the US government designed to deal with all kinds of public health emergencies, for the facts, and your state and local county/city health departments for details specific to your location.

While the facts of the pandemic are changing daily—and will continue to do so for a while—CDC has issued basic guidance for all Americans to follow. And it comes down to the basics of good hygiene and common courtesy.

- Wash your hands thoroughly—that's soap and water for at least 20 seconds, especially after going to the bathroom, before preparing meals or eating, and after blowing your nose, coughing or sneezing. Any soap will do, just be sure to wash your entire hand, including the outside of the thumb, the back of the hand, and between all of your fingers.

  If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol.
- Cover your cough and sneezes with a tissue.
- Avoid those who are sick.
- Stay home if you are sick, except to get medical care.

AS FOR CLEANING YOUR HOME, A QUICK PRIMER:

Cleaning refers to removing germs, dirt and impurities from surfaces. Cleaning doesn't kill germs but lowers their number, reducing the risk of spreading infection.

Disinfecting refers to using chemicals to kill germs on surfaces. This

does not necessarily mean surfaces are cleaned or germs removed. But risk is lowered by killing germs after cleaning a surface.

- Clean and disinfect daily high-touch surfaces within common areas. This includes tables, hard-backed chairs, doorknobs, light switches, remote controls, handles, desks, toilets, counters and sinks.
- Clean with household cleaners and EPA-registered disinfectants that are appropriate for the surface. Always follow label instructions. Wear gloves and make sure the room is well ventilated.
- Wear disposable gloves when cleaning and disinfecting surfaces and discard them after each cleaning. If reusable gloves are used, they should be dedicated to cleaning and disinfecting for COVID-19 only. Clean hands immediately after removing gloves.
- Clean surfaces with detergent or soap and water prior to disinfecting.
- For disinfection, use diluted household bleach solutions, alcohol solutions with at least 70% alcohol or common EPA-registered household disinfectants. Follow manufacturer's instructions for application and ventilation. Make sure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Prepare a bleach solution by mixing 5 tablespoons or 1/3 cup of bleach per gallon of water or 4 teaspoons of bleach per quart of water.
- For soft surfaces such as carpets, rugs, and drapes, remove any visible contamination and clean with appropriate cleaners. After cleaning, launder at warmest appropriate water settings and dry completely.
- If no gloves are used when handling dirty laundry be sure to wash hands afterward.
- Avoid shaking dirty laundry to keep from dispersing virus through the air.
- For all laundry, wash using the warmest possible setting and dry completely.
- Clean and disinfect clothes hampers just as you would other surfaces. Consider using a bag liner that can be tossed or laundered.
- Be sure to wash hands immediately after removing gloves.

The Centers for Disease Control and Prevention (cdc.gov) is the arm of the US federal government designed to track and address the public health of the American public.

BEATING THE BOREDOM

Social distancing—keeping 6 feet or more away from others—doesn't have to be a socially isolating experience. Given today's technology and old-fashioned nature watching, there are plenty of opportunities to keep kids engaged during the school closures. Some suggestions from Crystal Watson of the Center for Health Security at Johns Hopkins Bloomberg School of Public Health and Gregory Ramshaw, associate professor in the Department of Parks, Recreation, and Tourism at Clemson University:

READ. Download e-books and audiobooks about a favorite sport, or maybe a new one—read books on how to play, about famous games or matches, historic players' biographies.

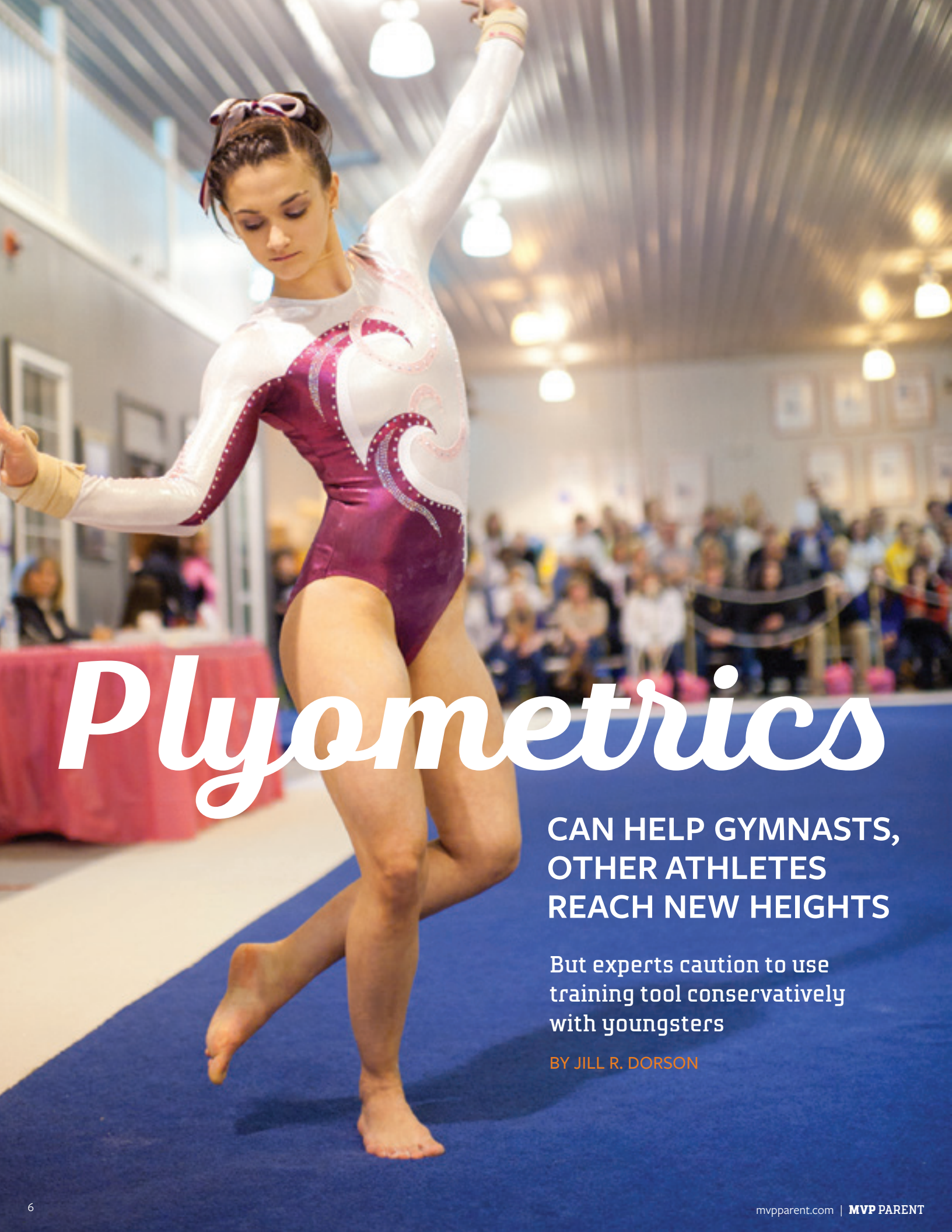
GO OUTSIDE. Breathe fresh air, preferably at least once a day.

