

The lie-in costs more than it gives

A short book about sleeping late at weekends and feeling jet-lagged every Monday

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First edition

Written by AI with human guidance. It can contain mistakes, which later editions correct.

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Before you start

This is a short book and you can read it in two sittings. It's about one habit, and the habit looks like rest. You get up at half past six all week, and on Saturday you sleep until half past nine, and on Sunday until ten, and by Sunday evening you feel better than you have all week. Then Sunday night you can't get off, and Monday morning the alarm sounds like an accusation, and you spend Monday and most of Tuesday feeling as though you've flown in from somewhere three time zones away. By Wednesday you're right again. By Friday you're tired, and the lie-in seems earned, and round it goes.

I'm going to argue three things. The first is that the habit makes sense from the inside. You are short of sleep by Friday, and sleeping longer is the obvious repair, and the weekend is the only time you can do it. The second is that the lie-in gives you less than it seems to and costs more than it seems to, and there's research on why. A late weekend doesn't only pay back sleep. It moves your body clock later, by something like half an hour to three quarters of an hour over two nights, and on Sunday night your body is being asked to sleep at what it now thinks is half past nine. The Monday feeling is that shift showing itself. Researchers have a name for the gap between your weekday and weekend sleep, and the name is social jet lag, and it isn't a figure of speech. The third is practical. The fix is not less sleep. It's getting up within an hour of your weekday time on both weekend days, getting outside into daylight

soon after, and moving the extra sleep you need to the front of the night instead of the end of the morning. Chapters 16 to 19 cover how.

This book doesn't think you're lazy for sleeping in, and it doesn't think mornings are virtuous. Chapter 7 is about the real need the lie-in serves, and chapter 11 is about why a fixed wake time is less grim than it sounds.

Three cautions.

If you do shift work, or you're up in the night with a baby or a small child, or you care for someone who wakes, the rule in this book may not fit your week, and chapter 20 says what does.

If you regularly find it hard to get to sleep or stay asleep, and it's been going on for months and it's affecting how you cope in the day, the NHS says to see a GP, because that's insomnia and it has its own treatment, and a regular wake time is part of that treatment but not the whole of it.

And if you sleep late at weekends because you can't face getting up, and that's been true most days for a fortnight or more, the NHS says to see a GP about your mood, and the weekend can wait until you have.

The notes at the back give my sources and their limits. Where I'm giving my own reasoning and not a finding, I'll say so.

Sunday night, Monday morning

It's Sunday night and it's twenty past eleven and you're not asleep. You went up at half past ten because it's a school night, and you've been lying there since, and the more you think about needing to sleep the less it happens. You've checked the phone twice. You've done the arithmetic about how many hours you'll get if you drop off now, and then again five minutes later with a smaller number. At some point you go, and at half past six the alarm goes off in what feels like the middle of the night, and you get up feeling thick and slow and slightly sick, and you stay that way until about eleven, and Monday is a day you get through rather than have.

Rewind to Friday. You were tired on Friday. You'd had five nights of half past six and five days of work, and you were running on coffee by Thursday afternoon, and by Friday evening you were on the sofa with a glass of something, and the one thing you were looking forward to was not setting the alarm. Saturday you woke at half past nine, and lay there another half hour because you could. Saturday night was a late one because there was no reason for it not to be. Sunday you woke at ten and felt, for the first time all week, properly rested. You had a slow breakfast. It was lovely. And then it was Sunday night and twenty past eleven and you weren't asleep.

These details are invented, but I'd guess yours are close. Some words. **The short week** is the five weekday nights on which you sleep less than you need. **The lie-in** is the weekend morning you sleep past your weekday time, and **the late night** is its partner, the Friday or Saturday you go to bed later because you can. **The drift** is

what the lie-in and the late night do to your body clock, which chapter 4 is about, and which is measurable. **The Monday** is the state you're in on Monday morning, and often Tuesday too, and this book will argue that most of it is the drift and not the job. **The Sunday-night wait** is the lying awake. **The wake time** is the time you get up, and the method in this book turns on holding it steady. **The window** is the hour of slack the wake time is allowed at weekends. And **the daylight walk** is what happens within an hour of getting up on Saturday and Sunday, and chapter 16 says why.

Before you go on, do one thing. Write down what time you got up on each of the last seven days, as near as you can remember. Then write down what time you went to sleep, roughly. Look at the difference between the middle of your sleep on a weekday and the middle of it at the weekend. If it's more than an hour, this book is about you. If it's more than two, chapter 10 has something to tell you.

Why the lie-in seems right

Before taking the lie-in apart, it's worth saying plainly what it's for, because it isn't for nothing. There are five things it seems to give, and the first four are real needs.

The first is sleep. You are short of it by Friday. That's not an illusion, and chapter 3 is about how real the shortfall is. If you've slept six and a half hours a night for five nights and your body wants eight, you're several hours down, and sleeping late is the most obvious way to put some back.

The second is the absence of the alarm. Being woken by a noise at a time you didn't choose, five days running, is a small daily violence, and the pleasure of waking without it is partly the pleasure of not being told what to do. Chapter 7 is about this, and the answer isn't to dismiss it.

The third is time with nobody wanting anything. For a lot of people the weekend morning in bed is the only hour of the week that belongs entirely to them. No emails, no children yet, no list. Lying there awake at nine on a Saturday with nothing required is a kind of rest that isn't sleep, and it's worth having.

The fourth is the feeling on Sunday afternoon. After two long nights you feel, by Sunday lunchtime, like a person again. The fog lifts. That feeling is genuine and it's what you remember on Friday when you decide not to set the alarm.

The fifth is the belief that the two things are unrelated, that Monday is bad because Monday is bad, and the weekend was separate and good. This is the one that isn't true, and the whole book is really about it. The Sunday afternoon feeling and the Monday morning feeling are two ends of the same thing. The lie-in produces both.

None of the first four needs goes away when you change the habit. You still need the sleep, and this book will argue you get more of it, not less. You still need a morning without an alarm, and you can have one, at a time your body clock can afford. You still need the hour that belongs to you. What changes is where in the weekend those things sit, and whether you pay for them on Monday.

An earlier book in this series, *You were tired at ten*, is about staying up late on weeknights for time of your own, and it's the other half of the short week. This book is about what you do at the weekend with the shortfall the week left you.

"I'm catching up on sleep"

You are, partly. It's worth being accurate here because the usual version of this argument overreaches, and once you've seen it overreach you stop trusting the rest.

