



Coaching the School Team

□ GREG SACK, OCIN

Ok, so you have bought your O book. You have had your schoolyard event. You have teamed up with a couple of other teachers and used the activity to help teach across the curriculum. Some of the students have even indicated that they would like more Orienteering.

And now you are back home from the Interscholastic Champs wowed by the superb skills and infectious attitude exhibited by the youth during the event. Inspired, you are wondering how you might lead your legions on to glory.

“Coach? Me?” you say. “I wouldn’t know how to begin! It’s just too complicated. I have all I can do just to get myself around a course. Maybe I can get the P.E. teacher to do something.”

Don’t count on it. It is much more likely that the P.E. teacher is overworked already.

Why not you?

Your interests are the most valuable part of being a good coach. You, like even the best of us, are learning how to Orienteer. You understand the value of life-long learning and of finding a sport that can be enjoyed for a lifetime. You know how to work with kids.

All it would take would be to find the program that would develop your coaching skills. So here is what you do. Write to:

United States Orienteering Federation
Coaching Certification Committee
P.O. Box 1444
Forest Park, GA 30051

and tell them to send you the **Coaching Orienteering: Orienteering Coach Certification Manual, Level 1** book. Don’t forget to include \$12 (US) + \$2.50 shipping and handling, or the name of your team (in which case it is free. Check the website www.us.orienteering.org and click on Juniors. Then look for **Details** under coaching resources. Or check <http://www.mindspring.com/~rshannonhouse/CM.htm> for criteria.)

The disclaimer on the website rightly

states that this book “is NOT an introduction to orienteering. It is a reference for the coach who is trying to prepare his/her team for a higher level of orienteering competition.” It is also full of the info you need to get from here to there. And it does NOT neglect the novice.

Certification?

Many sports require certification of coaches for several good reasons. While, at present, Orienteering does not require certification, it would be wise for any coach or teacher interested in teaching the sport to get it.

The USOF’s coach’s certification manual is an excellent teaching tool. This manual covers a wide range of Orienteering topics including:

- Good coaching techniques, planning and instruction guides;
- Exercises;
- Intros to Anatomy, Basic Fitness, and Sports Medicine.

It is geared toward developing a complete range of

Additional work

I would like to take this opportunity to encourage teachers and coaches go through our certification program and then go beyond it. If you haven’t yet gotten your Red Cross First Aid and CPR Certification, or if they are out of date, get certified.

Find a good coach’s clinic. Many cities now have sports medicine centers and professional trainers that have clinics and consultation arrangements. These clinics share the latest information on cardiovascular conditioning and injury prevention.

Learning the exercises and stretches that can prevent injuries directly from professional trainers can prevent costly errors. Some stretches and exercises, done incorrectly, can cause serious problems.

You can study the pictures in the manual and read the cautions carefully, and, without feedback, still end up learning the moves wrong.

A few facts to consider

There are three focuses to consider in exercising: Stamina, Flexibility, and Strength.

Most of us are well schooled in the benefits of aerobic exercising. We should be. Orienteering is primarily aerobic in nature.

The manual’s Chapter 3 covers how to train with a lot of emphasis on stamina.

This chapter also covers stretching nicely. But how

does the manual cover injury prevention?

Unfortunately, it only covers equipment under this heading. Under “Bracing”, it leaves us hanging by stating that “Each athlete must decide for himself what works best.”

Dr. Siegle of Cincinnati Sports Medicine states that the American Orthopedic Association recommends no braces un-



Photo by Greg Sack

participation. There are lesson plans for everything from local club Beginner Instruction to Workshops through a full Six-Week Season Plan.

The 63 clearly explained exercises are primarily geared toward developing the mental aspects of Orienteering. Plus, there are good explanations of training programs, stretches and the other physical aspects of the sport.





less there is a demonstrated need. This is because braces tend to transfer any stress to another joint thereby multiplying that joint's load.

