



Tuscola High School Athletic Guidelines

Necessary Forms:



- Pre-Participation Form (signed & dated)
- Consent to treat (signed & dated)
- Concussion Form (Checked, Initialed, Signed & Dated)
- Physical Exam – every 365 days + 30
 - Must be kept up to date.

Injuries and Medical Excuses



- All injuries must be reported to the Coach and Athletic Trainer.
- Excuses for physical education will also apply to attendance and participation on an interscholastic Team.
- The athlete must receive a release to participate from the doctor they received the original excuse.



Gfeller-Waller Concussion Clearance Act

- <http://gfellerwallerlaw.unc.edu/GfellerWallerLaw/gwlaw.html>



SPORTS MEDICINE: CONCUSSIONS

- A concussion is a traumatic injury to the brain and presents with a wide variety of signs and symptoms
 - Headache
 - Confusion
 - Amnesia (not remembering events before or after the injury)
 - Vision changes
 - Loss of consciousness
 - Dizziness
 - Irritability/emotional changes (inappropriate or atypical crying, laughing, etc)
 - Nausea/vomiting
 - Fatigue/feeling sluggish/slow/'foggy'
 - Having "bell rung"
 - Excessive fatigue/drowsiness
- ANY sign/symptom after a blow to the head is a concussion until proven otherwise

SPORTS MEDICINE: CONCUSSION

- **An athlete should NEVER return to play on the day they suffer a concussion**
 - Returning an athlete to play before complete resolution of symptoms can lead to recurrent concussion, prolonged post-concussion symptoms, OR even 'Second Impact Syndrome' (which is often fatal)
- **NEW NCHSAA Rule : An athlete with suspected concussion cannot return to play until he/she is cleared by a licensed medical physician**
 - Managing concussions is difficult even for well-trained and experienced medical providers. Coaches, you do not want this responsibility (or liability).

SPORTS MEDICINE: HEART ISSUES

There are red flags which can tip us off to undiagnosed heart problems

- Chest pain with exertion
- Passing out/fainting from exertion – this is not normal or due to being 'out of shape'
- Family history of a sudden cardiac death or unexplained death before age 50

Take home point: *Any* athlete who passes out or has chest pain with exertion needs a medical evaluation



SPORTS MEDICINE: SKIN INFECTIONS

- Skin infections are common in contact sports
- Most skin infections are relatively minor and self-limited
- Resistant staph infections (MRSA) have become quite common and can be severe
- Skin infections are spread by skin-to-skin contact, sharing pads/equipment/work-out gear, dirty equipment
- Any boil or abscess needs medical evaluation



SPORTS MEDICINE: SKIN INFECTIONS

Take home point: the vast majority of skin infections can be prevented by good hygiene

- Shower right after every practice & game
- Do not share equipment, pads, work-out clothes, towels, etc
- Wash hands frequently with soap/water or anti-bacterial towels/gels
- Wash equipment, mats, clothes, towels, etc regularly



Sports Medicine 101



What is athletic training?

- Athletic training encompasses the prevention, examination, diagnosis, treatment and rehabilitation of emergent, acute or chronic injuries and medical conditions.
- Athletic training is recognized by the American Medical Association (AMA), Health Resources Services Administration (HRSA) and the Department of Health and Human Services (HHS) as an allied health care profession.



Who are athletic trainers?

- Athletic trainers (ATs) are highly qualified, multi-skilled health care professionals who collaborate with physicians to provide preventative services, emergency care, clinical diagnosis, therapeutic intervention and rehabilitation of injuries and medical conditions. Athletic trainers work under the direction of a physician as prescribed by state licensure statutes.
- Athletic trainers are sometimes confused with personal trainers. There is, however, a large difference in the education, skillset, job duties and patients of an athletic trainer and a personal trainer. The athletic training academic curriculum and clinical training follows the medical model. Athletic trainers must graduate from an accredited baccalaureate or master's program, and 70% of ATs have a master's degree. Learn more about the [education of athletic trainers](#).
- [The Guide to Athletic Training Services](#) (pdf) describes the qualifications of athletic trainers and the clinical tasks they routinely perform in the delivery of quality health care.



