



Ohio Wesleyan University– Athletic Training Athletic Training Newsletter

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Introduction – by Todd Miller

Footwear, Footwear, Footwear! You guessed it, this issue deals with footwear. We are very excited to have an OWU Alum, Deydre Teyhan, assist with the issue. Deydre is currently a Physical Therapist in the US Army. On a personal note, she and her husband are the first military couple and 25th overall to complete a marathon in all 50 states. She has provided great

information on a new craze in footwear: Minimalist Running Shoe. She also included guides on how to adapt lacing your shoes for different foot types and/or injuries. We have put together some important points to consider when and where you purchase your next pair of running shoes and outlined some different common injuries that can be prevented just by

having a correctly fitted shoe. We are pleased to announce that starting next year we will be producing a newsletter each module. As opposed to each semester. If you are interested in back issues please go the Athletic Training Website and use the AT Newsletter link. As always, please let us know what you think and if there are any topics you would like to have covered.

Upcoming Dates:

April 9th-15th - NCAA Division III Week. Activities will be planned for each day of the week

April 12th—Health & Wellness Fair, 11:30am-2pm, Campus Center Atrium

April 15th—Special Olympics Track Meet at Selby

April 19th—Fall Sport Returner Physicals at the Wellness Center, Student-Athlete Banquet.

April 30th—Fall Sport Returner Physicals at the Wellness Center

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As an Athlete – Should You Get on the Minimalist Running Shoe Movement Bandwagon? - by Deydre Teyhan '93

Are you debating if you should give barefoot running or minimalist running shoes (MRS) a try? Have you been curious what all the fuss is about? Are you interested in trying it out – but concerned you might get injured during the transition period? This article will try to summarize the evidence (and the lack of evidence) to hopefully allow you to make an informed decision if changing to minimalist running shoes is for you.

Some of what we know:

A mid/forefoot running style has been found to decrease the initial ground reaction forces for a runner. Decreasing these forces is thought to be beneficial because tibial stress fractures and plantar fasciitis have been found in those with higher impact loading and rates of loading. MRS can be helpful in changing your running form so that you land more on the front part of your foot instead of your heels when you run. MRS provides less support, so the muscles in your feet have to work harder.

Top 10 Rules for Transitioning to Minimalist Running Shoes:

1. Be patient – stick with a program that slowly progresses your time running in MRS (even if you feel like advancing quickly).
2. Avoid running in MRS/barefoot 2 days in a row for the first 4 weeks.
3. Stretch your calf, foot, and hamstrings after you run.
4. Strengthen your leg and foot muscles before starting the transition.
5. Stop running if you experience pain.
6. Land softly (like a cat) – you should not HEAR your foot hit the ground.
7. Take smaller strides with a faster cadence.
8. Adopt a good running posture –relax
9. Teach yourself to run mid/forefoot by running in place or running up stairs to feel forefoot landings
10. Get on the forefoot and stay off the heel if you transition to MRS or barefoot running.

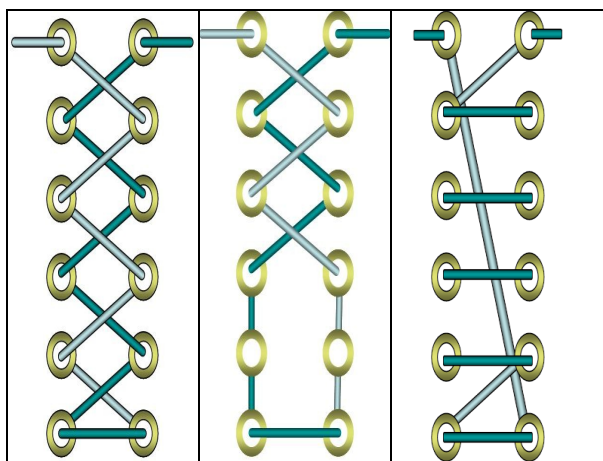
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Remember—Do NOT make a running shoe purchase based on looks or trying to make a fashion statement

Running Shoes Fitting/Buying Recommendations - DWU AT Staff

- Try on your shoes with the type of socks you will wear while running. Different socks may alter the fit. If applicable take your pair of orthotics.
- Feet get larger with age, have your feet measured once a year.
- Feet swell during the day. Go shoe shopping at the end of the day when your feet are their largest.
- When trying on shoes check the following to ensure a good fit:
 - The heel should fit snugly with no slippage.
 - The midfoot, the area under the arch but over your instep, should fit comfortably snug but not too tight.
 - The toe box should have enough room to wiggle your toes.
- Give your feet time to adjust to a new pair of shoes, walk around the house casually prior to running in them. If they hurt your feet walking around the house they will probably hurt while running.
- Know when to replace your shoes. If your shoes feel uncomfortable or less supportive and has wear on the sole, it may be a good time to get a replacement pair. (300-500 miles)
- When purchasing a pair of running shoes, find a store that can analyze your running gait and fit you in the proper shoe. Traditionally, these tend to be specialty stores that gear their merchandise to runners. In Delaware, try Second Sole on Sandusky St, or if you want a larger selection try Fleet Feet on Polaris Parkway. A trained sales person can assist you better than someone at a regular sporting goods or department store.

