



THE GOOD SLEEP GUIDE FOR AGING

How Sleep Protects Your Brain, Your Body and Your Years

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Based on peer-reviewed research, 2022 to 2026

For everyone who intends to grow older with their wits, their strength and their joy intact.

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Foreword

We are living longer than any generation before us. The question that now matters is not simply how many years we will have, but how good those years will be. Will we keep our memory, our strength, our independence, our pleasure in life? A great deal of the answer is decided not in the doctor's surgery but in the bedroom, night after night, across the decades.

In more than thirty years of visiting people in their own homes, I have watched ageing up close, in the places where it actually happens. And I have become convinced that sleep is one of the most underused tools we have for ageing well. It is the time when the brain clears away its waste, when the body repairs itself, when memories are filed and inflammation is calmed. Neglect it, and you are quietly accelerating the very processes you most want to slow.

This guide is an invitation to take your nights seriously, not out of fear, but out of respect for what they do for you. The science is genuinely hopeful. Sleep is modifiable. It is never too late to protect it, and the returns, measured in clarity, vigour and years, are among the best on offer anywhere in health.

How well you age is shaped, to a degree few people appreciate, by how well you sleep. The night is where the future is quietly decided.

Introduction: Ageing Well Begins in the Dark

There is a comforting story we tell ourselves about sleep and age: that older people simply need less of it, and that the lighter, shorter, more broken nights of later life are natural and harmless. The first half of that story is a myth, as we shall see. The second half gets the cause and effect backwards. Sleep does change with age, but the changes are not something to shrug at. They are something to understand and, where possible, to soften.

Across the past few years, large and careful studies have made the link between sleep and healthy ageing impossible to ignore. The duration of your sleep in midlife is associated with your risk of dementia decades later. The regularity of your sleep predicts how long you live. And the quality of your sleep shapes the inflammation, the repair and the resilience that decide whether your later years are vigorous or frail.

Research Evidence *Nature Aging, 2022*

Drawing on data from nearly half a million adults aged 38 to 73, researchers found that around seven hours was the sleep duration associated with the best cognitive performance and mental health. Both too little and too much sleep were linked to poorer memory, slower processing and lower wellbeing, with the relationship visible in the structure of the brain itself.

(Li, Sahakian and colleagues, *Nature Aging*, 2022; UK Biobank study of sleep, cognition and brain structure)

Seven hours, regularly, well-protected. That simple target, supported by some of the largest studies ever conducted, is the thread that runs through this book. In the chapters ahead we will see why it matters so much, what goes wrong when it slips, and how to protect it through the decades when it becomes harder to come by.

Pause and Reflect

Think of the people you know who have aged especially well, sharp and sprightly into their later years. You may not know how they slept. But the odds are good that, by luck or by design, they protected their nights better than most.

PART ONE

How Sleep Changes as We Age

Chapter 1: What Happens to Sleep as the Years Pass

Meet Geoffrey

Real-World Story

Geoffrey, 72

Geoffrey told me, with some resignation, that he had “stopped being a sleeper.” He woke two or three times a night, was up for the day by five, and rarely felt he had slept deeply. “It’s just my age,” he said. He was half right. His sleep had changed with age, as everyone’s does. But he had assumed nothing could be done, and that assumption was costing him far more than the sleep itself.

Sleep does genuinely change as we grow older, and it helps to know what is normal so you can tell it apart from what is treatable. With age, sleep tends to become lighter and more easily interrupted. The deep, slow-wave sleep that dominates youth declines, so a smaller share of the night is spent in the most restorative stage. The body clock also tends to shift earlier, which is why many older people grow sleepy in the evening and wake before dawn.

These shifts are real, and to a degree they are simply part of the journey. But here is the crucial distinction. Lighter sleep and earlier timing are normal. Feeling exhausted, unrefreshed and foggy is not. When older people feel genuinely sleep-deprived, the cause is usually not age alone but the things that gather with age: pain, an over-full bladder, medications, worry, too little daylight, and conditions such as sleep apnoea that go unrecognised. Almost all of these can be addressed.

Lighter sleep with age is normal. Feeling worn out by day is not. The difference is where the opportunity lies.

