Popular Running Styles

Pose/Chi/Good Form Running

Scott Miller, PT, MS, SCS, CSCS Partner/Director of Clinical Operations Board Certified Sports Clinical Specialist

Introduction

Agility Physical Therapy & Sports Performance Kalamazoo, Michigan | Portage, Michigan www.agilitysportsmedicine.com



Running "Style"

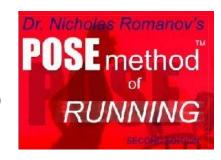
- "Running style may be described by the overall action, body angle, arm swing, foot placement, rear leg lift, and length of stride."
 Subotnick, 1985
- "Running style is described as a learned response to a given set of anthropometric and physiological constraints so that the movement of the body components minimizes the amount of mechanical work performed."
 Cavanagh et al., 1977

Common Running Styles

- Pose Method of Running
- Chi Running
- Good Form Running

POSE Method of Running

- Developed by 2-time Olympic Coach Dr. Nicholas S. Romanov in the former Soviet Union
- The first complete running technique developed in 1977
- It wasn't introduced to the public until 1997 (20 years later)
- First and only running technique in the world scientifically proven to reduce impact on knees by 50%



www.posetech.com

- POSE Method of Running
- S-like body position with slightly bent knees
- Forward lean from the ankles to employ gravity and work with it not against it
- Pulling or lifting feet up under the hip, not behind the buttocks
- Ball of foot landing under your body
 - (a.k.a., your GCM General Center of Mass)
- The Pose Model of running consists of three elements: Pose -Fall - Pull and it accepts gravity as the primary force for forward movement instead of muscular energy.



Pose Method of Running

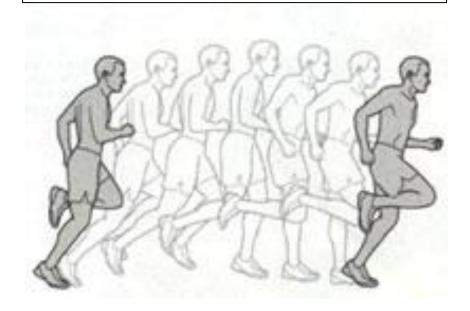
Shoulders keep the balance of the vertical line on the support

> Shoulders, hips, ankles – on the vertical line of support



Body slightly leaning forward, ready to move to next stride, keep knee bent

Stand on one leg, balancing on ball of the foot (BOF), other leg up under hips



Claims of the Pose Method

- Reduce impact on knees by 50%
- Dramatically improve training and racing performance
- Give you a competitive edge
- Help prevent injuries
- Help you lose orthotics for good
- Help you enjoy your running for the rest of your life!

Pose Method Techniques (See Video)

Notes:

Research

Reduced Eccentric Loading of the Knee with the Pose Running Method

ARENDSE, REGAN E.; NOAKES, TIMOTHY D.; AZEVEDO, LIANE B.; ROMANOV, NICHOLAS; SCHWELLNUS, MARTIN P.; FLETCHER, GRAHAM *Medicine & Science in Sports & Exercise*: Volume 36(2) February 2004 pp 272-277.

- N=20
- Normal heel-toe runners, instructed in mid-foot running (15 min.) and POSE method running (1 ½ hrs. 5 days)
- Data collected on each style via 6 camera vicom and strain gauge force plate

Instruction on Pose Method

The runners were encouraged to achieve the following postural changes and actions:

- 1) Align the acromium, the greater trochanter, and lateral malleolus in stance
- 2) Lean forward in the above posture and allow the body to fall forward and thereby initiate movement
- 3) At initiation of movement, lift the supporting foot by flexing the knee and avoid pushing away from the supporting surface
- 4) At successive stance phases, contact with the midfoot (ball of foot, not the toes) and avoid contact of the heel with the supporting surface
- 5) Maintain a flexed knee throughout the gait cycle

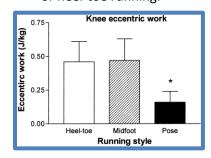
Conclusions of the Study

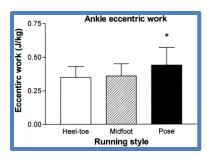
Pose running was associated with:

- Shorter stride lengths
- Smaller vertical oscillations of the sacrum and left heel markers
- Lower loading rates of the vertical impact force found in pose and midfoot running
- The ankle at initial contact was neutral in Pose compared with a dorsiflexed with heel-toe running and plantarflexed with midfoot running
- Conclusions of the Study

Continued...

