



SAMANTHA MCPHERSON

Digital Portfolio

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STYLE LIFE

AFTER EXPRESSING AN INTEREST IN ARIANNA'S INITIATIVE 'THRIVE GLOBAL' I WAS INVITED AS A REGULAR CONTRIBUTOR.

'YOUR KNOWLEDGE, LIFESTYLE ADVICE, TIPS AND TECHNIQUES WOULD BE SO INSIGHTFUL FOR OUR READERS' - ARIANNA HUFFINGTON



Samantha McPherson

Physiotherapist, MSc. Yoga & Pilates

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Samantha is a Physiotherapist specialising in Spinal Health and Wellbeing. She graduated from University of Norwich, U.K., is a qualified Pilates and Yoga teacher and now works with patients to treat persistent back pain from all aspects including; lifestyle, exercise, and cognitive functional therapy.

Samantha has contributed to London Wellbeing Conferences, Corporate Health, and has featured in Women's Running magazine. She created The Health Edit to start sharing the information her patients are craving. Samantha's mission is to shift thinking away from negative back pain thinking into joyful, fearless wellbeing.

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LinkedIn Profile



COMMUNITY // May 7, 2020

Pilates To Keep Your Spine Happy Whilst Working From Home

by Samantha McPherson



COMMUNITY // November 29, 2019

How I Avoid Burnout When Caring For Others

by Samantha McPherson



COMMUNITY // June 10, 2019

Back Pain and Burnout – 5 Principles to Reduce the Impact of Pain Amidst the Burnout Epidemic

by Samantha McPherson

JOINT VENTURE

MANY PEOPLE ARE HASTY TO CONCLUDE THAT RUNNING IS BAD FOR THE JOINTS. IS IT A MYTH OR IS THERE AN ELEMENT OF TRUTH IN THIS WORRYING CLAIM?

CHRISTINA MACDONALD FINDS OUT

WOMEN'S RUNNING MAGAZINE APPROACHED ME TO CONTRIBUTE TO THEIR 'JOINT VENTURE' DISCUSSING THE BENEFITS OF RUNNING FOR JOINT HEALTH

You've probably heard it before. "Running is bad for your joints." "It will wreck your knees." "You'll need a knee replacement in 20 years." Comments like these usually come from non-runners. Running is a natural action for humans, yet many people who don't do it seem convinced that this highly beneficial exercise choice—that burns many calories, improves heart health and reduces disease risk—is ultimately bad for you. So are they right—could your favourite sport be harmful to your joint health?

We have good news for you. A 20-year study, conducted by Professor James Fries of Stanford University in California, found that runners from the study (now in their 70s) who run consistently could expect to have less arthritis than the non-runners when they get older. It also showed the runners to have a lower risk of osteoarthritis and hip replacements.

A 2014 study conducted by Dr Grace Hsiao-Wei Lo, assistant professor of medicine at Baylor College of Medicine, Texas, found that running at any stage of life doesn't increase a person's risk of osteoarthritis of the knee. In fact, it may even help to ward off the condition. The findings of the study, presented at the American College of Rheumatology Annual Meeting in Boston, looked at more than 2,600 participants, giving them knee x-rays, assessments and surveys. Researchers concluded that runners had a lower prevalence of knee pain than non-runners, regardless of their age.

BORN TO RUN

The experts are not surprised. "Our bodies are designed to run," says Professor John Brewer, Head of School of Sport, Health and Applied Science (SHAS) at St Mary's University (stmrys.ac.uk). "In the past, we had to run to catch food or avoid being the food of a predator, so running is a natural form of human locomotion."

Samantha Moss is lead physiotherapist for Nuffield Health (nuffieldhealth.com), and has been monitoring various studies. "There is currently no good evidence that running alone causes osteoarthritis," she says. "There is some evidence that extreme levels of running [is harmful]; that those who run marathons and ultra-marathons have a higher incidence of osteoarthritis, but there have been no good research trials into this

confirm a link either way."

Moss adds: "A review of running and risk to joint health (published on the website PubMed.gov in the US) found no evidence that moderate levels of running in itself was detrimental. In fact, we can reduce the risk of osteoarthritis by maintaining a healthy weight, building muscle, flexibility and balance, which can all be achieved through activities such as running."

