

yoga for health



Yoga is a powerful tool for getting well and staying not just well, but better than well. What's its secret? Victoria Woodhall asks doctor and yoga teacher Timothy McCall MD

What are the health benefits of yoga? In answer to this, their most frequently asked question, the International Association of Yoga Therapists (IAYT)¹ trawled through dozens of studies, papers and articles and drew up a comprehensive list of more than 60 physiological, psychological and biochemical benefits. These range from reduced blood pressure to the regulation of the endocrine, gastrointestinal and excretory functions, normalisation of weight, improved sleep, decreased anxiety and depression, better hand-eye coordination, improved memory and learning efficiency, increased white blood cell count, decreased LDL ('bad') cholesterol, and a general antistress and antioxidant effect, which is important in the prevention of degenerative diseases.

Yoga helps us when we are well by optimising the functioning of all the body's systems. When we are ill it can help manage symptoms such as fatigue, pain and low mood. It can even play a role in reversing disease. Dr Dean Ornish was the first to provide scientific proof that lifestyle changes including yoga and a low-fat diet could reverse heart disease, as well as lengthen telomeres (the ends of chromosomes that control ageing) and slow, stop or reverse the progression of early-stage prostate cancer.²

Yoga offers very simple tools to tackle stress, which can cause and worsen a whole host of health conditions. Among yoga's many therapeutic benefits

are its effects on the mind. Bo Forbes, a clinical psychologist and yoga practitioner, is one teacher successfully using yoga programmes to help treat anxiety and depression.

But how is yoga such a powerful tool? Here, Dr Timothy McCall MD, author of *Yoga as Medicine: The Yogic Prescription for Health and Healing* and medical editor of *Yoga Journal*, shares his insights.

AS SOMEONE WHO HAS BEEN A DOCTOR FOR almost 30 years, I can tell you that yoga is the most powerful overall system for promoting health and wellbeing I have ever seen. Why? Because we are working on immune function, the nervous system, the cardiovascular system, we are strengthening the muscles, improving flexibility, improving wellbeing, putting you in touch with your deeper purpose – what are you on the planet to do? Nothing in medicine deals with things like wellbeing, peacefulness, a sense of purpose and fulfilment – yet these are the things that matter most to us and have a huge impact on our health.

Yoga has a different view from Western medicine as to what constitutes health, and this may be partly why it is so effective. In medicine we take people who are symptomatic and try to make them less symptomatic. However, in yoga the absence of symptoms doesn't equate to health. Health extends far beyond not having a headache, knee pain or even curing cancer. It is about optimising the function of every system in your body.

When you bring a body into balance and improve posture and breathing, a lot of symptoms from back pain to insomnia will almost spontaneously get better.

How does it work?

Yoga is a holistic practice that taps into dozens of systems that may have additive or even multiplicative effects. Stretching and lengthening the muscles calms the mind and can improve the breathing. Calming and strengthening the nervous system affects the mind. Cultivating peace of mind affects the nervous system, the immune system and the cardiovascular system.

Whether it's *asana*, *pranayama*, philosophy or meditation, yoga is a broad tool for tackling stress, which is a factor in some of the biggest health problems of our time. A lot of disease has a stress element to it - not just the things you might expect such as migraines, insomnia or irritable bowel syndrome, but also major diseases such as type 2 diabetes, depression, heart attacks and strokes, as well as autoimmune diseases such as MS and rheumatoid arthritis.

Something as simple as changing your posture can improve your breathing, which has all kinds of beneficial stress-reducing effects. But by and large, physicians know nothing about this. Doctors think about breathing only as a way of bringing more oxygen in to the body, not as a way of affecting your mental health or the state of your nervous system.

And yet we know as yogis that when we breathe differently it changes our nervous system and our anxiety levels, it affects our sleep, our mood, how well we interact with other people. Yoga takes into account a web of causation that is much more complex than the limited number of factors that most doctors consider.

Why is the breath so important?

It is perhaps the most important tool in yoga practice. The ancient yogis discovered that the breath, which is normally automatic, has profound effects on the nervous system if consciously controlled, with the potential either to increase activation or promote relaxation, depending on the practice.

The breath is our doorway into the whole autonomic

nervous system (ANS) - the automatic functions (such as controlling heart rate, blood pressure, organ function and so on) that the body does by itself. Of all those automatic functions, the only one that almost everybody can take over voluntarily is the breath.