The shortfall is real. Hans Van Dongen and colleagues kept forty-eight healthy adults in a laboratory for two weeks on four, six or eight hours in bed a night, and the people on six hours, which is a very ordinary weekday amount, built up deficits in attention and reaction time across the fortnight that by the end matched two nights with no sleep at all. The striking part was that they didn't feel it. Their ratings of their own sleepiness rose in the first few days and then more or less levelled off, while their performance kept falling. So if you feel roughly fine on Thursday, that's not evidence you're fine.

And extra weekend sleep does put some of it back. Christopher Depner, Kenneth Wright and colleagues put healthy young adults through five short nights, then two nights of sleeping as long as they liked, then two more short nights, against a group that was short all nine nights. Over the weekend the catch-up group slept about an hour and ten minutes more than their baseline, and their late-evening eating, which sleep loss had pushed up, came back down. So far so good, and that's the part you feel on Sunday.

Then the week started again. In the short nights after the weekend, the catch-up group's body clocks had shifted later, their evening eating and weight went back up, and their insulin sensitivity fell by somewhere between nine and twenty-seven per cent depending

on the measure, which was no better and by some measures worse than the group that never got a weekend at all. The authors' conclusion was that weekend recovery sleep is not an effective way to prevent the metabolic effects of a repeatedly short week. This was a small study of healthy young people and the numbers matter less than the shape. The weekend put back an hour. It didn't put back the week, and it moved the clock.

Shingo Kitamura and colleagues found something related from a different direction. They estimated each person's optimal sleep length by letting them sleep as long as they wanted for several days in a laboratory, worked out how far short of it their normal life fell, and found that even one hour of that shortfall took about four days of extended sleep to recover from. Two mornings can't do the job of four days. So yes, you're catching up. You're catching up on some of it, by a method that makes next week's shortfall bigger.

"It's only a couple of hours"

It's only a couple of hours in the same way that a flight from London to Athens is only a couple of hours. Your body clock doesn't measure the number. It measures the timing.

The mechanism is this. You have an internal clock, and it runs on a cycle a little longer than a day, and it's held to twenty-four hours mainly by light, by when you see it and when you don't. Sleep late and you see morning light two or three hours later than usual, and you're awake and lit up later into the evening, and the clock takes that as a signal to run later. It's a small nudge, but it's a nudge in the same direction two nights running.

Yang, Spielman and colleagues tested exactly the pattern in this book. Ten healthy young adults had their sleep times pushed two hours later on Friday and Saturday night, to copy an ordinary weekend, and the researchers measured the timing of their melatonin rise, which is the body's own marker of when night begins. After the weekend it came about thirty-two minutes later. That's from two hours of lie-in for two nights. On Sunday night the participants took longer to fall asleep, and on Monday morning they were sleepier. A single dose of melatonin on Sunday afternoon reversed it, which is interesting and not something I'd suggest, but which shows the mechanism is the clock and nothing else.

Stephanie Crowley and Mary Carskadon did the same with older teenagers, who go to bed an hour and a half later and get up three hours later on a typical weekend, and the clock moved by about

forty-five minutes over two nights. Teenagers' clocks run later anyway, so the effect may be bigger in them, but the direction is the same.

So take half an hour to three quarters of an hour as the size of the drift from a normal weekend, in a study, with the numbers as they are. Now put yourself in bed on Sunday night at half past ten. Your clock thinks it's ten, or a quarter to. You're being asked to sleep before your own night has started, and that's why you're staring at the ceiling, and that's why Monday's alarm at half past six arrives at what your body counts as six, or a quarter to. The tiredness isn't the two hours you didn't sleep on Sunday. It's the thirty or forty minutes you're now out of step, on top of a short night, and it takes a couple of days of getting up early to pull the clock back, which is why Wednesday is the first normal day.

"I haven't been anywhere, so it isn't jet lag"

The phrase social jet lag was coined by Marc Wittmann, Till Roenneberg and colleagues in 2006, and they meant it literally. Jet lag is what happens when your body clock and the clock on the wall disagree, and it doesn't matter whether the disagreement came from an aeroplane or a duvet. They measured it as the difference between the middle of your sleep on work days and the middle of it on free days, and they found that most people in their sample of five hundred had some, and late types had most, because the late types were the ones the weekday alarm hurt most and who caught up hardest at the weekend.

That paper wasn't about tiredness. It was about what went with the gap. The people with more social jet lag reported worse sleep quality and lower wellbeing, and were much more likely to smoke, and the researchers argued that these tracked the misalignment itself rather than simply being a feature of night owls. It was a survey, and a survey can't say which way the arrow points, and I'll keep saying that because it's true of most of this literature. But it named the thing accurately.

Here is the honest way to picture your week. Monday to Friday you live in one time zone. Friday night you fly east by two hours, without moving, and spend the weekend there. Sunday night you fly back. Nobody would expect to feel sharp on Monday after that itinerary if it involved an airport, and the only reason you expect it of yourself is that it didn't. This is the one analogy in this book and

I'll drop it now. The point is that the Monday isn't a mystery, and it isn't a character flaw, and it isn't the job. It's a schedule you'd recognise instantly if someone described it as travel.

There's a further honesty owed. The body clock's response to a weekend is not as large as a real two-hour flight, because you didn't shift your light all day, only in the morning and evening, and the studies in chapter 4 found roughly a third to half of the full two hours. That's why the Monday is a bad morning rather than a lost day. But it's also why it's so easy to miss the cause. A half-hour shift is enough to wreck Sunday night and Monday morning and small enough to blame on something else.

"Monday is bad for everyone"

Monday has a reputation, and some of it is earned. It's the day the emails have piled up, the day the week's problems are all still ahead, and the day after two days off in which you remembered what you're like when you're not working. Nobody would claim that fixing the lie-in makes Monday a delight.

But separate two things. There's the Monday you'd have anyway, which is a workday after a rest, and there's the Monday you have, which is a workday after a rest with a body clock forty minutes out and a short night behind you. The first is a mood. The second is a physical state, and it looks like the first from the inside, which is how it hides. Thick head, slow thinking, a faint nausea, the third coffee by ten, irritability with people who've done nothing. That's not the emails. Those symptoms are what a shifted clock feels like, and you can check the claim by thinking about how Wednesday feels, which is a workday with the same emails and no drift.

Here's a test you can run this week without changing anything. Rate how you feel at nine on Monday, out of ten, and again at nine on Wednesday. Then do it the week after. If Wednesday beats Monday by more than a point or two, week after week, the difference isn't the work, because the work is the same. It's the schedule you kept on Saturday and Sunday.

There's a second thing hidden in the reputation. Because everyone has a bad Monday, the badness reads as normal and shared, and there's a kind of comfort in that, the office joke, the mug. It's the same comfort that lets any common habit go unexamined. Lots of

people have it, so it must be the weather. In fact lots of people have it because lots of people sleep late at the weekend, and the ones who don't, the ones with dogs and small children and early trains, don't tend to get the joke.

