

Q&A Skin Problems in the Athlete

Q: It's the football life for me, and I plan to practice all summer. But last year, I developed a bumpy rash and sunburn that wouldn't go away. What do you advise?

A: Athletes who spend considerable time outdoors in summertime encounter a range of skin problems related to heat, humidity and perspiration. Because playing any sport involves movement, pressure and friction are also part of the equation.

The rash you describe could well be miliaria, or "prickly heat." It's a common problem among football players who practice during the summer. Miliaria occurs when it's hot enough to make you sweat but the sweat glands are clogged. This triggers a rash that can range from tiny red, itchy bumps to small blisters.

To prevent miliaria this summer, keep your skin dry, clean and protected with topical drying agents such as powder or antiperspirant. A low-dose corticosteroid cream may also help. Meanwhile, ensure that equipment and footwear fit properly.

Your sunburns are of greater concern. Overexposure to the sun's ultraviolet light causes premature aging, wrinkles, patchy skin darkening or lightening, and skin cancers.

The sun is at its most intense in the middle of the day, sending out UVA and UVB rays that damage the skin. UVA light penetrates more deeply. Now, sunscreens containing encamsole protect against both types of UV light. They are available in SPF 15, 30, 45 and 60; the lighter your skin, the higher the recommended SPF number.

If you're like most people, and use one bottle of sunscreen all summer long, you're using only half of what you need. Apply sunscreen 30 minutes before you go outside and then reapply it every two hours – or more often, if you're sweating profusely. Use 2 tablespoons (equivalent to one shot glass) on exposed areas, with a full teaspoon over your face, ears and neck.

Treat the occasional sunburn by applying cold compresses and topical corticosteroid creams to reduce inflammation.

Other heat-related skin problems that some athletes run into include blisters and acne. Friction and perspiration can combine to produce blisters on the hands and feet. These can be prevented by ensuring that hand- and footwear fit well, and by wearing acrylic socks or two pairs of powdered socks.

Acne can break out on the back, shoulders and head when perspiration combines with pressure and friction from tight, synthetic uniforms, helmets and shoulder pads. Here, the best prevention is to keep the affected areas as clean and dry as possible.

By Wilma Bergfeld, MD, and Allison Vidimos, MD, Cleveland Clinic Department of Dermatology



Cleveland Clinic Sports Health Finds New 'Home Base'

Cleveland Clinic Sports Health services will be concentrated at a centralized, newly renovated facility this fall, at 5555 Transportation Boulevard in Garfield Heights, just off I-480.

There, Cleveland Clinic physicians will offer sports health primary care and treatment for sports- and exercise-related injuries. They will also perform orthopaedic procedures in six state-of-the-art outpatient surgery suites.

Comprehensive rehabilitation services will be offered on site and include a pool for aquatic therapy. Sports medicine physical therapy services will be offered as of July.

Our popular Performance Enhancement Programs will now be conducted at the Sports Health Center, to help high school athletes as well as weekend warriors. Imaging facilities, including MRI and X-ray, are conveniently offered on site.

To make an appointment for physical therapy at our new Sports Health Center, please call 877.440.TEAM (8326).

Other Convenient Locations to Serve You

Sports health and rehabilitation services are also offered at Cleveland Clinic's main campus and at community locations including Beachwood, Brunswick, Euclid, Independence, Mentor, Solon, Strongsville, Westlake and Willoughby Hills.

877.440.TEAM
sports-health.org

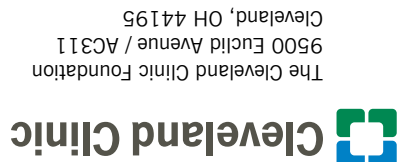
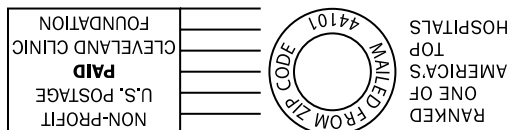
For expert advice on how to handle your sports injury, or for an appointment at any location, call our toll-free number or visit us on the web.