BETTER BONE HEALTH

Far from jeopardising our mobility in later life, some loading of the joints is actually good for us. "Running can improve joint and bone health, especially if you manage the volume and frequency of runs," says physiotherapist Stuart M from Kensington Physio & Sports M (kenspysio.com). "When v

JOINT HEALTH

FAMILY AFFAIR

Often the warnings about running ruining your knees come from older relatives, who assume that a family history of arthritis means you're guaranteed to have problems. Is that really the case?

If a first-degree relative had a knee replacement early on, then you may be more predisposed to joint issues in future. "A family history of osteoarthritis is an indicator that you are more likely to suffer yourself," says Buckingham. "There seems to be a variance in the quality of cartilage between us. Some have very resilient stuff, which seems to put up with anything. Others have poor cartilage, which wears more easily regardless of how much you stress it."

Moderation is key, but don't be deterred. "Simply put, if you have decent cartilage and no family history, then you can get away with a lot more," says Buckingham. "If you have osteoarthritis in the genes then you are likely to suffer and sadly, if you run and stress the cartilage, you are much more likely to suffer early on."

However, working on leg strength, ensuring your shoes are the right ones for you and having regular rest days in between running sessions will all help. "I would never say avoid it completely," says Brewer. "If you have a family history of osteoarthritis then running in moderation is still possible, but seeking medical advice first from an expert is an important first step. Start slowly, increase gradually and, if there is a family history, it makes total sense to be cautious."

Running may be part of your weekly training schedule but you could combine it with low-impact exercise to give your joints a break. "That includes cycling or swimming, both of which place less stress on the joints," says Brewer.

If you want to do a longer race like a marathon and you have a family history of knee problems, don't be put off. "Train well, work with a physiotherapist to strengthen the muscles around the knees and rest up in between runs. As long as you are sensible, I think it's highly unlikely that you will increase your risk of arthritis or knee operations," says Brewer. "Most people will be fit as a result of their regular exercise and will have maintained a low body fat percentage, and these are important enhancers of quality of life as we get older. Many hundreds of thousands of people run marathons and ultras each year, and they are not all queuing up for knee replacements afterwards."

PROTECT YOUR JOINTS

ULTRA RUNNERS MINI ANDERSON AND MARTIN KELLY REVEAL HOW THEY RECOVER AFTER A LONG RACE LIKE A MARATHON OR ULTRA

 MAXIMISE RECOVERY TIME BETWEEN RUNS	 LOOK AT THE BIGGER PICTURE	 GET THE RIGHT SHOES	 TRY A NATURAL P.L.	 TRY A SPORTS MASSAGE
Have at least a one-day gap between runs unless they are very gentle and not too long," says Kelly.	Hydration and nutrition can really reduce the downtime and get you physically ready to go again," says Kelly.	"I use Hoka One One shoes as they have a lot of cushioning, taking the pressure off my joints," says Anderson.	Take an anti-inflammatory supplement like Nordic O2 Omega 3 capsules every day which are fantastic," says Anderson.	has a massage two days after races. Time Out is good for managing yourself at home," says Anderson.

SO WHY DOES IT HURT

If you're reading this while suffering joint pain, you're talking but there are risk factors to do put some runners at risk problems. If your technique poor, you have weak muscle imbalances, the wrong running shoes or you overdo your volume, you may suffer. "I can arise when an individual

biomechanical issue that puts extra stress on a particular joint or when they do too much and refuse to listen to signals (like pain) telling them to rest or ease off," says Brewer. Unfortunately, carrying extra weight can exacerbate the problem. "Simple physics says that the greater the force through the joint surface, the greater the wear and tear, which is the essence of osteoarthritis," says physiotherapist Mark Buckingham from Witty Paak & Buckingham (wpphysio.co.uk). "The joint surface does not increase in size with an increase in weight, so therefore there is greater force on the same surface area. Hyaline cartilage is remarkable stuff but it can tolerate only so much and once it has gone, it's gone—much like your teeth!"