I'll say the interpretation plainly, since it's mine. The Monday is partly made on Saturday morning. Not all of it. But the part that's a physical state rather than a mood, and that's the part that makes the mood worse.

"It's the only time nobody needs anything from me"

This is the objection that deserves the most respect, because it's the one that isn't really about sleep.

For a lot of people the lie-in isn't nine hours of unconsciousness. It's seven hours of sleep and two hours of lying there. Half awake, warm, unbothered, no list. Perhaps the phone, perhaps a book, perhaps nothing. If you've got children it may be the only two hours in the week when they're occupied elsewhere and you're not on duty. If you live alone it may be the only stretch when you're not performing for anyone. That's a real need, and telling you to get up and go for a brisk walk at seven is the kind of advice that gets a book thrown across a room.

So don't lose the hour. Move it. What the hour needs is that nobody wants anything from you, and that you're not required to be anywhere. It doesn't need to be at nine, and it doesn't need to be horizontal. It can be seven, with the curtains open and a mug, in the same bed or a chair by a window, with the same book and the same nothing. What your clock needs is light and an upright body at something close to the weekday time. What you need is unclaimed time. Those two things aren't in conflict. The conflict was only ever between unclaimed time and darkness, and the darkness was never the point.

If the house is the problem, if getting up means being found and asked for things, then the hour is a negotiation, not a sleep question, and it's worth having out loud. Saturday from seven to

eight is mine, and I'll be in the kitchen or the garden and I'm not to be asked for anything unless there's blood. Most households can grant that, and the ones that can't have a different problem that this book can't solve.

There's one more thing the lie-in gives that's worth naming, and that's the absence of the alarm, the waking naturally. That's a pleasure and you can keep it. Chapter 17 is about a wake time held within a window, and inside that window you can wake as your body wakes, without a noise. What you give up is the extra two hours beyond the window, and I'd guess that when you look closely, those two hours were mostly the lying there, which you can have with the light on.

"I'm a night owl, it's just how I'm made"

Chronotype is real. People differ, partly by genes, in when their clock wants to sleep, and the late types aren't being difficult. If your body wants to sleep from one until nine and your job wants you up at half past six, you are going to be short all week and you are going to catch up at the weekend, and that's exactly what Wittmann and colleagues found. Late types had the most social jet lag, because they had the most to catch up.

But look at what follows. If you're a late type, the weekend drift moves you later still, because your clock is already inclined that way and you've just told it to go further. Monday then hurts you more than it hurts an early type, not less. The lie-in feels most natural to precisely the people it costs most. That's not a moral point. It's arithmetic. The further your clock sits from the weekday alarm, the more the weekend widens the gap and the harder Monday pulls it back.

And chronotype is less fixed than it feels. Kenneth Wright and colleagues took people camping for a week in summer with no electric light, and everyone's clock moved earlier, by about two hours on average, so that their internal night began near sunset and ended before they woke. The people who moved most were the late types. Ellen Stothard and colleagues then did it for a single weekend and got about two thirds of the shift. The finding I take from this isn't that you should camp. It's that a good part of what feels like being made a night owl is the modern light pattern, dim

days indoors and bright evenings, and that it moves quickly when the light changes. Your clock wasn't built to want one in the morning. It's been taught.

So if you're a genuine late type, everything in this book applies with more force and a little more gentleness. The fixed wake time will feel harder for the first couple of weekends. The daylight walk in chapter 16 will do more for you than for anyone. And you'll want to be honest about the late night, the Friday and Saturday bedtime, because for a late type the bedtime drifts as readily as the morning, and the morning can't be held if the night keeps sliding.

What this book doesn't say is that you should become a morning person. You should become a person whose clock is in the same place on Monday as it was on Friday. Where that place is, within reason, is your business.

"I feel great on a Sunday"

You do, and the feeling is the most persuasive thing the habit has, so it needs a proper look rather than a dismissal.

By Sunday lunchtime you've had two long nights. Some of the short week's shortfall has been paid, as chapter 3 said, about an hour of it in the Depner study, and you've had a slow morning with no alarm, and it's the weekend. Of course you feel good. The question isn't whether the feeling is real. It's what it's evidence of.

It's evidence that you were short of sleep, and that two long nights helped. It's not evidence that the two long nights were the best way to get them, and it's not evidence that the feeling will last. Look at the shape of your week as a graph. Friday evening low, Sunday afternoon high, Sunday night bad, Monday low, Tuesday middling, Wednesday fine, then a slow decline to Friday. The Sunday peak is real and it's paid for by the Monday trough, and the two are about the same size, and you'd have neither with a flat schedule. What you'd have instead is a week that sits somewhere between them, a little lower than Sunday's peak and a lot higher than Monday's trough.

Here's the piece that's hard to feel from the inside. The Sunday-afternoon high isn't only recovery. Part of it is that at three on a Sunday your shifted clock is in its natural daytime, wide awake, well lit, because your night now runs later. You feel sharp on Sunday afternoon for the same reason you'll feel dreadful on Monday morning. The clock has moved, and on Sunday afternoon that's a tailwind. On Monday morning it's a wall.

I'd add an observation, and it's mine rather than a finding. People who hold a steady wake time through the weekend don't report a Sunday peak, and they don't miss it, because there's nothing to peak from. Their Saturday morning feels like their Wednesday morning, which for most of them is fine, and the weekend feels like two days off rather than two days of recovery. If that sounds flat, ask yourself what you'd trade for a Monday that felt like a Wednesday. I think most people, put the choice that way, would trade the Sunday high without much regret.

"It's two mornings a week, what harm can it do"

The Monday is the cost you feel. There's a set of costs you don't, and they've been studied, and the honest version of the findings is worth having, including the part where I tell you what they can't show.

Till Roenneberg and colleagues, in a very large survey, found that social jet lag went with a higher body mass index, and that this held after allowing for how long people slept. Parsons and colleagues looked at the Dunedin cohort, about eight hundred adults who weren't shift workers, and found social jet lag associated with clinically measured markers of metabolic trouble, and highest among people who were both obese and metabolically unwell. Patricia Wong and colleagues studied about four hundred and fifty midlife day workers and found that a larger gap between weekday and weekend sleep went with lower good cholesterol, higher triglycerides, higher fasting insulin and more body fat, after adjusting for sleep quality, sleep length, mood and health behaviour. Femke Rutters and colleagues, in a smaller study of healthy adults, found that people with two hours or more of social jet lag had higher cortisol, a higher resting heart rate and were less active than people with an hour or less. And Rosa Levandovski and colleagues, in a rural Brazilian sample of four thousand, found depression scores higher in people with more than two hours of it.