START BIRD WATCHING. How many can be seen from the kitchen window, or a hike in the neighborhood or local park? Make it a family competition. Download a bird-watching map or listen to audio recordings of bird calls and see how many can be heard in the neighborhood.

READ UP ON HEALTHY SNACKS...and then try making some.

WATCH OLD GAMES on YouTube, or on a sports-specific streaming service if you have one.

WATCH SPORTS DOCUMENTARIES about the history of the sport you love. You'll learn its history as well as the controversies to led to various rules changes and safety guidances in effect today.



Plyometrics

CAN HELP GYMNASTS, OTHER ATHLETES REACH NEW HEIGHTS

But experts caution to use training tool conservatively with youngsters

BY JILL R. DORSON

"FASTER, HIGHER, STRONGER."

The Olympic motto is what many young athletes strive for. What if you could help your child achieve these goals with an exercise as simple as jumping off a box?

A study published on PLOS ONE in January 2016 showed just that – but experts also advise caution when considering plyometrics for young athletes.

The study, a joint venture between the University of Lincoln in the United Kingdom and Texas A&M University in College Station, showed that adding specific plyometric training for 40 minutes twice a week improved the post-flight time on a handspring vault by a small, but relevant amount in young, competitive female gymnasts.

In layman's terms, a gymnast will be faster, higher and stronger after incorporating specific plyometric training, said study author Thomas Gee, PhD, ASCC, a senior lecturer in strength and conditioning at Lincoln.

"What is achieved from appropriately structured plyometric training are, most notably, increases in jump height and power, which would assist the gymnast to progress to more technically difficult vaults," Gee said.

Plyometric exercises include jumps, bounds and hops – for example, when an athlete quickly squats down from a standing position, then immediately jumps as high as they can, he said.

The action takes advantage of the "stretch-shortening cycle," during which the muscle is alternately stretched and then shortened to create more power. This cycle occurs repeatedly during normal daily activities, but in athletic training is isolated and more intense.

William Sands, PhD, FACSM, a sport technologist at the United States Ski and Snowboard Association in Park City, Utah, has also studied the effectiveness of plyometric training. He says the exercises can be applied to nearly any sport that requires an explosion of power, including diving, track and field, or figure skating. Within gymnastics, plyometric training may have benefits for the floor exercise in addition to the vault.

Though Sands is a proponent of plyometrics, he says only athletes who are already strong should incorporate such a regimen.

"Plyometrics have not shown to be more effective than traditional weight training," Sands said. "One of the problems with youngsters is they often get involved in activities that are more bounding things, like long leaps, hopping on one foot, or jumping up and down on boxes. Those are all OK as long as the athlete has a history of having strength that is well developed."

Should your son's or daughter's gymnastics coach propose adding plyometric training to an already jam-packed workout regimen, Gee and Sands suggest the following guidelines:

- Warm up properly;
- Use a landing surface that has some give;
- Learn how to land properly;
- Select exercises that mirror "movement demands" of the sport;
- Begin with low-intensity workouts;
- Have a professional oversee the workout; and
- Be prepared to focus and concentrate.

Both say that though the results can be positive, it's important to approach plyometric training with caution.

"Can (plyometric training) improve explosion?" said Sands. "Yes, it can help. But for immature bones and joints, it's probably not a great idea. When you do add plyometrics to your training, you have to do it in a conservative way." ■

Jill R. Dorson is a San Diego-based journalist. Her main focus is sports, and she has a special interest in telling stories about athletes as well as sports medicine and training. A dyed-in-the-wool Boston Red Sox fan, Jill enjoys golf, movies and reading. She lives in Fallbrook, Calif., with her husband, daughter, two cats and a big dog.

Vaping. Has. Consequences.

Just because you can't smell it doesn't mean it's harmless

BY NICOLE WETSMAN AND JANICE T. RADAK

Vaping—nearly 80% of adolescents are doing it, according to the Centers for Disease Control and Prevention—that's 8 out of 10 teenagers, which means that student athletes are not immune.

Vaping is defined as inhaling and exhaling the vapor (technically called aerosol) produced by an e-cigarette or similar battery-powered device. The devices are small, some as small as a USB drive. They use a "pod" or cartridge, each of which has as much nicotine as a full pack of traditional cigarettes. The catch, for parents and coaches alike, is that, unlike traditional cigarettes which produce smoke and leave a distinct smell in the air and on clothing, vaping is odorless. The flavored pods, which often left a candy-like smell, have been recently banned, but remain for sale on the internet.

So vaping may be happening closer to home than you realize. Indeed, vaping recently surpassed traditional cigarettes as the favored tobacco product of today's youth—and it's not just high schoolers who are partaking.

Sadly, where sports participation—particularly team sports—had been seen as a deterrent to tobacco use in years past, vaping is seen across all aspects of today's teenage life, including team sports.

"Coaches believe that their athletes are already healthier than others. They believe they're not using substances, but it's sometimes a dirty secret in athletic communities," said Philip Veliz, PhD, associate director of the Sport, Health, and Activity Research and Policy Center at the University of Michigan. "We can't turn a blind eye. It's something that has to be addressed in sports organizations."

USE AMONG ATHLETES

Vaping is still pretty new in the scheme of things, so there isn't much medical or even sport research about what it does to an athlete's body or which type of athlete might engage in this behavior, Veliz explained.

Older research on cigarette smoking shows that adolescents who participate in physical activities, such as sports, are less likely to smoke. Some sports, though, are less protective against cigarette smoking than others: kids who play contact sports, like football, are at a higher risk than kids who run cross country, for example.[1]

Veliz was able to analyze data from the 2014-2015 Monitoring the Future survey, which asks high schoolers about attitudes, drug use, and other behavioral topics.[2] A subset of that year's survey answered additional questions about e-cigarette use.

"If vaping interferes with the body's ability to heal, it would interfere with the athlete's ability to train well or reap the benefits of training." **JEFFREY SPIEGEL, MD**

Veliz compared reported sports participation with e-cigarette or cigarette use. As in earlier studies, this showed that kids who played sports—especially those who played 3 or more sports—were less likely to use traditional cigarettes. However, he found no difference between athletes and non-athletes with regards to their e-cigarette use.

Wrestlers were at the greatest risk of using all tobacco products, including e-cigarettes, followed by lacrosse players—both at risks higher than 20%. Football, baseball, softball, and volleyball players were also at higher risk of using e-cigarettes—all above 10%.

"There isn't a protective effect of sports participation against vaping, not the way that there is for cigarette use," Veliz said. "The idea might be that kids think vaping or e-cigarettes are safer than cigarettes. Athletes might also see that is the case, and that it wouldn't impact their sports the same way."