When you change the breath, you change the ANS. In fact, some of the amazing feats that the ancient yogis developed, such as being able to sit naked outside in freezing temperatures, speeding or slowing down the heart or reducing their breathing to almost nothing, are due to the ability to control their nervous system. When you deepen and smooth out the breath, you are sending your ANS a signal of rest and relaxation instead of tension and potentially affecting all the internal organs, the blood, digestion, reproduction and so on. Slowing down the breath and making it more regular - with no major bumps or hiccups - begins to lessen feelings of stress within seconds. Yogic lore teaches that controlling the fluctuations of the breath helps calm the fluctuations of the mind.

All you need is yoga?

As preventative medicine, yoga is as close to one-stop shopping as you can find. While yoga by itself doesn't cure too much, there's almost nothing it can't help. Is yoga going to cure your cancer? No, but it might allow you to have more energy and fewer side-effects from treatment. The yogic approach does not say avoid all conventional medicine or don't ever take a drug or never have an operation. Instead we say that those are more tools.

In general, yoga helps us use fewer drugs and have fewer operations. If you have type 1 diabetes we are not going to say, 'Don't take your insulin, just do yoga' - that would be crazy. Use the drug, and complement it with yoga; or, the way I look at it, start with yoga and complement it with conventional medicine.

Yoga is strong medicine but it's slow medicine. If you want quick results or to feel better right away, you may need to consider conventional medical approaches. If you can be more patient, yoga can help you feel a little bit better right away, but the real deep effects come from continued practice over a long period.

How can it be used to heal?

Yoga wasn't originally invented to improve health or facilitate recovery from serious illness but as a spiritual path, to which disease was seen as an obstacle. However, there is a growing body of scientific evidence suggesting that yoga has serious therapeutic value. Studies have shown that it can benefit a wide variety of conditions from insomnia to attention deficit hyperactivity disorder (ADHD), multiple sclerosis, chronic pain, heart disease, depression and anxiety, rheumatoid arthritis, HIV/AIDS, alcoholism and drug withdrawal, to name but a few. When we use yoga therapeutically, we are not just addressing whatever physical problem the person is coming to us with, but also their overall situation, their stress levels, their posture, their breathing and, in as many ways as possible, are aiming to move them in a good direction.

One study I've been particularly impressed with is a two-year pilot into yoga's effectiveness for osteoporosis, published in 2009 by Loren Fishman MD, medical director of Manhattan Physical Medicine and Rehabilitation in New York.³ He had people doing just ten minutes a day of asana and found dramatic improvements in bone mineral density. As impressive as that is, from a yogic perspective it's just the beginning. Yes, in yoga we are increasing bone mineral density but we are also making you less likely to fall and break a bone by improving your balance and by making you more mindful. And if you are about to fall, your core strength around your spine helps you right yourself. Then there's the fact that by learning to spread your toes and your metatarsal bones you actually widen your foot slightly, giving you a broader base for greater stability. When you have a wider foot, you are less likely to fall over; you are more stable. Yoga can also reduce the production of cortisol, the body's main stress hormone, which directly interferes with calcium deposition in the bone.

While health studies into yoga usually focus on one or a few specific effects – because that's the way we tend to measure success in medicine – they rarely tell the whole story, because there is often a raft of other benefits that may not be examined. So, looking back at the osteoporosis study, we learned that the patients'

bone mineral density improved but in all likelihood they also slept better and were happier as a result of their practice.

Is all yoga good for healing?

It's important to differentiate between yoga and yoga therapy. Take back pain, for example. There are now five randomised controlled studies that have found yoga to be effective (there are no randomised controlled studies that have shown that most back surgeries are effective). However, if you go to a general yoga class, it can make your back pain worse, or better, depending on how it's being taught and the nature of your back problem. If your back pain is caused by hyperextending (overarching) your lumbar (lower) spine and you go to a backbending class and are not careful, you are going to walk out of class in worse pain.

The average teacher in a health club isn't likely to know enough to teach therapeutic yoga well, especially not in a group setting. A yoga therapist, on the other hand, personalises the approach to what the individual needs. Yoga therapy is generally taught one-on-one or in small groups, often with the aid of props. With any injury or medical condition, unless it's minor, think carefully about going to a class, especially if you are not very experienced. Someone else is dictating the speed and the poses, which may not be what you need at that moment. Talk to the teacher, tell them your problem and ask them whether this is something they could manage in class. Err on the side of safety and listen to your body. If you start to feel a sharp pain, come out of the pose right away. Your body is giving you feedback. Unfortunately, in our achievement-oriented culture, many people feel like they need to push through. But in yoga it's 'pain, no gain'.

What's the pose for...?

