

THE POWER OF WHEN

Discover Your Chronotype—and the Best
Time to Eat Lunch, Ask for a Raise, Have Sex,
Write a Novel, Take Your Meds, and More

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Foreword by Mehmet C. Oz, MD

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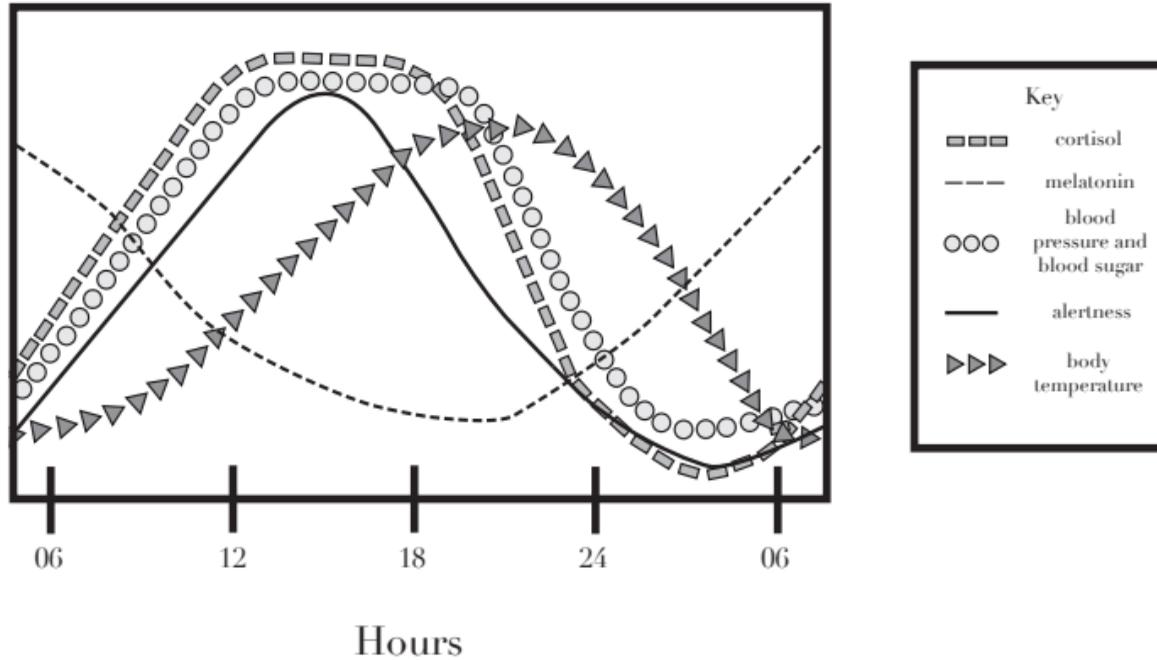
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As my daughter told me, this book “should be dedicated
to your awesome children and wife.” I could not have
put it any better myself.

The book is dedicated to my Wolfpack: Lauren, Cooper, Carson,
and my four-legged kids: Monty, Sparky, and Sugar Bear.
And a special dedication to all my patients throughout my
sixteen years of practice. I love learning from you all,
every time we meet.

Timing Is Everything



This is an example of several circadian rhythms going on inside you RIGHT NOW!

WATCHWORDS

Bio-time: Your biological clock or schedule; the ebb and flow of hormones and enzymes, and the changes in circulatory activity over the course of the twenty-four-hour day. Synonymous with “circadian rhythm.”

Chronobiology: The study of circadian rhythm and its effect on human health and wellness.

Chrono-misalignment: The negative impact on your health, focus, and energy when your social schedule is out of sync with your biological schedule.

Chronotherapy: Using tools like light and hormonal supplements to improve health and quality of life for patients with insomnia and mood disorders.

Chronotype: A classification of the general timing of your biological clock.

Chronorhythm: A schedule of the optimal physiological time to do just about every daily activity within the context of our busy, modern lives. This is a daily rhythm for success.

Circadian rhythm: Your biological clock or schedule; the ebb and flow of hormones and enzymes, and the changes in circulatory activity over the course of the twenty-four-hour day.

Social jet lag: The foggy feeling you get when your social schedule is out of sync with your biological schedule.

