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PROFESSIONAL BASEBALL ATHLETIC TRAINERS SOCIETY

IN THE SPOTLIGHT: **NICK KENNEY**

From the Farm to the Presidency

By: Magie Lacambra, MEd, ATC

A self-proclaimed farmer's son, Nick Kenney grew up in Wilmington, OH. Since his mother returned to work at the local university, Kenney spent his pre-school days on the farm with his dad, learning at a young age what work ethic meant. "On the farm, the day is not over until the work is done. That prepared me for what I am doing now," claims Kenney. Nick really enjoyed farm life and wanted to follow in his father's footsteps, but his dad wanted something different for his son, and encouraged him to get an education.

Kenney's mother's worked in the department of math and science at Wilmington College which provided her children with two benefits that unknowingly would shift Kenney's professional path: free rehab services and a tuition waiver. Suffering a torn ACL while playing football in high school caused Kenney to use the rehab perk, which was provided by athletic training students from the college. This experience showed Kenney that, "being an athletic trainer may be where it's at since it seemed like a great way to stay in sport without playing sports," he recalls. The tuition waiver proved beneficial as well, as Kenney went on to get a degree in Athletic Training with a minor in business from Wilmington College in 1994.

Although Kenney did not go into farming, the work ethic he learned from his dad on the farm stayed with him as he graduated from college. "My goal after graduating was to find a job that allowed me to utilize and improve my skills right away, while looking for the ideal job," explains Kenney. He soon took a job at Clinton Memorial Hospital providing rehab services, having shared his career aspirations with his old program director from college, Maxine Urton, professional athletics or higher level college athletics.

Kenney's first opportunity in pro sports came 5 months after graduating from college. Maxine knew a young orthopedic surgeon that was looking for an assistant athletic trainer to work with the Cincinnati Cyclones of the International Hockey League (IHL). Although Kenney didn't know anything about hockey, he took the job. "This job prepared me for baseball. I had to make quick, accurate decisions when evaluating players, so it would not affect player rotations and the flow of the game," recalls Kenney.

Kenney's position with the Cyclones was contracted thru TriHealth, who also provided rehab services to the Cincinnati Reds. During the hockey off-season, Kenney would work in the clinic providing rehab services to Reds players, offering him another opportunity to hone his skills.

IN THIS ISSUE

In 2000 the IHL merged with the AHL. Not all teams joined the merger, including the Cyclones who opted to move to a lower-level league instead. Kenney was not aligned with this move and after 7 years with the Cyclones made a career choice to move into an administrative position with TriHealth as a Program Manager of Sports Medicine. In this role, Kenney oversaw rehab services with local universities and the Cincinnati Reds. Kenney held this position for 3 years, and met fellow PBATS member, Lonnie Soloff, who was working with the Reds at the time. Kenney soon joined Soloff with the Reds as full-time second assistant athletic trainer for the 2003-2004 seasons.

When Soloff took the Head Athletic Trainer's role with the Cleveland Indians in 2004, he asked Kenney to be his assistant athletic trainer. Kenney took the offer even though it moved him away from his home near his parents. He remained in Cleveland thru the 2009 season.

Before the start of the 2010 season, the Kansas City Royals contacted Kenney about their Head Athletic Trainer position. Kenney did not feel he was ready for a Head AT position, but Soloff encouraged him to listen to any job that is interested in him to find out why. Kenney took his friend's advice and was hired as the Royals Head AT in time for the upcoming season.