A lot of people ask me, 'What's the pose for sinus problems?' or 'What pose do I do if I have rheumatoid arthritis?' and the answer is always, 'It depends' – on the context of your whole life. How strong are you? How much time do you have to devote to yoga? What limitations do you have as a result of old injuries? What drugs are you taking? If you have a drug that makes you



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dizzy, for example, we are going to think twice about putting you in a balancing pose.

When we use yoga therapeutically we are not just addressing whatever physical problem the person is coming to us with, but their overall situation. A yoga therapist will consider all these different things and come up with individual recommendations.

How often do I need to practise to experience health benefits?

You can feel the benefits from a single session, but if you want ongoing benefits that increase over time, you need to start a practice habit. The best way is to practise a small amount seven days a week. I would

rather you did five minutes seven days a week than 20 minutes three times a week. By doing this you are creating what the ancient yogis called a *samskara* - a habit of action or a thought - making a mental groove that grows deeper the more you practise. By doing five minutes every day, you might find you want to do a bit more - six or ten minutes. Start with a little and let the practice itself convince you to do more. That's when the chance for profound change really begins.

How do I change old habits?

We all have neural pathways left by old habits and repetitive thoughts that live in our brain. How come, for example, someone who quit smoking 20 years ago can

wing pose (chakrasana)



get fired from work, stop at a bar on the way home, have a few drinks, borrow a cigarette and the next day be smoking again? How did that happen? That old samskara was there, although somewhat attenuated through disuse. With yoga practice we create a new samskara, we repeat it until it gets stronger and gradually it starts to outcompete the old habits.

In creating samskaras we are forging new neural pathways. Until relatively recently, medical science believed that the brain was not capable of major change in adulthood. Now, with advances in understanding, scientists talk about neuroplasticity, meaning that the brain is capable of change. When you perform a new action or have a new thought, brain cells called neurons form new connections or synapses. The more you repeat it, the more synapses form and the stronger those neural pathways get. Neuroplasticity, I believe, is the neurological basis of the yogic idea of samskaras – and of Patanjali's recommendation of success in yoga, which is practice over a long period of time without

interruption. As yogis we can take advantage of neuroplasticity to change the structure of the brain.

Yoga makes you want to do what's good for you. How?

Yoga practice wakes up the ability to feel your own body. When you can feel the consequences of your behaviour, you start to make different decisions. Say, for example, you judge whether you can eat a particular food by whether you like how it tastes. When you can feel your own body, you might notice: 'Every time I eat that food I like the taste of, half an hour later I feel groggy and depressed.' You start to make the connection between the two and find yourself saying, 'I don't think I want to eat that food.'

I can tell you as a doctor, 'Don't eat that; it's bad for you,' yet most of the time that advice goes in one ear and out the other. But when it comes from your own body, that's extremely motivating. Part of what yoga does is it makes you want to do what's good for you.

yoga for men



If 30 million people in the world do yoga, why is it mostly women who make up the numbers? Victoria Woodhall asks Jeff Phenix, 'What's holding men back?'

If we look at who comes through the door at triyoga, women outnumber men by about four to one, if not more. In teacher-training groups the numbers of men can sometimes be as low as one in 15. Despite the fact that yoga comes from a strong male lineage and that many of the poses that originated in India were essentially designed for male bodies (which some women even now complain about - think of trying a shoulder stand with a GG chest!), in the West yoga can often be seen as something of a closed door for men. It doesn't help that magazine articles tend to be illustrated with a pretty size-eight model sitting serenely in lotus or striking a tree pose against the sunset. Where's the man in baggy shorts with the paunch, more interested in improving his bad back than his karma? If you are a man reading this, who has never done yoga before, you probably think it's something you should do, but somewhere there may be a resistance that stops you setting foot in a class (many male practitioners tell us they started yoga from a book).

One physiotherapist, a three-times-a-week tennis player in his thirties, told us that while he would recommend yoga as a remedial exercise for someone who had an injury, he wouldn't consider taking it up himself. He would miss his 'workout' and the competitive side of tennis where he could measure his performance by his scores.





push-up or four-limbed staff pose (chaturanga dandasana)

One way of looking at yoga as a competitive sportsman, is as a discipline to help keep you injury free. In 20 years from now when other people's bones are starting to creak and old injuries start to nag, you are more likely still to be playing. If you like to sweat and to measure your performance in numbers, try vinyasa flow, or Ashtanga - in which there are six sequences of ever-increasing difficulty.

Yoga is a powerful tool for so many things - stress relief, improved sporting performance, better focus, fuller range of movement as well as general health - and there's no good reason for anyone, male or female, to miss out. It sharpens the mind-body connection and trains you to be in the present, really to be aware of what's going on around you, to stay calm when life becomes challenging. People who do yoga alongside their sport report that they are better able to see advantages - such as a space opening up on the pitch or court. Increasingly, top athletes from across a range of sporting disciplines, as well as entrepreneurs, business leaders and politicians, are turning to yoga because it helps their performance without blunting their competitive nature.