Now the limits. Every one of those is a snapshot. They show that people with a big weekend shift tend also to have worse numbers. They don't show that the shift caused the numbers. It could run partly the other way, or both could come from something else, a

late chronotype, a stressful job, drink. The authors say so themselves. The Depner experiment in chapter 3 is the one place where the weekend pattern was imposed on people and the metabolic effect followed, and it was small and short.

So here's what I'd say, and it's an interpretation. The two hours a weekend isn't obviously harmless. The pattern that goes with it is consistently a bad one across several countries and several kinds of measurement, and the one experiment that tested it points the same way. That's not proof, and I won't tell you the lie-in is giving you diabetes. What I'll say is that the thing you're doing to feel better on Sunday keeps company with things you'd rather not have, and the one cost you can see, the Monday, is probably not the only one.

"Getting up at the same time every day sounds grim"

It sounds like a rule for a barracks. It's worth looking at what it actually gives, because regularity turns out to be doing more of the work than length.

Andrew Phillips and colleagues followed sixty-one undergraduates for a month with sleep diaries and built a measure of how regular their sleep was, day to day. The irregular sleepers weren't sleeping less. They were sleeping at different times, and their clocks had drifted nearly three hours later than the regular sleepers', their melatonin rising after midnight against half past nine, and their grades were lower. When the researchers modelled why, the main driver was light. Irregular sleepers got less contrast between bright day and dark night, and the clock, with less to hold on to, slid.

Jessica Lunsford-Avery and colleagues used the same measure in about two thousand older adults and found irregular sleep went with later timing, more daytime sleepiness, and worse numbers for weight, blood pressure and blood sugar, independently of how long people slept.

Again, snapshots. But take the shape. What the body clock wants is not a particular time. It's the same time. It's a mechanism for predicting when the day starts so that everything else, temperature, hormones, digestion, alertness, can be ready. Give it a consistent signal and it settles. Give it a signal that moves two hours every five days and it spends the week catching up.

Now the grimness. A fixed wake time is not a fixed life. It's one number. Everything after it is yours. You can get up at seven on a Saturday and do nothing until noon. You can eat breakfast in bed, or not eat breakfast. Nobody's asking you to be productive. The rule is about when your eyes open and the curtains do, and it's the least demanding rule in this series, because it asks for one act a day and then leaves you alone.

And there's a gift inside it that people don't expect. When the wake time is steady, the wake becomes natural. Within a few weeks most people find they're waking a few minutes before the alarm, at the weekend as well, and the alarm becomes a backstop rather than an assault. The thing you liked about the lie-in, waking on your own, is what a steady wake time gives you every day. What felt like the freedom of the weekend was really the freedom of waking without a noise, and that turns out to be available seven days a week, at the price of a schedule.

"If I get up early on Saturday I'll be wrecked all day"

You might be, the first Saturday. Let's look at why, and what to do about it, because this is the moment the habit reasserts itself.

If you've had five short nights, you get up on Saturday tired. That's the short week showing itself. The lie-in was hiding it, and now it isn't. The tiredness is real information and it's telling you the same thing the Van Dongen study told you in chapter 3, which is that six and a half hours isn't enough and you've been running a deficit that Saturday morning had been quietly disguising.

There are two things to do with a tired Saturday, and neither is to go back to bed at nine. The first is to hold the wake time and pay the debt from the other end, by going to bed early on Saturday night. An hour earlier than your weekday bedtime, on a night when nothing's required of you, is an hour of sleep that doesn't shift your clock at all, because the clock is set mainly by morning light and evening light, and an early night in the dark tells it nothing it didn't already know. Sleep at the front of the night is the same sleep as sleep at the end of the morning, without the drift. Chapter 18 is about this.

The second is a short nap, early in the afternoon, if you need one. I'll be careful here. Crowley and Carskadon tried a weekend schedule with teenagers that included an afternoon nap, and the clock still drifted, but their nap group also went to bed an hour and a half later than on weeknights, so the nap wasn't what moved the clock. The lesson is that a nap doesn't fix a late bedtime. It does

take the edge off a tired Saturday. Keep it to twenty or thirty minutes, before three, so it doesn't eat into the night, and note that the NHS advises people with insomnia not to nap in the day at all.

Then look at the second Saturday. If you've held the wake time both days of the first weekend and gone to bed earlier on the Saturday, your clock hasn't moved, and Monday was better, and the week that followed started from a better place. The second Saturday you're less tired than the first, because the week wasn't fighting a drift. By the third or fourth the Saturday tiredness is mostly gone, not because you've got tougher but because the debt you were carrying has stopped being made worse every weekend. The wrecked Saturday is a one-off, or a two-off. The wrecked Monday was weekly.

"The problem is the week, not the weekend"

There's a lot in this. The short week is the engine. If you slept enough Monday to Friday you'd have nothing to catch up on, and the lie-in would lose most of its pull. So why is this book about the weekend?

Because the two feed each other, and the weekend is the easier place to cut in. Here's the loop. The short week leaves you tired by Friday. You sleep late Saturday and Sunday to recover. The late mornings move your clock. On Sunday night you can't sleep at your weekday bedtime because your clock isn't ready. Monday you're short and out of step. Tuesday you're pulling the clock back. By Wednesday you're level and by Friday you're tired again, from the short nights, and also from the two days of correction the weekend cost you. Then you sleep late.

Fix the week and you break the loop at the top. But fixing the week means going to bed earlier on weeknights, which means giving up the late evening that the earlier book in this series, *You were tired at ten*, is entirely about, and which is hard, because that evening is the only time of your own on a weekday. Fix the weekend and you break the loop in the middle, and the fix is one number and a walk. It's cheaper. And it makes the week easier, because a Monday that starts level is a week that starts level, and a week that doesn't spend Monday and Tuesday pulling the clock back is a week with two fewer bad days in it.

There's also this. Even if you can't fix the week, the lie-in isn't the repair it looks like. The sleep it gives is real but it comes with the drift, and the drift costs some of what the sleep gave, as chapter 3 showed. An early night on Saturday gives the same hour without the cost. So the weekend fix isn't a substitute for a better week. It's the version of catching up that doesn't charge interest.

If you do want to fix the week, do it after this, not instead. Hold the wake time for a month and see what your week feels like when it isn't recovering from the weekend. You may find the week was less short than you thought, and that a fair share of the tiredness was drift and not hours. Or you may find you need another half hour a night, in which case you'll know, and it'll be a clean number rather than a fog.

What the lie-in costs you

Add it up, since the whole argument is that the price is hidden.