"When each foot hits the ground with every stride, a force equivalent to three times the runner's body weight is transmitted through the lower limbs," says Brewer. "When a runner is overweight, this is going to greatly increase the forces transmitted into and through the knee joint, increasing wear and tear and the risk of problems."

Experts advise trying to lose weight if you are significantly overweight as it can increase injury risk in general. "Being overweight or having previous injuries are some of the risk factors for developing osteoarthritis in the knees, hips and lower back," says Moss. "Studies since the 1980s have demonstrated this repeatedly. However, being active and losing weight removes load through the joints and so reduces risk."

If you are excessively overweight, you may choose to lose some weight first by sticking to low-impact exercise, such as cycling, swimming or using the cross-trainer. However, don't be put off entirely. "Being slightly overweight and running 15-20 miles a week is likely to create fewer problems than being 10 kilos overweight and running 70 miles a week," says Brewer.

He also points out that if you take up running for the first time and you are overweight, you're not likely to be doing long distances for a while, which offers some protection from injury risk. "When someone who is significantly overweight runs, they are unlikely to have a high level of fitness that can sustain running for long, or at a high speed," says Brewer. "Therefore the potential for joint damage is greatly reduced, and consequently people who are significantly overweight should be encouraged to run at a tolerable speed as a means of burning calories and aiding weight loss."

RUN FOR BETTER JOINT HEALTH

WE TALK TO THREE WOMEN WHO FOUND THAT RUNNING BENEFITED THEIR JOINTS, RATHER THAN MAKING THEM WORSE

"RUNNING HAS EASED MY ARTHRITIS"

35-year-old Leanne Dove is an NHS Project Manager from Bournemouth who was diagnosed two years ago with rheumatoid arthritis.

"I HAVE LESS KNEE PAIN NOW I RUN"

38-year-old Scott from Scott Shields has hypermobility syndrome, where the joints are too flexible.

"RUNNING HAS STRENGTHENED MY KNEE"

39-year-old Pam Fox from Mowden suffered with knee pain for years due to ligament damage.

CORPORATE HEALTH AND WELLBEING

AS PART OF THE EXPERT TEAM AT NUFFIELD HEALTH MY ROLE INVOLVED GENERATING COPY FOR OUR CORPORATE CLIENTS TO SHARE WITH THEIR TEAMS TO ENHANCE THEIR WELLBEING AT WORK

PREHAB & INJURY PREVENTION

KPMG Health and Wellbeing Suite, 5th Floor, 15 Canada Square

GP Services + Travel Clinic + Physiotherapy + Health Assessments

WARM UP



- Raises body temperature which reduces the potential for muscle and connective tissue injuries and reduce the likelihood of post exercise muscle soreness.
- TRY THESE: High knees, squats, lunge rotation and push ups.



PREHAB EXERCISES

- Complete twice per week to help protect your body from injuries
- TRY THESE: Standing lunges, All four kickbacks, Bridge Pose, Forearm plank, Deadlift



PREHAB STRETCHES

- Build flexibility in your muscles after exercising to reduce risk of injury
- TRY THESE: Chest opener, Low lunge, Cobra, Seated Hamstrings, Quadriceps stretch



Recovery Foods

- High glycaemic carbohydrates ; rice, potatoes.
- Lean protein is essential for muscles tissue repair - black beans, nut butters and eggs.
- Antioxidants reduce inflammation and oxidative stress - mixed berries and dark green leafy vegetables
- Omega 3 fats also have anti-inflammatory benefits and promote heart health - oily fish, avocados, olive oil and walnuts

Hydration

- 60% of your body is water
- Adequate hydration helps prevent fatigue and cramp.
- Exercising whilst dehydrated can cause heat cramps.
- General advice is to drink little and often (500ml every 4 hours)
- Remember coffee and alcohol are diuretics which reduce the amount of water absorbed.



NUFFIELD HEALTH
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 INFOGRAPHICS



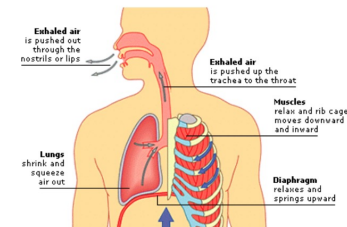
Boosting Resilience

Samantha Moss, KPMG

[Meet Our Experts](#)



LUNG HEALTH



How much do you know about your lungs?