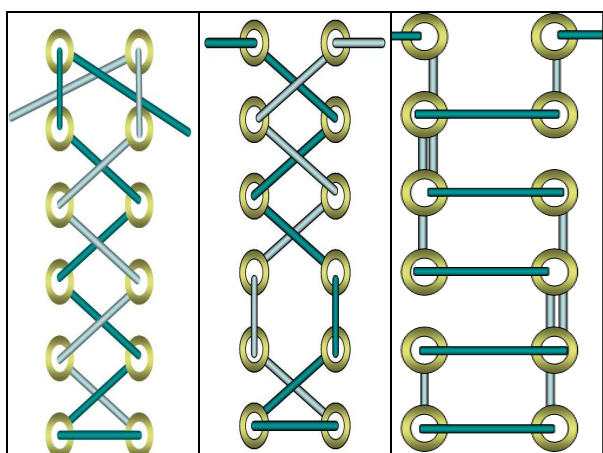
Lacing Techniques - by Deydre Teyhan '93



Traditional

Widen Toe Box

Toenail Problems or Corns



Heel Fit

High Instep

Parallel Lacing for High Arches

- **Traditional**— This is the most effective method for most individuals and shoe types.
- **Widen Toe Box**—If your goal is to widen the toe box, do not start the “criss-cross” method until the 2nd or 3rd hole to minimize tightness in the toe box region.
- **Toenail Problems or Corns**—Lace down from the top eyelet opposite of the problem toe to the bottom of the eyelet on the side of the problem toe. Leave enough end of the lace to tie at the end. Then lace side to side until the top eyelet is reached. This technique creates an upward tension on the bottom eyelet over the painful or problematic toe, relieving pressure.
- **Heel Fit**— (Lace Lock). This can help prevent your heel from sliding up and down excessively in the shoe. Lace normally until the 2nd to last set of eyelets. Create a vertical section by feeding the laces upwards to the last set of eyelets on the same side of the shoe. Now cross the lace over to the opposite side of the shoe, underneath the vertical lace. Pull tight and tie normally. If you have shoes with an extra set of eyelets off to the side at the top of the shoe, lace through those eyelets when using this technique.
- **High Instep**— Sometimes pressure or pain can occur on the top of your foot when wearing a shoe that is not deep enough for your foot. This technique uses the traditional “criss-cross” method but skips or avoids crossing over the tongue at the highest (or painful) part of the foot. You can vary the pressure across the top of the foot by carrying the holes skipped or by skipping over two holes before crossing again.
- **Parallel Lacing for High Arches**— For High Arches, lace the shoes so the laces go straight across. After lacing the bottom two eyelets on the outer side to the inner two eyelets, continue to cross the eyelets in a parallel fashion from inside to outer side, and then repeat until one set of the eyelets is left.

Miminalist Running Shoes cont'

Over time the use of MRS can actually improve foot and leg muscle strength. It might sound counter intuitive – but when you land barefoot you land softer than when you are wearing a shoe with lots of cushioning. Why? Your body can sense the ground reaction forces better so you naturally bend your knees and hips more to absorb the force. The good news is that even when running in traditional running shoes – if you take shorter strides with a faster turn over – you can reduce the ground reaction forces regardless of the type of shoe you are wearing.

Some of the concerns:

Since these shoes provide less support and your muscles have to work harder – the transition period can lead to increased rates of injuries. If you are thinking about transitioning – it is smart to transition during your off-season (way before pre-season kicks off!). Some expert runners suggest it takes over 6 months (maybe up to 2 years) to successfully

transition to MRS. Some runners switch to MRS but don't change their running form to a mid/forefoot running style. These runners actually had higher rates of loading which puts them at higher risk of injury. There is nothing "magical" about the shoes. If you decide to start wearing the shoes, you also have to decide to transition from a rearfoot running style to a mid/forefoot running style. If you have a history of foot problems, Achilles problems or low back pain – transitioning to mid/forefoot running style may cause more problems. Please check with a team physician before transitioning.

Sports with a Traditional Shoe:

If you participate in a sport that requires a traditional shoe (Football, Soccer, Basketball, etc...), you can still utilize an MRS. As previously stated, do so during the off season utilizing the same transition process. Developing stronger feet, learning to run better, and learning to land better are positives for all athletes. It is impor-

tant to transition both in and out of the MRS and your traditional shoe.