One important note for parents: The survey did not ask about Juul, a brand of e-cigarette that is particularly popular with teens and adolescents. Many young people, when asked if they vape, will say that they do not, even if they use Juul—because it's thought of as distinct. So ask if your teen is "Juuling" and you may get a different response.

WHAT DO NICOTINE AND VAPING DO?

To be clear, there is no medical use for nicotine—either through vaping or traditional cigarettes. While athletes may enjoy the immediate stimulation it can cause, many studies show that nicotine is harmful to adolescent brain growth, particularly to those areas of the brain that control attention, learning, mood, and impulse control. (See "E-Cigarette, Vaping, Terminology and Facts," page 11.)

Vaping is simply another way to inhale nicotine, the addictive agent in tobacco: Yes, many illicit e-cigarette products also carry THC, the psychoactive ingredient in marijuana, but we'll focus here on nicotine and the other chemicals in the vaping cartridge. There is research on what those things do to the human body and the potential impact that might be particularly harmful to and impede performance in teens participating in sports.

For example, research shows that vaping can affect blood flow and blood vessels. Blood flow, or circulation, carries oxygen and nutrients to every cell in the body and speeds up when we are active. Healthy blood vessels act as elastic tubes that widen (dilate) and constrict to push the blood throughout the body; this is called flow-mediated dilation and it is a measure of blood vessel health. One study from Italy found that nicotine, which is known to constrict blood vessels, has a negative effect on flow-mediated dilation—and that effect came from both traditional and e-cigarettes.[3]

And nicotine is not the only chemical in e-cigarettes that can affect how blood vessels work. Alessandra Caporale, PhD, led a study that looked at how blood vessels function after using vaping and e-cigarette products.[4] "We initially thought the major effect would be nicotine. But inside the e-cigarette aerosol are other components," said Caporale, a post-doctoral researcher in the Laboratory for Structural, Physiologic, and Functional Imaging at the University of Pennsylvania School of Medicine.

Her study found that propylene glycol and glycerol, two chemicals in the liquids vaporized in e-cigarettes, can be irritants when inhaled. They also found that e-cigarettes release tiny particles of metals, smaller than 100 nanometers. These small particles are known to cause vascular inflammation and other negative effects that can damage blood flow. And the effects are immediate.

Additionally, Caporale looked at how blood vessels responded before and after study participants inhaled the e-cigarette vapor. After the study participants inhaled the e-cigarette vapor, dilation was reduced by nearly 34%, indicating changes to the inner linings of the vessels. "The endothelium [the lining of the blood vessel] was not functioning properly," Caporale said.

Those effects on vessels are nearly impossible to perceive, she said, so e-cigarette users would not notice that anything was different, and the effects of a single use would most likely resolve after about 4 to 6 hours. However, when the vapor is inhaled consistently, those effects could add up to potential long-term, lingering vascular problems.

Importantly, Caporale noted that even small changes in blood vessels might affect athletes. "When you go to the gym, your muscles need a boost of oxygenated blood. They need reactive and healthy vessels to dilate as needed. If the ability of vessels is impaired, it means the whole system is down, and doesn't work as well."

Another chemical in the mix is diacetyl, which has been linked to

"Popcorn lung," a condition that affects the tiny air passages in the lungs, making it difficult for sufferers to get enough air. It was first identified in workers at popcorn factories, hence the name. Technically known as bronchiolitis obliterans, its symptoms can develop as early as 2 weeks after exposure. Symptoms include fatigue, dry cough, shortness of breath and/or wheezing in the absence of a cold or asthma.

In 2019, vitamin E acetate, another chemical in the cartridges came to the public's attention. An understanding of the harmful effects of this chemical came to light when EVALI,* a potentially fatal lung disease, was formally diagnosed after 55 people died as a result of vaping. It remains unclear how EVALI develops or why, but in the most severe cases, it causes the lungs to completely stop functioning. (*EVALI stands for e-cigarette or vaping product use associated lung injury)

School coaches have noticed other health concerns around vaping. One North Carolina swim coach said she found that her swimmers who vaped tended to be sicker for longer periods of time, missing both meets and practices. "I found there seemed to be a relationship between vaping and respiratory types of illnesses," said Nina McPherson, a high school swim coach in Waxhaw, North Carolina.[5]

WOUND HEALING AND TRAINING

Damaged blood vessels might also contribute to slowed healing in wounds as studies show that smokers have a higher chance of complications from surgeries and their wounds take longer to heal.

Over the past few years, Jeffrey Spiegel, MD, professor of otolaryngology, head and neck surgery at Boston University School of Medicine, said he started to have patients ask about vaping. "They would say, I know smoking is unsafe around surgery, but is vaping ok?" In response, he conducted a study to see if e-cigarettes affected wounds in the same way that traditional cigarettes do.[6] His work showed that there was more tissue death in rats that were exposed to both traditional cigarette smoke and e-cigarette vapor, than in rats that were exposed to neither. Tissue death is a sign of impaired wound healing.

"Wound healing is a pretty good model for physical health in general," said Spiegel. "You need good nutrition, good blood flow to heal an injury."

If vaping impacts wound healing, that would also have repercussions for athletic performance, Spiegel noted. Sports injuries may take longer to heal, especially if they are significant, such as fractures, muscle tears, or other problems.

In addition, working to build muscle is a constant cycle of micro-injuries. Exercise causes microscopic tears in muscle fibers, which heal to regrow stronger. "If vaping interferes with the body's ability to heal, it would interfere with the athlete's ability to train well or reap the benefits of training," Spiegel said. "It's the same way for people with bad diabetes, or an autoimmune disease, or anything that interferes with their ability to heal. We can't expect them to be able to reach the types of performance of an elite athlete."

SCHOOLS WEIGH IN

Serving on school-based sports teams is viewed as a privilege and many schools have policies against smoking and/or vaping—parents and coaches would be wise to make certain that such policies have been updated to include both. And make sure students know there are consequences for breaking those policies.

NBCNews reported the case of a Massachusetts hockey player who was stripped of his team captain status when it was discovered he was vaping on school premises.[5] He was also suspended from school which meant he missed college recruiters.

While benching and play-off suspensions have been common punishments, many schools, doctors, and parents are beginning to look at vaping through a different lens: addiction. Indeed, the Truth Initiative (truthinitiative.org) is working with school districts that want to explore offering cessation programs to students caught vaping, rather than suspensions.

Vaping is a definite trend among today's youth and young athletes are not immune. Keeping young athletes informed about the negative consequences of using these types of products may help to keep them healthy...and in the game. ■

Nicole Wetsman is a freelance writer in New York City. Janice T. Radak is Editorial Director for MVP PARENT.