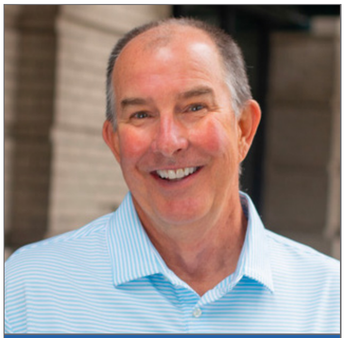
Kenney spent 12 years as the Royals Head AT/Director of Medical Services, developing and implementing his model for medical care. Kenney currently serves as the Royals Director of Medical Administration/Medical Services, a title he earned in 2021. In this role, Kenney oversees the medical care of the Royals major and minor league players. "In my role I can support KT (Kyle Turner) to be the clinician that he is, that he needs to be and the person that establishes and maintains the relationships to succeed as the Head Athletic Trainer," explains Kenney. "When the team is on the road, I visit our minor league affiliates and meet with our athletic trainers in those cities. I want to see how we can help them, and how we can develop them" continues Kenney.

In addition to his position with the Royals, Kenney serves on the PBATS Board, something he credits to Ron Porterfield, then PBATS Secretary. "Ron kept telling me to get involved with the Board as he thought I had something to offer," shares Kenney. In 2013 Winter Meetings Kenney accepted his first role on the Board as American League Head AT Rep. Four years later in 2018, Ron became PBATS President and appointed Kenney as PBATS Secretary.

In December 2023, PBATS celebrated their 40th Anniversary and voted Kenney as their 9th President. "It is a tremendous honor and extremely humbling to be President as I was voted to this role by my peers who I think are the best in the business," shares Kenney. As President, Kenney wants to "continue to press educational initiatives, to push inclusion and to stimulate young members to get involved." Kenney plans to be more visible to the membership. "I want to talk with our members, get to know them better and find ways to get more involvement," explains Kenney.

Kenney is excited to continue serving the Royals and lead PBATS into the future. He will do this while spending quality time with wife Patty, and adult children Paige, Colin, Nathan and Madison. In addition, Kenney will continue on the Board of Directors for the Bra Couture Cancer Foundation in Kansas City, as this is a cause very close to his and Patty's hearts.

NEWS AND NOTES



2023 PBATS Hall of Fame Inductee

Rick Griffin
Seattle Mariners

2023 PBATS Hall of Fame Inductee

Mark Letendre
PBATS Alumni

2023 PBATS President's Distinguished Service Award

Steve Donohue
New York Yankees

2023 PBATS Minor League Athletic Trainer of the Year

Nate Brooks
Oakland Athletics

2023 PBATS Major League Staff of the Year

Brian Ebel
Baltimore Orioles

2023 PBATS Major League Staff of the Year

Mark Shires
Baltimore Orioles

2023 PBATS Major League Staff of the Year

Patrick Wesley
Baltimore Orioles

2023 PBATS Major League Staff of the Year

Chris Poole
Baltimore Orioles

2023 PBATS MINOR LEAGUE ATHLETIC TRAINERS OF THE YEAR INDIVIDUAL LEAGUE AWARDS

Coordinator	Nate Brooks	Oakland Athletics
International League	Jeffrey Paxson	Milwakee Brewers (Nashville Sounds)
Pacific Coast League	Jonathan Fierro	Los Angeles Angels (Salt Lake Bees)
Eastern League	Coy Coker	Colorado Rockies (Hartford Yard Goats)
Southern League	Seth Clapp	Chicago Cubs (Tennessee Smokies)
Texas League	Alex Wolfinger	St Louis Cardinals (Springfield Cardinals)
Florida State League	Brandon Hammerstrom	Toronto Blue Jays (Dunedin Blue Jays)
California League	Masa Koyanagi	Los Angeles Angels (Inland Empire 66ers)
Carolina League	Nevan Dominguez	Kansas City Royals (Columbia Fireflies)
Midwest League	Paden Eveland	St Louis Cardinals (Peoria Chiefs)
South Atlantic League	Carson Wooten	Chicago White Sox (Winston-Salem Dash)
Northwest League	Dan LaBerry	Seattle Mariners (Everett AquaSox)
Arizona Complex League	Cody Derby	San Diego Padres (ACL Padres)
Florida Complex League	Brianna Spence	Houston Astros (FCL Astros)
Dominican Summer League	Jorge Rodriguez	Los Angeles Dodgers (DSL Dodgers)