Having a clear, calm mind and a healthy body gives you the edge, whether that's in sport, business or life generally. Happily, more men are starting to realise this.

FOUR YOGA MYTHS UNRAVELLED

MYTH 1: It's for girls

If you are a man, yoga might not feel like a natural fit for you - all that stretching can seem challenging even if you are very fit and do a lot of sport. Women are by and large more flexible than men and are more likely to choose yoga as their main fitness activity; hence its 'female' image. Men tend to prefer their 'weekend warrior' pursuits.

Men can find yoga a challenge not only physically, but mentally too, says Jeff. 'It can be tough when you are surrounded by women who all seem to be better at it than you. It takes time and a bit of humility to break through that mental resistance.'

'I teach a group of women golfers who say they have fewer aches and pains, that they feel better in their bodies and that their game has improved. But when they tried to persuade their men to come along, the husbands couldn't get past the teasing from their peers. The notion that yoga is somehow effeminate can terrify men. They think it's a bit balletic, a bit tree-huggy, that they'll look silly or not get anything useful out of it.'

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Luckily, with top sportsmen and businessmen now 'coming out' about their yoga practice, perceptions are gradually changing.

MYTH 2: It's not a proper workout

"The reason why everybody likes yoga is that it isn't very hard." So said a celebrity fitness trainer recently in a UK national newspaper. This is just the sort of unhelpful comment that puts many people off - especially men. "Many men don't realise that there are dozens of styles of yoga and that they can find one that allows them to work as hard as they like," says Jeff. Yoga teacher Baron Baptiste, who acted as a performance coach to the Philadelphia Eagles football team, reports that in his experience men tend to get hooked into stronger styles because they 'connect with the power of the practice'.¹

"Even Olympic athletes (with the possible exception of gymnasts) would find certain types of yoga, such as Ashtanga, a challenge," says Jeff.

You are not going to bulk up like a bodybuilder by doing yoga, nor are you going to get marathon-fit. But you will work your cardiovascular system and develop longer, leaner, more balanced muscles that will not only support whatever sport you play, but are also useful in other areas of your life - twisting around to reverse the car, swinging a golf club, lifting your child up without doing your back in, reaching up to the top of the wardrobe to get a suitcase. This 'real life' fitness becomes more important as we age. Gyms are now recognising this and buzzwords such as 'evolutionary



eka pada koundinyasana



movement' and 'functional fitness' are creeping in, ushering out the 1980s six-pack aesthetic and bulky, overtrained muscles. The 'evolutionary' or 'primal' approach takes the body through all the movements it was designed to do.

Yoga has known this all along – we need to access a full range of motion to stay healthy and strong and to use all muscles in balance.

MYTH 3: I'm not bendy enough

Flexibility is not a requirement for yoga but it comes with practice. Everyone works non-competitively at their own 'edge'.

"Yoga is extremely beneficial for men, because it addresses our typical problem areas – tight shoulders, hips, hamstrings and quads plus legs that are weak relative to upper body strength, and a weak core," says Jeff. "All of these can contribute to low back pain, which men also frequently report. In time your body will balance out. The muscles are then better able to support one another, spreading the work more evenly and efficiently." On a physical level, yoga is about balancing strength with flexibility.

In the meantime there are ways out of every tight spot with simple adjustments, props and an attitude of 'less is sometimes more'.

Getting out of a tight spot, by Jeff Phenix

Tight shoulders: A bulky upper body can make common poses such as downward facing dog tricky. Tightness in the biceps means it may be hard for you to straighten the arms, reducing stability in the shoulders. A bulky upper body might also make binding in a twist more tricky.

Try this: In downward facing dog (a), take the hands slightly wider apart with index fingers pointing straight ahead. In bound twist (b), use a strap to bridge the gap between the hands.

Tight hamstrings: If the backs of your legs are tight, trying to touch your toes when bending forward or to straighten the legs in downward facing dog may overwork the back, causing it to hunch (see forward-bending instructions in the practice section, page 136).

Try this: In seated forward bends (c), use a belt to bridge the gap between your hands and feet or (d) sit on blocks to help elevate the hips and lengthen the spine. In standing forward bends, place your hands on blocks. Make sure you bend at the hips, not the lower back. In downward facing dog (e), keep the back straight but bend the knees.