There's the Sunday night. An hour, sometimes two, of lying awake, at the worst possible moment, the night before the hardest morning, because your clock isn't ready. There's the Monday itself, which by the ratings in chapter 6 is likely to be a day at six or seven out of ten that could be an eight. There's Tuesday, which is usually most of the way back but not all. Call it a day and a half a week of running below your level, which is thirty per cent of your working week, every week, for years.

There's the Saturday morning. Two hours of it, unconscious or half so. If you're the person from chapter 7 who values the lying there, that's a real use of the time. If you're honest and it's mostly sleep you don't remember, then it's two hours of the freest morning of your week spent not having it.

There's what the drift does to Saturday and Sunday night. The late night and the lie-in push your clock later, so by Saturday evening you're not tired until later, so you stay up later, so Sunday's lie-in is longer, and the whole weekend runs on a timetable that has nothing to do with the one you'll wake to on Monday. Some people like a weekend that runs on a different clock. It's worth knowing that's what you've chosen and that it isn't free.

There are the numbers from chapter 10, which I'll repeat only to say again what they are and aren't. They're associations, not proof. But the pattern in your body of a shifting clock keeps company

with worse blood sugar, worse cholesterol, higher heart rate, higher weight and lower mood, in several countries, and the one experiment that imposed the pattern found the metabolic cost. I don't know what that means for you. Neither does anyone. It's a cost without a price tag, which is not the same as no cost.

And there's the thing you can't measure, which is the identity that grows around the Monday. The person who's no good until Wednesday. The mug, the joke, the third coffee. It's a small identity but it's a wrong one, because it makes a schedule into a character, and you'll carry it into every Monday for the rest of your working life unless you notice that it was Saturday's doing all along.

What it does to Sunday night

Sunday night deserves its own chapter, because it's where the habit does its most visible damage and where people most often blame the wrong thing.

You go to bed at half past ten, or eleven, because it's a school night. You've slept until ten that morning, so you've been awake for twelve or thirteen hours instead of your weekday sixteen, and your clock has moved forty minutes later over the weekend. Both of those mean you aren't ready. Sleep needs two things, a long enough stretch of being awake and a clock that says it's night, and on Sunday you have neither. So you lie there.

Then the mind gets involved. Lying awake at eleven on a Sunday, the thing to think about is Monday, and Monday is a day of things you haven't done yet, and now the wait has a content. It feels like dread. Some of it may be dread. But a good deal of what gets called the Sunday scaries is a body that isn't sleepy and a mind that's been handed an empty hour and a subject. The subject is available every night of the week. The empty hour is a Sunday thing, and the lie-in made it.

Then comes the phone, because you're awake and it's there, and the light and the content push the clock later still and give the mind more to do. Then it's midnight, and you've done the arithmetic about six and a half hours, and then six, and eventually you sleep, and the alarm at half past six arrives after five and a half hours on a clock that thinks it's a quarter to six.

An earlier book in this series, *Nothing gets solved at three in the morning*, is about the night mind and what it's worth, which is very little, and its advice for the awake hour holds here. But this book's point is that on Sunday you can stop the awake hour from arriving at all. Hold the wake time on Saturday and Sunday and the clock doesn't move. Get up at seven on Sunday and by half past ten you've been awake for fifteen and a half hours and your clock says night and you sleep. The Sunday-night wait isn't a fact about Sundays. It's what a lie-in that morning ordered for you, and if you don't place the order it doesn't come.

I'd add that a lot of people who think they have a Sunday-night sleep problem have a Sunday-morning one, and have been treating the wrong end.

Daylight is the lever

The method in this book has three parts and this is the first, because it does the most work for the least effort, and because almost nobody uses it.

Your clock is set by light. Not by the alarm, not by coffee, not by getting up as such. By the light that reaches your eyes and when. Light in the morning pulls the clock earlier. Light in the evening pushes it later. That's the whole mechanism, and everything else about weekend timing is downstream of it.

The camping studies in chapter 8 are the clearest demonstration. A week in natural light moved clocks about two hours earlier, a weekend moved them two thirds of that, and the people who moved most were the late types. And Victoria Revell, Helen Burgess, Charmane Eastman and colleagues showed the tool in a laboratory, with bright light on waking plus a wake time moved an hour earlier each day advancing the clock by about an hour and three quarters over three days, even before adding melatonin. Nobody's asking you to camp or to sit in front of a lamp. The point is the size of the effect and the speed of it, which is bigger and faster than most people would guess.

So here's the second part of the rule. Within an hour of getting up on Saturday and Sunday, get outside. Ten minutes will do something. Twenty is better. It doesn't need to be sunny. An overcast morning outdoors is many times brighter than a lit kitchen, and your eyes, not your mood, are what's counting. Walk

to a shop, stand in the garden with the coffee, take the dog, take the child, take the bins. What matters is that the light arrives at your weekday time and not two hours late.

Then the other half, which is the evening. On Friday and Saturday night, dim things. Not a ritual, just fewer lights on after nine and the phone down earlier than usual. Evening light is what tells your clock to run late, and the weekend evening is when you're most likely to be lit up until one. The Phillips study in chapter 11 found that the irregular sleepers' drift was best explained by their light, less in the day and more at night. Reverse that and the clock follows.

I'll say the interpretation plainly. If you did only this, the daylight walk both mornings and dimmer weekend evenings, and changed nothing else, I'd expect the Monday to improve noticeably, because the light is what the clock listens to and the lie-in's harm was mostly a light schedule. Add the fixed wake time and the early night and the drift stops altogether.

The fixed wake time

The second part of the method is the number. Pick your weekday wake time. Add an hour. That's the latest you get up at the weekend, both days, and I'll call the hour the window.

Say you're up at half past six Monday to Friday. The window runs to half past seven. On Saturday and Sunday you can wake any time up to half past seven, without an alarm if you can trust yourself and with one set for half past seven if you can't. Inside the window you wake as you wake. Past it you get up. The NHS advice on sleep says the same thing in fewer words, wake up and get out of bed at the same time every day, and don't sleep in after a bad night. I've allowed the hour because a rule with no give in it gets broken the first time you have a late Friday, and a rule that's broken gets abandoned.

Why an hour and not two? Because the drift in the studies came from two hours, and a two-hour window is the habit under another name. An hour is inside what your clock can absorb without a noticeable shift, especially if the light arrives soon after, and it's enough to feel like a weekend. If you're a late type and an hour feels brutal, start with an hour and a half for a month and tighten it. Don't start at two.