Social schedule/social rhythm: When you do things—rise, eat, exercise, work, socialize—throughout the day.

Time-wise tips and tricks: Strategies that help you sync your social schedule and your biological schedule.

Every person has a master biological clock ticking away inside his or her brain, and dozens of smaller biological clocks throughout his or her body.

But not every person's biological clocks keep the same time. Your friend's inner clocks might run at a different pace than yours, or your partner's, or your kids'. You know this already; you've observed that some people wake early, or don't feel hungry when you do, or are full of energy when you are winding down. Different people fall into different classifications, called "chronotypes," based on general morningness and eveningness preferences.

According to conventional wisdom and historical definition, there are three chronotypes:

1. **Larks**, the early risers
2. **Hummingbirds**, neither early nor late risers
3. **Owls**, the late risers

What's Your Chronotype?

1. **Dolphins.** Real dolphins sleep with only half of their brain at a time (which is why they're called unihemispheric sleepers). The other half is awake and alert, concentrating on swimming and looking for predators. This name fits insomniacs well: intelligent, neurotic light sleepers with a low sleep drive.
2. **Lions.** Real lions are morning hunters at the top of the food chain. This name fits morning-oriented driven optimists with a medium sleep drive.
3. **Bears.** Real bears are go-with-the-flow rambler, good sleepers, and anytime hunters. This name fits fun-loving, outgoing people who prefer a solar-based schedule and have a high sleep drive.
4. **Wolves.** Real wolves are nocturnal hunters. This name fits night-oriented creative extroverts with a medium sleep drive.

If you don't recognize yourself in the short descriptions above, perhaps you recognize one of your parents. Remember, your chronotype is genetic—determined specifically by the PER3 gene. If you have a long PER3 gene, you need at least seven hours of deep sleep to function, and tend to be an early riser. If you have a short PER3, you can get by on light or little sleep, and you tend to be a late riser. It's likely that at least one of your parents had the same chronotype as you.

Why so many types? Why is there variation at all? Since the dawn of man, a range of chronotypes has been necessary for species survival. Each chronotype had its purpose and contributed to the larger group's security. Bio-time had to be diverse for the larger group to stay safe over the long night. Although we don't stand watch over the cave opening anymore, our genetic structure hasn't changed all that much since pre-historic times, and neither have the following ratios:

- **Dolphins account for 10 percent of the population.** Light sleepers, they rouse at the smallest noise to wake and warn the group of danger.
- **Lions account for 15 to 20 percent.** They rise early, taking the morning shift of guarding the group and watching out for roving predators.

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- **Bears account for 50 percent.** Their cycles match the rise and fall of the sun; they hunt and gather in daylight.
- **Wolves account for 15 to 20 percent.** They take the late shift to guard the group, drifting off when the most extreme Lions start to stir.

BIO-TIME QUIZ

Part One

For the following ten statements, please circle “T” for True or “F” for False.

1. **The slightest sound or light can keep me awake or wake me up.**
T or F
2. **Food is not a great passion for me.**
T or F
3. **I usually wake up before my alarm rings.**
T or F
4. **I can't sleep well on planes, even with an eye mask and earplugs.**
T or F
5. **I'm often irritable due to fatigue.**
T or F
6. **I worry inordinately about small details.**
T or F
7. **I have been diagnosed by a doctor or self-diagnosed as an insomniac.**
T or F
8. **In school, I was anxious about my grades.**
T or F
9. **I lose sleep ruminating about what happened in the past and what might happen in the future.**
T or F
10. **I'm a perfectionist.**
T or F

If you marked “T” for True for **seven or more** of the above ten statements, **you are a Dolphin** and can skip ahead to page 22.

Otherwise, continue on to . . .

Part Two

After each of the multiple-choice options, you'll find a number in parenthesis. Keep a tally of these numbers to get your final score.

