

by Dr Kelly Starrett and Juliet Starrett

Can you stand up from

CROSS LEGGED?

Just one of the simple exercise tests in a clever new book that'll reveal how well you will age

TAKE off your shoes. That's right: shoes off. Now, with one foot crossed in front of the other (and without holding on to anything), bend your knees and lower yourself to the floor until you're sitting in a cross-legged position.

You're not finished yet, though. To get back up again, lean forward with your hands outstretched in front of you for balance. Then try to rise off the floor, if possible without placing your hands or knees on the floor for support.

So how did you do? Doctors never mention it and most fitness trainers have other fish to fry. But your ability to get up and down off the floor from this position is one of several key indicators we've identified that tell us not only how good your mobility is but also signals you are more likely to live a longer, healthier life.

We like to call these indicators 'vital signs' because they instantly show how well, and how much, you move in everyday life and we believe they are just as significant in predicting long-term health as charting your pulse, blood pressure and cholesterol levels.

Why? Because they provide vital clues as to why you might have certain aches and pains.

They also allow us to predict how well you might recover from illness or injury and how healthy you will be as you age. The way you move — or don't move — is one of the most important predictors of a long and healthy life.

Does your back feel horribly stiff when you get off the sofa? Do your knees creak every time you step away from your desk? Do you struggle to look out of the back window when you're reversing the car?

Once you get to midlife, it's hard to ignore the stiffening-up caused by years spent sitting at a desk or slouching in front of the TV, but few of us fully appreciate the impact this can have on our health and longevity.

The problem is that, on an average day, most of us take our joints through only a fraction of the movement range they were designed for.

What's more, a sweaty hour in the gym, a few competitive sets of tennis, a day on the golf course, and even regular Pilates and yoga are simply not enough to rectify the damage this causes.

In this new series, which starts today and continues tomorrow in the Mail on Sunday, we set out five key tests (our favourite 'vital signs') to assess your mobility and suggest exercises and activities that will help improve your scores — and your general health — fast.

These tests are our blueprint for better movement — a lifejacket handed to you with instructions on how to prepare your body for aging, injury and to cope better with the physical aches and pains that come

from living in this chair-bound, technology-loving world of ours.

Together, they will help you shake off the rust. Improve your scores and you won't have to worry about throwing your back out when you change the duvet. Your balance will improve, your shoulders will relax, your spine will become more stable, and knee pain will fade.

NOTE: When doing these activities, expect a little discomfort and residual muscle soreness, but stop if anything triggers sharp jabs of pain. You should be able to breathe steadily through each exercise. Stop or come down a level if you find yourself holding your breath.

SIT TO RISE TEST

THIS is such a comprehensive test, assessing strength in your leg muscles and core as well as your balance and coordination, that scientists use it as a good indicator of overall health as we get older.

Studies show people who learn to master this challenge with minimal wobbling or support are actually more likely to live longer than those who struggle.

That's because your body has to be stable, supple and efficient to score high marks on the test, and those physical attributes mean your joints and muscles are all working well, which implies that the rest of your body is more likely to be working well, too.

Significantly, mastering this test means you'll be less likely to fall as you get older — and far more able to get yourself up again if you do.

Whatever your age, your goal should be to get up and down off the floor without reaching for any support. Keep practising at least once a day until you can do it.

WHAT TO DO

WITH your shoes off, stand with one foot crossed in front of the other. Position yourself next to a wall or a piece of furniture if you think you'll need support. Without holding on to

anything (unless you feel unsteady), bend your knees and lower yourself to the floor until you're sitting in a cross-legged position.

Now, from the same cross-legged position, lean forward with your hands outstretched in front of you

for balance, and rise off the floor — if possible, without support.

HOW TO SCORE

START with a score of ten, then subtract one point each time you do one of the following:

- Bracing yourself with a hand on the wall or furniture.
- Placing a hand on the ground.
- Touching your knee to the floor.
- Supporting yourself on the side of your legs.
- Losing your balance

RESULTS

10 POINTS — excellent. You have very good mobility. Practise frequently to maintain your skill.
7-9 POINTS — you're close. With practice, you'll get a perfect ten.

3-6 POINTS — an acceptable score, but there's certainly room for improvement.

0-2 POINTS — poor, but don't be discouraged and disheartened. This is something you can master with practice.



