



Ohio Wesleyan University– Athletic Training Athletic Training Newsletter

❖❖❖ Fall 2011. Volume 2, Number 1

Upcoming Dates:

October 26th—Healthy Bishop Day, Smith Lounge and Dining Hall 5-7pm

Available Now—Flu Vaccines at the Wellness Center, call 740-368-3160 to schedule an appointment.

Nov 19-27—Thanksgiving Break

December 9—Last Day of Classes

December 12-15— Finals Week

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Introduction - by Todd Miller

The focus of this issue is injury prevention. We have been able to put together three informative columns that integrate well with each other. Below is an article on the proper use of a warm-up and cool down and how to integrate it into daily practice sessions. Inside we continue with an ACL prevention program. This program

was designed by OhioHealth and is a great resource to supplement pre-season conditioning and out of season activities. Also included is a chart that discusses when and what to eat prior to, during, and after exercise. Our final column is updating the changes this year at the DWU Wellness Center. With the voting of team captains being

a common occurrence on campus at this time of year the "Thoughts from Henry St." discusses Leadership. The issue finishes up with a great book that will make you feel better about your academic experience at Ohio Wesleyan University. As always, enjoy, and any feedback or ideas for future issues is welcome and appreciated.

The Fundamentals of Preparation and Recovery within Team Practices— by Andrew Kaszubski

The importance of a warm-up and cool-down is often overlooked and/or misunderstood by many athletes and coaches. The purpose of a warm-up is to prepare the body for the coming exertion; it is also a period of psychological preparation (familiarization with the facilities and the weather, getting into the right frame of mind, etc...). A warm-up and cool-down should play a key part of the training session or game. There are many kinds of psychological and physiological processes that are taken from resting levels to performance levels for an athlete to use their abilities. A well-planned warm-up can also reduce the risk of injuries.

With time constraints put in place in regards to how long and frequent you can practice by the NCAA, how efficient is your warm-up? To better explain this, think about a quote by Real Madrid soccer coach Jose Morinho and his philosophy on the warm-up. He says "*pianist don't warm up to play the piano by running around it, they warm up by playing it!*" This is something the men's soccer team has taken to heart this year as we have

evolved our training sessions, right down to the warm-up! Again, think about how much time you spend warming up.

A typical training session for the men's soccer team last between 60 and 90 minutes and the first 15 minutes is always dedicated to dynamic, mobility and strengthening exercises while incorporating a ball. If we were to take away the ball then we would lose roughly 60 extra minutes a week getting touches on the ball. Not only are we allowing more time for fundamental skill development, but the players are also spending more time in their team shape and learning the game!

High knees, Butt-kickers, carioca are all great exercises, but look into adding movements that incorporate core strength and mobility. These movements, such as forward lunges with a twist, lateral lunges, robot kicks or even inch worms, are a great way to start off a training session because they activate your muscles, increase core temperature, and allow for increased range of motion.

Functional movements can be incorporated into the first 15 minutes of your training session. Integrating these movements during passing, receiving, dribbling or other sport specific activities allows time to practice fundamental skills while improving your body's performance. You can have the team perform fundamental skills for a certain time then stop and have team members perform these types of functional movements.

The cool-down is another time to focus on your body as well as your sport specific skills. Instead of having your players walk into the locker room consider incorporating a 10-minute cool-down. A proper cool-down should allow time for stretching, rehydrating and even refueling! The purpose of a cool down is to tell your body it's time to slow down and start the recovery process. It can be as simple as having the team perform light jogging followed by static stretching while drinking water. The window of opportunity to refuel after a session is roughly 45 minutes. The men's soccer team has introduced chocolate milk with peanut butter and honey sandwiches!

What to Eat—Before, During, and After Exercise— by Dawn Holmes, MS, RD, LD, OhioHealth Team Nutritionist

Just as you train with a variety of workouts, you need to train with fuels as well. Try different foods to determine what works best. Remember, sports foods and fluids are dependent upon a strong nutrition foundation. See <http://www.choosemyplate.gov/> for meal ideas.

