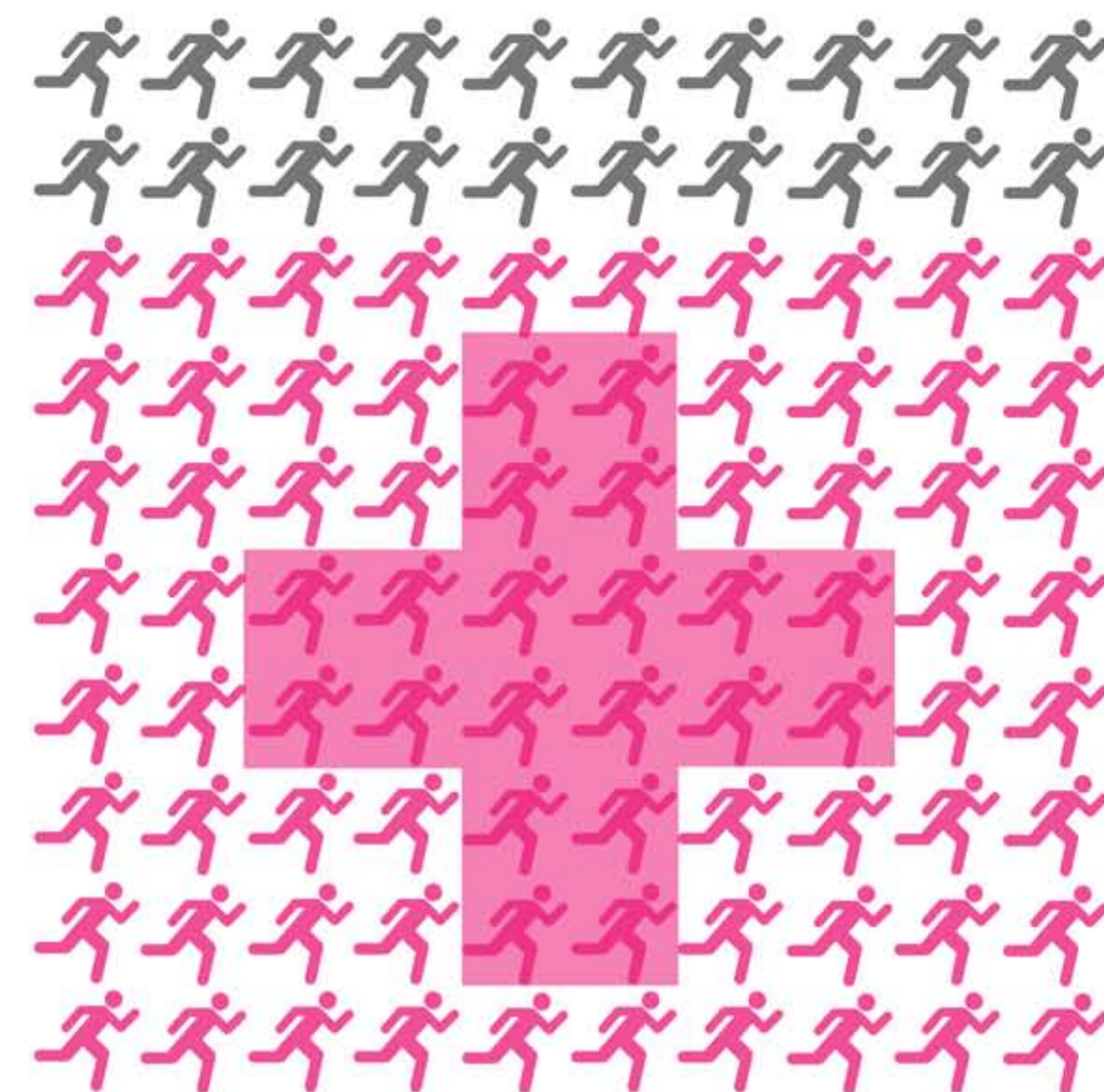


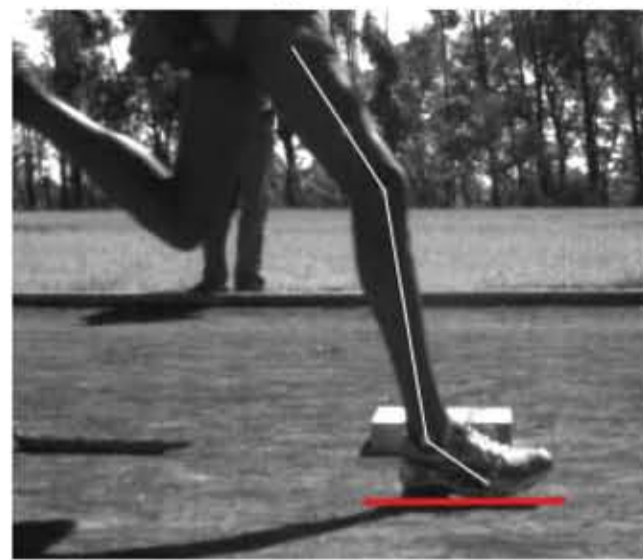
# Barefoot Running and the Body



80% of Runners are injured annually

With modern materials and decades of research and development why are so many runners still getting injured?