2023 PBATS TEAM PHYSICIAN 20 YEAR SERVICE AWARD

Dr. Kenneth Akizuki	San Francisco Giants
Dr. Stephen Gryzlo	Chicago Cubs
Dr. Timmothy Kremchek	Cincinnati Reds
Dr. Keith Meister	Texas Rangers
Dr. Thomas Noonan	Colorado Rockies
Dr. Anthony Saglimbeni	San Francisco Giants
Dr. Gary Waslewski	Arizona Diamondbacks

2024 ALL STAR GAME ATHLETIC TRAINERS

AMERICAN LEAGUE	Matthew Lucero	Texas Rangers
	Brian Ebel	Baltimore Orioles
NATIONAL LEAGUE	Ryan DiPanfilo	Arizona Diamondbacks
	Tony Leo	Pittsburgh Pirates

2024 FUTURES GAME ATHLETIC TRAINERS

Nate Brooks	Oakland Athletics
Alex Rodriguez	Texas Rangers

Upper Body Plyometrics For The Overhead Athlete

Dale Gilbert, Washington Nationals, ATC, PTA; Jon Kotredes, Washington Nationals, ATC;
Jeff Allred, Washington Nationals, ATC

A good plyometric program is a must for all overhead athletes. It can assist in injury prevention, warm up and enhance performance in healthy athletes. It is also a necessary and important part of the rehab process for those returning to play from injury.

Plyometrics involves the quick stretching of a muscle from an eccentric muscle contraction to a concentric muscle contraction. This allows the muscle to produce a greater force.[1] There are 3 specific phases of a plyometric exercise. Phase 1 is the eccentric phase during which the muscle is stretched and eccentrically loaded. The amount and duration of the stretch during this phase will have a direct effect on the amount of force produced at the end of the exercise. The second phase known as the amortization phase is the time delay between the eccentric and concentric phase. The shorter the amortization phase is the more force will be produced during the final phase which is the concentric phase. During this phase, the muscle concentrically contracts or shortens to complete the cycle and produce the desired result.[1]

Plyometric program is an important component to all rehab protocols. Most protocols allow injured athletes to begin plyometric exercises during the advanced strengthening phase of the protocol.[2] Prior to beginning any plyometric activities the athlete should have regained normal pain free ROM, have no pain or discomfort on exam and their strength should be at least 70% of the contralateral side.[2] Failure to achieve these before beginning a plyometric program could cause a re-injury to the area.

In addition to being used during a good rehabilitation program plyometrics also have a role in helping healthy athletes maintain their ROM, strength and joint stability leading to a decreased risk of injury. An initial plyometric program could consist of a 2 handed drill such as a chest pass, overhead throw and side tosses.[3,2] Once successfully mastered, you can progress to one handed exercises such as IR tosses, ER tosses and 90/90 tosses. Whether used as part of your daily warm up or as a part of your strength and conditioning program these exercises require use of the core and lower body integrated with the upper body. Use of the entire body when performing these exercises as well as the throwing motion will also help decrease injury risk.

In conclusion whether you are a healthy athlete looking to improve your performance or an injured athlete working your way back to competition, plyometrics should be an important part of your program. The exercises shown below are just a few of the many plyometric exercises that you can add to your program if you are not already using them.

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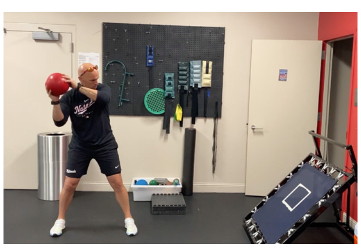
Click on image or link to download video tutorial file.