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Sports Health Competitive Edge



He's Got Courage: Much-Injured Athlete Beats the Odds to Make Football History

Jeff Mayer's life turned upside down as he neared the end of rehab from two knee surgeries for football-related injuries. The Baldwin-Wallace College football player was feeling good and hoping to return to the gridiron soon.

But while walking home one snowy night, he was involved in a hit-and-run car accident that left him with a broken pelvis, broken nose, dislocated shoulder and right knee, and other injuries.

Mayer could have given up on football, and no one would have challenged his decision. Instead, he began setting small, realistic goals.

Down...

A standout athlete in Vermilion, Ohio, Mayer was being recruited to play college football – his ultimate dream. But during senior year, Mayer tore his left anterior cruciate ligament (ACL), and the letters and phone calls from colleges stopped coming.

"I realized I could overcome the physical injury, but mentally, I was crushed," he says. Still, Mayer didn't quit. He worked his knee back to health and decided to attend Baldwin-Wallace, playing football on B-W's freshman and junior varsity teams.

The summer before his junior year, he expected to move up to varsity. But injury struck again. This time, Mayer tore his right ACL and meniscus during practice. Cleveland Clinic orthopaedic surgeon John Bergfeld, MD, the B-W team physician, repaired his knee.

...but not out

His second knee rehab was going well at the time of the hit-and-run accident. It negated all his progress to date. Mayer consulted Dr. Bergfeld, who brought in colleague Richard Parker, MD, an arthroscopic knee surgery specialist.

"Our expertise lies in bringing a team of experts together who specialize in these complex procedures, which take lots of planning. The key was the timing of the surgery," Dr. Parker says.

The physicians waited nearly six months after the accident to reconstruct Mayer's knee, so that his pelvis could heal. But Mayer began to realize there was a chance he could play football again.

To keep his hand in the game, he coached his teammates, while spending about 18 months working with B-W physical therapists and certified athletic trainers to get back to 100 percent.



"Jeff's injuries were cumulative and severe," Dr. Bergfeld recalls. "I was so impressed because he never gave up. 'Can't' wasn't in his vocabulary."

The catch that 'erased' the past

Mayer, a mechanical engineering major with a 3.8 GPA, decided to transfer from B-W to Case Western Reserve University to complete his degree. During the transfer process, Mayer found out that he was eligible to play one more semester of college ball.

It was the perfect season for Mayer to play at Case. The team earned its first-ever spot in the Division III playoffs. With 2 seconds remaining in the playoff game, he caught the game-winning touchdown as the clock ran down. Case won, 21-20.

"That catch erased everything that had happened during the past few years," Mayer says.

Courage recognized

In recognition of Mayer's determination, he was awarded the Cleveland Clinic Courage Award at the Greater Cleveland Sports Awards in January. The honor is given annually to an athlete who displays courage beyond the boundaries of the playing field and who inspires others.

Mayer was nominated by Dr. Bergfeld. "Any of the injuries Jeff sustained would have taken the average athlete out of competition," he says. "In all my years of caring for amateur and professional athletes, I have never seen an athlete display Jeff's courage despite all adversity, both on and off the field."

So what kept Mayer motivated? "You can't control most of the things that happen to you. You can either sit on the sideline or turn a negative situation into something positive," he says. "A positive attitude is what gets you through."

Do Sports Drinks or Energy Drinks Have the Edge?

By Carolyn V Snyder, MPH, RD, LD, and Tara Harwood, RD, LD

As the summer sports season gains momentum, concerns about hydration begin to heat up. What is the most appropriate replacement fluid? Are there any differences between sports and energy drinks? Sports and energy drinks have become extremely popular over the past few years, with many new brands and flavors entering the market. The wide variety of choices can be challenging. While energy drinks and sports drinks are clearly different, there is quite a bit of overlap.

One purpose for a sports drink is to maintain hydration (hydration should not be considered the main reason to choose a sports drink over water). In addition, if you are exercising intensely or in the heat for more than 60 minutes, then a sports drink is needed to provide carbohydrates for energy and electrolytes. This helps muscles contract and relax and regulates nerve impulses and plasma volume lost from heavy sweating.