1. **If you had nothing to do the next day and gave yourself permission to sleep in as long as you like, when would you wake up?**
 - a. Before 6:30 a.m. (1)
 - b. Between 6:30 a.m. and 8:45 a.m. (2)
 - c. After 8:45 a.m. (3)
2. **When you have to get out of bed by a certain time, do you use an alarm clock?**
 - a. No need. You wake up on your own at just the right time. (1)
 - b. Yes to the alarm, with no snooze or one snooze. (2)
 - c. Yes to the alarm, with a backup alarm, and multiple snoozes. (3)
3. **When do you wake up on the weekends?**
 - a. The same time as your workweek schedule. (1)
 - b. Within forty-five to ninety minutes of your workweek schedule. (2)
 - c. Ninety minutes or more past your workweek schedule. (3)
4. **How do you experience jet lag?**
 - a. You struggle with it, no matter what. (1)
 - b. You adjust within forty-eight hours. (2)
 - c. You adjust quickly, especially when traveling west. (3)
5. **What's your favorite meal? (Think time of day more than the menu.)**
 - a. Breakfast (1)
 - b. Lunch. (2)
 - c. Dinner. (3)
6. **If you were to flash back to high school and take the SAT again, when would you prefer to *start* the test for maximum focus and concentration (not just to get it over with)?**
 - a. Early morning. (1)

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- b. Early afternoon. (2)
 - c. Midafternoon. (3)
- 7. If you could choose any time of day to do an intense workout, when would you do it?**
- a. Before 8:00 a.m. (1)
 - b. Between 8:00 a.m. and 4:00 p.m. (2)
 - c. After 4:00 p.m. (3)
- 8. When are you most alert?**
- a. One to two hours post wake-up. (1)
 - b. Two to four hours post wake-up. (2)
 - c. Four to six hours post wake-up. (3)
- 9. If you could choose your own five-hour workday, which block of consecutive hours would you choose?**
- a. 4:00 a.m. to 9:00 a.m. (1)
 - b. 9:00 a.m. to 2:00 p.m. (2)
 - c. 4:00 p.m. to 9:00 p.m. (3)
- 10. Do you consider yourself...**
- a. Left-brained—that is, a strategic and analytical thinker (1)
 - b. A balanced thinker (2)
 - c. Right-brained—that is, a creative and insightful thinker (3)
- 11. Do you nap?**
- a. Never. (1)
 - b. Sometimes on the weekend. (2)
 - c. If you took a nap, you'd be up all night. (3)
- 12. If you had to do two hours of hard physical labor, like moving furniture or chopping wood, when would you choose to do it for maximum efficiency and safety (not just to get it over with)?**
- a. 8:00 a.m. to 10:00 a.m. (1)
 - b. 11:00 a.m. to 1:00 p.m. (2)
 - c. 6:00 p.m. to 8:00 p.m. (3)
- 13. Regarding your overall health, which statement sounds like you?**
- a. "I make healthy choices almost all of the time." (1)

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- b. "I make healthy choices sometimes." (2)
 - c. "I struggle to make healthy choices." (3)
- 14. What's your comfort level with taking risks?**
- a. Low. (1)
 - b. Medium. (2)
 - c. High. (3)
- 15. Do you consider yourself:**
- a. Future-oriented with big plans and clear goals. (1)
 - b. Informed by the past, hopeful about the future, and aspiring to live in the moment. (2)
 - c. Present-oriented. It's all about what feels good now. (3)
- 16. How would you characterize yourself as a student?**
- a. Stellar. (1)
 - b. Solid. (2)
 - c. Slacker. (3)
- 17. When you first wake up in the morning, are you . . .**
- a. Bright-eyed. (1)
 - b. Dazed but not confused. (2)
 - c. Groggy, eyelids made of cement. (3)
- 18. How would you describe your appetite within half an hour of waking?**
- a. Very hungry. (1)
 - b. Hungry. (2)
 - c. Not at all hungry. (3)
- 19. How often do you suffer from insomnia symptoms?**
- a. Rarely, only when adjusting to a new time zone. (1)
 - b. Occasionally, when going through a rough time or are stressed out. (2)
 - c. Chronically. It comes in waves. (3)
- 20. How would you describe your overall life satisfaction?**
- a. High. (0)
 - b. Good. (2)
 - c. Low. (4)

SCORING

19 to 32: **Lion**

33 to 47: **Bear**

48 to 61: **Wolf**

DO HYBRIDS EXIST?

Sometimes, people take the quiz, read the profiles, and are still uncertain which type they fall into. Within each major type (Lion, Bear, and Wolf), there is a range. But even if some Bears wake up earlier than other Bears, that does not make them Lions.