Two Handed Exercises


Chest Pass: Athlete should stand facing the rebounder with the legs shoulder width apart. A 5-7 pound rebounder ball should be held at chest height with the hands on either side and the elbows flexed until the ball is held 3-4 inches in front of the chest and the elbows are slightly below 90 degrees. The exercise begins when the athlete extends both elbows while pronating and releasing the ball towards the rebounder. The athlete will then catch the ball on its return flight from the rebounder as they eccentricly decelerate and return to their starting position. Subsequent repetitions will repeat this process in a ryhthmic and continuious fashion. These exercises should be preformed in sets of 10-15 reps.

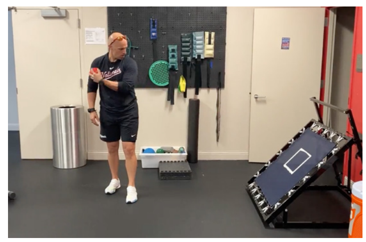

Overhead Toss: Athlete should stand facing the rebounder with the legs shoulder width apart. A 5-7 pound rebounder ball should be held with both hands on the sides several inches directly overhead with elbows facing the rebounder and bent to 90 degrees. The exercise begins when the athlete extends both elbows while pronating and releasing the ball towards the rebounder. The athlete will then catch the ball on its return flight from the rebounder as they eccentrically decelerate and return to their starting position. Subsequent repetitions will repeat this process in a rhythmic and continuious fashion. These exercises should be preformed in sets of 10-15 reps.



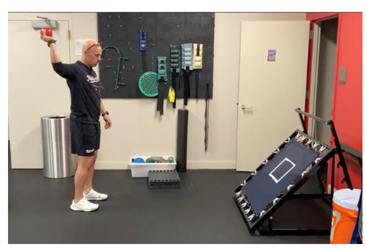

Side Toss: Athlete should stand perpendicular to rebounder with feet shoulder width apart. A 5-7 pound rebounder ball should be held with both hands on the sides. The front arm will be adducted across the chest and slightly elevated. The rear arm will have the elbow bent so that the rebounder ball may be held 3-4 inches above and 1-2 inches in front of the rear shoulder. The exercise begins when the athlete rotates the trunk and extends the rear elbow causing the ball to travel in a roughly 45 degree downward angle toward the rebounder. The athlete will then catch the ball on its return flight from the rebounder as they eccentrically decelerate and return to their starting position. Subsequent repetitions will repeat this process in a rhythmic and continuious fashion. This exercise should be completed bilaterally. These exercises should be preformed in sets of 10-15 reps.

One Handed Exercises


IR Tosses: Athlete should stand with feet shoulder width apart and perpendicular (90Deg) to a wall or rebounder. Arm should be at the side and elbow flexed to 90 degrees and palm of the hand facing the target holding a 1-2 pound plyoball. The exercise begins with internal rotation of the shoulder releasing the ball so it hits the wall or rebounder . The athlete will then catch the ball on its return flight from the rebounder as they eccentrically decelerate and return to their starting position. Subsequent repetitions will repeat this process in a rhythmic and continuious fashion. These exercises should be preformed in sets of 10-15 reps.




ER Tosses: Athlete should stand with feet shoulder width apart and perpendicular (90Deg) to a wall or rebounder. Arm should be at the side and elbow flexed to 90 degrees and the back of the hand facing the target holding a 1-2 pound plyoball. The exercise begins with external rotation of the shoulder releasing the ball so it hits the wall or rebounder. The athlete will then catch the ball on its return flight from the rebounder as they eccentrically decelerate and return to their starting position. Subsequent repetitions will repeat this process in a rhythmic and continuious fashion. These exercises should be preformed in sets of 10-15 reps.




90/90 Tosses: Athlete should stand with feet shoulder width apart facing a wall or rebounder. Shoulder should be abducted to 90 degrees, ER at 0 degrees and elbow flexed to 90 degrees. You should be holding a 1-2 pound plyoball. The exercise begins by internally rotating the shoulder, releasing the ball so it hits the wall or rebounder. The athlete will then catch the ball on its return flight from the rebounder as they eccentrically decelerate and return to their starting position. Subsequent repetitions will repeat this process in a rhythmic and continuious fashion. These exercises should be preformed in sets of 10-15 reps.

