

## MEMORY LOSS VS DEMENTIA

The odd memory lapse is no big deal – so when should we start to worry? Experts explain, and share the best ways to stay sharp

[Amy Fleming](#) Fri 26 Jan 2024 06.00 EST Last modified on Mon 29 Jan 2024 09.58 EST

Isn't it Sod's Law? Just at the point in our lives when we start seriously considering our long-term health and mortality – perhaps after witnessing older loved ones getting an illness such as dementia – our responsibilities are piled so high that we can feel as if we're losing our mental capacities already. The names of our favourite animals and humans become an interchangeable word soup. Our keys become increasingly elusive. Alerts must be set on all calendar entries.

But how can we tell whether this frustrating flakiness is a reflection of age-related cognitive decline; the early signs of our own impending dementia; or merely an overly taxing phase from which we will recover? Could it even just be normal forgetfulness? We're not robots, after all.

It may be reassuring to hear from neurologist Richard Restak, 82, whose new book is [How to Prevent Dementia: An Expert's Guide to Long-Term Brain Health](#). He says there might be a more everyday reason for memory lapse: "All through life, stress causes a decrease in normal brain function: you have difficulty with memory; you can't come up with names."

All through life, stress causes a decrease in normal brain function *Richard Restak*

Of course, it's impossible to completely avoid stressful things, but one you can choose to swerve, he says, is worrying that you're getting Alzheimer's because of mild forgetfulness: "There are examples of people coming out of shopping malls and being unable to remember where they parked the car. Well, that's just normal forgetting."

A more worrying version of the story would be, Restak says, "If you come out of the mall and you can't remember, 'Did I drive here, did I take a bus or did somebody drop me off?'"

Restak is clearly still mentally sharp: as well as writing books, he is a clinical professor at George Washington University in Washington DC. But he calmly accepts a mild decline in his abilities that comes with age. He recalls a book tour dinner many years ago in which he was introduced to a dozen new people. "I had no trouble at all remembering the names," he says. "I'm not sure I could do that today."

'How can we tell whether this frustrating flakiness is a reflection of age-related cognitive decline?' Illustration: Rosie Roberts/The Guardian

Problems recalling names are easily fixable, in any case, Restak tells me: "Memory is based on images, not words. So I could take your name, Amy Fleming, and see a picture of you in flames – flaming – and so when I next see you, your name will come to me."

Memory is also often more about paying attention than cognitive deficits. Returning to Restak's mall analogy, he says if you've got something more interesting than car park coordinates on your mind when you arrive, you won't pay attention to the seemingly insignificant car park zone, and therefore you won't lay down a memory of it. It is much harder to pay attention to things that don't excite us.

If can't name the actor in the film you've just seen, it's worth diverting this mental energy into positive action

Signs of a dementia-depleted memory are far more marked, says Linda Clare, professor of clinical psychology of ageing and dementia at the University of Exeter. "It's a real gap somewhere that there shouldn't be," she says. "My own experience of this was telling my mum that I was going to make a big move from Cambridge to north Wales and that I'd found a house. And the next morning, she had no recollection of any of it. Then I knew for sure that this wasn't just normal forgetting."

Clare recalls another example, of a man who got into the car and couldn't remember what the controls were for. "It's those crunch moments that send you off to the doctor." But she concedes that it is hard to draw precise markers, as circumstances other than dementia can cause dramatic momentary lapses – such as urinary tract infections, hormone imbalances, mini strokes, depression and anxiety.

If you experience a dramatic memory lapse, or cognitive changes that aren't normal for you, the usual investigative pathway would be a visit to a memory clinic, via GP referral.

"We're trying to encourage people, if they do notice a change in functioning, to go to the doctor," says Clare. This is partly because other health problems causing the cognitive symptoms, such as cardiovascular disease affecting blood flow to the brain, could be picked up, but also because drugs can help slow the progression of dementia if taken early.

But let's roll back a little: if you're panicking because you're getting older and can't name the actor in the film you've just seen, it's worth diverting this mental energy into positive action. For example, you might want to start by learning new ways to manage stress. "Try to decrease stress, and cognitive function will improve," Restak says.

Clare suggests breaking the vicious cycle of worrying about your health by focusing on taking care of yourself. "It's not always easy," she says. "Responsibilities don't go away. But is there a way to get a little bit more sleep, or have someone give you a break for an hour or two to do something you want to do? Small things that keep you going are worth doing."

