

Relax, and Run with Ease

Perhaps because running is something we are familiar with since early childhood, multi-sporters and even elite runners often overlook the technical aspects of running.

“I ALREADY KNOW HOW TO RUN”

While all serious runners are familiar with traditional elements of training, such as intervals and tempo runs, technique may never be addressed in all the hours spent running. Most apparently think: “I already know how to run”; however, running is an art that should be learned and perfected. The technique of running can be improved in almost all individuals, in some cases dramatically. According to Dr Nicholas Romanov, former Soviet coach and now a senior triathlon advisor for the USA, the potential for improvement in running technique is virtually limitless and has the potential to lower body metabolism by a staggering 30% to 50%, with associated reductions in oxygen consumption and exercise heart rates. For the great majority of competitors, these gains eclipse what might be achieved through increased fitness. And most importantly, effective running technique lowers the possibility of injuries and increases running speed.

THE QUEST FOR SIMPLICITY

Running technique really refers to a specific system of body movements aimed at transferring the body horizontally from

point ‘A’ to point ‘B’, the aim being to achieve this with the lowest possible energy expenditure.

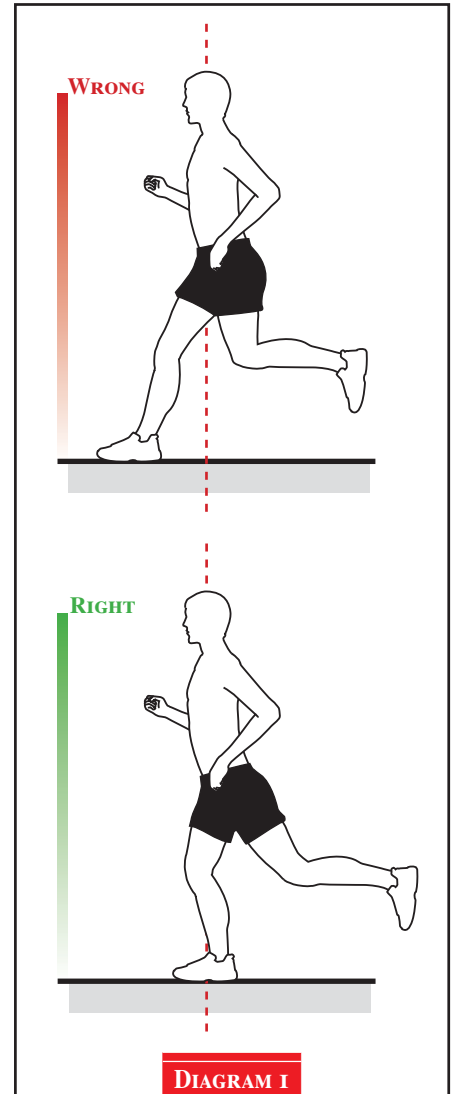
New Zealand multi-sport expert and world champion triathlete John Hellemans describes runners who approach the ultimate in efficient running style as follows: “They almost float, hardly touching the ground, with an even stride, pelvis pushed forward, a nice extended push off and an upper

body which is still and relaxed.”

The 2 main factors influencing optimal running technique are contact time with the ground and the position of the feet in relation to the body. Contact

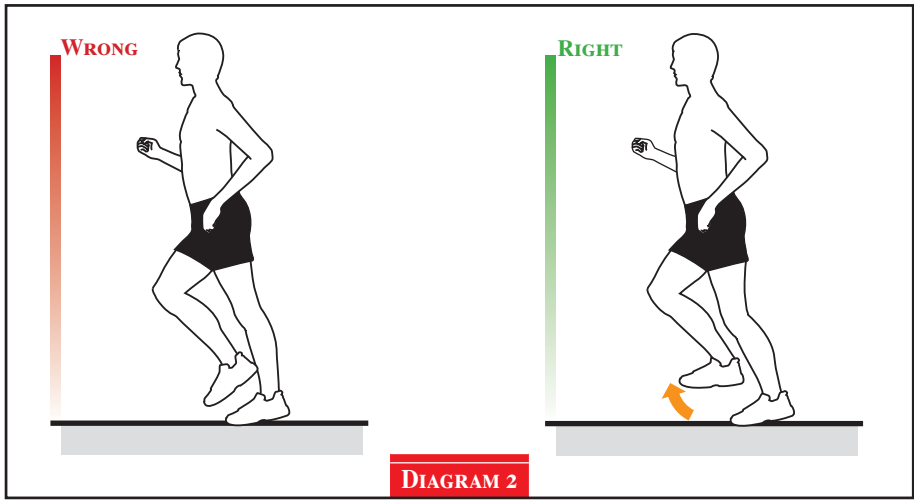
time should be as short as possible in order to minimise frictional forces: short contact time really requires an optimal body position — landing on the mid-foot, underneath the fulcrum of the body.

