

Hansen Multisport

Running Biomechanics

Indications of Biomechanical Issues

- Inside (medial) knee pain
- Outside (lateral) knee pain
- Kneecap pain or discomfort
- Arch “stretching” and pain
- One-sided back or hip pain
- Heel pain
- Calf pain



Biomechanical Issues?

- Review running form
- Check footwear – how old is it?
- Purchase from reputable shoe store – people who know running (Fleet Feet) and who know anatomical variations
- Keep a log of training along with aches and pains
 - What routes did you run?
 - Right side of pavement, left side of pavement?
 - New shoes, new inserts/orthotics?
 - New technique or focus?
- Talk with your doctor
- Possibly refer to Sports Medicine for evaluation by Specialist
- Alternate route or surface
- Try not to “run” through the discomfort

Changing form

- Change slowly!!
- Short, focused “workouts” with modified form.
- 10- 30 sec of modified form dispersed during workout. Increase duration of modification, over time.
- Slowly increase time
- Listen to your body

The importance of Warming Up and Stretching

Before we get into the good stuff it is important to remember that the drills that we are about to go through need to be done when you are warmed up. Some of the movements may be a little unfamiliar and can be quite explosive so make sure that you have warmed up for a good fifteen minutes with some easy running

and have stretched thoroughly. Concentrate on making sure that your calves and hamstrings are nice and supple in particular. If you have any aches and pains or are a bit stiff from a previous workout it will most probably be best to have an easy day and do your drills when you are fresh.

Once you have warmed up find a nice soft and even surface to do your drills on. This could be an artificial surface running track or a nice level piece of grass such as a soccer field for example.

Flexibility Markers

- Hip Flexors - able to easily extend (load) rearward beyond the vertical dynamically (not statically).
- Soleus Achilles Tendon Complex - able to sit on haunches, knees fully flexed with heels down in regular running shoes.
- Quad Group - able to do butt kicks with heel touching glutes, without arching back or tilting pelvis forward.
- Groin - able to sit upright, soles of feet together and place hands on knees.
- Hamstrings - able to lie on back, legs extended and lift one leg, knee locked, to vertical or even a little less; not a critical factor as mentioned before
- DO NOT STRETCH external rotators