If you are straddling Lion/Bear or Wolf/Bear, you are probably a Bear, like the majority of the population.

To further hone your assessment, try a two-question mini-quiz devised by Brazilian researchers¹ that is as accurate as any other standard measurement.

1. Rate your energy level on a scale of 1 (very low) to 5 (very high) in the morning.
2. Rate your energy level on a scale of 1 to 5 in the evening.

Subtract the second score from the first score. For example, if you rated the morning energy as very high (5) and the evening energy as very low (1), your total score is 4. If you rated your morning energy as very low (1) and your evening energy as very high (5), your total score is -4.

SCORING

4, 3 or 2: **Lion**

1, 0, -1: **Bear**

-4, -3, -2: **Wolf**

The greatest chronotype confusion is usually over **the insomnia**

issue. Are all insomniacs Dolphins? Not necessarily. Each major type has its bad sleepers and shares some personality traits with Dolphins. Some extreme Lions wake up at 3:00 a.m., can't fall back to sleep, and have been told by their doctor that they have "sleep offset insomnia." Lions, like Dolphins, are conscientious, goal-oriented, and risk-averse. Extreme Wolves stare at the ceiling every night until 3:00 a.m., and their doctors have called this "sleep-onset insomnia." Wolves, like Dolphins, are introverted, creative, and anxious. And some Bears are often irritable and frequently fatigued. There are some similarities but also important differences.

If you suspect you might be a Dolphin, even if you got six or fewer "True" answers on Part One of the BTQ, take a follow-up mini-quiz (if not, skip ahead to page 26):

Are You a Lion or a Dolphin?

Answer T or F to the following statements.

1. I'm not very hungry when I wake up.
T or F
2. My sleep is fitful and shallow.
T or F
3. I have no interest in being the boss.
T or F

If you answered T to at least two of the above three statements, you are a Dolphin.

Are You a Bear or a Dolphin?

Answer T or F to the following statements.

1. You don't really care about food.
T or F
2. You'd be thrilled to get six hours of sleep a night.
T or F

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3. You aren't a team player.

T or F

If you answered T to at least two of the three statements, you are a Dolphin.

Are You a Wolf or a Dolphin?

Answer T or F to the following statements.

1. You are usually the last to leave a party.

T or F

2. You're spontaneous and make snap decisions about major purchases and vacation plans.

T or F

3. You hit snooze at least twice in the morning.

T or F

If you answered F to at least two of the above three statements, you are a Dolphin.

BEAR FACTS

Bears might think that they have it easy. Since their schedules are solar-synced, that must mean they don't have many changes to make to their daily schedules to be on perfect bio-time, right?

Wrong.

Let me ask you, Bears: Are you operating at peak potential on your current schedule? Are you bursting with energy and getting high-quality sleep? Are you carrying extra weight around the middle? Having as much energetic sex as you'd like? Killing it at work? Enjoying excellent communication in relationships? Avoiding colds and the flu? Able to focus and concentrate as well as you'd like?

Just because your sleep/wake cycle is on bio-time does not mean that the dozens of other clocks in your body are in sync. Established social schedules—work time, dinnertime, sex time—do *not* automatically match up with a Bear's chronobiology.

CHRONOTYPES

In fact, Bears, you have a lot of adjustments to make to your daily schedules. But the effort will pay off. Wouldn't it be nice to feel sharp at work all day, to avoid late-night fridge raids, to wake up refreshed, not to be dependent on coffee to wake up and alcohol to fall asleep, to feel alive and healthy every day of the week? Of course!

If you make my recommended changes to your daily schedule, you take control of your destiny and become the person you were born to be.

LION ENVY

A close friend of mine once took this quiz and said, "I'm a Bear."

Knowing him to be a weekend napper, a foodie, and a personable guy with many friends (and a few extra pounds), I wasn't surprised to hear it. But he was.

"I don't want to be a Bear!" he said. "I want to be a Lion!"

My friend does have some Lion traits. He started up his own business and sees himself as a real go-getter with intense ambition and drive. His professional goals are his prime motivator, and, having heard me talk about chronotypes, he sized himself up, based on this one aspect of his personality, as a Lion.