This means that if you are protecting your ankles, you may be putting your knees at an unnecessary risk. It would be a much better strategy to strengthen the joints, ligaments and muscles

Without strength training our aerobic exercise actually increases the likelihood of injury. A study by Robert Johnson, MD, of the University of Vermont reports that proper training resulted in 69% decrease in ski patrol and instructor injuries (Orthopaedics Today, 9/98).

Training for Injury Prevention

One quarter of all sports injuries are to the knees. Repairing torn anterior cruciate ligaments (ACL) alone is a \$6 billion a year business. Studies have shown that ACL incidences could be greatly reduced, especially for women.

Untrained, women are 4-6 times more likely to suffer serious knee injuries than their male counterparts. This is due in part to the difference in female versus male hips. As a woman goes through puberty her hips widen. This in turn causes an increase in the inward angling of the femur resulting in more stress on the knee.

Women are also a victim of societal training. On the playground girls are more likely to stand around and talk while boys are chasing each other around. Plus there are societal modesty conventions that may play a part. As a result, high school female athletes tend to use their quads while males use their hamstrings more. This puts their knees at risk.

A study carried out in 1998 by Timothy Hewitt of Cincinnati Sportsmedicine Research and Education Foundation illustrates how effective training can be. They trained 366 high school girls in how to jump, land and in strength development. They compared these young women with untrained students, 434 boys and 463

girls. After six weeks each group had 2 contact knee injuries that resulted in a minimum of 8 weeks suspension of sports activities. The untrained girls had 8 additional non-contact knee injuries. The other two groups had no non-contact knee injuries.*

Our own coaching manual has a good explanation of plyometrics, an integral component in the training above. However, some important elements are not well covered.

Understanding the importance of training the athlete on how to land is relatively new. A simple test is to jump off of a box 12-18 inches tall and freeze on landing. Are the knees bent? Are they shoulder width apart? Are they aligned or knocked?

It has been shown that strength training and proper stretching can play an important role in injury prevention as well as performance improvement. Strength training increases bone density while stronger muscles can relieve reliance on and protect ligaments.

There are several exercises that strengthen ankles and knees for a lifetime of good health. But where does the average person learn how to train and which exercises to do? The P.E. teacher and you, the coach, of course.



**This study and others may be obtained through <<http://www.sportsmetrics.net/article1.htm>>*

*Knee image on next page combined from **Sports Medicine Update**, Vol. 15, No. 4 and **The Fit Knee Workout**, ©1996 by Krames Communications, 1100 Grundy Lane, San Bruno, CA 94066-3030 (800-333-3032).*

The sample exercise sheet on the last page is recreated from a hand-out given out by Cincinnati Sportsmedicine and Orthopaedic Center to Physical Therapy patients recovering from ankle injuries.

NATA offers tips for high school athletics

The National Athletic Trainer's Association has issued tips to help students and their coaches reduce the risk of injury in high school athletics.

NATA athlete recommendations:

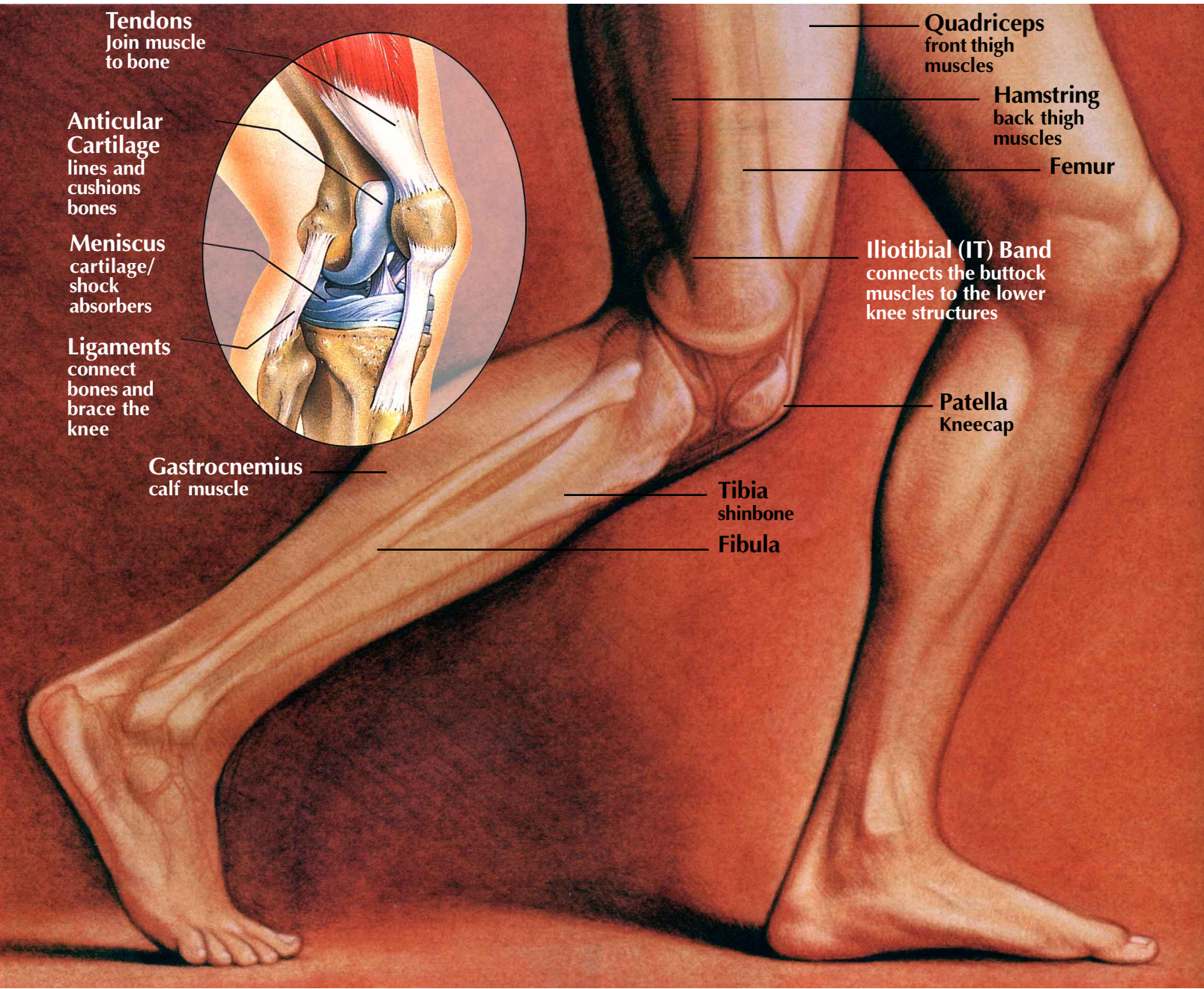
- Every student receives overall conditioning regardless of his or her sport.
- Each student gets a preparticipation physical exam, including a general and orthopedic exam.
- Athletes work with trainers and coaches year-round to maintain condition, appropriate exercises and nutrition.
- Athletes focus on developing muscular strength and endurance, cardiovascular fitness and flexibility.
- An athlete's diet should be high in complex carbohydrates.
- In warmer climates, athletes should become acclimated to high levels of activity in hot weather.
- The night before an event, athletes should hydrate with electrolyte fluids to reduce the risk of dehydration.
- All athletes should use appropriate equipment that fits properly in practices as well as in competition.

NATA school and coach suggestions:

- In warmer climates, practices should be held in early morning or late afternoon, and limited to no more than two hours.
- Fluid breaks should be offered at least every 45 minutes, and athletes should be entitled to unrestricted amounts of fluids to help prevent dehydration and other forms of heat-related illness.
- Ice should be available on the sidelines of every game and at practices for use on appropriate injuries.
- Every school should have a written emergency plan that is reviewed regularly and addresses every level of medical care.
- Every school should develop an Injury Protection Manual that documents how injuries will be handled.
- The athletic department should be encouraged to have an Emergency Medical Authorization Card on file for every athlete.
- Coaches should be certified in first aid and CPR.