Sports drinks differ

Sports drinks can be isotonic, hypotonic or hypertonic. These are measures of “osmolality,” meaning the concentration of particles (carbohydrates, sodium salts or sweeteners) dissolved in a liquid.

Isotonic drinks contain the same number of particles per kilogram as your blood. They are ideal for rehydration because their osmolality matches the body's. Thus, they are quickly absorbed, rapidly replacing fluids and electrolytes lost through sweating. Their content is about 6 percent carbohydrate, so isotonic drinks also help to maintain energy levels.

Hypotonic drinks maximize the rate of water uptake but generally provide levels of calories that are too low. Only recently has it been possible to add enough carbohydrates to sports drinks to maintain energy levels without increasing osmolality, using very long-chain-carbohydrate polymers,

Hypertonic drinks are used to supplement daily carbohydrate intake and increase muscle glycogen stores (energy stored for the muscles' use during exercise). However, hypertonic drinks cannot effectively rehydrate the body because they contain more particles than blood, so the fluid is not easily absorbed. In fact, hypertonic drinks can actually make you more dehydrated. Hypertonic drinks have also been shown to cause gastrointestinal distress, such as cramping and diarrhea.

Souped-up 'sodas'

Energy drinks are basically soft drinks that contain high levels of substances such as caffeine, taurine and glucuronolactone. Marketed as mental stimulants, energy drinks may sound healthy, but a Consumer Reports analysis of a dozen popular varieties found that caffeine levels, which often aren't listed on the label, can top 200 mgs per bottle or can. Calories can exceed 260 per serving, and many energy drinks contain more than the one 8-ounce serving listed on nutritional content label.

Energy Drink	VERSUS	Sports Drink
High caffeine content		Negligible to no caffeine content
11% - 15% carbohydrate		2.0% - 8.75% carbohydrate (< 400 mOsm)
Also contains B vitamins, minerals, ginseng, guarana, taurine, maltodextrine, creatine, ginkgo biloba		Also contains glucose, fructose, sodium, potassium
Promotes dehydration due to high caffeine levels. New research shows that caffeine is not a diuretic. Consumption displaces the intake of beverages with high water content.		Hydrates the body during exercise or sports-related activities. Replaces electrolytes lost through sweat and carbohydrates used by exercising muscles.
Carbonation results in stomach cramping.		No carbonation.
Quick burst of energy from caffeine and sugars		Rehydration and fuel for exercising muscles

MythBuster

Myth: Energy drinks are a recent phenomenon.

Fact: Energy drinks for sun-drenched, physically active individuals are not a new creation at all. Early American ranchers created their own energy drink concoction, called “Switchel.” They mixed honey or molasses syrup with cider vinegar, ground ginger and water when they had to work in the hayfields. The molasses and vinegar in the original recipe have been replaced by minerals and sugar today, to make the drink more palatable. But the end results, amazingly, are the same: a boost in hydration and glycogen during times of peak performance.

The Roster

Meet Dr. Paul Gubanich, a board-certified medical orthopaedic specialist in the Center for Sports Health and the Department of Orthopaedic Surgery. Dr. Gubanich is available to see patients at our Cleveland Clinic Family Centers in Strongsville and in Brunswick.



Specialty Interests: Management of sports concussions, outcomes research, childhood wellness, injury prevention, performance enhancement and medical problems in athletes

Reason for specializing in Sports

Medicine: Sports medicine allows me to help my patients pursue their goals and dreams, and live an active, healthy lifestyle. This is complemented by my personal beliefs that as a society, we need to focus on the

prevention of disease and disability, rather than simply reacting to illness and injury as they occur.

Any particular interests? I care for a wide variety of athletes at different skill levels. Overall, my focus is to try and return athletes safely and expeditiously to their activities while optimizing their performance. I am also involved in several research projects, involving an injury surveillance system; optimal treatment for sports concussions; and childhood wellness, in the Healthy Futures Program that encourages youths to increase physical activity and decrease risky behavior.