Running shoes with thick soles encourage heel striking



Proper form is essential to remain injury free



Heel striking is not a natural motion.

## biomechanics (n)

\ 'bī-ō-mə-'ka-niks\

the study of how muscles, bones, tendons and ligaments work to produce movement; the forces exerted by muscles and gravity on the skeletal structure.

Professor Daniel E. Lieberman of Harvard University has conducted a series of studies proving that barefoot running puts less stress on the body. Notice the leg of the runner is angled exactly the same in both photos. However the running shoes in the bottom photo change the angle at which the runners foot strikes the ground. This change in angle directs impact to the runners knees.



Toes naturally spread apart during each footfall. This articulation along with the flattening of the arch greatly decreases the amount of shock absorbed by the body.

### Forefoot strike

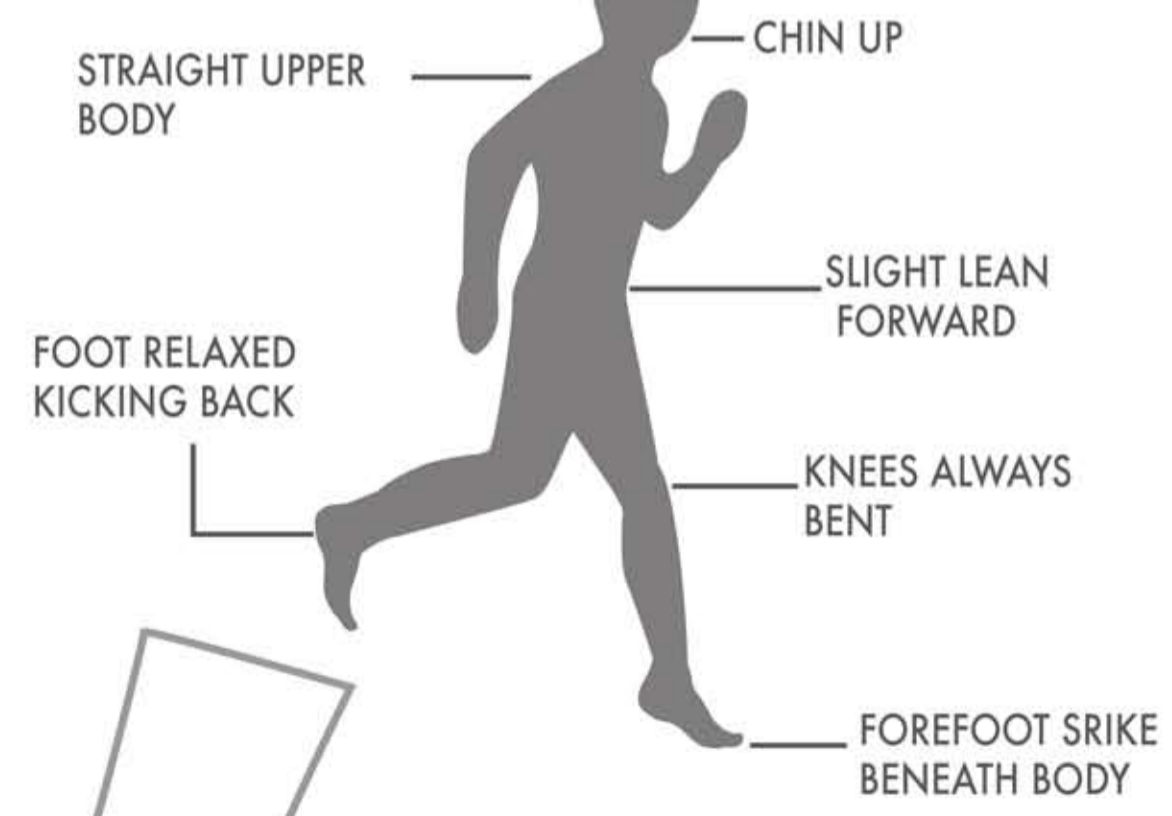


VS.

### Heel Strike



### Barefoot Form



**INITIAL CONTACT**  
Land on the ball of your foot rather than your heel. This allows your natural arch to absorb the impact force

**TOUCHDOWN**  
Your heel should touch the ground lightly, but the front half of your foot should bear all the weight.

**LIFTOFF**  
Pick up your feet rather than pushing off. Keeping your weight over the balls of your feet. Pull your heels up with your hamstrings.

**HEEL STRIKE**  
Landing with a heel strike puts all of your impact force on a small bony area, this sends a shockwave to the skeletal system.

"Shoes block pain, not impact. Pain teaches us to run gently."  
-Ken Bob Saxton, Barefoot running guru