AT Your Own Risk

- <http://www.atyourownrisk.org/>

Sports Medicine 101

- What are the signs of inflammation?
- ICE vs. Heat
- Tips on proper stretching
- Sprains and Strains
- Importance of hydration
- Top 5 things you shouldn't do in the gym!!



Inflammation

- The body's response to injury.
- Beginning stage to healing.
- 5 cardinal signs of inflammation:
 - Heat
 - Redness
 - Swelling
 - Pain
 - Loss of Range of Motion







Ice vs. Heat



- What does ICE do?
 - Constricts blood vessels to decrease blood flow
 - Decreases Inflammation
 - Decreases muscle spasms
 - Decreases pain
- What does HEAT do?
 - Increases blood flow to treatment area for healing
 - Improves flexibility and stretching abilities
 - Relaxes soft tissue (muscles)



Ice vs. Heat

Use Ice

- Acute injury (new)
- Presences of swelling, discoloration, and loss of function.
- Pain
- Contusions
- First degree burns

Use Heat

- Pain has diminished
- No presence of discoloration or swelling.
- Chief Complaint: stiffness, loss of ROM



Ice vs. Heat

Do Not Use Ice

- Raynaud's Disease
- Impaired Sensation
- Peripheral Vascular Disease
- Uncovered wound

Do Not Use Heat

- Fever present
- Impaired sensations
- Infection
- Open wound
- Peripheral Vascular Disease



Ice vs. Heat

ICE

- Ice Pack – 15-20 Minutes
- Ice Bath – 15-20 Minutes
 - For extremities
- Ice Cup (massage) 7-10 Minutes
- RICE

HEAT

- Moist Heat Packs - 15-30 Minutes
- Warm Bath (100-105dg)
 - 15-20 minutes
- Dry Heat Pad – 15 -20 Minutes



Tips on Stretching

Stretching

- How does a muscle work?
 - Muscle guarding – Protection
- Stretching muscles means you are lengthen nerves too



Tips on Proper Stretching

- Do not bounce!
- Slow steady hold. Hold for at least 20 seconds. Repeat 3-5 times.
- Stretches are more effective after a warm up.
- Protect your joints when stretching.
- Breathe normally when stretching.
- Cool down and stretch post exercise.
- You shouldn't be in pain. Go until you feel a moderate stretch and hold it. Repeat. Each repetition you should go further.



Sprains and Strains

■ Sprains

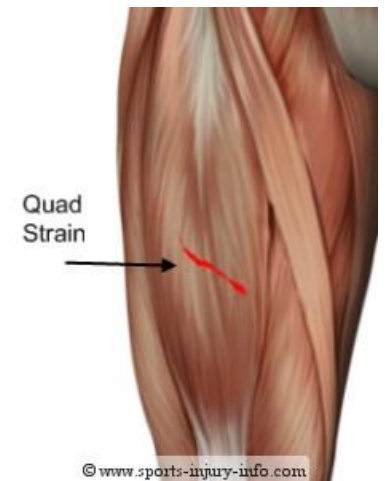
- Damage to a ligament or joint capsule
- Ligament connects bone to bone
- Cartilage material
- Most commonly seen in sprained ankles
- Inflammation



■ Strains

- Damage to a muscle
- Muscle is overexerted or over trained
- Pain with movement of injured muscle.
- Sometimes associated with discoloration.
- Inflammation

*Special Tests and Manual Muscle Tests are performed to diagnose between the two injuries.





Sprains and Strains

How to treat sprains?

- R.I.C.E.
 - Rest Ice Compression Elevation
- Brace
- Control inflammation

How to treat strains?