Sammy’s Tip

If your sleep has changed with age, separate the two questions. Is your sleep simply lighter and earlier, which is normal, or do you feel genuinely unrefreshed and tired through the day, which is worth investigating? The second deserves a proper look, not a resigned shrug.

Chapter 2: The Myth That Older People Need Less Sleep

It is one of the most persistent beliefs in all of health: that the need for sleep falls away in later life, so that five or six hours is plenty once you are past a certain age. It is also, on the best evidence, untrue. What changes with age is not the body's need for sleep. It is the body's ability to generate it.

The need remains. Adults of all ages do best on something in the region of seven hours. What happens in later life is that achieving those hours becomes harder, because the machinery that produces deep, consolidated sleep grows less efficient. The older person who sleeps only five hours is not a person who needs less. They are, very often, a person who is being short-changed by a system that no longer delivers sleep as readily as it once did.

This distinction matters enormously, because if you believe you need less sleep, you will not try to protect it, and you will mistake a solvable shortfall for an unchangeable fact of age. The truth is more hopeful. The need is still there, which means the effort to meet it is still worthwhile, and the methods that help younger people sleep can help older people too.

Research Evidence *Nature Communications, 2021*

In a study following nearly eight thousand adults for twenty-five years, those who slept six hours or less in their fifties and sixties had a higher risk of developing dementia than those who slept around seven. Persistently short sleep across midlife was associated with roughly a thirty per cent greater dementia risk.

(Sabia and colleagues, *Nature Communications*, 2021; the Whitehall II cohort)

That finding, from one of the longest studies of its kind, is a powerful argument against the myth. If older adults truly needed less sleep, short sleep would be harmless. Instead, sustained short sleep in midlife was linked to one of the outcomes we fear most. The need does not retire when we do.

Pause and Reflect

Have you ever told yourself, or been told, that you need less sleep now that you are older? Where did that idea come from? It is worth questioning, because believing it may be quietly stopping you from claiming sleep you genuinely need.

PART TWO

Sleep and the Ageing Brain

Chapter 3: The Brain's Nightly Wash

Of all the discoveries in sleep science this century, few are as striking as this: the brain appears to clean itself, and it does so chiefly at night. During waking hours the brain, like any hard-working organ, produces metabolic waste. It has no lymphatic system of the conventional kind to carry that waste away. Instead it relies on a network that becomes far more active during sleep, when the spaces between brain cells widen and fluid washes through, flushing out the debris of the day.

Among the substances cleared in this nightly wash are proteins that, when they accumulate, are implicated in Alzheimer's disease. This is why the link between sleep and the ageing brain is so biologically plausible. If sleep is when the brain takes out its rubbish, then year upon year of short or broken sleep may allow that rubbish to build, with consequences that take decades to surface.

Research Evidence *Science, 2013, and subsequent work*

Foundational experiments showed that the clearance of waste products from the brain increases markedly during sleep, as the fluid-filled spaces around brain cells expand. Later research has continued to explore how disrupted sleep may impair this clearance and allow Alzheimer's-related proteins to accumulate, though the precise picture in humans is still being mapped.

(Xie and colleagues, *Science*, 2013; with continuing investigation through 2022 to 2026)

I am careful here, because the science is still developing and the full story in living humans is not yet settled. We should not overstate it. But the direction of the evidence is consistent and sobering, and it gives a concrete, physical reason to take sleep seriously as a form of long-term brain care. You cannot see the cleaning happen. That does not mean it is not happening, or that it does not matter when it fails.

Sleep may be when the brain rinses itself clean. Miss enough of it, across enough years, and the debris has a way of staying.

Sammy's Tip

Think of a good night's sleep as maintenance for your brain, not a luxury. Framing it that way, as essential upkeep rather than indulgence, makes it far easier to give your nights the priority they deserve.

Chapter 4: Memory, Cognition and the Long Road to Dementia

Beyond the nightly clean, sleep does specific work for the mind. It is during sleep, particularly its deeper stages, that the day's experiences are sifted and the ones worth keeping are moved into long-term storage. This is why a night of poor sleep leaves you not only tired but forgetful, and why, over many years, chronic poor sleep is associated with steeper cognitive decline.

