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Turn Back Time on How you Move – Part 1

It's hard to dispute that the modern Western world has adopted a far more sedentary lifestyle compared to their previous generations. This sedentary lifestyle has lead to an epidemic of metabolic disorders and musculoskeletal injuries. It's no coincidence that the rise in musculoskeletal injuries has occurred at a time when the seated position has become the most common worldwide working posture. To blame all our injuries on chairs would be a little harsh though. There's more to it than that. Changes in stress and nutrition amongst other things certainly have an important part to play. This article will provide you with some answers on how we can reduce musculoskeletal injuries brought about by the changes in movement and postures that we have taken on board with our modern life.

Modern day life has made most of us adopt different sustained postures and movement patterns to those of our ancestors. People in less-developed countries and in some ethnicities still move and adopt postures more like our ancestors. For instance, if you've spent some time in Asia you would have seen the locals sitting in full squat position perhaps talking, waiting for the bus, drinking tea, or taking some toilet time in nature (fig 1a). Compare the joint angles at the hips, knees and ankles in a full squat compared to sitting in a seat – it's a different ball park! (figs 1a + b) Although there is some suggestions that Asians have hip structure than suits a full squat position more than Westerners – our young ones show us that we do indeed have the ability to squat. Figure 1c is my daughter reading one of her favourite books in a full squat position at age two. We just lose it because we don't use it.



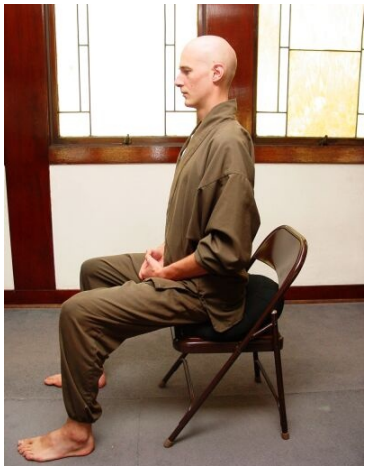
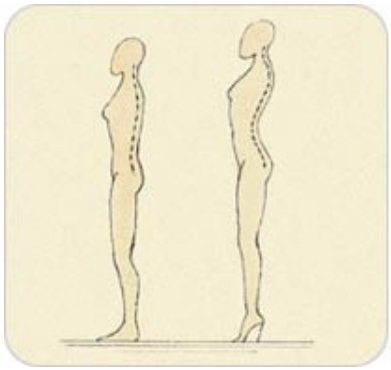


Figure 1 a. b. c.

Incorporating a deep squat for a few minutes at the end of your sessions during the warm down can be a great way to restore some range to creaky old ankle, knee and hip joints. A bonus is that by sitting in a deep squat you can stretch all these areas at the same time. I often have discussions with my clients in this position before they head away back into their working days. You may need to hold onto something to stop yourself falling backwards when you first start doing this. That's OK – better than a lump on the back of your head. Start with a wide-open stance and work the feet closer together and straighter as this gets easier. The tibialis anteriors (muscles at the front of your shin) should be relatively relaxed and focus on the weight being through the middle of the feet.

Deep squatting may not suit everyone. If you have knee or back pain this position may be a problem. The old rule applies. If it hurts – don't do it. Go slow and work your way down within your limits.

As well as chairs another culprit that ruins our ability to perform a deep squat is wearing high heeled shoes. Prolonged exposure to high heels functionally shortens the soleus muscles (calf muscles) and can cause a whole host of dangerous, painful postural changes right throughout the body (see Figure 2). Bottom line is - wear these sparingly.



While we're on the topic of footwear, be very careful about the type of footwear you and your clients wear while you train. Since our species has been on two feet we have interacted with the surface of the world through our feet. Having 2 inches of air cushions, high density foam or gel bags in the sole of your shoe totally changes your foot's perception of what's going on below it. The 26 bones, intrinsic muscles, and a host of mechanoreceptors and proprioceptors (specialised cells that tell you what your foot is doing), provide a whole busload of information back to your brain about your balance and centre of gravity compared to your base. Don't mess with this information too much! My friend and colleague Phill Beach rightly calls shoes "sensory deprivation chambers". If you have a problem client who can't seem to find their balance, foot position or weight shift during an exercise get their shoes off and get them to feel what's going on with their feet. This will often improve the quality of the exercise immediately.

Incorporating bare feet time throughout your day is a great way to get your feet smarter. Lose your shoes as much as humanly possible! Walking over uneven terrain – at the beach, over trails is the ultimate way to get your feet back in shape. If you're a trainer don't wear running shoes all day, unless you're running. Get some flatter, thin soled shoes that allow your feet to get smart.

In conclusion, deep squat often. Minimise your exposure to high heeled shoes. Smarten up your feet by selecting appropriate footwear or no footwear.