Before

	Fuel		Hydration
3-4 hours before	Summary: Eat a carbohydrate-rich meal to top off your fuel stores. Include some protein to help with muscle recovery. Consider a liquid meal replacement, like Carnation Instant Breakfast, if you can't stomach solid foods.		Dehydration impairs performance. Monitor your urine color to assess hydration status, it should be pale yellow.
	Examples: Yogurt & granola, strawberries Pancakes/French Toast, syrup, bananas, pecans Grilled chicken sandwich, lettuce/tomato, baked potato Pasta w/meat sauce & green beans, bread sticks, non-fat milk Breakfast wrap - scrambled eggs, cheese & salsa, 100% fruit juice	2-3 hours before	16-24 oz of fluids - water - sports drink - non-fat milk - 100% fruit juice
30-60 minutes	Top off your fuel stores with an easy to digest carbohydrate snack.	10-20 minutes	~ 8 oz (about 8 gulps or swallows)
	Granola bar, Pretzels & banana, Fig bars, Graham crackers, Bagel, Sports drink or chews		Water Sports drink

During – Sustain energy (Halftime or between matches)

Every 15-20 minutes, 8 oz of water or sports drink	Hydration is important during activity. If you exercise at a high intensity for longer than an hour, you will need to add carbohydrates for energy. Sports beverages contain carbohydrates and electrolytes to improve fluid and energy intake for long workouts or competition. Add easy to digest carbohydrates during halftime or between matches.
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After - Recovery

	Fuel		Hydration
30 minute window	The first 30 minutes after a workout is crucial for recovery. Your body is primed for carbohydrates to restore fuel to your muscles and protein (10-20 grams) to make repairs. This is especially important for daily high-intensity or back-to-back workouts.	How much did you lose?	For every pound of body weight lost during your exercise, consume 16-24 oz of fluid. Monitor your urine color
	Examples: - Chocolate milk (low-fat), granola bar - 2 string cheese, whole-grain crackers, apple - Bagel with cheese or turkey, sports drink - Smoothie – low-fat yogurt, frozen berries & banana		-Chocolate milk (low-fat) -Recovery drink with protein, carbohydrate, & electrolytes
2 hours	Repeat above every 2 hours (twice) or consume a meal similar to your 'before' meal.		

Changes and Updates at the Wellness Center — by Marsha Tilden, Director of Student Health Services

This year, the OWU Student Health Center is located at 4 Williams Drive. Hours are Monday-Friday from 8:30 a.m.-noon and from 1-5 p.m. The center's telephone number is (740) 368-3160. Please note that students will be charged a \$10 fee this year for each office visit with a physician or nurse practitioner. Fees will be placed on your student's account as a "wellness charge." This will help us to address the rising costs of health care while continuing to provide quality care. We appreciate your understanding in this matter.

All students should get the flu vaccine, but the vaccination is especially important for students at higher risk of severe influenza and their close contacts. The higher risk group includes students who have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurologic, or metabolic disorders (including diabetes mellitus), as well as students who are immunosuppressed. Flu vaccines are available at the OWU Student Health Center for \$20. Students may pay by cash, check, or put the charge on their student account.

ACL Prevention Program— by OWU Athletic Training Staff

A tear of the Anterior Cruciate Ligament (ACL) in the knee can be a very devastating injury. It normally leads to reconstructive surgery, a long rehabilitation process, and an extended period of non-participation (6 months). Injury to the ACL often occurs in a non-contact manner in sports that require sudden stops and changing of direction (Basketball, Soccer, Football, and Lacrosse) During the 2010-11 academic year at Ohio Wesleyan University there were 6 student-athletes that sustained non-contact ACL tears.

Prevention is one of the best ways to treat ACL injuries. OhioHealth Sports Medicine has designed the following ACL prevention program for its healthcare providers and coaches to use during not only the offseason but in-season practice and conditioning sessions. This program consists of a dynamic warm-up, strengthening, plyometrics, sport specific agility drills, and stretching to address possible core and lower extremity strength and biomechanical deficiencies in the athlete. Proper technique and biomechanics needs to be emphasized, the quality of repetitions are more important than the number. The program should take approximately 50-60 minutes to complete if the suggested time allotments of each section are followed. This program should be done 3 times a week for 4 weeks. If done 3-4 weeks before the season starts, the exercises could be incorporated into in-season practice and conditioning. The 4 weeks are broken into Phase I (weeks 1 & 2) and Phase II (weeks 3 & 4). The focus of Phase I is initiating proper mechanics. The exercises performed during Phase II should become more complex and sport specific.

Dynamic Warm-up

A proper warm-up is a crucial part of all training programs and sport related activities. The purpose of this

warm-up is to slowly prepare the athlete's body for the training session. When possible the following dynamic stretches and movements should be integrated into a continuous slow jog lasting approximately 8-10 minutes. Each should be done for 20-30 yards taking 30 seconds each.

