



MAKE LIKE A FLAMINGO AND RETRAIN YOUR BRAIN

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So what do YOU do every night before climbing into bed? And bear in mind this is a family show. How about standing on one leg at the end of the bed, the other knee bent up at right angles, shin and foot dangling, hands crossed shoulder to shoulder, before closing your eyes and counting?

I've stopped doing this now. Too many bruises. But for a short while it was definitely de rigueur in this house — him in the bathroom with his toothbrush, me crackin' my shins on the bed post. On a good day, I might make it to eight seconds before hopping and teetering across the bedroom floor like a thing deranged. Then I'd do it all again on the other side. Over and over again, telling myself 'it will come. All it takes is practice'. For when first I started doing this, my time pre-teeter was a mere two seconds.

'Pah!' you're probably thinking. 'I can stand

on one leg for AGES! What's the matter with the woman?'

You might especially be thinking that if you were born, say, twenty or thirty-odd years after me. And that's okay because I would have done the same once.

The key thing here is not the standing on one leg, it's the closing of the eyes that counts, according to Ben Wolff, a yoga teacher who also happens to be a clinical hypnotherapist and neuroscience geek. It's a pose he named the 'Flamingo', for obvious reasons.

If you're one of those yoga or Pilates

people who heads unthinking to the safety of the wall as soon as the teacher suggests so much as lifting a foot off the floor, rather than face the ignominy of wobbling off balance, this article might just be for you.

Yoga teacher disclaimer: There may be very good reasons why you need that support — physical injury and instability or inner ear issues, for example — but it can also be about fear. Fear of vulnerability, and fear of looking foolish and ancient in front of an entire class who, you imagine, could balance on a fingernail on a barbed wire fence for several minutes at a time with very

little effort. I know this because that fearful person has been me.

SOBERING NEWS...

An 'Ageing and Exercise' paper by Roy J Shephard¹, published in 1998, still makes a sobering read. Left to their own devices, he suggested, our bodies begin their inexorable journey towards that great good night sooner than you might think. Muscle strength? That peaks at 25. Calcium? 30. 'Maximal oxygen intake' also begins to decline at 25. 'Ageing,' he said, 'leads to a progressive decrease of muscle strength and flexibility.' That's before we factor in the eyes and ears, and any clinical conditions and injuries we might pick up on our journey through life — including the still-emerging after-effects of any Covid infection. All of which might contribute to balance, of course.

In 2017, a study looking at physical performance across the adult life span (aged 30 through to 90+), correlating age and physical activity², found that whilst 'men performed better than women across all ages, the decrement by age group was similar between genders'. Worsening

physical performance was observed as early as the fifth decade for chair stands and balance and in the sixth decade for gait speed and aerobic endurance. Loss of balance, it would appear, is not just a problem for the oldest old. Strength, agility, muscle mass — and, inevitably, balance — begin declining in midlife.

And with many mountain and cave rescuers staying operational (and ostensibly still fighting fit), into their fifties and sixties (and even beyond), this is surely something we all need to think about.

HOLDING BACK THE YEARS

One minute we're off to the gym in our high-cut leotard and feel-the-burn leg warmers (or whatever your gender-appropriate equivalent), balancing on one leg for hours on end, wondering what all these old people are dithering on about. The next — in the blink of an eye, it seems — we're the ones doing the dithering, reaching for the wall, tripping over our own feet, wondering where it all went.

If coming into yoga teaching as a more mature yogi has done anything, it's brought me face to face with my own incipient frailty because, given the probable need to demonstrate a range of balancing postures with some level of conviction, it was likely to be a tough job if I couldn't. And, I'm not ashamed to admit, there's many a class where the 'balance section' is more an exercise in watching the teacher fall over.

Oh and I know how much you think you're holding back the ravages of time with your body-punishing triathlons and mind-blowing gym routines, your yomping up hills with half an operating theatre strapped to your torso, but what about that Flamingo?

Which brings me back to Ben. He reckons the ability to stand on one leg with our eyes closed is the most important thing any of us can strive for — more important even than hour after hour of pavement pounding, hill scaling, bicep curling and hamstring stretching. It's also a handy guide to our functional age.

Manage it for four seconds, he says, and your 'balance-based real age' is estimated to be 70 years. Seventy! I hardly dared ask what my mere two seconds signified. By nine seconds, you've turned the clock back to 50. Keep it going for 28 seconds and you're back in your late-twenties.

In a recent piece in BBC Science Focus Magazine³, Dr Michael Moseley quotes different figures for expected age-related balance times. With closed eyes and under 40, you might manage fifteen seconds, thirteen aged 40-49. But the decline becomes more marked from fifty onwards. Up to 59, you might expect eight seconds, four up to 69, and aged 70-79 just three seconds with eyes closed. Very slightly more generous than Ben, but you get the picture.