REFERENCES

1. *Veliz PT, Boyd CJ, McCabe SE. Competitive sport involvement and substance use among adolescents: a nationwide study. Subst Use Misuse. 2015;50:156-65.*
2. *Veliz P et al. Adolescent sports participation, e-cigarette use, and cigarette smoking. Am J Prev Med. 2017;53:e175-e183.*
3. *Carnevale R, et al. Acute impact of tobacco vs electronic cigarette smoking on oxidative stress and vascular function. Chest. 2016;150:606-12.*
4. *Caporale A, et al. Acute effects of electronic cigarette aerosol inhalation on vascular function detected at quantitative MRI. Radiology. 2019;293:1-10.*
5. *Edwards E. Vaping is hurting teenage athletes, dashing their future in sports. Published July 10, 2019. Available at https://www.nbcnews.com/health/kids-health/vaping-hurting-teenage-athletes-dashing-their-future-sports-n1027011. Accessed March 11, 2020.*
6. *Troiano C, Jaleel Z, Spiegel JH. Association of electronic cigarette vaping and cigarette smoking with decreased random fap viability in rats. JAMA Facial Plast Surg. 2019;21:5-10.*

E-CIGARETTE, VAPING, TERMINOLOGY AND FACTS

What are e-cigarettes?

- E-cigarettes are electronic devices that heat a liquid and produce an aerosol, or mix of small particles in the air. They come in many shapes and sizes. Most have a battery, a heating element, and a place to hold a liquid.
- Some e-cigarettes look like regular cigarettes, cigars, or pipes. Some look like USB flash drives, pens, and other everyday items. Larger devices such as tank systems, or "mods," do not look like other tobacco products.
- E-cigarettes are known by many different names. They are sometimes called "e-cigs," "e-hookahs," "mods," "vape pens," " vapes," "tank systems," and "electronic nicotine delivery systems (ENDS)."
- Using an e-cigarette is sometimes called "vaping" or "JUULing."

How do e-cigarettes work?

- E-cigarettes produce an aerosol by heating a liquid that usually contains nicotine, flavorings, and other chemicals that help to make the aerosol.
- The liquid used in e-cigarettes often contains nicotine and flavorings. This liquid is sometimes called "e-juice," "e-liquid," "vape juice," or "vape liquid."
- Users inhale e-cigarette aerosol into their lungs. Bystanders can also breathe in this aerosol when the user exhales it into the air.

What is JUUL?

- JUUL (pronounced "jewel") is a brand of e-cigarette that is shaped like a USB flash drive (third from left in illustration). Like other e-cigarettes, JUUL is a battery-powered device that heats a nicotine-containing liquid to produce an aerosol that is inhaled.
- All JUUL e-cigarettes have a high level of nicotine. According to the manufacturer, a single JUUL pod contains as much nicotine as a pack of 20 regular cigarettes.2
- JUUL is one of a few e-cigarettes that use nicotine salts, which allow particularly high levels of nicotine to be inhaled more easily and with less irritation than the free-base nicotine that has traditionally been used in tobacco products, including e-cigarettes.
- News outlets and social media sites report widespread use of JUUL by students in schools, including classrooms and bathrooms.
- Approximately two-thirds of JUUL users aged 15 – 24 do not know that JUUL always contains nicotine.
- Although JUUL is currently the top-selling e-cigarette brand in the United States, other companies sell e-cigarettes that look like USB flash drives. Examples include the MarkTen Elite, a nicotine delivery device, and the PAX Era, a marijuana delivery device that looks like JUUL.
- Additional information about USB-shaped e-cigarettes and actions that parents, educators, and health care providers can take to protect kids is available at cdc.gov – search for e-cigarette.

What is in e-cigarette aerosol?

- E-cigarette aerosol is NOT harmless "water vapor."
- The e-cigarette aerosol that users breathe from the device and exhale can contain harmful and potentially harmful substances
- The aerosol that users inhale and exhale from e-cigarettes can expose both themselves and bystanders to harmful substances.
- It is difficult for consumers to know what e-cigarette products contain. For example, some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine.

What do we know about heated tobacco products?

- Heated tobacco products (HTPs) like IQOS and Eclipse, sometimes marketed as "heat-not-burn" technology, represent a diverse class of products that heat the tobacco leaf to produce an inhaled aerosol. They are different from e-cigarettes, which heat a liquid that can contain nicotine derived from tobacco.
- HTPs are available in at least 40 countries and have several have been authorized for sale in the United States by the FDA. In 2018, few U.S. adults (2.4% of all surveyed, including 6.7% of current smokers surveyed) had ever used HTPs. Youth use of HTPs is unknown, but monitoring is underway.
- Scientists are still learning about the short-term and long-term health effects of HTPs, but the available science shows they contain harmful and potentially harmful ingredients. Youth use of any tobacco products, including heated products, is unsafe.
- It is important that we continue to modernize proven tobacco prevention and control strategies to include newer products entering the market such as HTPs.

Excerpted from: US Centers for Disease Control and Prevention. Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults. Updated Feb. 3, 2020. Available at https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html. Accessed Mar. 10, 2020.

YOUTH OVERUSE INJURIES

GUEST EDITORIAL
BY ROBERT A. WEIL, DPM

AND WHAT CLINICIANS, PARENTS AND COACHES CAN DO

It's one of the key issues in youth sports today: an epidemic of overuse and repetitive motion injuries. It affects both lower and upper extremities, across the board, in all sports at all ages. As the world of youth sports has grown dramatically, so have these injury problems. Overuse injuries cause a significant loss of time off the field, but more importantly, they threaten future sport participation which could inadvertently lead to increased obesity. This population is at increased risk because growing bones are less resilient to stress and children's awareness of symptoms as signs of injury are limited.

Youth sports (age 6 – 18) has grown into a mega-business with traveling teams, club teams, training facilities and sports specific coaches annually serving upwards of 60 million youth, according to the National Council of Youth Sports. That's in addition to our huge junior high, high school and college mania. Excessive pressure to play when hurt, overzealous parents, and Svengali-like coaches are part of this mix of overuse—both physical and mental. The explosive use and abuse of pain killers, both over-the-counter and prescription, is extremely alarming, especially in our "pills for everything" sports culture. The pressure from parents and coaches is on young athletes to "suck it up" and stay in the game. While this thinking has been around for years in high school and college, this pressure is starting at younger and younger ages. Adding to the burden is the parent- and coach-driven notion of specializing in a single sport which directly increases the risk of repetitive motion injuries in young growing bodies.

While we all know that incorporating a multi-disciplinary approach to help deal with these problems is the gold standard of clinical care, we also know that medicine is a fragmented business. MVP PARENT's goal of creating a multidisciplinary community to discuss a never-ending array of biomechanical, structural, muscle- and tendon-related problems, injuries, and challenges is much needed. Getting information both to and from parents, coaches, and numerous clinical specialties such as physical therapy, orthopedics, podiatry, chiropractic, and athletic training, to name a few, really adds to the team approach needed to reduce this epidemic of youth sports overuse and repetitive motion injuries.