Dynamic movements include: high knees, glut kicks, shuffle, and skipping. Dynamic Stretches include: straight leg kicks, inverted hamstring, knee hug, foot up, and lateral lunge.

Core & Lower Extremity Strengthening

It is suggested that 3 exercises be used during each session and the exercises change from session to session. A difficulty progression of some exercises is also given as the program moves from phase I to phase II. Teams should be split into two groups: Group 1 performs Core/Group 2 performs Lower Extremity and then switch. If 3 Core and 3 Lower Extremity exercises are used and each are done for 3 sets of 30 seconds with a 30 second rest - this section should take approximately 18-20 minutes.

Core Strengthening exercises include, Front and Side Planks, V-Sit up, Medicine Ball drills, and Bridges. Exercises can be made more difficult by adding extremity extension, trunk rotation and/or a stability ball.

Lower Extremity Strengthening exercises include an overhead squat>single leg, lunges, hamstring curls, Regular and reverse Clam Shells, calf raises>single leg, monster walks, and balance exercises>eyes closed>diagonal movements.

Plyometric & Agility Drills

Below are a variety of exercises that could be used in this section. It is suggested that 3 exercises be used during each session and the exercises change from session to session. The plyometric movements should start on

both legs and progress to single leg movements. The focus of the sport specific agility drills should first be on the precision of foot, knee, and hip mechanics and progress with increasing speed.

Teams can be split in two: Group 1 does plyometrics/Group 2 does agility and then switch. If 3 plyometric drills and 3 agility drills are used and each are done for 3 sets of 30 seconds with a 30 second rest - this section should take approximately 18-20 minutes.

Plyometric exercises include scissor jump, squat jump>burpies, line jump>hurdle jumps, box jump>drop jumps, and single leg jump with a stick landing.

Sports Specific Agility drills can be completed by performing ladder drills.

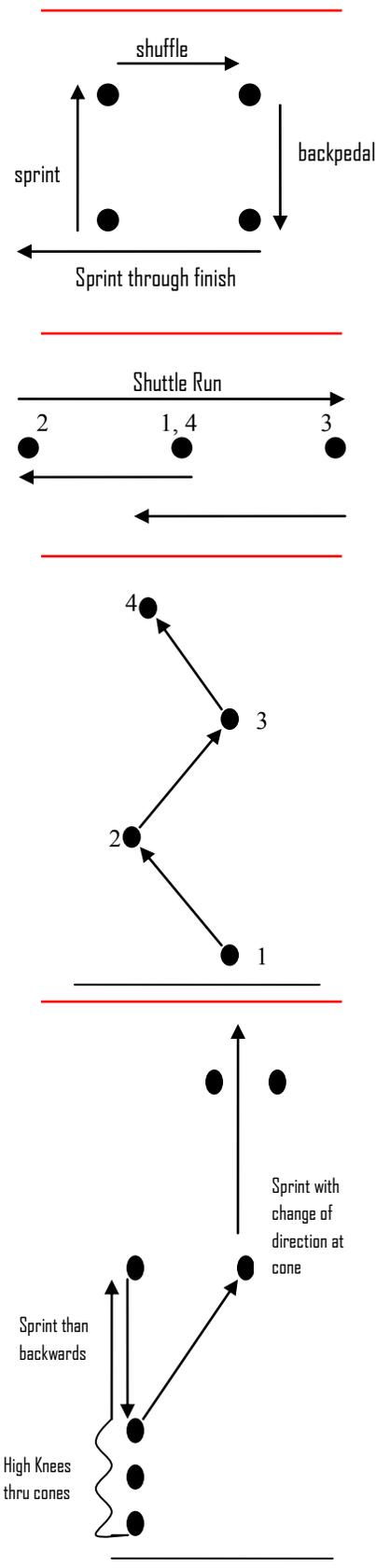
To the right are 4 examples of cone drills that can be done. Depending on the sport audience the sport specific movement additions will vary.

Stretching

The programs last section consists of static stretching of the 6 major lower extremity muscle groups: hamstrings, quadriceps, hip flexors, external hip rotators, calfs, and adductors. Most exercise programs include stretching in or immediately after the warm-up. This program uses static stretching in a manner of a cool-down to help regain proper length-tension relationships to improve postural alignment and to gain long term changes in tissue flexibility and joint range of motion. Each stretch should be held 3 times for 45 seconds each.