Best thing about being a sports medicine provider: Sharing the successes and failures of my patients on a personal level is both a humbling experience and a privilege. Some of my favorite interactions stem from my involvement with the community.

Advice for athletes and parents: Injuries may be frustrating, but addressing them head on will lessen the overall duration of symptoms. Prompt evaluation, diagnosis and treatment speed recovery, and decrease risks of recurrent injury and chronic problems.

Suggestions for coaches and trainers: Each individual athlete has unique goals and abilities. A one-size-fits-all training program may lead to poor performance and/or injury. By listening to your athletes and adapting the training program to their individual needs and goals, they will experience more success and greater enjoyment.

Parting words: Sports should enhance your life and well-being. I encourage young athletes to challenge themselves while savoring the time they spend in sports with family, friends and coaches. Growing up, I was a multi-sport athlete like many of my patients, participating in football, hockey, track and baseball. Each sport has its unique challenges, but the most important thing is to have fun.

Background Education: The Ohio State University College of Medicine and Public Health, Columbus; Internal Medicine Residency, Cleveland Clinic; Primary Care Sports Medicine Fellowship, Cleveland Clinic; Masters of Public Health, Case Western Reserve University, Cleveland

Professional Highlights/Affiliations: Associate Medical Staff, Cleveland Browns; Research Committee member, American Medical Society for Sports Medicine; member, American College of Sports Medicine; member, American College of Physicians; Medical & Scientific Committee member, National Arthritis Foundation

Call 877.440.TEAM (8326) to see Dr. Gubanich at our Cleveland Clinic Strongsville or Cleveland Clinic Brunswick family health centers.

Competitive Edge

Competitive Edge offers active individuals, athletes, coaches and athletes' parents updates from Cleveland Clinic Sports Health professionals on nutrition, health and injury prevention.

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For a tour of the new Cleveland Clinic Sports Health Complex at 5555 Transportation Boulevard in Garfield Heights, please contact Marketing Coordinator Mary Jindra at jindram@ccf.org.

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Home Gym Hang-Up

BASIC PUSH-UP

Lie on your stomach on the floor. Place your hands by your chest, under your shoulders. Push yourself up from the ground, keeping the body straight – from your head and shoulders down through your ankles. Try to keep your elbows tucked in toward your body. Pause and then slowly return to starting position. Repeat 10 times per set, for two to three sets.

Our upper body muscles are crucial for daily functional activities. Push-ups are a staple upper-body exercise for home workouts. Below is the basic push-up with some variations. While these exercises focus on the chest, it's important to include your upper back muscles in any exercise routine, to maintain muscle balance and postural stability.

Andrew Robinson, MEd, ATC, CSCS, Exercise Physiologist; Elizabeth Sprogis, MA, Exercise Physiologist

BEGINNER

1



2



3



SPIDERMAN PUSH-UP

Start in the same position as the basic push-up. As you push your body upward, bring one knee out to the side and draw it up toward your elbow so that it is bent at 90 degrees. Pause and then return to starting position. Repeat 10 times per set, for two to three sets, alternating legs in each set.

INTERMEDIATE

1



2



3



MEDICINE BALL

Start in the basic push-up position, with one hand on a medicine ball. Push upward, bringing your other hand onto the ball so that both hands are holding the ball. Do a second push-up with both hands on the ball. Take your opposite hand off the medicine ball and do a third push-up, with one hand on the ball and one hand on the ground. Repeat, reversing directions. Do this sequence five times per set, for one to two sets.

ADVANCED

1



2



3



4



5



6



Note: The weighted medicine ball is a great way to add variety to your workout. The ball is available in several sizes and weights, so that individuals of any fitness level can use them. The medicine ball is good for isolated upper body exercises. It can also enhance basic core and lower extremity exercises by including an upper body component. Choose a size and weight that are challenging but still allow you to maintain good form and control, and accomplish the exercise.

Disclaimer: Always check with your doctor before starting a new exercise routine or increasing its intensity. If you experience pain while doing these or other exercises, stop immediately and contact your physician.