It certainly takes a village to keep your athlete in the game and many parents mean well...but need guidance to help steer their young player. My book, *#Hey Sports Parents: An Essential Guide for any Parent with a Child in Sports*, can play a role. Whether your young athlete is serious and accomplished in their sport or

just looking to participate and enjoy the experience, their safety and the prevention of injury—both overuse and acute, is very important. My co-author, Sharkie Zartman, knows a little about that. She's a former All-American, National team member, and Hall of Fame volleyball player...she's lived it! She is a kinesiology professor and long-time coach whose daughters were both D1 athletes. It's a book for parents of athletes written by an athlete/coach and a sports podiatrist who's treated them.

Our goal was to help parents understand their role as the parent of an athlete, how to determine a youth's level of participation, and to provide criteria for how to choose a coach (and avoiding coach abuse, which has exploded as a national nightmare of late). We have a Sports Doctor section that addresses treatment and prevention of common acute and overuse lower extremity injuries, including what to tell your child's various clinicians. We also discuss proper shoe selection, foot mechanics and orthotics, specialization concerns, youth sports and drugs, essential exercises and the challenges of youth tackle football. Following MVP PARENT's lead, we also include a team approach with expert commentaries:

- Nutrition for young athletes by registered dietitian Kate Davis
- Dr. Denise McDermott on athletics as mind medicine for life
- Sports safety by Dr. Steve Horwitz, chiropractor for the 1996 US Olympic Team and founder of TeamSafe™

These and other experts also tackle physical training, sports psychology and mental training, coaching and parental behavior as well as concussion information and awareness of youth sports emergency criteria. And the Parent Perspectives section provides valuable insights, challenges, and experiences of real sports parents.

Athletic trainers, podiatrists, orthopedists and the community of clinicians are key allies in the fight to limit overuse injuries in today's youth sports. MVP PARENT's focus on keeping its audience informed on all aspects of research, treatment, and prevention of injuries in every sport imaginable is unmatched. Keeping the education and awareness of these huge challenges in our hyper youth sports culture is of ongoing importance to all of us. ■

DR. ROBERT WEIL & SHARKIE ZARTMAN

There are many tough decisions now for parents whose children want to participate in sports: how to choose the right program, how to help coach them, preventing injuries.

Dr. Robert Weil, an original New Yorker with an office in Aurora, IL, is a sports podiatrist that has helped many elite athletes and hosts the radio show "The Sports Doctor". His co- author Sharkie Zartman, is a former All-American volleyball player and former member of the U.S. National team. They have combined their expertise into one book designed to help parents navigate through youth sports programs.

#Hey Sports Parents is broken down in four Sections. The first section written by Sharkie, is *Sports Parenting 101* which includes choosing the right program, nutritional guidelines, college recruiting and stress management.

"In the next section," says Dr. Bob, "called *The Sports Doctor Is In*, I talk about overtraining, sports and drugs, the importance of the right shoes and orthotics, and the very real risks of contact football for kids. The third and fourth section highlight various experts in youth sports and parenting.

Dr. Bob and Sharkie met years ago when they both hosted shows for the same radio network. "We thought this book would be a great resource because of our different professional perspectives" says Sharkie.

You can find #Hey Sports Parents on Amazon, Kindle, and Ingram.

GOOD Hygiene

CAN HELP PREVENT THE SPREAD OF SKIN INFECTIONS IN SPORTS LIKE WRESTLING AND FOOTBALL

BY CHRIS KLINGENBERG

Skin infections can be a major issue for high school athletes—wrestlers and football players in particular—that can cause them to miss practices or competitions, but schools often do little to educate youth athletes about skin infections and how to prevent them. Experts say parents can play a key role in filling that information gap.

"Any sport requiring contact with another individual (such as wrestling), or wearing equipment on your body that your child will sweat into that is difficult to wash (such as a football helmet or hockey equipment) could put your child at risk for a skin infection," said study author Kurt Ashack, MD, a transitional resident in dermatology at St. Vincent Health System in Indianapolis. "As a parent, you can help your kids understand the importance of hygiene through example and education."

The study, conducted at the University of Colorado Anschutz Medical Campus in Aurora, looked at skin infections resulting in time lost that were reported by high schools from across the country in a national online database. The sport with by far the highest percentage of skin infections was wrestling (an astonishing 73.6%), followed by football (17.9%). The most common types of infections were bacterial (60%) and tinea or fungal (28.4%) infections. Body parts most often affected were the head/face (25.3%) followed by the forearm (12.7%). The findings were published by the *Journal of the American Academy of Dermatology*.

"Generally speaking, any new lesion or growth on the body that arises acutely should raise suspicion for an infection," Ashack said. "It could be a red circle that is itchy and growing larger (tinea). It could be little bumps that are red, painful and inflamed (staph). It could be flesh-colored bumps that easily scrape off, causing them to spread (molluscum virus). Also be sure to inspect for any skin breaks or tears that could easily be infected. Take proper care to protect these areas with a bandage or Ace wrap. If the area becomes red or painful, it could be a sign of infection, and not just irritation."

Guidelines on transmission of skin infections exist but are poorly implemented—a 2012 Journal of School Nursing study from Washington University in St Louis, Mo., reported that just 32% of Missouri high schools had such guidelines—so in many cases it's up to parents to educate youth athletes about the importance of hand hygiene and other methods of preventing skin infections.

Jim Thornton, MA, ATC, PES, past president of the National Athletic Trainers' Association, said there are several steps parents and young athletes can take to reduce the risk of skin infection.

"Cleanliness is most important," Thornton said. "Make sure the athlete's gym, shower surfaces, other facilities, and equipment are kept clean. Athletes should wash their hands and shower after every sports activity. They should not share towels, athletic gear, water bottles, disposable razors, or hair clippers. All clothing and equipment should be laundered and/or disinfected daily. Athletes should be encouraged to complete daily skin surveillance and report any suspicious lesions or wounds to their athletic trainers or physicians." ■

Chris Klingenberg is a freelance writer and previously was a sports editor for Gatehouse Media New England where he covered sports for six local high schools. He still covers games as a freelancer and enjoys watching high school athletes on the feld. Klingenberg has also been an AAU baseball coach for seven years, a varsity baseball assistant for two years and will be entering his second season as the JV baseball coach at Westford Academy in the spring.

HELMETS DON'T OFFER PROTECTION

IF THEY DON'T FIT PROPERLY

BY DOUG WILLIAMS

"Checking" isn't permitted in youth hockey, but that doesn't mean there isn't contact. Hockey, after all, is a collision sport.

Kids skating full speed while chasing the puck can trip and hit the ice hard. They can fly into the boards, be slapped with a stick, take a puck to the head, slam into a goal or be illegally checked. It's why players wear pads and helmets.

Helmets, however, must fit properly to work, and there's evidence that many boys and girls in the sport are wearing improperly fitted headgear.