Ulnar Collateral Ligament Surgeries in Professional Baseball Players

Nick Flynn, ATC and Dr. Timothy Griffith, MD

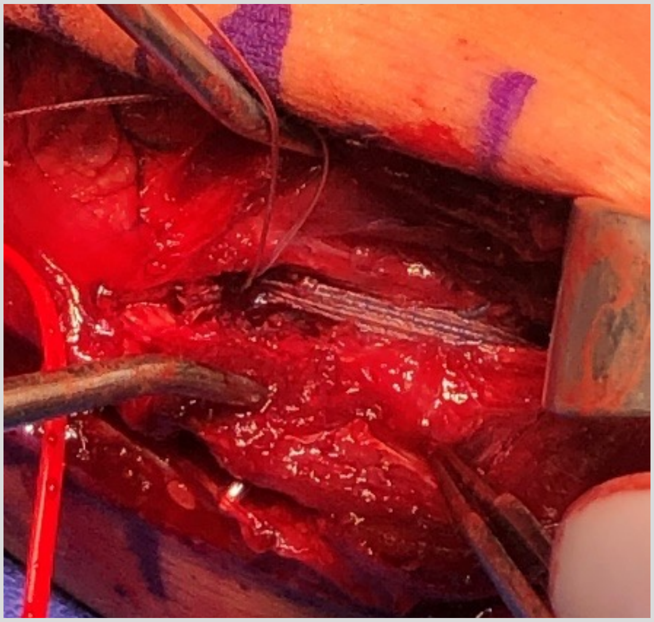
Among professional baseball pitchers, Ulnar Collateral Ligament (UCL) injuries are among the most common issues. UCL injuries are due to a valgus stress force on the elbow; they are often due to overuse but can also be caused by an acute event in the elbow. The UCL is the major stabilizer to the medial elbow and supports the elbow when throwing. An injury to the UCL can eventually lead to reconstructive surgery, usually referred to as Tommy John Surgery. The number of these surgeries has continued to increase over the years and the surgical techniques have evolved.

The goal of any type of UCL surgery is to restore stability to the elbow. The first UCL reconstruction surgery was performed in the 1970s by Dr. Frank Jobe. The medial UCL, when unable to be repaired, is reconstructed with autograft tissue via a “Docking” or “Modified Jobe” (Figure of 8) technique through bony tunnels that are drilled into the humerus and ulna. Allografts (tissue from a cadaver) can be used, but for professional baseball players an autograft (tissue from the person’s own body) is used. A palmaris longus or hamstring tendon graft is often used, although some surgeons use other tissue.

Following a traditional UCL reconstruction there is a lengthy rehab process. The pitcher will rehab, begin a throwing program 4-6 months after the surgery and finally return to pitching between 10-18 months. The timeline can vary depending on many factors, but it is expected to miss at least 12 months.

Over the last 20 years, we have begun to see UCL repairs rather than traditional reconstructions. In a UCL repair, there is no graft used. More simply, a repair is performed using an anchor at the site of the tear (proximally or distally), using the patient’s own good quality UCL tissue. This repair is then augmented with a braided suture that is placed in anchors both proximally and distally with the ligament, much like a seatbelt.

The main benefit of UCL repair vs reconstruction is that the surgery is less invasive and the recovery times are much quicker. The rehab process is shorter and it is possible to return to pitching in as little as 6 months. However, UCL repair is not suitable for all injuries. The results are best on partial tears and avulsion injuries to the proximal or distal ends of the ligament. If the ligament has many degenerative changes or poor tissue quality the UCL repair will often be less successful than the reconstruction.



UCL Repair with Internal Brace

In recent years, there has been a large increase in the number of hybrid procedures. In these surgeries, a UCL reconstruction is performed and augmented with an internal brace. As with a traditional reconstruction, a graft will be harvested and used to reconstruct the UCL. Some surgeons elect to augment this reconstruction with an internal brace, a braided non-absorbable suture, via anchors.