'The health benefits are staggering,' says Ben. 'You feel your whole system recalibrating, which is kind of the point'.

Thinking it at first an 'esoteric secret', he came across the pose in 2009, in an article about Zhong Li Ba Ren's book, 'Self Help is

Better Than Seeking Doctors' Help', which considered the pose Jin Du Ji Lu to be 'all you need for complete body and brain health'.

'From a Qi Gong or Tai Chi perspective, it targets the six important meridians in the leg. In neuroscience, this makes complete sense because the longest signalling pathways run from foot to brain and back again. Not only that, but for any animal to have a sense of where it is in space is crucial, and this works both our internal interoceptive systems and our external proprioceptive systems of spatial awareness.'

He admits that he too could only manage two seconds at the start but now he's not only lifting a leg, crossing his arms shoulder to shoulder and closing his eyes, he's cleaning his teeth at the same time — and holding the pose for two minutes each side.

WHAT ELSE CAN IT TELL YOU?

Being able to stand on one leg has been linked to increased levels of physical activity⁴ and decreased risk of falls⁵ as well as being associated with longevity and quality of life. According to the World Health Organisation⁶, falls are the second leading cause of unintentional injury deaths worldwide, with adults over sixty suffering the greatest number of fatal falls.

As already noted, there might be many contributory factors to a fall: muscle weakness, poor balance, visual impairment, the effects of medication, environmental hazards, inner ear conditions, failing to wear the right footwear or simply tripping up over that pesky tree root. The NHS reports that around 1 in 3 adults over 65 and half of people over 80 will have at least one fall a year and about half of these will have more frequent falls.

Current government guidance⁷ ranks falls as the ninth highest cause of disability-adjusted life years in England with short and long-term outlooks for patients being generally poor following a hip fracture — an increased one-year mortality of between 18% and 33% — along with negative effects on daily living activities such as shopping and walking (they don't list the ability to walk up hills). A review of long-term disability found that a surprising 20% of hip fracture patients entered long-term care in the first year after fracture.

Admittedly, they recommend activities such as Nordic walking, circuits, resistance training and exercising with weights at least two days a week to mitigate your risk — so all that running up and down hills carrying heavy loads may go some way towards saving you — but my own observation is that we still need that vital 'listening to the proprioceptive messages' element to maintain the balance wiring in the brain.

PREDICTING MENTAL DECLINE

One more thing. The ability to stand on one leg isn't just about guarding against future falls — it can also be an indicator of brain health. A small Japanese study in 2014⁸, had nearly 1,400 women and men, with an

average age of 67, attempting to stand on one leg for at least a minute. The test was conducted eyes open, with the standing leg selected by the subject — my assumption here is that we instinctively choose our dominant leg and that this would be a factor. Those who lasted less than 20 seconds were more likely to have already suffered a small stroke⁹ and may already be suffering mental decline. The study, published in 'Stroke', concluded that 'postural instability was found to be associated with early pathological changes in the brain and functional decline, even in apparently healthy subjects'.

TOO YOUNG TO BOTHER YET...

You may well still be young and vibrant. You may still be able to run up a hill at speed with karabiners clanking about your climbing harness and a stretcher on your back. You may even consider yourself a long way yet from that sixty-year slide into decrepitude.

But, as Roy J Shephard hinted way back then: You're already sliding. Wherever you are in your rollercoaster ride through life, the ability to stand on one leg is seeping inexorably away from you. Along with a lot of other things you'd perhaps have liked to hang on to. You just haven't noticed it yet. One day, someone like me will invite you to stand on one leg whilst cleaning your teeth and you'll think 'Whoa!' what happened there?' Ask a physio if you don't believe me.

And the good news? Well if you develop that awareness now, the likelihood is you'll stave off the seepage. And, better still, even if it's temporarily gone, with a bit of practice you can get it back. Persuade your brain that you're still 35 after all.

HOW BALANCE WORKS

A number of factors feed into our ability to maintain postural control, stay upright and move through space. Our central nervous system takes in the sensory information coming at it from our eyes, ears, muscles and joints and essentially orchestrates our body's response.

But you don't have to be standing like a big pink-feathered bird — or even cleaning your teeth — to tune into proprioception. Just stand one bare foot behind the other, heel to big toe, weight evenly distributed between front and back (see exercise right) for several minutes.

