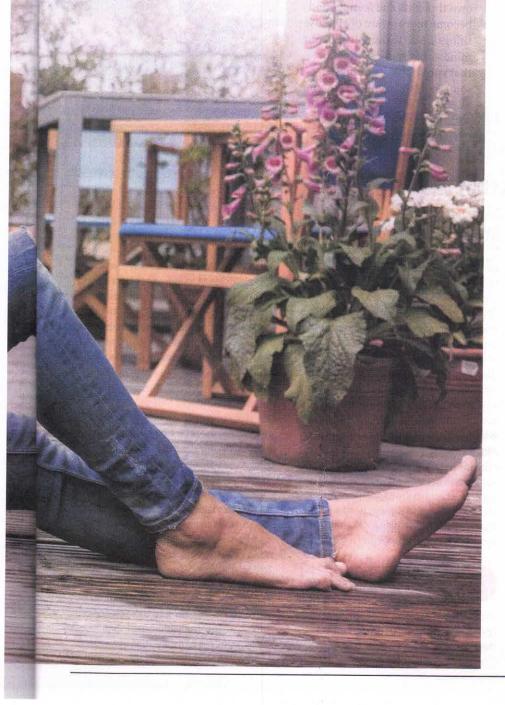


Why should meditate?

With meditation proven to improve stress levels, memory and wellbeing, it could be time to make it a part of your everyday life



For a practice

that has been around for thousands of years, meditation can sometimes still be met with a healthy amount of scepticism. Does it work? Is there really any benefit? And while it's easy to dismiss it as a New Age exercise, there's so much scientific data to back the case that we should all be engaging in a little daily meditation.

Contrary to popular belief, meditation is not about switching your thoughts off and ending up in a trance-like state. Psychologist and meditation teacher Cassandra Dunn says it's actually about being more aware of what you're thinking as opposed to completely closing your mind. "It's taking the time to sit and focus... essentially cultivating that capacity to pay attention and just notice where your mind wants to go," she says.

There are many and varied forms of meditation – from Buddhism's popular mindfulness meditation, which involves focusing on the present moment and paying attention to one's surroundings without judgement, to transcendental meditation (popularised by The Beatles after they travelled to an ashram in India in the 1960s to learn the practice), which is about focusing on a mantra and trying to rise above one's current state of being.

Then there's Kundalini yoga, which is a more physical form of meditation that combines movement with deep breathing and mantras to achieve a calmer state.

There's a meditation style to suit almost everyone and it's a practice that's portable and inexpensive. We're so committed to exercising our bodies, is it time to do the same for our minds, too?

How meditation works

The practice of meditation is simple, but it goes against the grain of our hyper-busy lives. "Mindfulness meditation [is about] bringing your mind to focus on a specific object, whether that be your breath moving in and out of your body, sensations in your body or the sounds you hear," says Dunn. "It's about being still and paying attention to what's happening in the moment but it's also training yourself to take a bit more of an observer position with all the stuff that goes on inside your head and your body."

As with anything new, Dunn admits it can be difficult to focus at first, but it's important to persevere. "All you're really doing is breathing in and breathing out, but it's actually doing a lot. It's training you in this ability to sit with your own experience, with your own thoughts and feelings and become more aware of all those things we do to ourselves in our mind - that sense of urgency that you should be doing something different. It's training all sorts of skills that we tend to be losing in our distractible, device-driven world."



The benefits of meditation

The positive outcomes of meditation are many and varied but, in particular, meditating can have a notable effect on...

Stress
It's common to hear that meditation is an effective

meditation is an effective way of relieving stress and increase feelings of calm. It was this that intrigued Harvard neuroscientist Dr Sara Lazar and prompted her to research the effects of meditation. In a study led by Dr Lazar, non-meditators were asked to embark on an eight-week meditation-based stress-reduction course.

Each participant undertook a brain scan before the course and after eight weeks of meditating every day for 30-40 minutes. The after scans done on the participants found that there was a decrease in grey matter in the amygdala, which controls the fight or flight response of the brain – the reaction that causes us to feel stress. The change in grey matter correlated with the levels of stress people reported – the more their reactions to the stress stimuli around them changed post-meditation course, the smaller the amygdala became.

The physical side effects of stress

include everything from headaches to low energy and insomnia, and stress encourages the production of cortisol, which stimulates overeating (inspiring the need for high-fat and high-sugar foods in particular). Dunn, who works with a lot of patients trying to get healthy and lose weight, says meditation can assist by encouraging mindfulness when it comes to eating. "You're recognising what's hunger, what's boredom, what's stress and what's just habit," says Dunn. "That requires being present in the moment and noticing the urge to reach for something sugary and delicious, and think, 'Hold on a second, what's really happening? Am I just stressed? Do I actually just need some fresh air? Is it something else? How is this serving me and my goals and my values?""