If you see yourself at the top of the food chain and are disappointed not to actually be a Lion, or if you aspire to be an early riser with energy to spare and a strategic mind, know that your Lion Envy is misplaced. Each chronotype has advantages and disadvantages across the board, from careers to relationships to physical health. What might seem like a bonus could be a detriment. Lions do tend to rise through the ranks and become bosses, but they tend not to be creative and extroverted. Lions might get more done before breakfast than most of us do all day, but they have a hard time in the social arena due to their very early bedtime and fatigue.

The grass is always greener on the other side of the chronotype. Instead of wishing you were another type, develop self-awareness and understanding of your own bio-time patterns.

DOLPHIN

- **Four Key Personality Traits:** Cautiousness, introversion, neuroticism, intelligence
- **Four Key Behaviors:** Avoiding risky situations, striving for perfection, obsessive-compulsive tendencies, fixating on details
- **Sleep/Alertness Pattern:** Dolphins usually wake up feeling unrefreshed and are tired until late in the evening, when they suddenly hit their stride. Most alert: late at night. Most productive: in spurts throughout the day. Naps: They try to nap to catch up on sleep but can't quite make it happen.

LION

- **Four Key Personality Traits:** Conscientiousness, stability, practicality, optimism
- **Four Key Behaviors:** Overachieving, prioritizing health and fitness, seeking positive interactions, strategizing
- **Sleep/Alertness Pattern:** Lions wake up bright-eyed at dawn or earlier, start to feel tired in the late afternoon, and fall asleep easily. Most alert: noon. Most productive: morning. Naps: Lions hardly ever nap. They'd rather be doing something useful.

BEAR

- **Four Key Personality Traits:** Cautiousness, extroversion, friendly and easy to talk to, open-minded
- **Four Key Behaviors:** Avoiding conflict, aspiring to be healthy, prioritizing happiness, taking comfort in the familiar
- **Sleep/Alertness Pattern:** Bears wake up in a daze after hitting the snooze button once or twice, start to feel tired by mid- to late evening, and sleep deeply but not as long as they'd like. Most alert: mid-morning into early afternoon. Most productive: late morning. Naps: Bears catch extra hours on the weekends, on the couch.

WOLF

- **Four Key Personality Traits:** Impulsivity, pessimism, creativity, moodiness
- **Four Key Behaviors:** Taking risks, prioritizing pleasure, seeking novelty, reacting with emotional intensity
- **Sleep/Alertness Pattern:** Wolves have difficulty waking up before 9:00 a.m. (they do it, but they're not happy about it), are groggy until

midday, and don't feel tired until midnight or later. Most alert: 7:00 p.m.
Most productive: late morning and late evening. Naps: Tempting, but if a
Wolf sleeps during the day, he won't fall asleep at night. It's just not worth it.

THE TEMPERATURE TEST

Still not sure of your chronotype? There's a biological way to determine your kind, and all it requires is a little bit of commitment and a digital thermometer.

Your hypothalamus regulates your temperature within a pretty narrow range of 96.8 to 100.4 degrees Fahrenheit. A nightly drop in “core temperature” (vital organs) as opposed to “shell temperature” (skin and muscles) is a signal to the body to feel sleepy; a morning rise in temperature signals that it's time to wake up. Your chronotype determines when you'll hit your temperature high and low points.

To take the Temperature Test, record your temperature every hour between 5:00 p.m. and bedtime. When does your temperature start to rise? When does it start to drop? The rise in temperature won't be dramatic. It could be just a few tenths of a degree (this is where digital thermometers come in). Chart your temperature for three days to collect sufficient data.

Dolphin: This will not work for you. Dolphins aren't like other types: Their core temperature goes up at night. It's one of the reasons they have difficulty falling asleep.

Lion: Temperature starts to drop at **7:00 p.m.**

Bear: Temperature starts to drop at **9:00 p.m.**

Wolf: Temperature starts to drop at **10:00 p.m.**

REALITY CHECK

The following schedule is how you'd organize your day in a perfect world. But real life is not perfect. Due to social or work situations that are out of your control, you might not be able to follow the schedule to the letter.

That's okay.

The worst thing you can do is say, “If I can’t do X, Y, or Z at exactly the right time, the whole thing is thrown off, so forget it.” Any changes will result in improvements to your health and happiness. It’s not an all-or-nothing proposition. Ideally, you could do it all. Practically, you might not be able to. So do what you can now. Over time, as you notice positive changes, you might find that you can do a little more.