Getting up means up. Not awake in bed with the phone. Feet on the floor, curtains open, out of the room. The body clock takes its cue from light and posture and movement, and an hour of lying in a

dark room awake is, to the clock, an hour more sleep. If you want the lying there, and chapter 7 says you may, have it with the curtains open and the light on your face, and it counts as up.

The alarm question. Some people can't hold a window without one, and if that's you, set it and don't be embarrassed. Most people find within three or four weekends that they're waking inside the window on their own, because a clock that's been given the same signal for a fortnight starts to predict it. When you've woken before the alarm three weekends running, you can try without. If you slide, put it back. This is a tool, not a test.

And the number applies on holiday, and on the long weekend, and on Boxing Day. Not because you're not allowed a rest, but because the drift doesn't know it's Christmas, and the Monday after a week of lie-ins is the worst Monday of the year. If you ever want to see the full mechanism at work, note how the first week back after a fortnight off feels. That's fourteen days of drift being pulled back in one go, and it's the argument for the window in a single bad week.

The nap and the early night

The third part of the method is where the extra sleep goes, because you still need it. The short week is still short. The lie-in was putting sleep at the wrong end of the night. The early night puts it at the right end.

Friday night. You're tired from the week, more tired than you've been letting yourself feel. Go to bed early. Not at nine like a child, though there's nothing wrong with nine. An hour before your weekday bedtime, in the dark, with the phone elsewhere. You'll sleep, because you've been awake sixteen hours and your clock says night and you're short. That's an hour of catch-up that moves nothing, because the clock's evening signal is light, and you gave it darkness at a time it was already expecting some.

Saturday night. The temptation is the late one, because Sunday is free. The late night is the other half of the lie-in and it does the same thing to the clock, as chapter 8 said. If you go to bed at one on Saturday and get up at half past seven on Sunday, you've held the window and you'll be very tired, and by the following Saturday you'll have decided the window doesn't work. The window works if the bedtime comes with it. Saturday bedtime within an hour of your weekday bedtime, and earlier if you're tired, and you'll wake inside the window on Sunday without effort.

If there's a night out, have it. Chapter 20 is about the big Friday. One late night a month or so doesn't undo anything, if the wake time holds the next morning and the light arrives. It's the weekly late night paired with the weekly lie-in that makes the drift.

The nap. If Saturday afternoon finds you flagging, a short sleep before three o'clock, twenty to thirty minutes, is a fair way to pay a little of the debt without touching the clock. Set an alarm, because a two-hour nap at four is a lie-in by another route and you won't sleep that night. And if you're someone with genuine insomnia, the NHS says not to nap at all, and it's right, because a nap takes pressure off the night that you need to keep.

What you'll notice within a month, if you do all three, is that the early nights stop being needed. The week that follows a level weekend isn't as short, because it doesn't spend two days correcting, and by the third or fourth weekend most people find they're going to bed at the usual time on Friday and Saturday and waking inside the window rested. The early night is scaffolding. Use it while the debt's being paid down and let it go when it isn't needed.

The decision

Here's the rule, in one line.

The rule. I get up within an hour of my weekday wake time on Saturday and Sunday, I'm outside in daylight within an hour of getting up, and the extra sleep I need goes at the start of the night, not the end of the morning.

That's the whole thing. Three parts, and the first two are the ones that matter most, and the third is what makes the first two bearable.

Some when-then plans, because a rule without them gets decided fresh every Saturday and freshly lost.

When the alarm goes at the end of the window and I want to turn it off and roll over, **then** I put my feet on the floor and open the curtains before I decide anything, because the decision made lying in the dark will be the wrong one and the decision made standing in the light won't.

When it's Friday night and I'm exhausted and the thought of Saturday morning fills me with dread, **then** I go to bed an hour early tonight rather than planning to sleep late tomorrow, and I remind myself that the sleep is the same and the drift isn't.

When it's Saturday evening and I'm not tired at eleven, **then** I go up anyway with the lights low and something to read, because I'm not tired at eleven only if my clock has already started to slide, and going up holds it.

When I'm outside on Sunday morning at half past seven with a coffee feeling faintly ridiculous, **then** I remember that this ten minutes is the whole lever, and that it's replacing the Sunday-night wait and half of Monday.

What to expect, and this is my expectation and not a finding, since nobody's tested the three parts as a package. The first weekend is tired. The Sunday night is better than usual, noticeably, and Monday is better than usual, and you'll be tempted to read that as coincidence. The second weekend is less tired. By the fourth, Saturday morning feels like an ordinary morning and Monday feels like a Wednesday, and the identity in chapter 14, the person who's no good until midweek, has quietly gone. What you'll miss is the Sunday high, and you'll find you don't, because you're not low enough on Friday to need it.

A note on what you've decided. You haven't decided to sleep less. You've decided to sleep at the same time. If the total over the week turns out lower, the short week is the reason, and the earlier book on weeknight bedtimes is where to look. Most people find the total goes up, because the Sunday-night wait and the Monday-night early collapse stop wasting hours.

Shift work, babies, teenagers, the big Friday night, and when it's more than the weekend

Some situations the rule doesn't fit as written, and some where it doesn't apply.

Shift work. If your week has nights in it, or rotates, you don't have a weekday wake time to anchor to, and social jet lag is your whole life rather than your weekend. The studies in this book mostly excluded shift workers for that reason. The principles still hold, light when you want to be awake and darkness when you want to sleep, and consistency wherever you can get it, but the schedule is a different problem and this book doesn't solve it. If your shifts are wrecking your sleep, that's a GP conversation.

Babies and small children. If you're up at two and four and six, the weekend lie-in, when a partner takes the early shift, is not a habit to fix. It's survival, and the extra sleep is worth more than the drift. Take it. When the nights are reliably unbroken again, come back to this book. What I'd say in the meantime is that the daylight walk still helps, even after a broken night, because the clock is separate from the debt.

Teenagers. Teenagers' clocks run genuinely later, and the school day starts genuinely early, and a teenager sleeping until noon on Sunday is doing what their body asks. Crowley and Carskadon's work in chapter 4 was with teenagers and found the drift, so the mechanism applies, but I'd be gentle about it. Morning light at the

weekend and a later school start do more than nagging. This book is for the adult in the house, and the best thing that adult can do for the teenager is model a steady wake time rather than impose one.

The big Friday night. You're out until two. Fine. The choice on Saturday morning isn't between the window and no window. It's between getting up at half past seven exhausted and getting up at ten with a shifted clock. My advice is a middle path, up by nine, outside straight away, a short nap in the early afternoon, an early night on Saturday, and the window held properly on Sunday. One late night doesn't make a drift. One late night followed by two lie-ins does. If the big night is every Friday, that's a different book, and it's the one about asking the price of the evening.