PICTURES: NATASHA PSZENICKI

HOW TO IMPROVE

'REWILD' your hip joints by sitting on the floor cross-legged every day to help undo the damage done by prolonged chair sitting. Work up to 30 minutes sat like this, using every opportunity to 'sit and rise' with minimal support. For maximum benefit, alternate between cross-legged and these positions:

90/90 SITTING

SIT with one leg at a 90-degree angle in front (your thigh will be straight out from your hip and your foot will be in front of you, as in the picture right). Slightly resting on the front leg's side of your bottom, bend the other leg at a 90-degree angle behind you. Switch sides every so often to rotate the hips. Sitting like this allows one hip to be rotated externally and the other internally, both of which allow your legs and pelvis to move efficiently. Studies show this can improve lower back pain.



ONE LEG UP SITTING

SIT with one leg straight in front of you, keeping the other leg bent, its foot flat on the floor. Clasp your hands around the bent leg for stability (see right). After five minutes in this position (or however long is comfortable), switch sides.



LONG SITTING

SIT with your legs out in front of you, keeping your back straight or your torso leaning slightly forward, towards your toes, which should be pointing upwards. This position stretches the muscles along the front and back of the thigh (quads and hamstrings), firing up your buttock and calf muscles, which are the movement engines of the body.



SUBSCRIBER
++BONUS++



Scan here to follow our step-by-step guide
MAILPLUS.CO.UK

THIS test measures hip flexibility and the range of motion in your thigh muscles.

Problems arise because sitting puts your body into prolonged hip flexion, keeping the angle between your body and your upper thigh at 90 degrees.

If we sit for too long, the muscles which run from the pelvis to the thigh bone become stiff or shortened, tugging on the spine, which puts strain on the lower back.

Eventually, the body turns to alternative ways to find balance, causing muscles up and down the body to tighten, possibly spinning the leg, knee and foot outwards.

Your brain gets used to directing them to do so and hip flexion becomes habitual. Then, when you stand up, these muscles stay engaged, tugging on your spine and creating discomfort.

When hip extension is restricted like this, it basically truncates the forceful movements that enable you to walk and run with ease and speed, and even the

THE COUCH TEST

action needed to throw a ball far enough to give your dog some exercise.

Working to free this joint is not just basic body maintenance — it's a great way to offset the ageing process. It will help you move with greater ease. In fact, hip extension may have the biggest impact on your everyday functionality.

WHAT TO DO

REMOVE your shoes and stand with your back to the couch. Raise your right leg behind you, bend the knee, and tuck it into the corner of the couch where the back and seat cushions meet.

Rest your right shin against the back of

the couch, toes pointed upwards. Keeping your torso as upright as possible, bend your left knee, keeping your left foot on the floor. Now try to squeeze your right buttock and inhale to a slow count of five. Switch sides and repeat the buttock squeeze on the left side (left leg on the couch this time).

This is the 'starter' position (position 1, pictured near right), but if it is too difficult, move your knee a few inches forwards from the back of the couch and try the buttock squeeze again.

If this position feels comfortable, tuck your right leg into the corner of the couch and bring your left leg up, so your foot is on the edge of the seat, knee bent at 45 degrees.

Repeat the exercise, squeezing the buttock



of the back leg for a count of five. This is position 2 (pictured near left).

Progress to doing this stretch on the floor instead of a couch, if you can. Your right knee, cushioned by a towel, should rest on the floor at the intersection with a wall with your shin resting against the wall behind you, toe pointed upwards.

Place your left knee on the ground, then, using both hands on the floor to hold yourself up, squeeze your right buttock for a five-second hold. Repeat on the other side (this is position 3).

Increase the challenge by raising your left knee up and placing the foot on the ground in front of you while still supporting your body with hands on the floor (position 4).

For the advanced position (position 5), take your hands off the floor and lift the torso upright. The test measures your ability to hold a five-second squeeze on the back leg in the most stretched position you can manage.

RESULTS

YOU REACHED POSITION 1 — A good start. Make

sure you practise every day and you'll start to make progress.

YOU REACHED POSITION 2 — This shows limited hip extension. Keep going.

YOU REACHED POSITION 3 — This shows a fairly good range of motion. Keep going until you can put your front foot on the floor.

