

ATHLETIC HEALTH INFO FOR PARENTS

Kelly Johnson

Athletic Trainer
for UCHS

November 20,
2014

WHO IS KELLY JOHNSON, ATC?

Graduated from Point Loma Nazarene University in 2009

Became a certified athletic trainer in 2009

Became a personal trainer & health coach in 2010

Became a certified nutritionist and wellness coach in 2014

Runs personal training business (Kelly Johnson Fitness)

What does an athletic trainer do?

Assesses/diagnoses injuries

Prophylactic taping and bracing

Rehabilitation of injuries

Makes medical referrals and recommendations

Provides emergency care

Collaborates with other health care professionals

WHAT IS KELLY'S ROLE AT UCHS?

- Here to help EVERY athlete in ANY sport (even some students who aren't in CIF sports--like band and ROTC)

- Sports covered: (high risk or high impact are priority)

Fall Sports- football, volleyball, field hockey, water polo, cross country, golf, tennis

Winter Sports- basketball, soccer, water polo, wrestling

Spring Sports- badminton, baseball, softball, golf, lacrosse, swim, tennis, track & field, volleyball

- Hours covered: every day after school for a few hours (roughly 2.5 each day depending on what is going on on campus)
- Special hours covered?? (football, lax, etc)

SPORTS TOPICS COVERED TONIGHT

- **Nutrition & Hydration**
- **Concussions**
- **Care for Common Injuries**

Nutrition

CARBOHYDRATES VS PROTEINS

- Carbs fuel the body & give energy
- Proteins help repair/build muscle
- Eating together creates better absorption of both

CARBOHYDRATES

- Helps give muscles energy to get through a workout
- “Low Blood Sugar” is related to not having enough carbs in your diet. How to fix it?
- Simple carbs vs complex carbs
- Crucial to “restock” carbs within 30 mins of a workout for highest efficiency of absorption
- Examples of carbs?

PROTEIN

- Repairs muscle tissue after workout and “tearing of fibers”
- Essential to building muscle (NOT necessarily bulking up)
- Examples of proteins?

SNACKS

- Whole grain cracker with cheese or fruit
- Greek Yogurt with Granola or blueberries
- Nuts
- Nutrition bar- beware of high sugar
- Hard boiled egg
- Chocolate milk (preferably reduced fat or low sugar)
- Snack sized cottage cheese & fruit
- Hummus & whole wheat tortilla

Hydration

HYDRATION

- What is hydration?
- How to gauge hydration?
- Is your athlete drinking enough water?
- Water vs sports drinks

WHAT IS HYDRATION?

- Hydration is one of the most fundamental processes in a healthy body!!!
- Cellular water is used to:
 - bring essential nutrients to cells
 - wash out waste products and toxins from cells and deliver them to organs of excretion
- Studies have shown that a loss of 2% or more of an athlete's body weight due to sweating is linked to a drop in blood volume
- This means that the athlete's heart has to work harder to move blood through the bloodstream

IS MY ATHLETE HYDRATED?

- Monitor urine volume output & color
 - A large amount of light colored, diluted urine means hydration. Dark colored, concentrated urine means dehydration
- Weigh the athlete before & after practice
 - Any weight loss is likely from fluid, so the athlete must drink enough fluids to weigh the same before & after practice

HOW MUCH FLUID DOES MY ATHLETE NEED?

Remember that fruits & veggies are hidden sources of water too!

- Roughly $\frac{1}{2}$ body weight in oz
 - If I weigh 100 lbs, I should drink roughly 50 oz of fluid daily

WATER VS SPORTS DRINKS

- Sodium helps prevent cramping
- Carbohydrates provide extra energy
- Potassium helps with muscle function

Beverage	Amount	Carbohydrates	Sodium	Potassium
Water	8 oz	0 g	0 mg	0 mg
Powerade	8 oz	17 g	53 mg	32 mg
Gatorade	8 oz	14 g	110 mg	30 mg
G-2	8 oz	7 g	110 mg	30 mg

Concussions

CONCUSSIONS

- What is a concussion?
- Who has a student who has had a concussion?
- What are the signs & symptoms of a concussion?
- How to recover from a concussion
- Second Impact Syndrome & Post Concussive Syndrome
- Criteria for Return To Play
- Prevention

WHAT IS A CONCUSSION?

- A concussion is an injury to the brain that happens on a cellular level
- Can you “see” a concussion in the brain???
- MRI/CT Scan?

SIGNS & SYMPTOMS OF A CONCUSSION

- Headache
- Confused about recent events
- Dizziness
- Balance problems
- Nausea/Vomiting
- Appears dazed or stunned
- Vacant stare
- Appears drowsy
- Loss of consciousness
- Mood changes
- Feeling lethargic or slowed down
- Difficulty concentrating
- Fogginess
- Fatigue
- Blurry or double vision
- Sensitivity to light
- Memory problems
- Appears uncoordinated or unsteady

CONCUSSION RECOVERY

- REST!!!!!!
- Any activity that increases blood flow to the brain will cause symptoms to worsen
- What types of activities should be avoided?
 - Working out
 - Cardio/Weight Lifting
 - Texting
 - Video Games

RISKS

- Someone who is not fully recovered from a concussion is much more likely to sustain another concussion
- The second concussion often causes worse symptoms and lasts longer
- Athletes who have had a previous concussion at some point in their lives are more likely to sustain another concussion
- Young children and teens are more likely to sustain a concussion and can take longer to recover than adults
- If your child returns from concussion too quickly, he or she risks either prolonged symptoms or Second Impact Syndrome

SECOND IMPACT SYNDROME

- Second Impact Syndrome is when a second concussion occurs within hours, days, or weeks following a prior concussion. It causes rapid brain swelling and results in coma or death.
- ([view video](#))
- (case studies from CDC)

CRITERIA FOR RETURN TO PLAY

1. Must be symptom free for @ least 1 week
2. No symptoms with light exertion (cognitive and physical)
3. No symptoms with light exercise
4. No symptoms with weight lifting
5. No symptoms with heavy exercise like sprinting
6. No symptoms with practice
7. No symptoms with full RTP

CONCUSSION PREVENTION

- Wear a properly fitting helmet (if applicable)
- Learn and utilize proper athletic/hitting techniques
- Stay in good physical condition to minimize fatigue
- Strengthen neck muscles
- Get adequate sleep
- Wear a mouth guard (if applicable)

Care for Common Injuries

COMMON INJURIES

- 2 types of injuries:
 - Chronic/overuse
 - Acute/one time event that just happened
- Common chronic injuries include:
 - Shin Splints
 - Tendinitis/Tendinosis (Jumper's Knee)
 - IT Band Syndrome (Runner's Knee)
 - Osgood Schlatter's/Sever's Disease
- Common acute injuries include:
 - Muscle Strains
 - Ankle Sprains

CARE FOR COMMON INJURIES?

- Ice is ALWAYS best option!!!
- Never heat within first 72 hours of acute injury
- Ice vs Heat- reactions in the body
- When in doubt, remember to R.I.C.E.
 - Rest
 - Ice
 - Compression
 - Elevation

Questions?