When it's more than the weekend. If you can't get to sleep or stay asleep most nights, not just Sunday, and it's been going on for months and it's making the day hard to cope with, the NHS says see a GP, because that's insomnia, and there's a specific talking treatment for it that works better than tablets, and a fixed wake time is one of its tools but not all of them. If you're sleeping late at weekends because you can't face the day, and you've felt low most of the day most days for two weeks or more, the NHS says see a GP about your mood. And if you fall asleep in the day without meaning to, at the wheel or at a desk, that's a GP visit this week, whatever the weekend looks like.

When you slept till eleven

It'll happen. A month in, a bad week, a Friday that runs late, and Saturday you wake at eleven and lie there until half past, and by Sunday the whole weekend has gone the old way and Monday is the old Monday.

Two things, in order. The first is what it means, which is nothing much. One weekend of drift is one weekend of drift. Your clock has moved forty minutes and it'll move back over two or three mornings of light, the way it always did. The month of level weekends before it isn't undone. Habit isn't a streak, and it isn't broken by a miss, and the research on habit formation that earlier books in this series lean on found that a single missed day made no material difference to how the habit formed. The habit is the wake time, and the wake time is still there next Saturday.

The second is what to do, which is the window, next weekend, with the daylight walk, and nothing extra. Don't get up at five on Sunday to make amends. Don't go without sleep in the week to reset. Don't decide that you're the kind of person who can't hold a schedule. Get up inside the window on Sunday if it's Sunday, and if it's Monday, take the Monday, and get up inside the window on Saturday.

Then, when you're not tired, ask which belief let you back in. Was it "I've earned it" after a hard week, in which case chapter 3 is the one to reread, because the earning is real and the lie-in is the wrong currency. Was it "it's only one morning", which is chapter 4. Was it the lying there, which is chapter 7, and which you can have at seven with the curtains open. Was it a late Saturday night that

made Sunday's window impossible, which is chapter 18, and which is the most common way the rule gets lost, because people hold the morning and forget the night.

What you shouldn't do is take the bad Monday as evidence that the method failed. The bad Monday is evidence that the method works, because you've just seen what one weekend off it costs, and a month ago you didn't know that was where the Monday came from. Now you do. That's the whole change this book is after, and a lapse is the clearest lesson in it.

Saturday at eight

It's Saturday and it's eight o'clock and you're awake. You woke at twenty to, without the alarm, which you set anyway. The curtains are open. There's a coffee. You're in a chair by the window and nobody wants anything and you're reading something with no purpose, and it's the hour that used to be at ten with the curtains shut, and it's better, because you're in it.

At half past eight you go out. Round the block, to the bakery, nowhere. It's grey. It doesn't matter. Twenty minutes of grey daylight and you come back and the day is yours, all of it, from nine, and it's long.

Saturday night you're tired at eleven, which surprises you, and you go up. Sunday you wake at ten past seven. Same chair, same window, same walk. Sunday afternoon feels ordinary, not high, and you notice that and don't mind. Sunday night you go to bed at half past ten and you're asleep by eleven, and there's no arithmetic, and there's no phone, and there's no Monday in your head because you're not awake to have one.

Monday the alarm goes at half past six and it's just an alarm. You're not thick. You're not slightly sick. You have one coffee, not three. The emails are the same emails. It's Monday and it feels like a day, and by Wednesday nobody at work has made the joke, because you haven't looked like the joke.

That's what the lie-in was costing. Not the sleep, which you're getting more of. Not the rest, which you're having. The Monday, and the Sunday night, and a day and a half a week for years, in exchange for two hours of morning you mostly weren't awake for.

One thing, this weekend. Set the alarm for an hour after your weekday time, both mornings, and when it goes, open the curtains before you decide anything.

Notes

These notes give the sources behind the claims in each chapter and say what each can and can't support. The book is not medical advice. If you have persistent trouble sleeping, daytime sleepiness you can't explain, or low mood, see a GP. Nothing here is a reason to change medication or to stop treatment for a sleep disorder. Where a claim is my interpretation rather than a finding, I've said so here or in the chapter. Sources were checked on 26 September 2026 from published abstracts unless stated, and none carried a retraction notice. Two carry corrections that don't affect the findings used, noted below. The Sunday night in chapter 1, the ratings exercise in chapter 6, the household negotiation in chapter 7, the week's graph in chapter 9 and the Saturday in chapter 22 are invented illustrations.

Before you start. The half hour to three quarters of an hour figure for the drift comes from Yang and colleagues 2001 and Crowley and Carskadon 2010, cited under chapter 4. The NHS guidance on insomnia and on low mood is cited under chapter 20.

Chapter 3. Van Dongen, Maislin, Mullington and Dinges, "The cumulative cost of additional wakefulness: dose-response effects on neurobehavioral functions and sleep physiology from chronic sleep restriction and total sleep deprivation", *Sleep* 26, 2003, pages 117 to 126. Forty-eight healthy adults aged 21 to 38, in a laboratory, with a published correction in 2004. Depner, Melanson, Eckel, Snell-Bergeon, Perreault, Bergman, Higgins, Guerin, Stothard, Morton and Wright, "Ad libitum weekend recovery sleep fails to prevent metabolic dysregulation during a repeating pattern of

insufficient sleep and weekend recovery sleep", *Current Biology* 29, 2019, pages 957 to 967. Thirty-six healthy young adults across three groups. The insulin figures in the chapter are the range the abstract gives. Kitamura, Katayose, Nakazaki, Motomura, Oba, Katsunuma, Terasawa, Enomoto, Moriguchi, Hida and Mishima, "Estimating individual optimal sleep duration and potential sleep debt", *Scientific Reports* 6, 2016, article 35812. The "four days for one hour" figure is from the abstract. The claim that the lie-in makes next week's shortfall bigger is my reading of the Depner circadian delay.

Chapter 4. Yang, Spielman, D'Ambrosio, Serizawa, Nunes and Birnbaum, "A single dose of melatonin prevents the phase delay associated with a delayed weekend sleep pattern", *Sleep* 24, 2001, pages 272 to 281. Ten healthy volunteers, mean age 22, within-subject design, melatonin onset delayed by 31.6 minutes after two nights delayed by two hours. Crowley and Carskadon, "Modifications to weekend recovery sleep delay circadian phase in older adolescents", *Chronobiology International* 27, 2010, pages 1469 to 1492. Twelve and thirty-three participants aged 15 to 17 in two experiments, delays of about 45 minutes. The account of light setting the clock is the standard one and the supporting studies are under chapters 8 and 16. The claim that it takes a couple of days to pull the clock back is my inference from the size of the shift, not a measured figure.