A study presented at the annual meeting of the National Athletic Trainers Association (NATA) found just 11 of 50 helmets worn by players in a youth hockey league in Massachusetts were properly fitted. The findings support a 2014 study published in *Orthopedics* that found only 30% of youth hockey players and 38% of lacrosse players had properly fitted helmets.

To Julia Lovely, a certified athletic trainer (ATC), the lead author of the NATA study, the findings are a warning light for parents. Lovely, a graduate teaching fellow at Springfield College in Massachusetts who works with the women's soccer and softball teams, says a properly fitted helmet can help prevent skull and facial fractures.

Lovely said improper helmet fit is likely in similar percentages in youth football and lacrosse, because at the youth level there are few available experts to ensure fit.

"There are no athletic trainers or equipment managers to know how these helmets are supposed to fit, so even if parents think they are sending their children out with helmets that are fitted properly – they seem to look OK – they still could be fitted improperly," she said.

Bart Peterson, MS, ATC, and chairman of the NATA Secondary School Committee, agreed with Lovely. In his work at Palo Verde High School in Tucson, Ariz., he's seen examples of ill-fitting helmets in area youth football.

"From a distance, you can tell the helmet doesn't fit," he said. "It's wobbling around, almost like a bobblehead."

Peterson and Lovely recommend parents discuss the importance of fit with their children and ask about comfort and snugness. Adjustments to pads and straps can make a big difference. Lovely suggests parents consult with an athletic trainer, if possible, about fit. She also cited a checklist, referenced in the *Orthopedics* study, that the authors of that study used to check helmet fit.

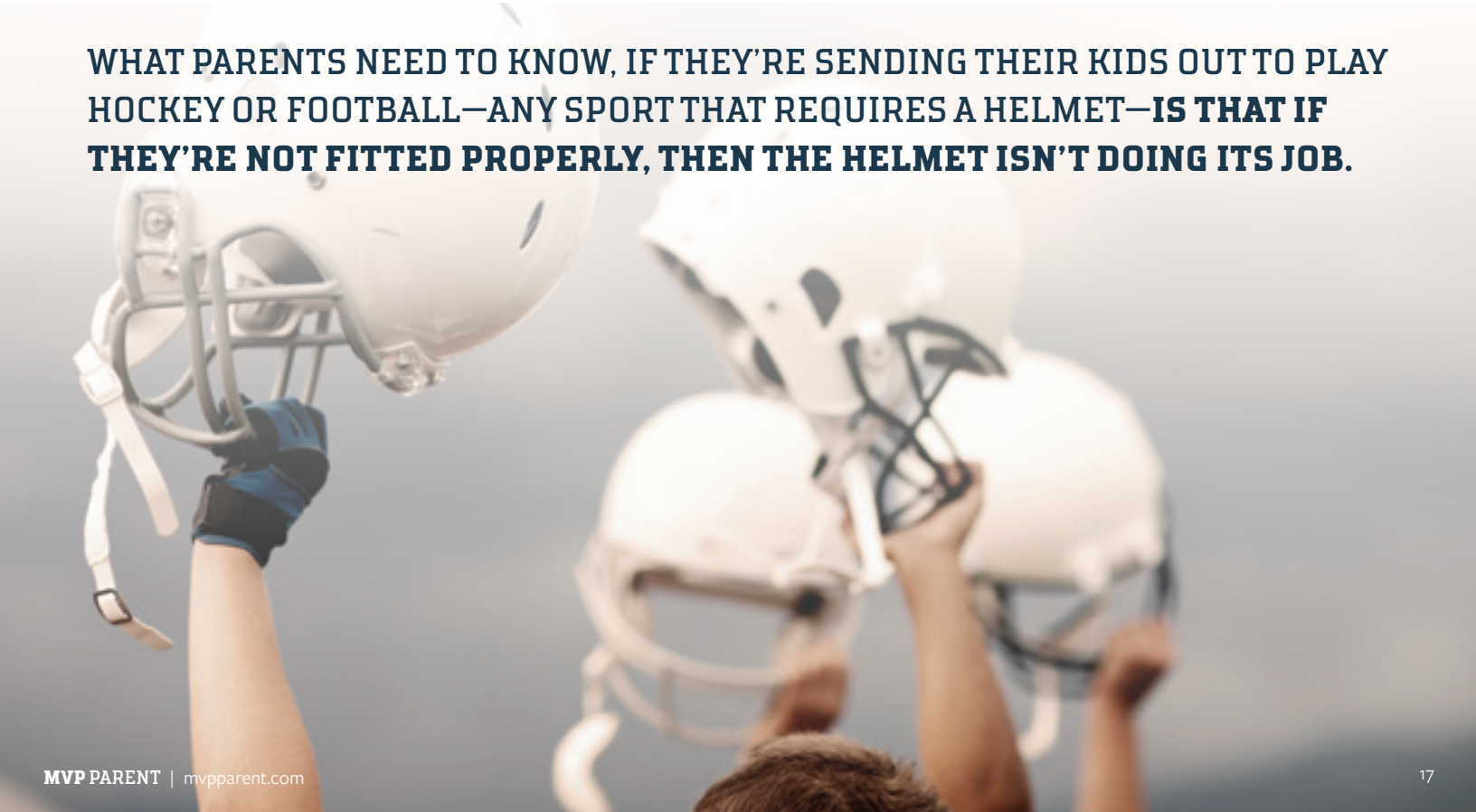
Among the key points parents can check:

- A helmet should be snug. Grab the helmet and move it from side to side. The head should move with the helmet.
- The helmet should cover the base of the skull in back.
- Straps should be snapped and tight.
- Ears should be visible through the ear holes.
- There should be a two-finger width between the top of the eyebrow and the helmet.

Lovely and Peterson suggest, too, that parents check helmet fit every season. A helmet that fits one year, they said, won't necessarily fit the next year. ■

Doug Williams is a freelance writer and former newspaper editor and reporter. He has covered three Olympics and has written for ESPN, NFL.com, Competitor magazine and the U.S. Olympic website. He also is the author of 10 non-fction books for young readers. He lives in San Diego.

WHAT PARENTS NEED TO KNOW, IF THEY'RE SENDING THEIR KIDS OUT TO PLAY HOCKEY OR FOOTBALL—ANY SPORT THAT REQUIRES A HELMET—IS THAT IF THEY'RE NOT FITTED PROPERLY, THEN THE HELMET ISN'T DOING ITS JOB.



KEEPING YOUR ATHLETE IN THE GAME

MVP PARENT

Subscribe Today and Save 50%!

GET MVP PARENT DELIVERED RIGHT TO YOUR HOME FOR JUST **$9.99/YEAR!**

MVP PARENT will be your trusted resource for keeping your athlete in the game.

Each month, you'll get vital information on injury prevention, training, sports performance, parenting, coaching, nutrition, and more delivered right to your home.

