

# DOCTOR'S CORNER

Robert G. Silverman, DC, MS, CNS, DACBN, CCN, CSCS, CIISN, CKTP, CES, DCBCN  
"Creating Health for Future Generations Starting Now"

## Keeping YOU at the Leading Edge in Healthcare

Happy Halloween & Happy Thanksgiving! Welcome to another edition of our newsletter.

The information that Dr. Silverman has compiled and written is aimed at educating, enlightening, and even inspiring you to a better and healthier lifestyle! This e-newsletter is also intended to keep you abreast with the most up-to-date information pertaining to chiropractic care and nutrition, keep you informed about our office's events and happenings, advise you on his seminars, and last but not least, to keep you in the loop with your favorite chiropractor and nutritionist!

### **PART I                      WHAT'S HAPPENING AT NEW YORK CHIROCARE**

#### 1) In-House Seminar

**When:** Nov. 18<sup>th</sup>, 2009: 7:00 PM - 8:15 PM (a different topic every 3<sup>rd</sup> Wednesday of the month)

**Where:** 280 Dobbs Ferry Rd., Ste. # 204, White Plains, NY 10607; ph: (914) 287-6464

#### **What: Healthy Eating for the Holidays**

Always gain a few pounds during the holiday season? Dr. Silverman will take you through the holidays without putting on those extra pounds. Recipes and holiday season pointers will be given to every attendee.

**Wow!:** Take **10% off** all nutritional supplements and **10% off** all nutritional programs when you start

**December 16<sup>th</sup> topic: Open Q & A:** *An open forum for everyone to discuss your exercise programs, nutritional supplements, natural protocols for different conditions, diet methodology, etc..etc..*

#### 2) Video Analysis

Ever wanted to know how your golf-swing, or your gait is throwing you off and may be causing injuries? With the use of video analysis, Dr. Silverman can assess walking, running, and performing an activity, to determine muscle imbalances and the biomechanics of the movements.

#### 3) Seminars Conducted

i) New York Chiropractic College - 8CEU continuing ed. - Oct. 24, 2009

*"Helping Your Athletic Patients Reach Higher: From treating sports injuries to performance enhancement"*

ii) Canyon Ranch, MA - 12CES continuing ed. - Oct. 9 - 11, 2009

*"Helping Your Client Reach Higher: From assessment to Performance Enhancement"*

iii) Pace University - Oct. 2009

*"Nutrition for Athletic Performance"*

#### 4) Syndicated TV Program - Get Healthy with Dr. Rob

*Get Healthy with Dr. Rob* is the name of the syndicated television program that Dr. Silverman is doing. These programs aim to inform and educate the general public about some of the most up-to-date findings, and some of the most talked about topics on nutrition and sports injuries. Dr. Silverman periodically invites doctors and other health-oriented leaders of their fields for interview sessions.

A) New Castle Channel 75 - Broadcasted from Ossining to Valhalla

Tuesdays, Thursdays and Saturdays from 7:00 - 7:30 PM

B) Town of Greenburgh

- Channel 75 Mondays from 6:00 - 6:30 PM

- Channel 76 1<sup>st</sup> and 3<sup>rd</sup> Thursdays of the month from 7:30 - 8:00 PM

C) White Plains Channel 76

D) Scarsdale Channel 75 or 76 (public access channel)

Wednesdays - multiple showings scheduled throughout the day. Please check for local listing

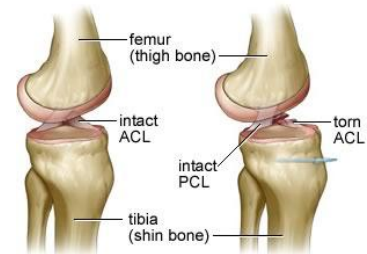
**PART II**

**ARTICLE**

## ACL Injury Prevention in High School Athletics

### ***What is the ACL?***

In medical terms, the anterior cruciate ligament (ACL) is the primary restraint to the anterior displacement of the tibia on the femur at all angles of the knee flexor. This means that when the ACL is injured, the shinbone can slide forward on the thighbone, causing the knee to "give way".



