

Running Anatomy

BY JOE PULEO & DR. PATRICK MILROY

Although running is the simplest sport in the world, it is also a magnificent symphony of bones and levers and muscles and chemical reactions and cooling systems working in concert. The simple act of standing at attention is a complex balance of opposing muscle groups working together on a bony frame that would wobble and fall over if the nerves weren't firing commands at a mind-boggling rate.

We seldom think about the body systems that allow us to run until something goes wrong, until we become injured and our attention is riveted to the offending body parts, whether Achilles tendonitis or runner's knee.

For some years Human Kinetics has been releasing sports anatomy books: strength training, yoga, stretching, women's strength training, dance, cycling, etc. The books break the body down into various regions, and then the author and illustrator get together to discuss and draw the various movements involved in the discipline.

Running Anatomy has finally been added to the line and it provides an excellent textbook of what happens when as you take your body out for its daily run.

The book is broken into the following chapters: The Evolution of the Human Runner, Cardiovascular and Cardiorespiratory Components, The Runner in Motion, Adaptations for Speed and Terrain, Upper Torso, Arms and Shoulders, Core, Upper Legs, Lower Legs and Feet, Common Running Injuries, Anatomy of Running Footwear, and Full-Body Conditioning.

The chapters dedicated to various body parts define the particular part with text and cutaway illustrations of the bones, muscles, tendons, and cartilage involved. Each chapter also contains non-running exercises that can be employed to improve the function of that body part.

Perhaps the most interesting chapter is the one on common running injuries, both because it is fairly complete and offers exercises the runner can do to counter the typical injury. But even moreso because the illustrations provide an opportunity for the runner to actually see the injured area under the skin. It's like having a set of x-rays to take a good, clean look at the injured area in order to better understand

the how and why of the problem, whether a new injury or one that is chronic.

The text is simple and the use of anatomical terms is leavened by also including common terms for the body parts with which we are familiar.

The chapter on the evolution of the running shoe is fascinating, also. And the book is new enough that the chapter does address the “in” topic of barefoot running.

All in all, a simple and direct way to look inside the runner to see how it all comes together to move us forward smoothly over Mother Earth.