This is often performed in revision scenarios or primarily in high velocity (>95 mph) pitchers. Though shown to be a much more robust construct, the clinical implications of this augmentation are unknown. The goal with this surgery is to have the reliability of a reconstruction with some benefits from the internal braces – the player may return to pitching sooner with less risk of damaging the graft and a lower chance of needing an additional surgery.

UCL Reconstruction with Internal Brace

The gold standard for UCL surgery remains the traditional reconstruction. However, after years of that being the only option we are now seeing other surgical techniques. The UCL repair is a quicker rehab, but only certain injuries are good candidates for this technique. The UCL reconstruction with an internal brace has become widespread in professional baseball in the last few years. More research is being done to look at long term outcomes for the hybrid technique. There are many factors that go into choosing a surgical procedure, but all three options will continue to be seen in baseball.

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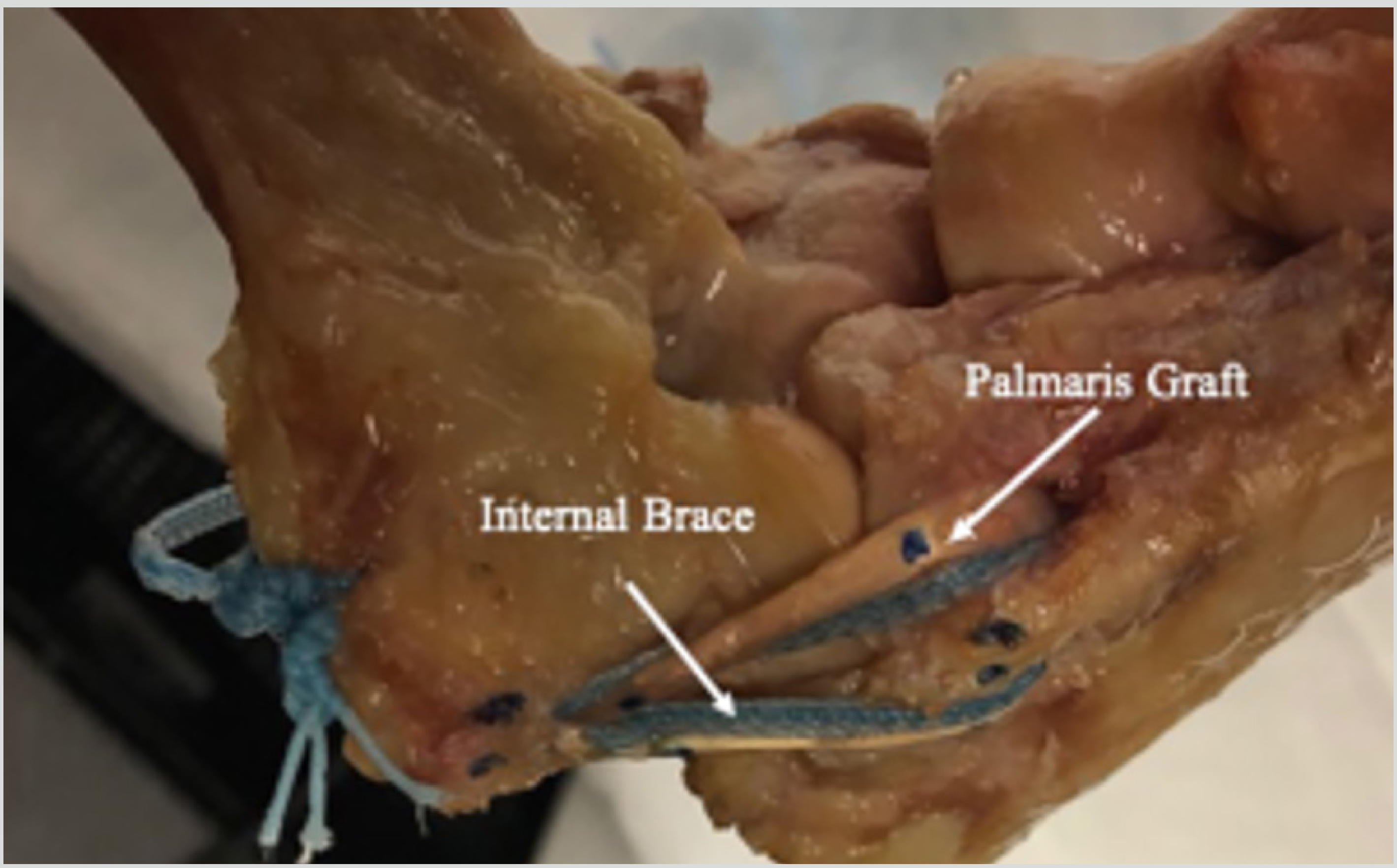

