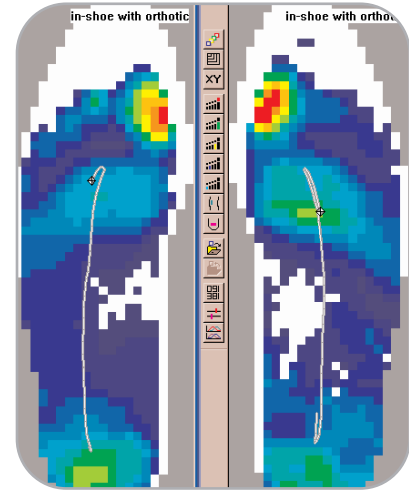
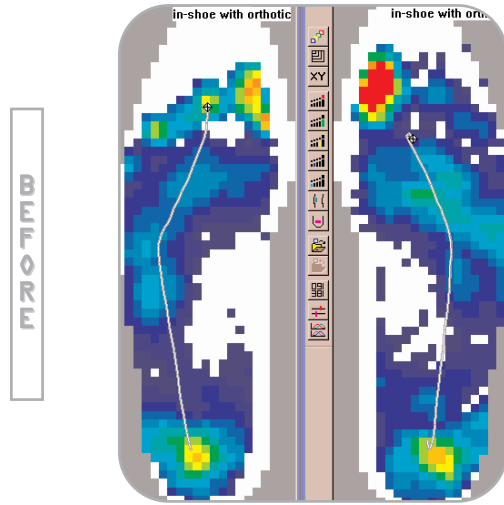


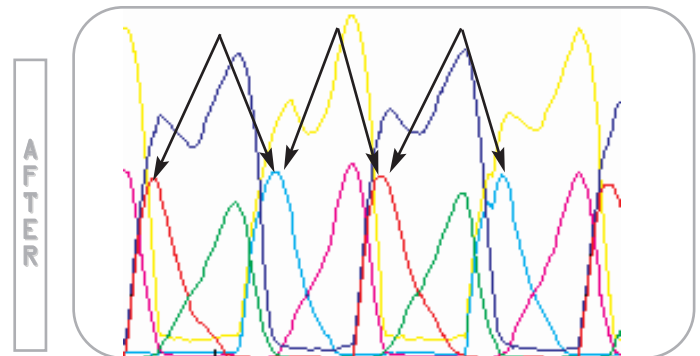
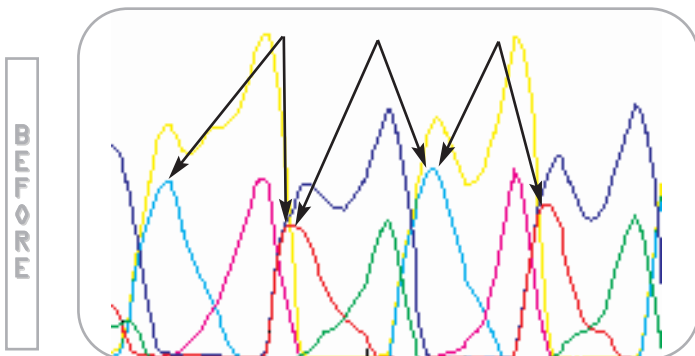
Physician heal thyself! Below is my own personal case in treating my chronic knee pain. I'm a slow marathon runner and recently began experiencing anterior right knee pain after running and lateral left knee pain after sitting and when sleeping. I had performed several different *F-Scan* tests and orthotic modifications without success. I finally figured out by feel, intuition, and with the *F-Scan* that my limb length difference was not on the side that I thought it was. Switching the heel lift made a very obvious improvement in foot function and gait, and also in relief of my chronic pain. I'm still slow, but my feet and knees feel great!

## *F-Scan* pressure profiles and Force vs. Time graphs for the total force on the foot and forces at rearfoot during heel contact and at forefoot contact



Above are the *F-Scan* pressure profiles of my orthotics with a moderate 1st ray cutout and a 1/8" heel lift on the left side. You can see the extreme lateral deviation from the center of force (CoF). Note the decreased sub 1st metatarsal phalangeal joint (mpj) pressures bilateral, and the high hallux pressure on the right. Note as well the lack of medial arch pressures.

The pressure profiles above are for a moderate 1st ray cutout and a 1/8" heel lift on the right side. Notice the symmetrical hallux pressures and the midline CoF bilateral. Notice as well the increase in medial arch pressures, as compared to the pressure profiles at left for before the modifications were done to the right orthotic.



Above are the Force vs. Time curves with my orthotics with a moderate 1st ray cutout and a 1/8" heel lift on the left side. The total force of the right foot is represented by the highest blue curve, and the force during right heel contact is the red curve. The highest yellow curve is the total force of left foot, and the force during left heel contact is the aqua curve. Notice the longer contact time and higher peak force of left heel (aqua curve) compared to right heel (red curve, see arrows). Obviously, the 1/8" heel lift on the left heel is making the contact period longer with increase in peak force.

Above are the Force vs. Time curves with the addition of the 1/8" heel lift on the right side. The right heel force curve (red) and left heel force curve (aqua) now show much more equal symmetrical patterns (see arrows). You can also notice how the curves are smoother and more consistent, as opposed to the asymmetry in the previous curves at left for before the modifications were done to the orthotics. This switch in the heel lift made all the difference in the world!