THE DOLPHIN’S CHRONORHYTHM

6:30 A.M.

Typical: As Stephanie says, “I’m too tired to get up, and too wired to fall back to sleep.”

Optimal: Get up and move. Your blood pressure, body temperature, and cortisol levels are low, so use exercise to turn them up. It might be the last thing you want to do when sapped by sleep inertia—that groggy, just-woke-up feeling. But do it anyway. I tell patients to roll out of bed, right onto the floor, and do a hundred crunches. Then flip over and do twenty push-ups. In just five minutes, your heart rate will go up. Muscle stress (a good kind) raises your cortisol level. During the first five minutes of your day, flip your physiology from exhausted to energized. Ideally, you’d get a twenty-five-minute workout in, but even a few minutes of cardio will help. If possible, get five to fifteen minutes of direct sunlight to activate your SCN during your workout or cool-down.

7:20 A.M. TO 9:00 A.M.

Typical: “I drag myself into the shower and then eat cereal and a bagel and get myself to school for my first class.”

Optimal: Jump-start with a cool shower and a high-protein breakfast. If you have done a few cardio moves as recommended, by all means, rinse off. Since a hot shower might lower core body temperature (it sends blood to the extremities), take a cool shower instead, as cool as you can stand it to

rush the blood into your vital organs, raise core temperature, and trigger “I’m awake now” hormonal secretions. This is also a great time for a one-minute meditation. Let the water run over your head, and think of nothing for sixty seconds. It will bring you into the “now” and help you focus. I use this technique most mornings, and it is wonderful.

Before you take a single bite of breakfast, drink a large glass of room-temperature water. Everyone is dehydrated after a night’s rest, especially Dolphins, whose metabolism works overtime overnight. You need to replenish depleted cells with fluid and the right nutrients from food. Although you might crave a bagel or a bowl of sugary cereal for quick energy, *morning is the wrong time to eat carbs*. Carbs increase the production of serotonin, the “comfort” hormone. You might need the food hug after a bad night, but it’s the opposite of what you need hormonally. When serotonin levels go up, cortisol levels go down, relaxing you. A bagel will hit your metabolism like a tranquilizer dart. Instead, **eat protein in the morning** to boost cell recovery and fuel muscles: eggs and bacon, yogurt, a protein shake, or a small serving of oatmeal with seeds and nuts.

9:30 A.M. TO 12:00 P.M.

Typical: “Like I’m in a fog. I can’t make myself feel more alert. I can barely concentrate.”

Optimal: Think. You *can* burn off the fog of sleep inertia with exercise, a cool shower, and a plate of eggs. If you drink coffee, now would be a good time to use caffeine wisely, to deactivate the sleepy neurochemicals. Have one cup only. Two cups will make your jittery. If you are already a big caffeine addict, do not immediately drop off to one cup. Check out my video on caffeine fading at www.thepowerofwhen.com.

Since you’re still gaining alertness, it’s not the best time to try to zero in and focus. Instead, use morning as a great time to brainstorm. Let your mind wander. See what brilliant ideas bubble up. When you’re slightly tired, your hyperactive, creative mind is primed to do what it does best: connect the dots, no matter how disparate and misaligned they seem. If you are into journaling or jotting down big-picture ideas, this is the per-

fect time to do so. It's what many Dolphins do at night while trying to go to sleep. But it's much better for them to do it in the morning—or any time before nightfall, if possible.

12:00 P.M. TO 1:00 P.M.

Typical: “If I get distracted, I might forget to eat lunch.”

Optimal: Eat something! Dolphins tend to have a wiry, lean body type. Neither chronic dieters nor foodies, they eat to live, and sometimes they can't be bothered or they forget, especially when they fall down a rabbit hole (warning: the Internet is full of them). Set an alert on your phone to remind you to eat something at 1:00 p.m. every day. Replenish yourself with nutrients that will fuel your body and brain—one-third carbs, one-third protein, one-third fat—and will keep your state of hyper-arousal on an even keel. Some suggestions: a sandwich, a burrito, soup and a salad. Always drink plenty of water, too. If you had coffee earlier, don't have more with lunch. Too much caffeine will not energize you. It'll only make you jittery, could decrease your appetite, and might keep you awake at bedtime (yes, even many hours later).