Cadaveric specimen showing a standard docking technique UCL reconstruction with incorporation of a strong braided suture passed through standard tunnels to serve as an internal brace. (Source Reference 1)

Heat Acclimatization to Improve Athletic Performance in Warm-Hot Environments

Michael N. Sawka, Julien D. Périard, Sébastien Racinais

Adapted from SSE 153

Introduction

As baseball players are arriving at training camp, the environmental conditions can vary significantly from where the players have been living. The following article provides practical suggestions to help athletes as they transition to the new environmental conditions. For detailed information about the physiological processes involved in heat acclimatization, please refer to SSE 153: Heat Acclimatization to Improve Athletic Performance in Warm-Hot Environments.

If given sufficient time to adapt, and access to shade and adequate water, healthy persons can tolerate extended exposure to virtually any naturally occurring environmental heat stress (Sawka et al., 1996). Heat stress results from the interaction of environmental conditions (temperature, humidity, solar radiation), physical work rate (body heat production) and wearing of heavy clothing/equipment that impedes heat loss (Gagge & Gonzalez, 1996; McLellan et al., 2013; Sawka et al., 1996). Environmental heat stress and physical exercise interact synergistically to increase strain on physiological systems (Sawka et al., 2011). Thus, conducting physical exercise in warm-hot conditions induces elevated body temperature, cardiovascular strain and altered metabolism that can cause thermal discomfort, impaired aerobic performance and increased risk of serious heat illness (Nybo et al., 2014; Sawka et al., 2011). Heat acclimatization confers biological adjustments that reduce these negative effects of heat stress (Horowitz, 2014; Sawka et al., 1996, 2011). Heat acclimatization, or acclimation, develops respectively through repeated natural (acclimatization) or artificial (acclimation) heat exposures that are sufficiently stressful to elevate both core and skin temperatures, which induce profuse sweating (Périard et al., 2015; Sawka et al., 2003).

Introduction of Heat Acclimatization

The magnitude of biological adaptations induced by heat acclimatization depends largely on the intensity, duration, frequency and number of heat exposures (Périard et al., 2015; Sawka et al., 2003; Taylor, 2014). Even resting in the heat or exercising in a temperate environment allows for some limited acclimatization, exercise in the heat is the most effective method to develop heat acclimatization. Usually, about 7-14 d of heat exposure are needed to induce heat acclimatization. Optimal heat acclimatization requires a minimum daily heat exposure of about 90 min (can be extended to 2 h and broken into two, 1 h exposures) combined with aerobic exercise, rather than resistance training. Athletes should gradually increase the exercise intensity and duration, or just the heat exposure duration, each day of heat acclimatization.

Heat Acclimatization Strategies for Athletes

Most experimentally tested heat acclimatization strategies were developed for occupational/military settings and not for competitive athletes (Périard et al., 2015). Competitive athletes are fitter and participate in events requiring higher metabolic intensities. Therefore, the “specificity of training” and “specificity of adaptation” principles might require higher intensity exercise bouts than what has been experimentally tested. Indeed, most heat acclimatization protocols were conducted over many days eliciting a “slow” adaptation. However, athletes may rapidly travel from a temperate environment to a warm-hot climate, or from a humid heat to a dry heat climate, and may need a more rapid (and complete) induction of heat acclimatization to optimize performance.