Conclusion

If you are interested about the ACL prevention program, please see a member of the athletic training staff and we will be able to give you a complete copy of the program and answer any questions you may have.



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Recommended Reading:

Beer and Circus: How Big Time College Sports is Crippling Undergraduate Education.

By Murray Sperber

In case you ever begin to doubt the education you receive while at Ohio Wesleyan University, pick this book up and READ. It discusses the differences in the experience of undergraduates at small liberal arts institutions and those at larger research based universities.

Ohio Wesleyan University—Athletic Training Mission Statement

The Ohio Wesleyan University Athletic Training Staff will strive to provide a comprehensive medical approach to the care delivered to Ohio Wesleyan University Student Athletes. We will provide accessible, professional and timely health care that allows the student athletes to participate in intercollegiate athletics. When decisions are made concerning student athlete's participation status, the Ohio Wesleyan University Athletic Training Staff will keep overall student athlete welfare as the cornerstone. Care includes, but is not limited to; Prevention, Evaluation and Rehabilitation of athletic related injuries, Referrals to on and off campus medical providers, and open communication with Student Athletes, coaches, physicians, administrators, and parents when applicable.

This medical plan will have a multi-disciplinary approach making sure that care includes both physical and mental well being, and not only helping student athletes with participation status in athletics but will also provide life skills that they will be able to use long after graduation from Ohio Wesleyan University. In order to have this type of approach many resources, both on and off campus will be utilized. These resources include but are not limited to: 1. Ohio Wesleyan University Student Wellness Center, 2. Ohio Wesleyan University Student Counseling Center, 3. Team Physicians from Max Sports Medicine, 4. Diagnostic Radiology and Emergency Medical Care from Grady Memorial Hospital, 5. Auxiliary Medical Services provided to Ohio Wesleyan University by OhioHealth, 6. Other resources as needed. The Ohio Wesleyan University Athletic Training Staff will work hard to continue to build and maintain strong working relationships with the resources listed above.

Thoughts From Henry St.— by Todd Miller

Many people have noticed the set of dog tags with a picture of a Marine, with a broad, almost larger than life, smile that I keep on the desk in my office. This is his story.....

Ray Mendoza was born on April 12, 1968. After graduating from the Ohio State University, where he was a student-athlete on the wrestling team, he joined the Marine Corps. In June 2003 he was deployed to Iraq in support of Operation Iraqi Freedom. It was a strong belief that of the 1,100 Marines in the 2nd Battalion, 1st Regiment, 1 Division, that Mendoza was the toughest, strongest Marine of them all. He was promoted to the rank of Major in the fall of 2005 and placed in command of Echo Company, one of the battalion's most combat hardened units. Tony Perry, of the Los Angeles Times, wrote that Ray was "too big, too strong, too quietly confident and too much of a natural leader to be brought down like other men." On

November 14, 2005, while leading his troops into the village of Ubaydi, Mendoza stepped from his vehicle and was killed by a hidden roadside bomb. His battalion commander, Lt. Col. Robert G. Oltman, stated that, "He trained his Marines so well that when he died his Marines did not hesitate or lose composure. They just simply performed flawlessly." At his funeral, Ray's college coach, Russ Hellickson, concluded his eulogy by stating, "Thank you for showing that Leadership is not a position, Leadership is an action."

Leadership is not a position. Leadership is an action. Too often we wait until we are in a position of leadership to act as a leader. Just because you are voted captain of your team, doesn't make you a leader. On the other hand, just because you are not a captain of a team, doesn't mean that you can't lead. Ray Mendoza was never a captain of an OSU wrestling team, but his actions prove his ability to lead.

Leadership is showing up on time. Leadership is showing enthusiasm for every practice and game. Leadership is noticing when a teammate is down and giving them a pat on the back and words of encouragement. Leadership is doing and saying things that may not be popular, but leads to a path of success. Leadership is holding yourself, then others accountable. Leadership is giving others opportunities, and if they make mistakes, supporting and teaching them how to make better decisions the next time. Leadership is lending a hand, not pointing a finger.

Ray Mendoza is survived by his wife and two children. After attending his father's funeral and listening to many people tell stories of his father, Ray's 8 year old son went into his bedroom and made a sign that he hung on his wall. The sign simply said, "I Want to be a Leader."

What do you want to be?