1:00 P.M. TO 4:00 P.M.

Typical: “Early afternoons are a struggle. I would love to close my eyes and take a nap. Sometimes, if I have time, I drop my head on my desk and close my eyes.”

Optimal: Recharge. Do not nap! Napping lowers the buildup of sleep pressure, making it harder to pass out at bedtime, already a challenge for you. Your goal is to improve the duration and quality of sleep *at night*. Taking an afternoon nap is self-sabotage. Do not drink coffee! No caffeine of any kind for Dolphins after 1:00 p.m. If your energy levels drop midday, recharge by being active. Whenever you lose steam, I want you to train yourself to think, “Exercise and sunlight.” Raise your blood pressure, heart rate, and cortisol levels by working large muscle groups. You don't even have to break a sweat. Just take a walk around the block, around the office, wherever, ideally outside to soak up more sunlight.

4:00 P.M. TO 6:00 P.M.

Typical: “Too much coffee! I don’t know if I can’t concentrate from being tired or jacked-up on caffeine.”

Optimal: Scale the wall. While the Bears and Lions around you are starting to peter out, your cortisol level is on the rise, making you as alert as you’ve felt all day, especially if you’ve kept the carbs to a minimum and if you took an afternoon stroll. Let your inner neurotic emerge. Obsess over a project. Do the heavy lifting intellectually and mentally. If you had a thread of an idea earlier during your off-peak morning brainstorming session, it’s now time to reel it in. If you work in an office environment, close the door to your office or get some kind of privacy (perhaps by putting on some imaginary blinders), and apply your afternoon peak alertness to figuring out the details of a specific project or task.

6:00 P.M. TO 7:00 P.M.

Typical: “I get hungry now from skipping lunch, and crave something quick and ready to eat. I’d be happy to grab a slice of pizza for dinner every night.”

Optimal: Be alone. Don’t eat yet. Since you set an alarm at lunch to remind you to eat, your hunger is manageable. Instead, take the post-work break for strategic downtime. Schedule fifteen to thirty minutes for quiet alone time to decompress. Your hyperactive mind will become increasingly anxious as the night wears on and cortisol levels rise. Starting the evening with quiet alone time can ward off or lessen those hormonal and emotional reactions.

Some Dolphins might do meditation or yoga. Others take a counterintuitive approach to quieting anxious thoughts by sitting alone in a quiet place and letting themselves ruminate on worst-case scenarios for a limited time. The purpose is to habituate yourself to anxiety by “going there” daily, and to save random worries that pop up throughout the day for that one time period only. Eventually, if you do this consistently, anxiety amplitude—the intensity of your worry—will decrease, as will the amount of time you

spend worrying. This strategy is particularly useful for insomniacs, but only if they really commit to this practice at the same time every day. Set an alert or alarm to remind yourself that it's time to "go there."

To reap the benefits of a retrained brain and reset chronorhythm, you have to be consistent.

Most patients are surprised that they can't ruminate darkly for the full fifteen minutes. If you're done with it after five minutes, spend the rest of your alone time counting breaths up to ten, then backward to one, and repeat. Go to www.thepowerofwhen.com and get a free video step-by-step of this breathing technique.

6:30 P.M. TO 8:00 P.M.

Typical: "After dinner, it's go time, like I'm fully awake and have energy. I run errands or start organizing things around the house or on the computer."

Optimal: Prepare and eat dinner. *Now* is the time for carbs. Lean body-type Dolphins are not usually on a diet. Have a big bowl of mac and cheese or a baked potato. It's called comfort food for a reason. Your serotonin level will go up and your cortisol level will go down, calming your hyperaroused body and hyperactive mind. If there is anything you need to discuss with your partner or family that might be upsetting or may cause consternation, do it while you eat. The serotonin level uptick will serve as a buffer for tense or anxious feelings.

8:00 P.M. TO 8:30 P.M.

Typical: "I get a lot done, or try to. I might set out to do one thing and get distracted by something else, especially online. There is always a chore or thing I have to do."