Concentration
Along with being a stress reliever, meditating could be the answer if you find your concentration levels are a bit erratic throughout the day. Dr Lazar's study found that

meditation improved attention levels, with an increase in grey matter found in the posterior cingulate - the part of the brain associated with mind wandering. This is the area of the brain that is affected in those who experience Alzheimer's disease, and what the study suggests is that the more grey matter you have in this area, the less your mind wanders. It's thought that the mindfulness experienced during meditation trains you to channel your attention to one thing and keep it there for a sustained period, while being aware of your thoughts and being able to act as an observer of them allows you to recognise when your mind is starting to roam.

And it seems the more you meditate, the more focused you become. Neuroscientist Wendy Hasenkamp and author of How To Focus A Wandering Mind, undertook a study using MRI to examine which parts of the brain were activated during meditation. According to the Scientific American, the study identified that "there are four phases of a cognitive cycle: an

episode of mind wandering, a moment of becoming aware of the distraction, a phase of reorienting attention and a resumption of focused attention."

The study then looked at meditators with more than 10,000 hours of practice and noticed they showed more activity in the attention-related regions of the brain compared with those new to meditation. Interestingly, the advanced meditators demonstrated less activation than the ones without as much experience. It seems that experienced meditators develop a level of skill that allows them to focus their mind with less effort.

Happiness

If you've been feeling a little

down, embracing meditation could be the answer. A Northwestern University-University of Massachussets study found that each of us has a natural 'set point' in our brains for good and bad emotions. The research found that people who are used to being happy have more activity in the front portion of the frontal lobes in their brain, while the right side is more active in people who are anxious or worry a lot. A later study found that resetting these set points is possible through meditation. Test subjects meditated for around one hour a day, six days a week and after only eight weeks reported that they were happier. Further tests showed that their set points had changed and that their normal level of mental happiness had been raised.

Additionally, research by Dr Lazar has uncovered that meditation can increase the grey matter in the left hippocampus, which assists with emotional regulation. This is the area of the brain where people with depression and PTSD commonly exhibit less grey matter.

"When we talk about negative emotions, a lot of that is created in our mind. A lot of it is the stories we are telling ourselves. As soon as you're in a negative mood you tend to interpret situations with that negative lens," says Dunn. "The thing that mindfulness does is it gives you the capacity to look at the stories you're telling yourself and ask yourself is it really helpful? You don't even have to engage with the thought, you just see it as a thought. [If the thought] is making you feel bad then let it go."

What happens to your brain when you meditate?

Meditation already has the capacity to change your brain when it comes to stressing less and boosting concentration, but did you know it can also be a way to train your brain? Neuroplasticity is about changing the way neurons in the brain talk to each other by doing an activity over and over again. Dr Lazar's studies have suggested that the brain changes in people who undertake a regular meditation practice. One study found that the pre-frontal cortex in the brain, which is important for executive decision-making and memory, was thicker for meditators than non-meditators. This is also the area of the brain that gets thinner with age, so meditation may help slow or prevent the age-related decline of the brain. In another study from the University of California, researchers scanned the brains of long-term meditators. They found that these individuals' brains were larger than their non-meditating counterparts, further supporting the theory that it can help increase grey matter.

How to squeeze some zen into your life

If you're committed to meditating, it's never been easier to make it a part of your routine. There are various studies into the optimum amount of time to meditate. Some suggest that 5-10 minutes of daily practice can provide some benefits while others say that the more you meditate, the bigger the reward. Dunn says she often tells her patients to aim for up to 10-20 minutes a day, with noticeable changes generally seen after eight weeks, sometimes sooner. "It's about] trying to make it manageable in your life so that it becomes a consistent habit. It's the consistency of it that's important," says Dunn.

And what about the best time of day to meditate? Dunn recommends getting it done first thing in the morning "[Meditating] when your mind is fresh is always best... it gets you off on the right foot to just sit and clear your mind and

set your intention for the day."

Dunn says to start with a guided meditation app, such as Insight or an online course, something that Dunn herself has created. There are now also wearables on the market that feature a meditation function or, if trackers aren't your thing, download a podcast such as *The Meditation Podcast*, which will take you through the practice. If you're after more personal tuition, search for local meditation classes in your area.

Over time, Dunn says you'll notice that your mind wanders less frequently, you can sit and meditate for longer and that you'll be able to catch yourself more quickly when your thoughts do start to roam.

And Dunn says it's important to remember "there's no good meditation or bad meditation because there are bad days and good days. There is only meditation".

6