- In preparation for initial contact, the knee flexed more in Pose than in heel-toe and midfoot running
- Lower eccentric work and power absorption at the knee in Pose than occurred in either midfoot or heel-toe running
- Higher power absorption and eccentric work at the ankle in Pose running compared to midfoot or heel-toe running.





Chi Running

Danny Dreyer, Founder, Ultramarathoner and T'ai Chi practitioner

- ChiRunners "get off their heels, lean forward slightly, land midfoot and take small strides."
- He instructs people to discard heavy padded running shoes and lace on minimalist shoes.
- He says the heavier shoes designed to protect the heel from shock restrict the foot and actually increase impact to the ankle, knee and hip. (based on Liberman's studies)



Chi Running Claims

- Injury-free running for the rest of your life
- Improve running efficiency with a mid-foot strike
- Increase your running speed while reducing effort
- Finish running a pain-free marathon and look forward to running again!
- Focus your mind, lift your spirit and open up your flow of chi.
- Helps reduce or eliminate injury and pain such as: knee pain, hip pain, IT Band Syndrome (ITB), hamstring pulls, Achilles tendonitis, plantar fasciitis, soreness and fatigue ???

www.chirunning.com

Chi Running Technique (See Video)

Notes:

Comparison of Pose & Chi Running

The *Pose Method* is very similar to *Chi Running*, but without the T'ai Chi influence and with more of a focus on <u>key poses</u>.

Pose Method

- The lean- from the ankles
- Relaxation
 - Don't hit pavement hard, loosen up, and gently lift legs rather than pushing off.
- Minimalist Shoes
 - Running shoes with thickly padded heals encourages poor running form such as heel striking
 - Highlights benefits of running barefoot

Chi Running

- The lean- from the ankles
- Relaxation
 - Only your lower abs should be tight while the rest of your body should be loose.
- Minimalist Shoes
 - Running shoes with thickly padded heals encourages poor running form such as heel striking
 - Certified minimalist shoe that was created in conjunction with Chi Running is New Balance

Comparison of Pose & Chi Running (Continued)

Pose Method

- Foot Landing
 - Forefoot
- Calf/lower leg usage
 - Engaged (pull up with hamstrings & hip flexors)
- Leg motion
 - knees lifted via heel 'pull'
- Cadence
 - Variable (dependent on speed)

Chi Running

- Foot landing
 - Full foot or Mid-foot
- Calf/lower leg usage
 - Disengaged
- Leg motion
 - Knees low
- Cadence
 - Constant
- Focus on a level pelvis, pelvic rotation and arm swing



Comparison of Pose & Chi Running Summary

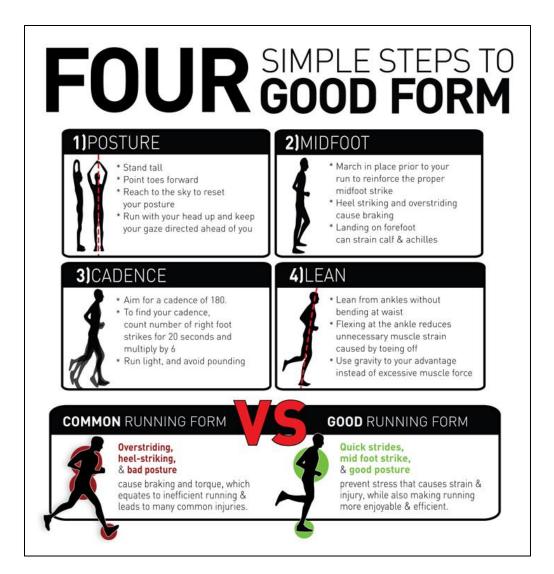
Differences are relatively minor with Chi Running having more of a focus on mindful running and meditation while the Pose Method takes a more 'scientific' approach.

Good Form Running

- Taught at our local running shoe store (Gazelle Sports)
 - Developed by Playmakers in Lansing, MI and sold to New Balance
- Emphasis on upright posture, slight forward lean (coming from ankles), midfoot landing, and quick cadence (around 180 SPM)
- Very similar to the Pose Method and Chi Running
- Not as much emphasis put on how to pick the foot off the ground
- Cadence and posture driven
- More "PT-like" from a science aspect

Good Form Running Technique (See Video)

Notes:



What method should we choose?

- Patient dependent and their current injury/needs
- Keep the research in mind...think about Impact Forces
- Need the frame to support any type of changes (cadence/form/shoes)
- Think strength & timing
- Utilize shoe & orthotic recommendations during transition (rehab) periods
- Use barefoot training as a tool vs. a NEW way of life
- Preach patience with our patients!!!

Contact Info