Where we need to do more research:

Some experts will state that running barefoot or in MRS will decrease injury rates. A retrospective study from Harvard found that mid/forefoot runners had a 50% reduction in injuries and improved performance compared to rearfoot runners. However, prospective studies are needed to determine the influence of running style and shoes on injury rates.

Want More Information:

If you want to learn more – I would suggest watching the video on YouTube titled the "Barefoot Professor". This video was done by Dr. Daniel Lieberman from Harvard University and in a quick 6 minutes a review of the evidence supporting barefoot/minimalist running shoes will be presented.

If you are thinking about transitioning – it is smart to transition during your off-season (way before pre-season kicks off!)

Common Injuries that can be Prevented with Proper Footwear - OWU AT Staff

Regardless of the distance or competition level, hip and lower extremity injury is an all too common occurrence in the running athlete. The following is a list of some of the most common over-use injuries we see in the Athletic Training Room.

Hip & Thigh

- Sacroiliac joint dysfunction
- Hamstring tendonitis/strains

Knee

- Patellofemoral syndrome
- IT band friction syndrome

Lower Leg

- Medial tibial stress syndrome (MTSS) - "shin splints"

- Stress fractures/reactions
- Exertional compartment syndrome

Foot & Ankle

- Achilles tendonitis
- Stress fractures/reactions
- Plantar fasciitis
- Neuromas

The human body works as a kinetic chain. This means that if there is a portion of the chain not working efficiently, the rest must compensate to achieve the desired workload. It is often during this compensation period that the athlete suffers from one of the above conditions. One of the easiest ways to avoid this compensation

pattern is to be sure your shoe is properly supporting your foot while running, thus promoting an efficient kinetic chain.

Everyone has their own body type and running style. Because we are not all built the same, the importance of understanding your foot type should not be underestimated. There are three major categories of foot type: **Supinator** (underpronation), **Pronator** (overpronation), & **Neutral** (neutral pronation). Have your gait analyzed by a trained sales person. Once your foot type is determined you will be fitted for the appropriate running shoe and on your way to an injury free season.

The importance of understanding your foot type should not be underestimated

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Recommended Reading:

Devoted: The Story of a
 Father's Love for His Son

By Don Yeager and Dick
 Hoyt

If you have never heard of Team Hoyt, I would ask that you go on YouTube and search "Team Hoyt My Redeemer Lives". This book chronicles how together Dick and Rick Hoyt have competed in countless Marathons, Triathlons, and other types of endurance races. That may not seem like that big of a deal until you know that Rick has been bound to a wheelchair for his entire life. Dick either pushes, pulls, or carries his son through all of these races. They have completed all of these races together and never stopped believing in I word: CAN.

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

I am going to get a bit personal....

Last spring I was diagnosed with having seizures. As is customary with a patient who is experiencing seizures, I was given a 6 month driving restriction. Obviously, considering my occupation and the unorthodox hours required, a driving restriction was not what I, or anybody else for that matter, would need or want. However, after coaches and staff members were informed of this issue, I had many offer to help me any way during this time. The humbling part was not only did they offer, but if I asked they would say yes, even if it meant they had to go out of their way.

During the fall season I primarily cover both soccer teams. After learning of my predicament, both coaching staffs told me that they would get me home after practices and games and that my family and I

wouldn't have to worry about transportation. This ended up being as simple as getting a ride home from a member of the Men's coaching staff to the Women's team dropping me off at my house in the school vans after a game at Otterbein. As the season progressed and team members realized that I couldn't drive, it was not uncommon for them to give me a ride from Selby Stadium to Roy Rike for practice, or if I was walking on Park St. they would stop and offer me a ride. These small actions may seem trivial, but show a pattern of selfless behavior.

Too often, random acts of kindness are perceived to go unrewarded. I feel that they do, just not always in a direct way. I do not find it to be a coincidence that after being so helpful and kind, the DWU soccer programs would end up having such great and successful 2011 seasons.

Sometimes we need to look at the bigger picture to see how we are being "rewarded" for our actions. Your acts of kindness will be rewarded. The rewards may not be immediate, come directly from the person you helped, or seem related at all to what you did. Just know that you will be rewarded.

Most of us do not perform acts of kindness in order to receive anything in return, but that doesn't mean that those cannot be recognized and publically appreciated. Obviously, I do not have enough time or space to list each person individually, but I would like to publically thank any and all who offered a ride, asked how they could help, or just stopped for a moment to ask how I was doing. I hope that after reading this, you know you and your efforts were greatly appreciated.

Thank you.