The ACL is one of a pair of ligaments in the center of the knee joint that form a cross, and this is where the name "cruciate" comes from. There are both an anterior and a posterior cruciate ligament (PCL). Both of these ligaments function to stabilize the knee from front-to-back.

### ***What causes an ACL injury?***

An ACL injury is usually caused by sudden, abrupt change in the force to the knee. This can occur during an unexpected cutting move made during a sporting activity, or during a landing from a jump during a basketball game. Most ACL injuries occur in a non-contact setting and do not involve a collision with another player.



### ***What does an ACL injury mean to an athlete?***

When an athlete injures the ACL, it may mean losing an entire season of play. If the injury is severe enough, it could also lead to surgery resulting in long-term rehabilitation, a possible loss of scholarship funding, and emotional and mental impairment affecting the athletes' quality of life<sup>1</sup>. ACL injuries could additionally be a lifelong potential for future arthritis in the injured joint.

### ***Why does it occur more frequently in female athletes?***

ACL injuries typically occur at a 4 - 6 times higher rate in female compared to male athletes. This may be associated with females being more quadriceps dominant. Another factor may be the decreased neuromuscular performance, and the increased ligamentous laxity during menstrual cycles from the fluctuation of female hormones (i.e. estrogen, progesterone, relaxin). Another possible cause is the decreases in passive and active knee stability in female athletes<sup>3</sup>. A study in the *New England Journal of Medicine*<sup>4</sup> found that there are differences in the leg ailment of males and females where females have an increased rate of knock-knee (valgus deformity). The intercondylar notch-width is smaller in females, thus creating less space for the movement of the ACL, resulting in increased risk of injury.

*The National High School Sports-Related Injury Surveillance Study*, currently in its fourth year of online data collection spear-headed by Dr. D. Comstock, has found that approximately one ACL tear occurred in every 15,000 times an athlete practiced or competed. On average, athletes are eight times more likely to suffer ACL injuries in competition than practice. Data was collected from a national sample of nine boys and girls high school sports (including football, soccer, basketball, wrestling, baseball, volleyball, and softball)<sup>2</sup>.

### 3 Most Common Sports for ACL Injury During Practice or Competition<sup>2</sup>

Girls' Soccer	1 in 6,500 times an athlete practiced or competed
Football	1 in 9,800 times an athlete practiced or competed
Girl's Basketball	1 in 11,000 times an athlete practiced or competed

Football had a lower number of ACL injuries per exposure; however, due to the larger number of players per team, it accounted for 41 percent of all ACL injuries in this study.

### Percentage of ACL injuries per sport observed<sup>2</sup>:

Football	41%
Girls' Soccer	19%
Girls' Basketball	13%
Boys' Soccer	9%

### Just in...

*The American Journal of Sports Medicine*, 2009, concluded that sports injury prevention training program improved strength and flexibility of the competitive female basketball players who were tested, and the biomechanical properties associated with ACL injury, as compared with pre- and post-training parameters in the control group. The clinical relevance is that the prevention program lowered the athletes' risk of injury.

### How to prevent ACL injuries

A few of the more important ways to prevent ACL injuries include:

- 1) Plyometric movements to improve lower body coordination, and endurance
- 2) Agility drills to improve lower body agility
- 3) Core stability. The core is the first to fire/activate, therefore stabilizing it allows the head and limbs to move appropriately and safely
- 4) Dynamic neuromuscular and proprioceptive training - these are shown to increase knee stability and decrease knee injury rates in athletes
- 5) Strengthening with weight resistance:
  - a. Improves quadriceps to hamstring strength ratio - especially in females
  - b. Sport-specific training
  - c. Strengthen the surrounding musculature around the hip, knee, and ankle
- 6) Single-leg strength - F.I.T.
  - a. Fierce glute function (especially the medius)
  - b. Incredible 1-leg strength
  - c. Terrific deceleration capabilities

## The Super-6 ACL Prevention Exercises

BY Sam Patierno, CSCS



### Single-Leg Stiff Legged Dead Lift

- 1) Stand on 1 leg, holding weigh in both hands
- 2) Keep back flat, lean forward at hips and lift free leg to the rear, in line with the torso
- 3) Touch weight to the ground
- 4) Return to starting position