- Ice
- Light stretching
- Wraps, neoprene sleeve
- Light usage/cardio
- No acute massages

Importance of Hydration

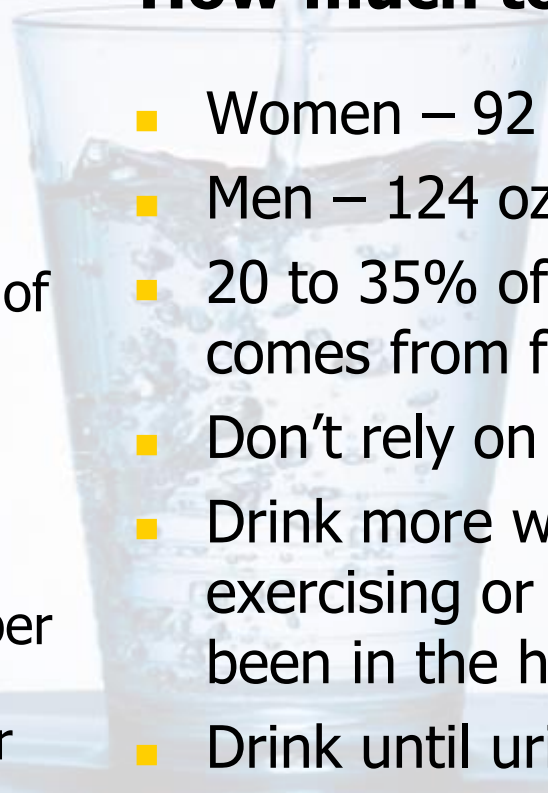


H2O Facts!

- Muscles and Brain = 75% water
- Blood = 82% water
- Water makes up 60-70% of your body weight.
- 75% of Americans are chronically dehydrated.
- Through your kidneys, electrolytes and toxins are managed to allow for proper body functions.
- Muscles cells = 75% water
- Fat Cells = 15% water

How much to drink?

- Women – 92 oz of water
- Men – 124 oz of water
- 20 to 35% of water comes from foods we eat.
- Don't rely on your thirst!
- Drink more when exercising or if you've been in the heat.
- Drink until urine is clear.