For the great majority of competitors, these [technique] gains eclipse what might be achieved through increased fitness.



Making Gravity Your Friend

It can be helpful to consider running as a ‘free falling’ of your body, secured by alternating the support from one leg to the other. In this scenario, Dr Nicholas Romanov believes the underlying principle of running is to: “Do nothing, don’t interfere”, reflecting the goal of minimising energy expenditure. The speed of your movement when running thus comes to be defined not so much by your own strength, but by your ability to harness the external force of gravity.



Slightly leaning forward and tucking in the pelvis, which moves with the thigh, achieves optimal body position. This controlled pelvic movement is essential to prevent you from planting the foot in front of the body (see Diagram 1). Hellemans notes that foot position in relation to the body has a major influence on overall running technique. The ankle should not hang loose, but actively step over the other ankle during the recovery phase, using a pulling up action of the toes (avoiding 'slapping' of the toes on the ground — Diagram 2).

Concentrate on staying relaxed at all times, using only muscles needed for forward movement.

fluid simplicity in running technique. The active muscular work in optimal running technique is performed by the muscles of the back surface of the thigh — the hamstrings — drawing the foot along the vertical line under the thigh. This movement per se, breaking contact with the ground, triggers the interaction of all external forces for the whole running stride cycle. The rest of the stride requires no active work!

SUMMING UP

The key elements of running technique may be summed up as follows:

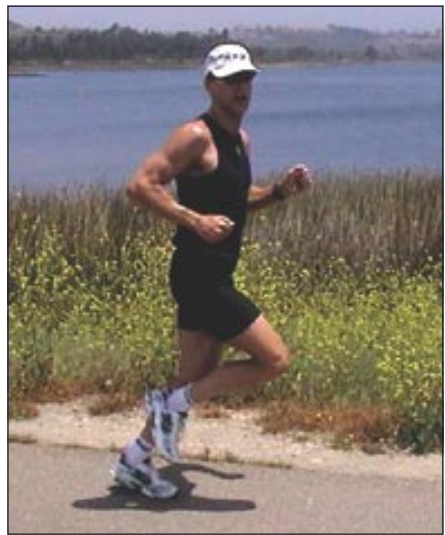
- Running is basically a transfer of support from one leg to the other. Your legs should be always bent at the

knees, and they should be kept under the general centre of mass of your body, which should maintain an 'S' shape. You should land on the balls of your feet (mid-foot), and your heels should stay approximately 1 cm above the ground.

- Never straighten your legs and never move them forward.
- Try to pick up (raise) your ankles straight under your hips using your hamstrings to initiate this movement. Don't try to reach out with your legs and push off forcefully. Don't be concerned about stride length and range of motion, but focus on keeping your strides short and rapid, getting off your feet as quickly as possible. Aim for a stride rate of at least 90 per minute.
- Concentrate on staying relaxed at all times, using only muscles needed for forward movement.
- Finally, do not use your legs to move forward — the idea is to *allow* your body to move forward *by itself* and not to interfere with this movement. Visualise this motion as an uninterrupted free-fall forward, with the change of support between the feet serving to check your fall.

POSE METHOD

The so-called 'pose method' developed by Romanov continues the theme of



Gordo Byrn showing the perfect 'pose'.

John Hellemans' Training Tip

Try incorporating some downhill strides on a soft surface into your training schedule. Over time, your leg speed will improve as your legs learn to move faster and try to 'catch up with your body'. Do use a soft surface and a slight grade only for these drills, and ensure you are thoroughly warmed up. Allow your body to fall downhill quickly, keep your ankles under your hips at all times, and bring them up quickly with the hamstrings.