The lungs are amazing, they are responsible for the movement of air and vital oxygen in and out of the body. Air travels into the nose and mouth, down the upper airways, known as the trachea and bronchi, all the way down into the alveoli where 'gas exchange' occurs. This is the body absorbing oxygen (O₂) and getting rid of carbon dioxide (CO₂).

How do they do it?

The main muscles that pull air into the body are the diaphragm (the biggest), the internal and external costal muscles and some smaller muscles up around your neck that work when you are short of breath - like during exercise.

Why breathe?

Humans need oxygen to survive - only 6 minutes without it is fatal. The body is designed to ensure that plenty of oxygen is moving around your body, by detecting the pH (how acidic/basic) the blood is, and how much CO₂ there is. If these levels go out of range, the first thing the body does to restore normal conditions, or homeostasis, is to alter the breathing pattern to help.

Breathing works via two systems

- 1) Autonomic - we breathe without thinking. However, this 'normal' day to day breathing is still susceptible to bad patterns that can affect how we feel and our stress levels.
- 2) Somatic - take a deep breath... there you go - we can also control our breathing and override our normal patterns. This is useful during pain, panic attacks and for relaxation.

How do I look after my lungs?

The first rule of lung health is that if you are feeling in any way unwell, upset, stressed, have a cold or feeling cold. The breathing rate will change. It usually speeds itself up. Over time fast, shallow breathing can become habit and we don't regularly breathe deeply. This is called **apical** breathing. What we really should be doing is breathing deeply and using all of the lungs. This is called **diaphragmatic** breathing. To help regulate breathing patterns and reduce stress levels try this 1 minute fix:

- 1) Standing or sitting, let your shoulders and arms relax.
- 2) Breathe deeply into your upper, middle and then down into the lower chest.
- 3) Breathe in through your nose, and out through your mouth.
- 4) Try to breathe in for 5 seconds and out for 5 seconds.
- 5) Breathe like this for 5 rounds. Feel good?

Resources

mind
for better mental health

Nuffield Health

NHS choices

No Frills
for better mental health

If you would like any further information regarding your health and wellbeing and how we can help - please do not hesitate to visit us at

Nuffield Health Health and Wellbeing Suite
5th Floor
KPMG
Canada Square

INVITED AS KEYNOTE
SPEAKER TO SHARE MY
APPROACH IN LIFESTYLE
CHANGES TO TREAT BACK
PAIN

- COPA SERIES, EXCEL
CENTRE 2018

Headline Speakers

HEADLINE SPEAKERS

COPA Series 2018 will host 90 CPD-accredited seminars presented by noteworthy business experts and researchers from the physio, podiatry, prosthetic and orthotic sectors all in one venue - providing the ultimate exhibition for rehabilitation professionals, chiropractors, podiatrists, physios and physical therapists.

We have carefully researched the industry to ensure that we deliver a selection of seminars that provide visitors with an incomparable depth of knowledge and insight from some of the sector's leading names.

Experience, advice and expertise will be shared by these inspiring individuals, who have had vastly successful careers in their chosen profession, providing essential guidance for all.

The following pages highlight just a handful of the incredible speakers that will be at the event. But don't worry if your topic isn't covered here, later on in this guide you will find our full seminar agenda, so you will be able to find the talks that are most relevant to you.

Get there early to avoid disappointment!

GRAHAM DAWSON

SENIOR PRISON PHYSIO

PHYSIOTHERAPY IN PRISON: MAKING A DIFFERENCE TO THE CLIENT AND CUSTOMER

Offender health management offers businesses a unique avenue to explore which may previously have been overlooked. The seminar will offer an insight into working within this environment. Graham will discuss the benefits of offering a physiotherapy service not only to the client base, but also the customer, gaining ideas for justification when approaching these establishments with business proposals.