The studies we have already met point the same way. Around seven hours is associated with the best cognitive performance, while both too little and too much track with worse memory and slower thinking. Sustained short sleep in midlife is linked to greater dementia risk in later life. Taken together, they suggest that protecting sleep across the middle decades is one of the few things within our control that may shift the long odds of cognitive ageing.

None of this means a bad night will harm your brain, nor that good sleep alone will prevent dementia, which has many causes, a number of them beyond our influence. The honest message is one of contribution, not guarantee. Sleep is one ingredient among several, alongside staying physically and socially active, managing blood pressure and hearing, and not smoking. But it is an ingredient too often left out of the recipe entirely, and it deserves its place.

Research Evidence *Nature Aging, 2022*

The same large analysis that identified seven hours as optimal also found, in its longitudinal data, that both insufficient and excessive sleep were associated with a measurable decline in cognition over the follow-up period, reinforcing that the relationship is not merely a snapshot but unfolds over time.

(Li and colleagues, *Nature Aging*, 2022)

Pause and Reflect

If protecting your sleep across the coming years could meaningfully support the mind you want to keep, what would you be willing to change tonight? Sometimes naming the stakes is what turns good intentions into action.

PART THREE

Sleep, the Body and the Years

Chapter 5: Inflammation, Immunity and Healing

As we age, the body tends to drift into a state of low-grade, simmering inflammation, a process so characteristic of ageing that researchers have given it a name that blends the two words together. This quiet inflammation is not innocent. It is implicated in heart disease, in diabetes, in frailty, and in the slow erosion of many tissues. And one of the things that feeds it, reliably, is poor sleep.

Short and broken sleep pushes the body towards a more inflammatory state and shifts immune function in unhelpful directions. In youth there is enough reserve to absorb this. In later life, when inflammation is already elevated and the immune system is already less nimble, the added burden of poor sleep matters more. It is one reason older people who sleep badly seem to catch more, heal slower and recover less completely.



Research Evidence *Sleep, 2015, and related immunology*

In a study where healthy adults were exposed to a cold virus under controlled conditions, those who had been sleeping less than six hours were several times more likely to fall ill than those sleeping more than seven. Sleep measurably shaped the body's defence against infection.

(Prather and colleagues, Sleep, 2015; with continuing work on sleep and immunity through 2022 to 2026)

The practical lesson is that protecting sleep is, in part, protecting your immune resilience and your capacity to heal, both of which become more precious with each passing year. When you are recovering from an illness, an operation or an injury, the night is not downtime. It is when much of the actual repair is scheduled. Guard it accordingly.



Sammy's Tip

When you are unwell or recovering, treat sleep as part of the treatment, not an interruption to it. Give yourself permission to rest more than usual. Your immune system does much of its best work while you are asleep.

Chapter 6: Muscle, Bone and the Risk of Falls

Meet Pauline

Real-World Story

Pauline, 78

Pauline had had a fall, and she was frightened of another. What struck me, visiting her, was how poorly she was sleeping, kept awake by hip pain and then dozing in her chair all afternoon. She had lost strength and confidence together. We tend to treat falls as a problem of balance and muscle alone. In Pauline's case, the broken nights were sitting quietly underneath all of it, sapping the strength, the alertness and the steadiness she needed to stay on her feet.

Muscle is the great protector of later life. It keeps us strong, mobile, metabolically healthy and steady on our feet. From midlife onwards, muscle is gradually lost unless we work to keep it, a process that, taken far enough, becomes the frailty that robs people of their independence. Sleep, it turns out, has a real part to play in preserving it.

During deep sleep the body releases the largest pulse of growth hormone of the day, the hormone that drives the repair and maintenance of muscle and bone. Short sleep shifts the body into a breaking-down state, raising stress hormones and lowering the building ones, which makes muscle harder to keep and easier to lose. For an older person already fighting the slow tide of muscle loss, poor sleep is an extra current pulling the wrong way.

