

# Athletic Training Newsletter



## Happy New Year!!!

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We hope you have had a great start to 2020. Welcome to the second issue of the Lakota West Sports Medicine Newsletter. We will continue to provide information on a variety of topics and issues in the sports medicine world. The focus will be on

topics pertinent to the time of year we are in, as well as topics receiving an increased amount of attention. Please feel free to provide us feedback on topics you may like to see presented in this newsletter. Our goal is to continue to provide high quality

healthcare and education to the Lakota West Community.



## Dairy – What are the benefits?

“Milk. It does a body good.” This slogan came from the 1980’s marketing campaign for milk trying to get people to understand the benefits of milk and dairy products. Now in 2020 there is more research that has been done on dairy consumption, and specifically the need for dairy products in an athlete’s diet as it relates to performance and recovery.



and fluid balance (providing Vit D, Calcium, Phosphorus, Potassium, Magnesium).

There is new research out of Canada reporting milk may provide assistance in reducing low-level inflammation from physical activity, providing assistance with recovery. There is also research that gradually ingesting low-fat milk following exercise, provides improved rehydration when compared sports or electrolyte drinks.

This is due to the fact it is slow releasing, giving the body increased amounts of time to absorb the nutrient dense fluid. Chocolate milk has shown positive findings as a recovery drink. This is due to the carbohydrate and proteins in the milk, as it stimulates protein synthesis, to effectively begin rebuilding and replenishing muscles following a workout.

Journal of Nutrition. 144: 1760–1767, 2014.

Seery S and Jakeman P. Br J Nutr. 2016;116(6):1013-21.

FergusonStegall L, et al. J Strength Cond Res. 2011;25(5):1210-24.

Lunn WR, et al. Med Sci Sports Exerc. 2012;44(4):682-91.



### Follow us via Social Media:

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- @BeaconOrtho



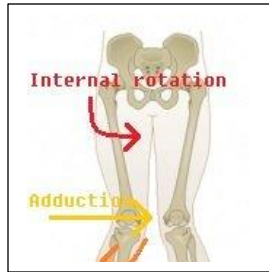
## Patellofemoral Pain Syndrome



Patellofemoral pain (PFP) is a very common knee issue that affects active individuals. Although the injury is common, it can be a complex ailment to manage. A better understanding as to what may be causing this issue by the clinician on a global scale can help better align the treatment. PFP describes pain that is present in the front of the knee around the patella or kneecap. The irritation of the joint can cause a dull, aching pain around the front of the knee. This pain can also cause stiffness, making everyday activities more difficult, including walking up and down stairs, squatting, lunging, and kneeling.

### Causes of PFP

- Increased hip adduction and internal rotation with running and jumping (knock knees)
- Weakness/tightness of the quadriceps musculature
- Muscle imbalance between the quadriceps and hamstring musculature
- Hip and spinal stabilizer (core weakness)



### Preventing and Treating PFP

- Have a sports medicine professional assess your gait and jump mechanics
- Lower extremity stretching and soft tissue work
- Hip, quadriceps, and hamstring strengthening
- Lower extremity stability training in single leg positions

### Exercises to Help in Treating PFP



Foam Roll Quad 15-20 times



Sidelying Quad Stretch 2x:30



SAQ x15 hold 5 sec at top



Foam Roll Hamstring 15-20 times



Hamstring Stretch 2x:30



Straight Leg Raise x20



Foam Roll IT and 15-20 times



Piriformis Stretch 2x:30



Clamshells x20



Supine Bridge with Ball Squeeze x15 5sec hold

*"The control center of your life is your attitude."*

*Journal of Athletic Training: September 2018, Vol. 53, No. 9, pp. 820-836.  
Journal of Athletic Training: April 2015, Vol. 50, No. 4, pp. 366-377.*

### Nutrition Corner

The ability of a student-athlete to fuel their energy needs is difficult at times. We are providing you with a recipe for a healthy snack to fuel throughout the day, and supplement your nutritional needs for the day.

#### No Bake Energy Bites

- 1 cup Old Fashioned Oats
- ½ cup of semi-sweet chocolate chips
- ½ cup ground flax seed
- ½ cup peanut butter (or any nut butter)
- 1/3 cup honey
- 1 tsp of vanilla
- Optional – Add a scoop of protein or recovery powder to recipe

1. Mix all the ingredients in a bowl thoroughly
2. Roll into ball shapes
3. Place on baking sheet covered with waxed paper
4. Place in the freezer for 1-2 hours
5. Remove and store in the freezer or refrigerator



## Sleep – A Hidden Performance Advantage

Sleep is an important part of maintaining overall health in the lives of every individual. Student-athletes need for proper sleep is a critical pillar in the formation of success and maintaining a high level of athletic performance. The quality and quantity of sleep can play a key role in many aspects of a student-athlete's life, whether it be having a good or bad training day, being

mentally prepared, or even giving you the edge between winning and losing.