### Bosu Plank

- 1) Keep back flat and form straight line from head to heels
- 2) Tilt pelvis and contract abs
- 3) Hold for 20 - 60 seconds



### Glute-Ham Raise

- 1) Raise, or extend hips until torso's perpendicular with legs
- 2) Raise body by flexing knees
- 3) Lower body until horizontal by straightening knees
- 4) Repeat



### Squat

- 1) Head straight, arms overhead
- 2) Feet pointing straight or slightly toed-out
- 3) Feet slightly wider than shoulder-width apart
- 4) Knees in line with toes
- 5) Squat back, not down



### Seated Leg-Curl

- 1) Seated vertical, back flat, chest out
- 2) Place lower calves over pad with legs out in front
- 3) Brace upper body, use handles to assist
- 4) Without moving back or hips, pull the pad down and back as far as you can
- 5) Slowly return to starting position



### Squat Jump

- 1) Start the same as the squat, descend slightly above parallel
- 2) Propel body upwards to max height
- 3) Land in similar position, soft on knees

Note: Do not adduct knees (bringing knees together) upon landing

### Reference:

- <sup>1</sup> Giugliano & Solomon, 2007; Parkkari, et.al., 2008
- <sup>2</sup> Dr. D. Comstock, Weekly Blog, Training & Conditioning.com
- <sup>3</sup> American Journal of Sports Medicine, 2009, vol. 3, no. 6: pg. 1169-1177
- <sup>4</sup> New England Journal of Medicine, Nov. 13, 2008, vol. 359: pg. 2135-2142

*“A good doctor is your partner along the path to optimal health and well-being” Mel Zuckerman*

Dr. Silverman would love to hear from you. Feel free to send us an e-mail if you have any suggestions, ideas, comments, or if you have any relevant questions that you would like posted on the newsletter.

Please respond to [info@DrRobertSilverman.com](mailto:info@DrRobertSilverman.com)

---

*Dr. Robert G. Silverman graduated Magna cum Laude from the University of Bridgeport, College of Chiropractic. He is a Certified Nutrition Specialist, Certified Clinical Nutritionist, has a Masters of Science in Human Nutrition, is a Certified Strength and Conditioning Specialist, and is a Diplomate with the American Clinical Board of Nutrition. Dr. Silverman is also a Certified Sports Nutritionist from The International Society of Sports Nutrition, and is a Certified Kinesio Taping Practitioner, a NASM-certified Corrective Exercise Specialist and has a Diplomate with the Chiropractic Board of Clinical Nutrition. He specializes in the diagnosis of joint pain and soft-tissue management and its treatments with an innovative, established and well-researched approach to non-surgical care, while incorporating proper nutrition protocols. He is board certified in Active Release Technique® (ART®), Graston Technique®, and cold-laser therapy. Dr. Silverman is a nationally known speaker, and has published numerous articles on treating and preventing sports injury, joint pain, and on nutrition, in addition to giving seminars on injury-related preventions, treatments and nutrition for various organizations and Fortune 500 corporations. He is a post-graduate instructor at the University of Bridgeport, College of Chiropractic. Dr. Silverman also serves as a chiropractor and sports injury consultant for basketball players, professional wrestling organizations, local, collegiate, and professional sports teams, professional tri-athletes, body-builders, martial artists and acted as the team doctor for the Amino Vital pro-cycling team. He serves as a member of the medical team of New York City's Triathlons and Marathons, Westchester Triathlon, multiple international Iron Man events, and local sports venues. Dr. Silverman appears on Westchester's channel 76 - Beyond the Game, as a sports injury consultant, and as a pain-management and nutrition consultant on radio 1460 AM, and as a health expert on 1230 AM "Ask the Expert". He has his own syndicated talk show on Westchester's channel 75 called "Get Healthy w/ Dr. Rob". In addition, Dr. Silverman was also a featured guest on Westchester's Channel 12 as their Nutritional Weight Loss expert and was also chosen as the national spokesperson for the Vitamin Ester-C.*

*Dr. Robert G. Silverman (914) 287-6464 e-mail: [info@DrRobertSilverman.com](mailto:info@DrRobertSilverman.com) website: [www.DrRobertSilverman.com](http://www.DrRobertSilverman.com)*