YOU REACHED POSITION 4 — This is better, keep practising.

YOU REACHED POSITION 5 — Congratulations, you have great hip agility, which will protect you from back and knee pain. Don't stop practising!

HOW TO IMPROVE

REPEAT the couch test regularly, as it tests how well you can extend hips whilst activating the glutes. Aim to spend less time sitting and try these targeted hip stretches:

KNEELING HOLD

KNEEL on the floor with your right leg in front

at a 90-degree angle and your left knee on the floor behind your bottom, torso upright, hands on your right knee.

Squeeze the right side of your bottom and move your right knee forward as far as you can — it won't go very far while you are squeezing your buttock — and hold the position. Keep the squeeze on as you breathe — five slow inhales, five slow exhales — for one minute. Switch sides.

STANDING HOLD

WITH your right foot forward and your left foot back, bend your right knee slightly and come into a moderate lunge. You should feel tension in the front of your left thigh. Squeeze your buttock (on the left side) and hold the squeeze as you breathe — five slow inhales, five slow exhales — for 30 seconds. Switch sides.

THE SQUAT TEST
TURN TO NEXT PAGE

OUR bodies are built to squat, and in many cultures squatting is as common as sitting in a chair. In the West, however, we rarely do it.

This is despite plenty of studies that have shown regular squatting can reduce the risk of arthritic hip pain and increase ankle mobility, making you less likely to fall.

Ultimately, with practice, everyone should be able to squat with their feet parallel (toes straight ahead, weight balanced between the balls and the heels of the feet) and hip crease below the knee.

If you are holding a heavy weight, aim to keep your back straight and torso upright, but if you are just squatting for the sheer joy of it, allowing your back to round can be restorative for the spine, helping to rehydrate the discs.

WHAT TO DO

STAND straight with your feet hip width (or farther) apart. Now bend your knees and lower your bottom towards the ground, keeping your feet straight, your weight balanced between your heels and balls of your feet.

Place your arms out in front of you and lean your torso forward if it helps you maintain balance. However low you manage to get, hold the position for five breaths.

HOW TO SCORE

THE ideal position (1) sees your bottom a few inches above the floor, hip crease well below the knees, toes pointed forward, heels flat on the floor.

If you can't reach the first position without falling, try angling your toes outward and separating your legs farther apart (**position 2**). Alternatively, keep your feet straight ahead but allow your heels to rise (if you can manage it, this is preferable to the toes-angled-outward position).

If this is still too difficult, try to lower your hips to the height of a chair seat so your legs roughly form a 90-degree angle (**3**).

As a last alternative, lower your hips as far as they will go (**4**).

RESULTS

YOU REACHED POSITION 1 — This is good news for your hips, knees, and ankles. Practise sitting in a deep squat at least three times a week.

YOU REACHED POSITION 2 — You're



THE SQUAT TEST

at it and you will master the squat eventually.

HOW TO IMPROVE

GET into whatever squat position you can comfortably achieve and stay there for three minutes every day, aiming to get gradually deeper each time.

Every time you get in and out of a chair, or on and off the loo, you are actually doing a mid-range squat, so do it slowly, consciously, and without using your hands for support.

You can also practise 'sit-stands' to increase your range every time you go to sit down.

Stand with the back of your legs near the seat of a chair.

Holding your arms straight out at shoulder height, slowly bend your knees and lower your bottom down on to the chair seat as if to sit, touch down for a second, then slowly rise back up. Each day add an extra 'squat' and when you reach 20, pick a

How to squat: Lower yourself steadily, keeping your weight balanced between your heels and the balls of your feet

lower chair and repeat the same sequence. Always keep your foot pressure even from the balls of your feet to your heels.

■ **ADAPTED** from *Built To Move: The 10 Essential Habits To Help You Move Freely And Live Fully* by Juliet and Kerry Starrett, to

be published by Orion Spring on April 6 at £18.99. © Juliet & Kelly Starrett 2023.

To order a copy for £16.14 (offer valid to 08/04/23; UK P&P free on orders over £20), visit mailshop.co.uk/books or call 020 3176 2937.

INSIDE TOMORROW'S

The Mail

ON SUNDAY

CAN YOU PUT YOUR SOCKS AND SHOES ON STANDING ON ONE LEG?