Student-athletes who take advantage of proper sleep habits have:

1. Decreased chance of injury/illness
2. Improved accuracy and speed with sport tasks
3. Enhanced reaction time
4. Improved positive decision making on and off the field

### Positive Sleep Habits

1. Get at least 8 hours of sleep every night (optimal 8-10 hours)
2. Have a regular sleep and wake-up time
3. Wind down 20-30 minutes prior to your bedtime
4. Sleep in a dark, quiet, cool (60-67°F) environment
5. Reduce/eliminate caffeine intake



*Sleep*. 2011 Jul 1; 34(7): 943-950  
*Sleep Med*. 2004 Sep;5(5):441-8

## Modality Corner – IASTM

A modality is a therapeutic treatment used to treat a condition. This section will be devoted to providing information on Instrument Assisted Soft Tissue Mobilization (IASTM).



There are a number of tools that perform this type of treatment including Graston, Hawk Grips, Rock Tape, Fuzion, and others. They all have the same goal in mind,

and that is to help enhance the healing process. The goal of IASTM allows a treating clinician an enhanced ability to detect and treat dysfunctions in soft tissue (muscles/tendons). The treatment helps to reduce pain and restore function by using the tools to identify soft tissue deformities and treat using the proper shape of the tool for optimal coverage. The treatment is then combined with targeted stretching and strengthening for a complete treatment plan.

A major benefit of the treatment is it can be customized to the individual based on their need and response to the treatment. There may be some response of pain and bruising to the treatment, and this allows the clinician to gauge the intensity and response to the treatment. The clinician will decide if the student-athlete may benefit from this type of treatment for their condition, and will explain the possible responses to expect. Feel free to contact us with

*Principles of Soft Tissue Treatment* 1994, 2 (2)63-65  
*Journal of Manual & Manipulative Therapy*, 94(2) 55-62  
*American Journal of Sports Medicine* 83(4) 249-251  
*British Journal of Sports Medicine* 93(27) 28-33

*“Confidence imparts a wonderful inspiration to its possessor”*  
 -John Milton

## Ask the Athletic Trainers

We are asking you to provide us with any questions you have or topics you would like to see covered in this newsletter. Our goal is provide you with the information you would like to gain more knowledge about.

Please feel to ask questions by sending an email to the athletic training staff:



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**Interested in learning more about sports medicine???**

**Come and talk with us about being a Student Athletic Training Aide, and how you can be part of the sports medicine team**

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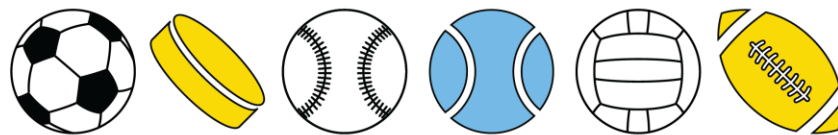
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**Cross Training – An Active Approach to Injury Prevention**

Cross Training is participating in an activity that is different from an individual's primary sport focus. The purpose of cross training is to develop different movement patterns, use different muscle groups, and skill sets to prevent overuse injuries or burnout. There are also mental benefits participating in a different activity. Cross training helps to provide a variety of movement patterns in order to stress the neuromuscular system in different ways to optimize overall athletic performance. Repetitive movements with the same sport, often called "rinse and repeat," do not allow an individual to develop into a well-rounded athlete, and have also shown to limit their potential. The table below provides some samples on sports that provide a complimentary training effect.



**CROSS TRAINING THROUGH SPORTS SAMPLING**

Playing multiple sports can help athletes improve performance while reducing the risk of injury and burn out and is an important part of making health a competitive advantage. Check out the following recommendations and benefits of cross training in complementary sports.

PRIMARY SPORT	COMPLEMENTARY SPORTS	BENEFITS	
Basketball	Soccer Track and Field (be careful of overuse injuries caused from running such as shin splints, stress fractures and patellofemoral pain syndrome)	Better defenders, footwork, agility, timing	
Football	Wrestling Lacrosse Baseball Martial Arts	Basketball Track Swimming Soccer	Hand eye coordination, confidence, mental toughness, footwork, body control, speed, explosiveness, muscle development, endurance, foot speed <sup>1</sup>
Soccer	Tennis Swimming Lacrosse	Basketball Volleyball	Speed quickness, anticipation, improve playing vision, passing/team play, develop other skills in different plains of motion vertical jump, coordination and spatial awareness
Swimming	Dance Gymnastics Cross Country Track and Field Baseball/Softball (avoid being a pitcher or catcher to limit repetitive throwing) Volleyball (be aware of any shoulder ailments)	Soccer Football Cheerleading	Balance, stamina, speed, bone/joint impact (which is not provided when then are swimming in the pool- this is essential for skeletal development.)
Tennis	Dance Basketball Track and Field Baseball/Softball (be aware of any shoulder ailments)		Cardiorespiratory capacity, endurance, mental toughness, control, explosiveness
Track and Field	Volleyball Swimming Dance	Baseball/Softball Basketball	Full body movements, multi-planar <sup>2</sup>
Volleyball	Soccer Track and Field	Swimming Golf	Agility, short explosive movements, develop reflexes, focus concentration
Wrestling	Football Rugby Volleyball	Baseball Golf	Develop a mental edge, learns read and react, accelerate/decelerate (body control) power, patience and hand-eye coordination

1. <https://winningyouthfootball.com/2011/11/2690/>  
2. <https://www.weckmethod.com/articles/5-reasons-to-include-multi-planar-movements-in-functional-strength-training>