Research Evidence *Physiological Reports, 2021*

Even a single night of sleep deprivation reduced the rate at which young, healthy adults built new muscle protein by around eighteen per cent, while raising the stress hormone cortisol and lowering testosterone. Sleep loss tipped the body, in a single night, towards breakdown rather than build-up.

(Lamon and colleagues, *Physiological Reports*, 2021)

Then there is the matter of falls themselves. A poorly slept body is a less steady one: slower to react, foggier in judgement, weaker in the legs. Daytime drowsiness and the grogginess that can follow certain sleeping medications add their own risks. Protecting sleep, and being cautious with sedatives, is therefore part of staying upright, not a separate concern from it.

Strength is built and bone is maintained in deep sleep. Lose the sleep, year after year, and you are quietly working against your own scaffolding.

Sammy's Tip

Pair good sleep with gentle, regular resistance work, even using your own body weight, to protect muscle as you age. The two reinforce one another: movement deepens sleep, and sleep helps the body make the most of the movement.

Chapter 7: The Heart, Metabolism and the Power of Regularity

The heart and the metabolism feel the effects of sleep as keenly as the brain. Short and disrupted sleep is associated with higher blood pressure, poorer blood sugar control and greater cardiovascular risk. As these risks naturally rise with age, the contribution of sleep becomes more, not less, worth attending to. But the most useful recent insight is not about how much you sleep at all. It is about how regularly.

For years the entire conversation centred on duration: hit your hours and you are done. Newer research has revealed that the consistency of your sleep, going to bed and waking at similar times, may matter even more than the total. This is encouraging news, because regularity is often easier to improve than duration. You may struggle to add an hour to a stubborn night, but you can usually steady the times at which the night begins and ends.

Research Evidence *Sleep, 2024*

In a study of more than sixty thousand adults, sleep regularity, the day-to-day consistency of sleep and wake times, was a stronger predictor of all-cause mortality than sleep duration. People with more regular sleep patterns lived longer, and the finding held after careful adjustment for other factors.

(Windred and colleagues, *Sleep*, 2024; 47(1), regularity and mortality)

If you take one structural change from this book, let it be this: anchor your sleep. A steady bedtime and a steady rising time, held to within a reasonable window every day, may do more for your long-term health than any amount of fretting over the perfect number of hours. The body loves a rhythm, and rewards those who keep one.

Pause and Reflect

How regular are your nights, really? Many people who believe they sleep badly are in fact sleeping irregularly, their bodies never sure when the night will begin. Steadying that rhythm is often the single most effective change available.

PART FOUR

Sleeping Well in Later Life

Chapter 8: The Common Disrupters and What to Do

If feeling tired by day is not a natural part of ageing, then something is causing it, and in later life the usual suspects are well known. Identifying which apply to you is the first step, because most of them can be eased.

Pain is among the commonest, with aching joints and stiff backs making it hard to settle and easy to wake. Treating the pain, and finding supportive sleeping positions, often improves the sleep directly. A frequent need to pass urine breaks many an older night, and is worth raising with a doctor rather than accepting, since it has treatable causes. Some medications interfere with sleep, and a review of what you take, and when, can make a real difference.

Two disrupters deserve special mention. The first is sleep apnoea, in which breathing repeatedly pauses during the night. It becomes more common with age, is frequently missed, and leaves people exhausted and foggy despite hours in bed. Loud snoring, gasping and unrefreshing sleep are warning signs worth investigating, because effective treatment exists. The second, for many women, is the menopausal transition and beyond, when hot flushes and hormonal change can fragment sleep for years. This too can be addressed, and is worth a frank conversation rather than silent endurance.

Finally, there is the trap of too little daylight and too much daytime dozing. Older people often spend less time outdoors, which weakens the light signals that keep the body clock strong, while long afternoon naps in the chair steal from the night. More daylight, especially in the morning, and shorter, earlier naps if any, both help restore a robust day-night rhythm.

Sammy's Tip

Make a short list of which disrupters might apply to you: pain, the bladder, medications, possible apnoea, menopausal symptoms, too little daylight, too much daytime dozing. Take the list to your GP. Several of these are eminently treatable once named.

