



## Staying Healthy As An Athlete

### Summary

1. Strength and Conditioning
2. Dynamic Warm Up and Static Stretching
3. Proper Nutrition
4. Adequate Sleep

### Strength and Conditioning

- Off-season strength and conditioning programs have been shown to reduce the risk of sport related injuries
- Specific Adaptations to Imposed Demands (SAID) is a principle used by S&C coaches to improve strength, power, and endurance in sport specific activities
- Improved performance + Reduced Risk of Injury = Greater athlete success
- Mark Fox is our S&C specialist at Maple City Health and Fitness and has experience in creating quality S&C programs for high school athletes of any sport

### Dynamic Warm Up and Static Stretching

- A quality dynamic warm up has been shown to help reduce the risk of injury and increase performance and should be performed before any and all competitive activities
- A dynamic warm up entails 10-15 minutes of stretching through continual movement and exercise to increase heart rate
- A good dynamic warm up addresses each of the major joints used in sporting activities and serves to warm up muscles and joints to prepare for competition
- A quick example: Walking Lunges, Side Shuffles, Cariocas, Prayer Stretch, Frankenstein's, Inch Worms, Shoulder Dislocates, Arm circles, Jump squats
- Static Stretching entails increasing the length of a muscle group across a joint for a prolonged hold; usually 30-60 sec
- Static Stretching is best after activity or competition and on non-competition days
- Static Stretching serves to help reduce Delayed Onset Muscle Soreness (DOMS), improve recovery time, and increase flexibility needed for sport
- A good goal is to stretch each major muscle group for 4 sets of 30 sec a few times per week

### Proper Nutrition

- Nutrition needs for athletes are much different than that of the average population
- Proper nutrition pre-competition, post-competition, and on non-competition days can help improve recovery and reduce the risk for injury

- Athletes will typically need more macronutrients (protein, fats, carbs) than non-athletes and proper timing of these nutrients can increase performance
- Below is a table from the National Strength and Conditioning Association with recommendations for daily caloric intake based off of activity level and gender

**TABLE 10.4 Estimated Daily Calorie Needs of Male and Female Athletes by Activity Level**

Activity level	Male		Female	
	kcal/lb	kcal/kg	kcal/lb	kcal/kg
Light	17	38	16	35
Moderate	19	41	17	37
Heavy	23	50	20	44

*Light activity level:* Walking on a level surface at 2.5 to 3.0 miles per hour (4.0 to 4.8 km/h), garage work, electrical trades, restaurant trades, housecleaning, child care, golf, sailing, table tennis.

*Moderate activity level:* Walking 3.5 to 4.0 miles per hour (5.6 to 6.4 km/h), weeding and hoeing, cycling, skiing, tennis, d

*Heavy activity level:* Walking with load uphill, heavy manual digging, basketball, climbing, American football, soccer.

### Adequate Sleep

- Sleep is most important for our bodies to recover
- During sleep the body releases growth hormone and other hormones to help the body recover and muscles heal properly following exercise
- The average sleep recommended is 7-9 hours a day but athletes may benefit from even more than this
- A lack of sleep can lead to less recovery between competitions and possibly an increased risk of injury if lacking over a long period of time