$$\div 2 =$$

Divide your body weight in half

THEN
divide by 8

to find the # of cups of

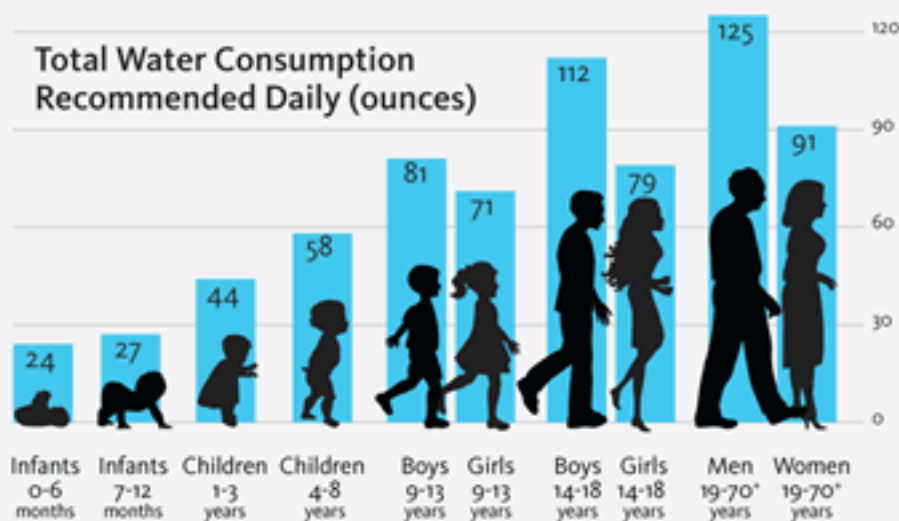
water

you should drink each day



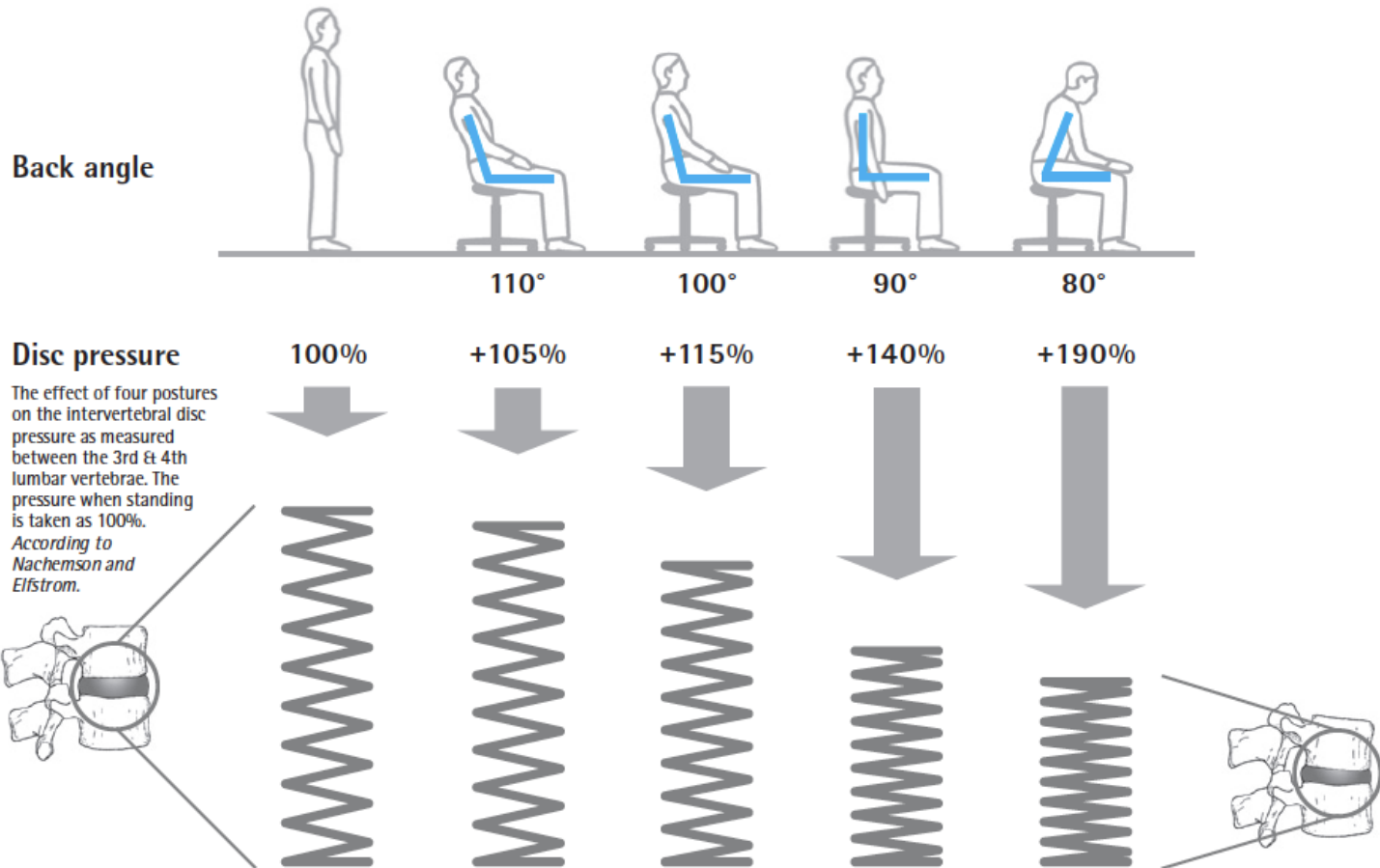
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**Total Water Consumption
Recommended Daily (ounces)**



when sitting correctly matters

How posture affects disc pressure



What Not To Do in the Gym!

- Don't lift weights without a proper warm up!
- Stay away from exercises above your head especially if you have a history of injuries to your shoulder/rotator cuff. These may cause shoulder impingement.
- Decrease weight/resistance and maintain proper form. Quality vs. Quantity.
- Act your age. "Im 17 I can lift way more....."
- Sets, Reps, Weights = only increase one at a time. Don't over do it. Higher reps and lower weights to prevent injuries.



What Questions Do You Have?

- Injury question?
- Exercise question?