On the other hand, having a mentally demanding job can be beneficial because it keeps the brain agile and strong, and make a dementia diagnosis less likely. "Whatever a person can do to stimulate their mental functioning is a good thing," says Clare. "We think complex mental activities are protective."

Not that having a mentally taxing job is a prerequisite for brain health. Restak's key phrase for tackling dementia is "cognitive reserve", which is something you can build like a muscle. He says: "The brain remains highly malleable throughout the lifespan, and cognitive reserve can be built up from childhood and at any time during the next 70 years."

Keep doing new stuff: languages, musical skills and staying on top of technology

Having a well-exercised brain will not necessarily prevent dementia, but it can keep you functional for longer if you do get the disease. Restak's top tip is to find something that "viscerally interests you" and indulge it like a "magnificent obsession: you continue to build on it with books, you go to movies about it – that's the way the mind stays sharp".

Keeping your brain doing new stuff, he says, is a way of "forming new networks within the brain". This applies to learning new languages, to musical skills, and is also why you should keep up with new technology instead of letting others do it for you.

Reading novels is another cognitive reserve-building power move. "They demand a lot more in terms of cognitive functioning than a nonfiction book, which you can open up to whatever chapter is of interest to you," says Restak. "You can't do that with a novel." You have to hold in your mind the story so far, who everyone is, follow the text and subtext and use your imagination.

Novels and puzzles require working memory. "Working memory is associated with IQ," he says. "If you've got a strong working memory, there is not a chance in the world you have dementia."

Some of the exercises he suggests (see panel, ) would "strain anybody" he says. The medical definition of dementia is a loss of memory, language, problem-solving and other cognitive abilities that is severe enough to impact daily life.

Along with reducing stress and keeping mentally agile, sleep – particularly naps – is your memory's friend

"So if you've enough working memory to learn and name, say, all the prime ministers since the second world war, it can be stated categorically that you do not have dementia," Restak says. "If you don't follow politics, listing the members of your football team according to position, or alphabetically, would do just as well."

Along with reducing stress and keeping mentally agile, sleep – particularly naps – is your memory's friend. "Laboratory studies confirm that naps solidify already learned information," writes Restak. "When we first learn something, that knowledge goes into the hippocampus, the brain region responsible for the initial formation of a memory. When we nap, hippocampal activity matches the pattern of activity that occurred when we learned the new information. This is called *neural replay*."

Sleep problems often increase with age, though. Restak says: "A daytime nap can prove helpful in regulating your night-time sleep."

None of this advice comes with guarantees. “You can’t take a specific person and predict whether or not they’re going to get Alzheimer’s on the basis of their lifestyle,” says Restak. “A high percentage of it is genetic, but these steps will lower the odds.”

Avoiding drinking to excess is another one, he says. “Everybody recognises that alcohol is harmful, but you have to live. If one drink a day causes you to feel better about life, I would say fine. Make up for it with the other ways of preventing dementia, – doing plenty of exercise and sticking to a healthy diet, say.”

The evidence continues to mount, too, for looking after your cardiovascular health and hearing, and for socialising as much as possible.

Cheeringly, just as it’s never too late to build your cognitive reserve, it’s never too late to boost your systemic health. “Making changes to benefit your health, at any stage, has an impact,” says Clare. “Even if you start exercising when you retire, it will still have a benefit. Do whatever you can do at that time – we’re never a lost cause.”

## **Who came after Wilson?**

### **Five exercises to help build cognitive reserve**

Name all of the UK’s prime ministers from Winston Churchill to the present day. Then do them backwards, then put them in alphabetical order – and then separate by political party.

If you don’t follow politics, list all the players in your favourite football team (or famous teams in history, such as the England 1966 or France 1998 World Cup winners) according to position played, or alphabetically.

Go around the supermarket without referring to your shopping list until the end.

Tackle puzzles such as Wordle and Sudoku. Restak says it’s useful to do anything “that can enable you or compel you to move pieces of information around in your mind”.

Learn a new word every day.

- The Complete Guide to Memory by Richard Restak (Penguin Books Ltd, £10.99). To support the Guardian and Observer, order your copy at [guardianbookshop.com](https://www.guardianbookshop.com). Delivery charges may apply.