Or imagine yourself collared by the local bobby, whilst en route home from a particularly boozy do, and try walking heel, toe, heel, toe, along a straight line. (Although my own local bobby pal suggests they rarely do this. 'You'd be surprised,' she says, 'how many drunks can walk in a straight line.')

TRY THIS SIMPLE EXERCISE TO TEST BALANCE AND CONNECT TO THOSE PROPRIOCEPTIVE MESSAGES

Yoga teacher Roger Cole PhD¹⁰ sums up the essentials of balance as 'the alignment of the body with gravity, the strength to hold and adjust alignment and the constant attention to continually monitor and correct alignment'. This simple exercise is a great way to test all three.

1 Stand with feet hip-width apart, roughly an arm's length away from a piece of furniture (back of a dining chair say, or a kitchen surface) — just far enough to have the tips of index, middle and ring fingers of both hands touching that surface. You should be standing crown lifted, eyes open, gaze forward, not leaning onto the fingertips.

2 Bring one foot in towards the midline of the body so it's directly under you, in line with your belly button and nose.

3 Bring your other foot in front of that one, heel to big toe.

4 Now spend some time observing how the body feels. You might feel twitches in the soles of your feet, the ankles might start to wobble. Perhaps those sensations will head up the legs to the gluteal muscles. And keep that gaze forward. Wobbles are good. It's just your brain working out where you are in space.

5 Now lift one finger on each hand. Now two. Each time pausing to observe how this feels.

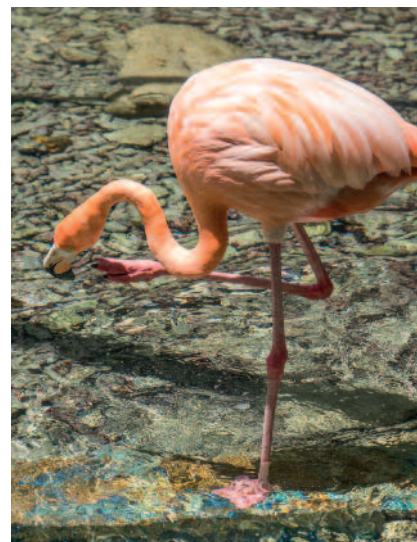
6 Lift one hand away and bring it to your sternum. Hold here. Lift the other hand to the sternum. Hold again. Each time tuning in to the twitches and wobbles.

7 Finally, lift one arm at a time to reach the fingertips to sky, creating a 'Y' shape. Hold for a few breaths then bring your palms together as if in 'prayer' and slowly lower the hands down through the midline.

About five minutes each leg should be enough.

Easy peasy, yes? Okay, now do that whole routine with your eyes closed and see how different that feels, now you've removed from your brain the sensory message of sight.

As a teacher, watching a class of strong, fit and healthy individuals of different ages going through the eyes-closed bit is fascinating. Where with eyes open, they all effect to be perfectly in balance, wobbles



barely noticeable — 'Nothing to see here!' — ask them to close those eyes and I can actually see each body fighting with itself to find equilibrium, to varying degrees.

NEVER TOO EARLY OR LATE

A work in progress and something to aim for then. Go the full Flamingo by all means but my advice is not to stand on a slippery floor, and practise well away from sharp corners. Rather choose somewhere you can teeter towards something soft. I'd also recommend breathing slow and low in the belly, in for six and out for six, to really ground yourself.

It's never too early, or too late, to start. Whether you're in your 20s, 30s, 40s, 50s or 60s. But starting now is always the better option. ☺

THANKS

Huge thanks to Dina Cohen of dynamicflowyoga.com for passing on Roger Cole's simple but effective balance exercise and Ben Wolff for sharing the 'Flamingo'. Thanks also to Howard Smedley, retired oncologist, for pointing me in the direction of notable research into balance and Dr Alistair Morris for his read-through and feedback.

POSTSCRIPT

Well talk about riding the Zeitgeist! Just before going to print, a further study¹¹, caused something of a stir in the mainstream media with its findings that 'the inability to complete ten seconds in one-legged standing in middle-age and older participants is related to a higher risk of all-cause mortality and, consequently, to a shorter life expectancy'. Don't say you haven't been warned. ☺

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JUDY WHITESIDE HAS BEEN TRYING VERY HARD NOT TO FALL OVER IN FRONT OF STUDENTS FOR THREE YEARS NOW, AS A CERTIFIED YOGA TEACHER AND BREATH-BODY-MIND TEACHER. AS WITH LIFE, IT CONTINUES TO BE A WORK IN PROGRESS, A NEVER ENDING CIRCLE OF LEARNING: SOMETIMES FUNNY, SOMETIMES FRUSTRATING, AND NEVER, EVER DULL.