

Light steps for a fine balance when walking by Sean Carey

Exercise prevents many illnesses but if you adopt the wrong stance you will never gain your full height



‘What we are seeing in our hospitals and surgeries up and down the country is that ‘normal’ has become not enough exercise,” says Scarlett McNally, an orthopaedic surgeon based in Eastbourne, England, and lead author of a recent review on exercise for the Academy of Medical Royal Colleges in the UK. “Too many of my patients are paying the price for that with broken bones and years of ill-health that could have been avoided by being more active.”

Analysis of more than 200 research studies found that speedy walking cuts dramatically the risk of developing many conditions, including cardiovascular disease, type 2 diabetes, dementia and some cancers. Thirty minutes a day, five days a week, with a light sweat on the upper lip, is the target, says McNally.

Yet while evidence suggests energetic walking is good for us, it leaves open the question of how we should walk. As a social anthropologist and teacher of the Alexander Technique I am very aware that although we can walk in many different ways, some of these are good, because they are biomechanically efficient in supporting body weight, and some are not.

On a visit to the Indian Ocean island of Mauritius I watched a group of middle-aged women walking home from work in the cane fields with loads on their heads. They walked quite slowly, their heads freely poised on their necks, shoulders level, contra-rotations working nicely along their spinal columns, and their feet landing underneath their trunks. It was poetry in motion.

A couple of weeks later, I am sitting in the morning rush-hour on a bench at Moorgate station, in London’s financial district, observing men and women of various ages getting off trains, and striding purposefully at speed along the platform towards the exit to get to their work on time.

Their co-ordination is nowhere near as good as the Mauritian cane workers. Instead of their heads being balanced on their necks, supported by neck, torso and leg muscles (the so-called anti-gravity musculature that allows us to reach our full height), almost everyone is overcontracting their torso muscles so that their stature is reduced. This is reflected by heads thrown back, chests and shoulders lifted, rib cages pinched and narrowed, pelvises displaced

forward or sideways, with ankles, knees and hips stiffened because of an overstride, where ankles land in front of knees.

Of course there are huge differences in the organisation of economic sectors based on agriculture and those based on information. Plants grow at the rate they grow, while companies operating in competitive, open markets are always looking to speed up the flow of information to secure an advantage. So those commuters I saw, like any in the western world, were responding to time – and other – pressures that are an intrinsic aspect of post-industrial societies where, increasingly, livelihoods are made through listening, talking and typing, rather than pulling, pushing and carrying.

So should we always walk slowly with lengthened alignment like the cane workers in Mauritius? Or is there a way to walk quickly without compressing the entire musculoskeletal system and interfering with breathing, circulation and digestion?

I think there is. As an experiment, stand with your feet underneath your head, and carefully place an open palm of one hand on the back of your neck at the base of your skull without stiffening your shoulders or interfering with the delicate balance of your head on your neck. Monitor what happens as you step slowly forward. Do this several times. Now initiate the movement into walking more quickly. In both instances if you habitually pull your head down on to your neck – or, to put it another way, your chin and the rest of your face will move upwards – and exaggerate the forward curvature of your neck, you will experience a downward pressure on your hand when you walk. You will also notice that the downward pressure tends to be greater when you walk more quickly.

You can then take the experiment a stage further. This time you will need a friend with a smartphone or a camera. Get them to video your full-length sideways profile standing and then as you start walking. Now watch the playback.

Chances are that instead of your whole body releasing up and forward from your ankle joints, head balanced on top of your spine, you will see that as you start the movement you throw either your chest or pelvis forward or sideways and pull your head back and down, thus stiffening your whole framework, all the way from your head to your feet.

Now find out whether you can perform the movement, both slowly and quickly, without tipping your head back and down. Alas, the truth is that most of us won't be able to, as our habitual pattern of walking is hardwired into our nervous systems.

So, what's the alternative? At this point you'll probably find it an advantage to place one foot a little way behind the other so that, without stiffening your ankles, knees and hip joints, most of your body weight is supported by the rear foot.

Now allow the knee of the front leg to bend so that you take a very small step forward with the front foot so that it touches the ground without unduly pressing downwards. This first light step forward will then trigger that crucial up and forward release from the ankle of your rear foot so that your body weight easily transfers on to your front foot and the knee of the back leg bends so that you then take another light step forward.

Keep going. If you've managed to maintain this you will now be walking with better balance without losing height and stiffening your musculature.

Now you are on the way to improving your biomechanical efficiency not only in walking, but in other everyday movements.

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