WEDNESDAY | 14.45 | KEYNOTE THEATRE 1

JAMIE GEORGE & RHYC CARTER

ELITE LEVEL PHYSIO & WORLD-CLASS ATHLETE

TRAIN LIKE AN ATHLETE, RECOVER LIKE AN ATHLETE

Professional athletes are given access to the highest standards of care. They are exposed to experts in their field, all working together to get them back on top form as fast as possible. They have access to the latest treatment technology, immediate scans and teams of specialists. From doctors and physiotherapists to nutritionists and strength and conditioning coaches. What can we learn from this? And how can this model be replicated to benefit the general public in a cost-effective and accessible way? Here's your chance to find out!

WEDNESDAY | 11.00 | KEYNOTE THEATRE 1

ROSI SEXTON

THE COOLEST OSTEOPATH THAT YOU MAY EVER MEET

WHAT BEING A PROFESSIONAL FIGHTER TAUGHT ME ABOUT TREATING PAIN

Hard to hand combat and healing may seem like polar opposites, but in martial arts these are traditionally seen as two sides of the same coin.

Rosi's twin careers - professional fighter and osteopath - have overlapped in a number of ways. In this talk, she reflects on some lessons from her unorthodox career path.

THURSDAY | 14.45 | KEYNOTE THEATRE 1

SAMANTHA MOSS

SENIOR MSK PHYSIO

THURSDAY | 11.45 | KEYNOTE THEATRE 1

THE SPINE LIFESTYLE: ASSESSING, TREATING & THRIVING THROUGH BACK PAIN

Samantha will talk you through the functional assessment and holistic treatment of patients with persistent spinal pain with particular emphasis on the use of lifestyle advice, relaxed breathing techniques, and cognitive functional therapy. Drawing on NICE guidance, pain science and experience, this seminar aims to put together useful concepts for every day practice.

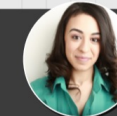
RUTH DUNCAN

FASCIA & PAIN THOUGHT LEADER

FASCIA AND PAIN

What is fascia's role in pain? Fascia is involved in force transmission, lubrication, and cellular communication. It protects, connects and separates all other structures and therefore must play a role in dysfunction and pain. This lecture will discuss what happens when fascia becomes strained and how it compensates, body dysfunction. Scar tissue and adhesions will also be discussed including their contribution to structural imbalances, physiological distress and ultimately pain.

WEDNESDAY | 11.45 | SEMINAR THEATRE 4



ALAA RAZAQ

CLINIC DIRECTOR & LEAD NHS MSK/ BIOMECHANICS PODIATRIST

REHABILITATION OF FOOT AND ANKLE: INCORPORATING ORTHOTICS & FLEXIBILITY FOR RESTORATION

Strength and endurance is key for rehabilitation. However, what we also need to factor in is at which stage does flexibility and rehabilitation? When restoration of function is required, is orthotics really vital? You can find out in this game-changing seminar!

THURSDAY | 13.15 | KEYNOTE THEATRE 1

EVAN KUESTER

PROSTHETIST VISIONARY

3D PRINTING AND PROSTHESIS ACROSS SPECIES

This seminar will explore the variety of new prostheses that have been created in recent years due to advancements in manufacturing technologies. The topics discussed during this seminar will range from creating prostheses and assistive devices for humans and animals alike, as well as the software and technology used to create them.

THURSDAY | 10.15 | KEYNOTE THEATRE 1

CARL TODD

LECTURER, CLINICAL DIRECTOR & CONSULTANT

WEDNESDAY | 11.00 | SEMINAR THEATRE 6

MANAGEMENT FOR MULTIPLE GROIN-RELATED ENTITIES POST HIP JOINT ARTHROSCOPIC SURGERY

To date there is limited evidence of post surgical management of FAI following hip joint arthroscopic surgery. Several rehabilitation protocols have previously been documented, all of which includes managing weight bearing, hip joint range of motion, exercises and therapeutic treatment techniques. However a recent scoping review highlighted gaps of patients fail non-surgical management approaches for hip pain (Peters et al. 2017). The purpose of this presentation is to highlight the management for multiple groin-related entities in patients that have previously failed rehabilitation post hip joint arthroscopic surgery.

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