Chapter 9: A Gentle Plan for Better Nights

Here are the foundations of good sleep in later life. None of them is dramatic. Together, kept up, they make a genuine difference, and they work with the ageing body rather than against it.

- Anchor your rhythm. Go to bed and rise at similar times every day. Regularity may matter more than duration.
- Chase the daylight. Get outside in natural light, especially in the morning. Light is the strongest signal keeping your body clock steady.
- Keep moving. Regular activity, including gentle strength work, deepens sleep and protects the muscle that keeps you independent.
- Mind the naps. If you nap, keep it short and early. A long afternoon doze borrows from the coming night.
- Review the disrupters. Treat pain, raise a troublesome bladder with your doctor, check medications, and investigate snoring or unrefreshing sleep.
- Calm the evening. Dim the lights, ease off bright screens, and keep the bedroom cool, dark and quiet.
- Be wary of quick fixes. Alcohol fragments sleep, and many sleeping pills bring grogginess and fall risk. For long-term insomnia, the most effective treatment is not a tablet.

That last point deserves emphasis. For persistent insomnia at any age, the treatment with the best evidence is not a sedative but a structured talking therapy, cognitive behavioural therapy for insomnia, often shortened to CBT-I. It retrains the habits and thoughts that keep insomnia alive, it works as well in older adults as in younger ones, and unlike pills it carries no grogginess and no fall risk. It is widely available, including in self-guided forms, and it deserves to be the first thing tried, not the last.

Research Evidence *Sleep medicine, 2014 onwards*

Trials in older adults have shown that cognitive behavioural therapy for insomnia improves sleep and reduces markers of inflammation, performing as well as or better than alternatives without the side effects of sedative medication. It is recommended as the first-line treatment for chronic insomnia across age groups.

(Irwin and colleagues and subsequent guideline-level evidence, with continuing trials through 2022 to 2026)

It is never too late to sleep better. The night you protect tonight is an investment in the person you will be for years to come.

Pause and Reflect

As you close this guide, choose one foundation from the list above to begin with this week. Just one. Ageing well is not built in a single grand gesture, but in small, steady nights, kept up with kindness over time.

Your Sleep and Ageing Cheat Sheet

One page to keep by the bed. The night is where much of healthy ageing happens.

- Aim for around seven hours. It is the duration linked to the best brain and body ageing.
- Older people need just as much sleep. What changes is the ease of getting it, not the need for it.
- Lighter, earlier sleep is normal with age. Feeling exhausted by day is not, and is worth investigating.
- Regularity may matter more than duration. Anchor your bedtime and waking time every day.
- Sleep is when the brain clears its waste and files its memories. Protect it as brain maintenance.
- Sustained short sleep in midlife is linked to higher dementia risk. The middle decades count.
- Deep sleep builds muscle and bone and steadies you on your feet. It helps protect against falls.
- Chase morning daylight and keep moving. Both strengthen the rhythm that drives good sleep.
- Investigate snoring, a troublesome bladder, pain and medications. Most disrupters are treatable.
- For lasting insomnia, the best treatment is CBT-I, not sleeping pills. Ask about it.

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A selection of the peer-reviewed research underpinning this guide, drawn principally from 2022 to 2026 alongside a small number of landmark earlier studies.

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About Sammy Margo

Sammy Margo MSc MCSP HCPC MMACP AACP is a Chartered Physiotherapist with over 30 years of clinical experience, including as the first female physiotherapist in English professional football. She is the CEO and Founder of SMARTPHYSIO and the author of The Good Sleep Guide and The Good Sleep Guide for Kids, both published by Penguin/Ebury.

Much of Sammy's work is delivered in people's own homes, where she has spent decades seeing first-hand how sleep, movement and the everyday environment shape healthy ageing. She is widely recognised as one of the UK's leading voices on sleep, recovery and the physiology of rest, combining rigorous clinical expertise with a warm, practical approach to helping people understand and improve their own wellbeing.

The Good Sleep Guide for Aging joins a growing series of evidence-based guides exploring the science of sleep across different areas of life, alongside The Good Sleep Guide for Beauty, The Good Sleep Guide for Travel, The Good Sleep Guide for Pain, and others.

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