SUBSCRIBE TODAY AT MVPPARENT.COM

The Secret to Injury Prevention:

SLOW STRENGTH TRAINING

The purpose of exercise is pretty simple; yet it is misunderstood by almost everybody who performs it: Exercise is designed to efficiently load and fatigue the muscles congruent to joint function beyond what they are accustomed to in order to stimulate improvements in muscular strength in the form of an adaptive response.

The key word is stimulate.

BY JAY VINCENT

Nearly every athletics program across the country, from grade school to professional sports, has in place some kind of strength and conditioning program. A stronger, faster, and more explosive athlete will perform better on game day, right? Yes, to some extent, but that's only part of the equation when it comes to strength and conditioning (S&C). The part that most coaches and parents ignore – but should be laser focused on – is the benefit of strength and conditioning in relation to injury prevention.

When our muscles become stronger, the other tissues that support them (bones, joints, ligaments) become stronger as well. Evolutionarily, it wouldn't make much sense to have a stronger muscle attached to a weak bone by means of a weak tendon. When you stimulate a muscle to grow stronger by loading it, a stimulus is generated which strengthens the tendons and ligaments as well since they are also loaded in the process.

Most coaches wouldn't even consider strength and conditioning a form of injury prevention: most likely because they are doing it WRONG. The implementation of explosive, Olympic style lifts into S&C programs have literally done the opposite of what it was intended to do. Not only do the training methods used by many poorly trained coaches injure an absurd number of athletes during training; such methods also drastically increase

STRENGTH AND CONDITIONING SHOULD BE PERFORMED DURING THE OFF SEASON WITH MANY REST DAYS INCORPORATED.

the chance of injury on the field or court by leaving the young athlete worn out and unrecovered with damaged joints and connective tissue.

So how do we fix this? Simple. SLOW IT DOWN.

The purpose of exercise is pretty simple; yet it is misunderstood by almost everybody who performs it: Exercise is designed to efficiently load and fatigue the muscles congruent to joint function beyond what they are accustomed to in order to stimulate improvements in muscular strength in the form of an adaptive response. The key word is stimulate. The deep muscle fatigue is a stress to the body. If the stress is significant enough, the body responds by allocating its resources to adapt to the stress, thereby increasing muscular strength which will allow the body to better handle the stress in the future. As muscular strength increases, all of the other body systems that support the muscle (cardiovascular, metabolism, bones, connective tissue, etc.) will improve as well.

How do we efficiently load the muscle? By creating continuous tension within the muscle. This is best accomplished by moving slowly. Performing an exercise slowly reduces the effects of momentum. For those who want to build muscle, momentum is the enemy: momentum actually reduces the amount of tension by helping the muscle to carry the weight through space (it makes no difference if the weight is your own body mass, a dumbbell, or an exercise machine). The body uses momentum in day-to-day activities to reduce muscle fatigue in order to conserve energy. Great for survival, not so great if you want to improve your body's physical capacity.

Not only does momentum make an exercise less effective, it makes it more dangerous. Moving resistance with excessive force is extremely dangerous on joints and connective tissue. It's basic physics: force = mass × acceleration. By reducing the amount of acceleration by moving slowly, we reduce the amount of force and effectively protect the joints. Slower continuous loading of the muscle has also been shown to be more effective in strengthening connective tissues than fast explosive loading of the muscle commonly advocated by coaches.

Most S&C programs will have their athletes performing "explosive" movements. Unfortunately, this represents a misunderstanding of basic exercise physiology. Many coaches share an erroneous belief that "training fast makes you fast." This is false and easily debunked when you understand physiology. The muscle fibers which allow the body to move "explosively" are fast-twitch muscle fibers. The body recruits these fibers when it needs to move very quickly or lift something heavy. You can improve the strength of these fast-twitch fibers by moving slowly and carrying an exercise to momentary muscular failure – defined by Ruther et al as the point in an exercise where the individual is unable to move the resistance in good form.

If an athlete wants to improve his or her strength and reduce the likelihood of injury with strength training, the formula is very simple. Address all of the major muscle groups in the body with basic, multi-joint movements such as chest press, squat, and pull down, and carry the exercise to the point of momentary muscular failure (MMF) . If an exercise is carried to MMF, only ONE set is sufficient.

The next key component is recovery. The young athlete needs FAR more rest days than typically allotted. When the athlete is resting, that is when the body is making the necessary repairs and adaptations from both the stress of training and competition. The athlete should not be trying to improve strength and conditioning during the season. In some cases, tacking that on to several games a week will do much more harm than good and usually increases the likelihood of injury.

Strength and conditioning should be performed during the off season with many rest days incorporated. If done properly, training should not be done daily and could not be done daily without resulting in over training. Just 1-3 strength training workouts per week is more than enough for an athlete of any level.

Combine the aforementioned principles with adequate sleep and nutrition and injuries among young athletes should become a rarity rather than a common occurrence. ■

Jay Vincent is the owner and founder of Bioft and a NASM Certifed Personal Trainer.

SUGGESTED READING

Baar K. Minimizing injury and maximizing return to play: lessons from engineered ligaments. Sports Med. 2017;47(Suppl 1):S5-S11.

Ostrowski KJ, Wilson GJ, Weatherby R, et al. The effect of weight training volume on hormonal output and muscular size and function. J Strength Cond Res. 1997;11(3):148-54.

Paxton JZ, Hagerty P, Andrick JJ, Baar K. Optimizing an intermittent stretch paradigm using ERK1/2 phosphorylation results in increased collagen synthesis in engineered ligaments. Tissue Eng. Part A. 2012;18(3-4):277-284.

Ruther CL, Golden CL, Harris RT, et al. Hypertrophy, resistance training, and the nature of skeletal muscle activation. J Strength Cond Res. 1995;9(3):155-9.

Starkey DB, Pollock ML, Ishida Y, et al. Effect of resistance training volume on strength and muscle thickness. Med Sci Sports Exerc. 1996;28(10):1311-20.

SPORTS Nutrition

SUPPORTING **PERFORMANCE, GROWTH AND WELLNESS** IN STUDENT ATHLETES

BY JILL LANE

Nutrition affects sports performance, for better or worse, regardless of age. In simplistic terms, nutrition matters for two primary reasons in athletes: fuel for performance, and fuel for recovery. In student athletes however, this list of reasons grows.

SPORTS NUTRITION: MASTER THE BASICS

The diet world has made nutrition confusing, when in reality, the biochemistry of nutrition is quite simple. Athletes don't 'do' diets. They fuel. That is important for a parent or leader of student athletes to understand – what you might be doing nutritionally as an adult is often not what your student athlete should be doing.

So what should student athletes eat for optimal performance, growth and wellness? Use the list below to focus first on adding what is needed, not on taking things away (that's a diet mentality and we're here for optimal growth).