For more information on NATA, visit www.nata.org

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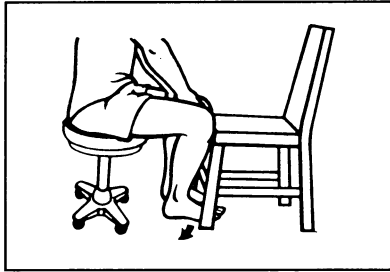


Anatomy of the leg

Runners need their legs to run. If we want our students to enjoy our “Sport of a Lifetime” for a lifetime, we have to give them the knowledge that they need to build legs that will last. Once injured our joints and muscles can become forever more susceptible to further injury. That is, unless proactive steps are taken.

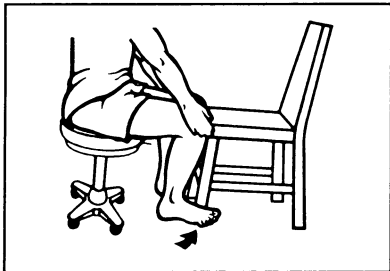
There are many stretches and exercises available. The following page is from the exercise guide that physical therapists hand out to patients recovering from ankle injuries. The common repetitions, whether in a recovery situation or a strengthening exercise situation, are 5x for 30 seconds for stretches, 10 repetitions of 10 second holds for isometrics, and 3 sets of 10 for strengthening involving movement. If the injury is severe enough, just stretch and go for range of motion first. Isometrics are commonly a good step beyond range of motion. This can be followed with resistance like therabands, weights or machines. And ice is usually used on anything that swells or gets hot.

Please teach the kids to “Listen to your body. Never intentionally do anything that hurts. If there’s pain, where’s the brain?” And get the professional advice and assistance that the situation calls for.

**Eversion**

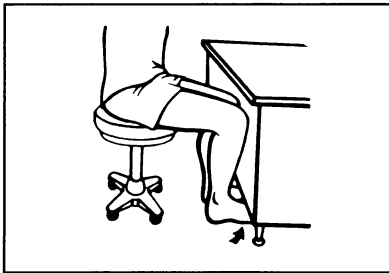
Sit facing a chair with your feet on the insides of the chair legs. Place your fists between your knees for stabilization. Press out against chair legs with your feet.

Hold 10 seconds, **Repeat** 10 times, **Do** 3 sessions per day

**Inversion**

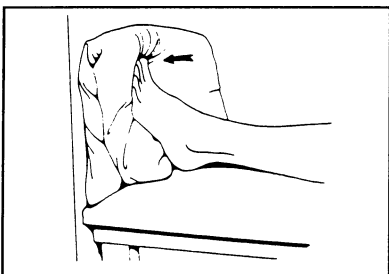
Sit facing a chair with your feet on the outsides of the chair legs using your knees for stabilization. Press in against the chair legs with your feet.

Hold 10 seconds, **Repeat** 10 times, **Do** 3 sessions per day

**Dorsiflexion**

Place your feet under a couch or table and lift up, pressing the top of your feet into the immovable object.

Hold 10 seconds, **Repeat** 10 times, **Do** 3 sessions per day

**Plantar Flexion**

With a rolled pillow against wall, press foot into pillow.

Hold 10 seconds, **Repeat** 10 times, **Do** 3 sessions per day

The Next Step

Replicate the same movements using a theraband anchored to a door or heavy piece of furniture like a bed. Build more ankle strength by balancing for 10 seconds on one foot at a time, 3 times per session. Progress to balancing on an unstable surface like a couch cushion or mini-trampoline. Further progression would be to try it on a stable surface with your eyes closed and finally on the unstable surface with eyes closed.