

WEAK IN THE KNEE? GET OVER IT!

By Richard Bell

The most devastating of all knee injuries is damage to the anterior crucial ligament or ACL. Chances are someone you know who's on crutches is a victim of this all-too-common misery. You may even be familiar with the prevailing wisdom—that ACL injuries are basically the kiss of death to anyone who wants to continue as an athlete.

Not necessarily. Restorative surgery has changed—becoming less time-consuming and invasive. And while we're at it, I don't much believe in knee braces. It's like wearing a bulletproof vest in the safety of your own home—you're training your most vulnerable muscles to get used to weakness. But since I'd rather you didn't get injured in the first place, I think specific strength training is key.

Did you know that ACL injuries are more common among female athletes? In volleyball, basketball and soccer, it's been estimated that women can be up to eight times as likely as men to injure the ACL. According to the American Orthopedic Society for Sports Medicine, each year approximately 20,000 high school girls suffer serious knee injuries, most involving the ACL.

Why the higher risk? One of the most common theories is that a woman's wider pelvis changes the alignment of her legs so that her thighs angle inward, putting the lower extremities in a vulnerable position. World-renowned strength coach—and my personal mentor—Charles Poliquin acknowledges these structural differences, but doesn't believe they're the major cause of female knee injuries.

"It's more of a cultural problem," he writes. "In the U.S., women tend not to do as much strength training as men do."

This is yet another reason I'm not big believer in a lot of aerobic training. Over time, I believe it weakens the structural stabilizers surrounding the knee, such as the vastus medialis (VMO), a quadriceps muscle that crosses the knee. Too much aerobic exercise at the expense of weight lifting can also cause a weak hamstring-to-quadriceps ratio, another recipe for knee injuries. As always, do what you have to do to excel at your chosen sport, but don't neglect the weight room.

Just what should you be doing there, if your knees are weak, or you don't want them to turn out that way? One of the exercises all my clients do is the full squat in the rack. This has been proven to develop the VMO muscle completely, and I'm proud to say that at this point I have only one client who suffers from a weak VMO muscle. In a future article I will provide more detail about how I plan to bring this muscle up to par.

Meanwhile, here are some simple and excellent lifts that support your knees:

- Seated or standing barbell good morning
- Any lower back extension involving the gluteus
- Dragging a weighted sled while walking backwards
- Dead lifts
- Single-leg step-ups