Chapter 5. Wittmann, Dinich, Merrow and Roenneberg, "Social jetlag: misalignment of biological and social time", *Chronobiology International* 23, 2006, pages 497 to 509. 501 volunteers,

questionnaire study. The aeroplane comparison is mine and the authors' term is their own.

Chapter 6. No research claim beyond those already cited. The Monday and Wednesday ratings are a suggestion for the reader's own observation, and the claim that part of the Monday is made on Saturday is my interpretation.

Chapter 8. Wittmann and colleagues as above. Wright, McHill, Birks, Griffin, Rusterholz and Chinoy, "Entrainment of the human circadian clock to the natural light-dark cycle", *Current Biology* 23, 2013, pages 1554 to 1558. Stothard, McHill, Depner, Birks, Moehlman, Ritchie, Guzzetti, Chinoy, LeBourgeois, Axelsson and Wright, "Circadian entrainment to the natural light-dark cycle across seasons and the weekend", *Current Biology* 27, 2017, pages 508 to 513. The "about two hours" figure for the week's camping is the commonly reported figure for the 2013 study and the 2017 abstract gives the weekend as about 69 per cent of it. Both studies were small. The claim that a night owl's clock has been taught is my interpretation of the authors' findings on modern light.

Chapter 9. Depner and colleagues as above. The claim that the Sunday-afternoon high is partly the shifted clock is my interpretation, and the observation about people with steady wake times is mine and not a finding.

Chapter 10. Roenneberg, Allebrandt, Mellow and Vetter, "Social jetlag and obesity", *Current Biology* 22, 2012, pages 939 to 943, with a published erratum in 2013. Parsons, Moffitt, Gregory, Goldman-Mellor, Nolan, Poulton and Caspi, "Social jetlag, obesity and metabolic disorder: investigation in a cohort study", *International*

Journal of Obesity 39, 2015, pages 842 to 848. 815 non-shift workers from a cohort of 1037. Wong, Hasler, Kamarck, Muldoon and Manuck, "Social jetlag, chronotype, and cardiometabolic risk", Journal of Clinical Endocrinology and Metabolism 100, 2015, pages 4612 to 4620. 447 adults aged 30 to 54. Rutters, Lemmens, Adam, Bremmer, Elders, Nijpels and Dekker, "Is social jetlag associated with an adverse endocrine, behavioral, and cardiovascular risk profile?", Journal of Biological Rhythms 29, 2014, pages 377 to 383. 145 healthy adults. Levandovski, Dantas, Fernandes, Caumo, Torres, Roenneberg, Hidalgo and Allebrandt, "Depression scores associate with chronotype and social jetlag in a rural population", Chronobiology International 28, 2011, pages 771 to 778. 4051 participants. All five are cross-sectional and the chapter says so.

Chapter 11. Phillips, Clerx, O'Brien, Sano, Barger, Picard, Lockley, Klerman and Czeisler, "Irregular sleep/wake patterns are associated with poorer academic performance and delayed circadian and sleep/wake timing", Scientific Reports 7, 2017, article 3216. Sixty-one undergraduates over thirty days. Lunsford-Avery, Engelhard, Navar and Kollins, "Validation of the Sleep Regularity Index in older adults and associations with cardiometabolic risk", Scientific Reports 8, 2018, article 14158, with author corrections in 2020 and 2021. 1978 adults, mean age 69. The claim that people start waking before the alarm within a few weeks is my observation and not a finding.

Chapter 12. Van Dongen and colleagues, and Crowley and Carskadon, as above. The NHS insomnia page, cited under chapter 20, advises against daytime naps. The account of how the second and later Saturdays feel is my expectation.

Chapter 13. The loop is my description. The earlier book on weeknight bedtimes is *You were tired at ten*.

Chapter 14. The day-and-a-half figure is an illustration built on the reader's own ratings from chapter 6, not a measurement. The associations are those under chapter 10.

Chapter 15. The two requirements for sleep, time awake and clock timing, are the standard two-process account. The earlier book on the night mind is *Nothing gets solved at three in the morning*. The claim that many Sunday-night problems are Sunday-morning problems is mine.

Chapter 16. Wright and colleagues and Stothard and colleagues as above. Revell, Burgess, Gazda, Smith, Fogg and Eastman, "Advancing human circadian rhythms with afternoon melatonin and morning intermittent bright light", *Journal of Clinical Endocrinology and Metabolism* 91, 2006, pages 54 to 59. Forty-four healthy adults, with the placebo group advancing 1.7 hours over three days of morning bright light and a wake time moved an hour earlier each day. Phillips and colleagues as above. The claim that an overcast morning outdoors is many times brighter than a lit room is standard and not separately sourced. What I'd expect from the light alone is my expectation.

Chapter 17. NHS, "Insomnia", [nhs.uk](https://www.nhs.uk), read 26 September 2026, which advises waking and getting out of bed at the same time every day and not sleeping in after a bad night. The one-hour window is my choice, informed by the two-hour delay used in the studies under chapter 4, and it hasn't been tested as such.

Chapter 18. The claim that an early night in darkness doesn't shift the clock rests on the light account under chapter 16 and is my application of it. The NHS advice against naps for people with insomnia as above.

Chapter 19. When-then plans follow Gollwitzer and Sheeran, "Implementation intentions and goal achievement: a meta-analysis of effects and processes", *Advances in Experimental Social Psychology* 38, 2006, pages 69 to 119, as in earlier books in this series. The three parts haven't been tested as a package and what I say to expect is my expectation.

Chapter 20. NHS, "Insomnia", as above, which lists short-term and long-term insomnia, says to see a GP if changing sleep habits hasn't helped, if it's gone on for months, or if it's affecting daily life, and describes cognitive behavioural therapy for insomnia as the treatment a GP may refer to. The NHS two-week guidance on low mood is as verified for earlier books in this series. The earlier book on nights out is *Ask the price of the evening*. The note on shift workers reflects the exclusions in Parsons and Wong above.

Chapter 21. The habit-formation finding that a single missed day made no material difference is Lally, van Jaarsveld, Potts and Wardle, "How are habits formed: modelling habit formation in the real world", *European Journal of Social Psychology* 40, 2010, pages 998 to 1009, as verified for earlier books in this series.

Looked up and not used. Taylor, Wright and Lack, "Sleeping-in on the weekend delays circadian phase and increases sleepiness the following week", *Sleep and Biological Rhythms* 6, 2008, pages 172 to 179, whose title states the book's thesis exactly but whose abstract

isn't available from any free source, so nothing from it is claimed. Yang and colleagues' melatonin result is reported but not recommended, since melatonin is a prescription medicine in the UK and this isn't a book about medication.