Tight hips: If your knees are higher than your hips when you sit cross-legged, it means that the thighs and hips are too tight to allow the knees to lower. These muscles are easily shortened if you spend a lot of time sitting on a chair or driving or doing sports. Your pelvis may also tilt backwards, causing you to slump, putting strain on your back.

Try this: Sit on the edge of a block (f) – or a pile of blocks – to raise your seat higher. Your knees should lower and you should feel your spine growing taller.

Tight quads (thighs): These can restrict your backbends and make postures such as pigeon and hero pose (g), challenging.

Try this: Use extra support under your buttocks to bring the floor to you.



A WORD ON PROPS

Belts and foam blocks allow you to get the full benefits of a difficult pose by taking your body where it won't yet go by itself. Props aren't cheating – in fact, in the Iyengar method, some poses exist only with props.

"Props keep the lines of energy in your body clearer, which is unlikely to happen if you muscle into a pose through brute strength," says Jeff. "If you are screwing up your eyes or puffing and panting, you are overworking – it's a common male trait. Our practical 'doing' mindset says, 'It's a workout, therefore I should be Working Out.' In class, it's always the men sweating buckets. Pushing too hard leads to tightening, which can restrict the flow of breath and energy. It took time for me to learn to work with the breath rather than the feeling of needing to achieve. Once you learn to work with subtlety and refinement you realise that sometimes you can go further by doing less."

In yoga a natural competitiveness can also be turned inwards as a means of becoming better in yourself.

MYTH 4: It will make me less competitive

Will all that yoga blunt your edges and ambition? The growing number of figures in big business who use yoga to help them stay at the top of their game suggests that this can't be true. The improved mental clarity, focus and ability to manage stress gained through yoga are important skills in a world swamped by emails, tweets and texts, and defined by economic uncertainty. In yoga, a natural competitiveness can also be turned inwards as a means of becoming better in yourself.

Early adopters include Guy Hands, multi-millionaire chairman of private equity company Terra Firma, who does yoga before work;² Bill Gross, America's 'bond king', says he has some of his most inspired ideas while standing on his head and that after practice 'a light bulb turns on and I'm on to something'.³ Russell Simmons, multimillionaire founder of Def Jam Records and Phat Farm clothing, is a long-time Jivamukti yoga devotee and has written a book *Super Rich* based on yogic principles.

Yoga can even look good on your CV. One head of human resources at a corporate law firm reportedly recommended the candidate who did yoga over their equally qualified rival.⁴

In the world of sport, it's becoming increasingly common to hear of yoga being part of an elite training regime – fans include UK football Premiership stars Roy Keane and Ryan Giggs. (Giggs, still playing in his late 30s, attributes his career longevity to yoga⁵ – and he even released a yoga-based fitness DVD.) Entire teams such as Tottenham Hotspur and Arsenal, the 2011 Welsh rugby World Cup squad, and the Philadelphia Eagles football team all do yoga. In tennis, Andy Murray and Rafael Nadal both practise regularly.



flying crow
(eka pada galavasana)

Five-and-a-half reasons for men to do yoga:

1. Improved physical and mental performance

Yoga trains all muscle groups to work together, sharing the load. This means that some are less likely to become tired or injured through overwork, and to become weak or even switch off through underuse.

Whatever physical activity you do in daily life, from sport to pushing your child on a swing, you will do more effectively. Improved concentration and focus help with mental performance and decision-making off the mat too.

2. Staying youthful

Yoga puts the body through its full range of motion, twisting, reaching, stretching, moving from sitting on the floor to standing. As we get older we can retain that range of movement in the face of the natural shrinking of the muscles over time. Yoga increases energy and regular practice often results in making healthier choices over diet, handling stress, and getting enough sleep – all things that make us look and feel young. 'Yogis tend to be more flexible, stronger, more energetic, thinner and more youthful than people who don't do yoga,' says Dr Timothy McCall.⁴

3. Dealing better with stress

Yoga helps us relax. Breathing more slowly and deeply oxygenates the blood and calms the mind, grounding us in the face of stress. Certain types of yoga, such as restorative yoga, focus particularly on activating the parasympathetic nervous system (our relaxation response) taking us out of 'fight or flight' mode and reducing stress hormones.

4. Better concentration and focus

Yoga and meditation develop mental clarity, training the ability

to connect with what's going on in the present moment and to screen out distractions.

5. Relieving back pain

Several studies show that yoga can be effective for back pain, a common complaint for men. 'It's where medicine does the poorest job and yoga does the best,' says Dr Timothy McCall.⁷

5½. Getting a better beach body

You know you care – just a little bit. Yoga trains long, lean, balanced muscles that look great in swimming trunks. What's not to like?



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