THE PRIORITY OF IMPORTANCE GOES LIKE THIS:

1. **Eat enough food throughout the day.** The #1 issue I see in youth athletes is under eating compared to training load. Food is fuel for the mind, muscle function, and growth in student athletes. Not eating enough robs first from the mind and growth, then from performance… pause and let that sink in. More on that in the section below. Most student athletes do best with 3 meals plus 2-3 snacks depending on age, training load, and performance goals. But don't fall into the old-school way of thinking that since they are 'young,' they can eat whatever they want as long as it has lots of calories. If you want a healthy athlete, what they eat repeatedly matters.

2. **Eat enough protein for recovery and growth.** Aside from vegetables, student athletes are often devoid of protein. Protein is not a direct fuel source, but it is a necessary building block. The amino acids that make up protein build and rebuild muscle tissue, mood chemicals, various enzymes in the body, joint soft tissue such as collagen, and much more. Without enough protein, strength can dwindle and recovery from training, illness, and injury can stall. Ideal protein intake in youth varies from 0.60 - 0.8 grams of protein per pound of body weight spread throughout the day.

3. **Upgrade carbohydrate and essential fat food sources.** Most athletes don't have issues taking in carbohydrates (bread, pasta, crackers, cereal, granola bars, juice, sports drinks, candy). Carbohydrates are the body's primary source of fuel and thus are super important for athletes. Look for where you can upgrade to higher fiber versions like oatmeal, beans, lentils, berries, and higher fiber bars such as KIND nut bars and fiber- augmented breads like Rudy's Double Fiber. Fiber supports overall heath and makes the energy from these foods leak into the body on time-release, instead of like a fire hose (which can be followed by a crash).

   When it comes to fats, make an oil change. Reduce fried and fast foods. Get rid of canola and vegetable cooking oils. Add back in extra virgin olive oil, avocado, raw nuts and seeds, and fatty fish such as salmon to support brain and skin health, keep inflammation in check, and maintain hormone metabolism.

4. **Stay optimally hydrated.** Data has shown that as many as 75% of student athletes arrive to practice and training already dehydrated. Makes me thirsty just thinking about it! Why does that matter? Starting at mild dehydration (only a 1% loss/change is body weight), an athlete may start to suffer with poor concentration and fatigue. Since our athletes are students first, this impacts their academic performance as well. Increase daily hydration with fruits, vegetables, and water first – especially during school hours. Sports drinks are earned (more on that in a later article). Download a hydration urine color chart and hang in your bathroom to help your athlete monitor their hydration. And make sure your team is weighing in athletes before and after training during hot days and/or intense phases of training – especially for those wearing gear such as football, lacrosse, and hockey – to help place hydration breaks and plan rehydration.

IS YOUR STUDENT ATHLETE WELL: AVOIDING RED-S

Athletes are good at training and competing well, even when they aren't well. I trained and competed at a very high level for almost 20 years with extreme fatigue, irregular periods, and issues with blood sugar and hydration that had me chugging sodas and pickle juice in the middle of the night….but nobody knew because an athlete doesn't want to get sidelined or give up the starting position they've worked so hard for – so they push through under the radar.

To keep your athlete well (AKA healthy), it's important to understand RED-S; Relative Energy Deficiency in Sport. Simply put, symptoms of RED-S strike when not enough food is eaten to match the demands of training, recovery, growth, and maturation. It is why the number one sports nutrition basic to master is to eat enough food throughout the day. The peculiar thing about how we understand RED-S right now is that the body will use the incoming energy (food) to fuel training and competition first, leaving recovery, growth, and maturation with whatever is left. What if 'whatever is left' isn't enough? Below is list of potential symptoms of low energy intake or under-recovery.

BE A CHAMPION FOR THE BEHAVIOR YOU WISH TO SEE.

BEWARE RED-S
DOES YOUR ATHLETE REGULARLY EXPERIENCE:

- Persistent fatigue
- Disturbed digestive health
- Recurrent illness and/or injury
- Slow healing
- Sudden disinterest in sport
- Irritability
- Irregular menstrual cycle
- Poor growth and or slow maturation

Review the foundational nutrition basics, as well as sleep quality and quantity and recovery time with your pediatrician, sports medicine doctor, or sports nutrition professional if one or more items are checked from this list.

HOW TO TALK ABOUT FOOD WITH YOUR ATHLETES: BE A CHAMPION

Often times the hardest part about food is talking about it. What I know to be true, and what experts in the space of picky eating and psychology will concur, is that the following three approaches make 'doing food' a friendlier, less confrontational topic in the home.

First, make it about what your athletes are interested in. They don't care, as much as we do, about being healthy. So saying, "eat this because it is healthy for you" often times won't create a change in behavior. But saying "eating protein helps with strength and I know you've been working so hard to get stronger in order to win that starting position. I am going to put protein in your lunch each day to help out, which would you prefer...chicken, turkey or beef?" This helps them connect the dots to their acute life goals and puts them in the decision-making equation.

Second, exposure equals preference. If you want your athletes or children to eat more vegetables, less sugar, more oatmeal, and less soda, those items need to be around (or not around) the house.

Third, be a champion for the behavior you wish to see. In other words, you have to do it too. If you want your athletes or children to eat more vegetables, less sugar, more oatmeal and less soda...you have to quietly do it too. A little parent-to-parent tough love – but this is a biggie you can't skip!

In review: Food is fuel and information to the body. All the pros attack it in this way. Add before you take away. Pizza, cupcakes, and chips are still going to happen, just less often. Do you know what your athlete's goals are? Correlate nutrition upgrades to their goals. Taste buds can be trained (thank goodness), so be patient. Lastly, how you do your food as a parent matters. I was invited to teach a 3rd grade class about nutrition and when I asked them to tell me what the word healthy meant, more then one young girl raised their hand and said "healthy means being on a diet because that is what my mom is always doing." My heart broke. They hear us, they watch what we do and they imitate it, good and not so good. Tomorrow you might say something like, "I decided to eat more vegetables at lunch and dinner because I noticed when I do I have more energy to do the things I like to do." You got this. Go fuel your champion! ■

Jill Lane, mom of 3, founder of Fueling Champions® has been teaching nutrition and exercise science to pro-athletes, sports families, student athletes, coaches and health care practitioners for 20 years. Some of her current and past clients include coaches and players from the NFL, NBA and MLB. As a former All-American, Olympic Development Team Member and Division I Scholarship Collegiate athlete herself, Jill has a clear understanding of what competitive athletes require to achieve and sustain their personal best.

Her mission to support the next generation of student athlete leaders (as well as those who lead them on a daily basis) comes full circle in Fueling Champions®.

References available upon request.

KEEPING YOUR ATHLETE IN THE GAME

MVP PARENT

MVP PARENT is committed to providing a credible resource that educates and supports the parents of youth athletes. **MVP PARENT** gives parents the information they need to keep youth athletes performing at the highest level physically, mentally, and emotionally. **MVP PARENT** takes a holistic and evidence-based approach to injury prevention, skill development, nutrition, and sports psychology.