The exercise-heat acclimatization phenotype is generally achieved through one of three induction pathways: i) constant metabolic rate; ii) self-paced and iii) controlled hyperthermia, or isothermic heat acclimation (Périard et al., 2015). The magnitude of adaptation may also relate to the induction pathway as Taylor (2014) has argued that repeated exposure to a constant metabolic rate regimen (i.e., traditional heat acclimatization) results in a less complete adaptation, whereas the progressive overload approach (e.g., controlled hyperthermia to a given core temperature) likely induces more complete heat acclimatization. It has recently been proposed that a controlled exercise intensity protocol whereby a given level of cardiovascular strain (e.g., heart rate) is maintained during daily exercise-heat exposure may further optimize adaptations (Périard et al., 2015).

To optimize performance, the exercise-heat stimulus should as closely as possible simulate the expected climate-exercise conditions during competition. However, this may require a gradual increase in the climatic heat stress, exercise intensity and duration and there may be trade-offs made by the athlete. For example, it has been shown that low-intensity long duration exercise elicits similar heat acclimatization benefits (i.e., reduced exercising heart rate, core temperature and metabolism) to that of moderate-intensity short-duration exercise (Houmard et al., 1990).

Heat acclimatization in a dry environment confers a substantial advantage in humid heat, but the physiological and biophysical differences between dry and humid heat lead one to expect that humid heat acclimation would produce somewhat different physiological adaptations from dry heat acclimation. The crossover benefits of humid and dry heat acclimatization and the benefits at higher exercise intensities have not been well studied. If heat acclimatization needs to be induced for both dry and humid heat, and if rapidity of induction is important, then we postulate that first acclimatizing athletes to dry heat (producing adaptations to sweating with some cardiovascular benefits) and secondly acclimatizing athletes to humid heat (likely inducing greater fluid regulatory and cardiovascular adaptations) might be most efficacious.

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Strategy	Suggestions for Implementation
Start Early	1. Optimize physical conditioning prior to initiating heat acclimatization. 2. Start at least 3 wk prior to competition. 3. Be flexible and patient: heat acclimatization performance benefits take longer than the physiological benefits. 4. Provide time to experiment with your heat exposure routine and to build confidence.
Mimic the Competition Climate and Exercise Tasks	1. In warm climates, acclimatize during the heat of the day, and conduct physical training in cooler parts of the day (morning or evening). 2. In temperate climates work out in a warm room wearing cotton sweats. 3. Exercise induces greater adaptations than resting in the heat. 4. Slowly replicate your future competition conditions (environment and work rates) as acclimatization is specific to the stressors.
Ensure Adequate Heat Stress and Recovery	1. Induce profuse sweating. 2. Use exercise-rest cycles to progressively increase your physical work capacity. 3. Work up to 100 min of continuous physical exercise in the heat. 4. Once you can comfortably exercise for 100 min in the heat, then continue for at least 7-14 d with added exercise intensity. 5. Sleeping in air-conditioned rooms will not affect heat acclimatization status and will aid in recovery from heat stress.
Drink and Eat Adequately	1. Your thirst mechanism will improve as you become heat acclimatized, but you will still under-drink if relying on thirst sensation. 2. Heat acclimatization will increase your water requirements, so consume sufficient fluids to avoid hypohydration. 3. You will sweat out more electrolytes when not acclimatized, so pay particular attention to consuming fluids/foods containing electrolytes during the first week of heat acclimatization. 4. Do not skip meals, as this is when your body replaces most of its water and salt losses.

Table 1: Heat acclimatization strategies for athletes preparing for competition in warm-hot weather (modified from NATO TR-HFM-187, 2013).

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