Optimal: Have sex, either with a partner or by yourself. It might seem odd to do it at 8:00 p.m., but post-dinner, pre-bedtime sex serves a couple of purposes for you. Not only does sex have soothing physical and emotional benefits—including a blast of oxytocin, the relaxing "love hormone"—but it will help you redefine what "bed" means to you. If

you engage in a positive, loving experience there, one that doesn't immediately precede the dread and anxiety of trying to fall asleep, you'll reinforce positive associations with bed and condition yourself to think of it as a fun, not scary, place. If you usually have sex immediately before sleep to relax, the effort could backfire. The exertion will feed into your anxiety, reinforcing the negative association with the thought "light switch off, brain switch into overdrive."

8:30 P.M. TO 10:30 P.M.

Typical: "Since I didn't sleep well last night, I go to bed early to catch up. But it doesn't work. When I lie down, my brain goes haywire. I think of stuff I need to do or would like to do. I might scroll through Facebook or finish watching a movie on my phone to get my mind off the insomnia."

Optimal: Power down. The post-dinner hours are all about relaxation. Direct your evening energy surge toward something purposeful but non-engaging to soothe and quiet your mind. Watch TV with your family or go out to a movie. Take a walk to get ice cream (more carbs!). Go ahead and clean out a drawer or whatever chore or task takes hold of your mind, but do it with the awareness that you have to stop at 10:30, no matter what. If you meet a friend for a drink or have a glass of wine, make sure your last swallow is by 9:00 p.m. Alcohol can disrupt sleep, and you need to give your body adequate time to metabolize the alcohol out of your system by bedtime.

10:30 P.M. TO 11:30 P.M.

Typical: "Still lying in bed, awake. I start to get frustrated and get on a bad loop of being anxious about not falling asleep, which only makes it harder to do. Or I'll think of something important and wake up my husband to talk about it. This does not go well."

Optimal: Power down. Using electronics at night makes it harder to fall asleep. The blue wavelength light emissions suppress melatonin secretions. Avoid any blue light by turning off all screens, including your phone, at 10:30 p.m. I call it the Power-Down Hour. If you must watch

TV, dim the brightness and make sure the picture is at least ten feet away from your eyes. In fact, dim all the lights in the house to stimulate the production and release of melatonin. I recommend special lightbulbs that have been created to filter out blue light at night. If you are interested, go to www.thepowerofwhen.com and see my video on these amazing discoveries (they're great for kids as well). Meanwhile, shift your focus to nonscreen activities that lower cortisol levels and blood pressure. If cleaning or organizing engages your brain—and I know it does—you have to stop that now, too. A great idea is to take a hot shower or bath to help lower your core body temperature. Engage in quiet, casual conversation. Cuddle. Meditate. Do some low-intensity stretching. What bores you to death? Do it now. What gets your juices flowing? Avoid it! Your wandering mind should not be checking emails that could excite or irritate you or scrolling through Facebook and clicking cool links. I discourage insomniacs from reading biographies or memoirs at night. Among my patients, nonfiction tends to be more mentally engaging than fiction. A novel is a safer choice. Even better, read something tedious and boring, like a computer instruction manual. Just don't turn it on!

11:30 P.M.

Typical: “Still lying awake.”

Optimal: Go to bed. Dolphins should not get in bed until now. In fact, except for 8:00 p.m. sex, don't spend *any* time in bed before now. Don't hang out or watch TV there. Don't read in bed. You must learn to associate bed with sex or sleep *only*.

Once in bed, try progressive muscle relaxation (go to www.thepowerofwhen.com to watch video instructions) or counting backward from 300 by threes. If you are not asleep in twenty minutes, get up and sit in a chair in the dark for fifteen minutes before returning to bed to try again. Repeat these twenty-minutes-in, fifteen-minutes-out cycles. The strategy is called “stimulus control.” The concept is to avoid the buildup of anxiety from just lying there. You might have a few bad nights using this strategy,

but eventually it'll help lower your anxiety and blood pressure in bed and will yield more continuous quality rest.

12:30 A.M. TO 2:30 A.M.

Typical: “Tossing and turning. My anxiety is ramping up. I look at the clock and calculate how many hours of sleep I might get if I pass out in ten minutes or twenty. My whole body feels tense.”

Optimal: Enter Phase One. If you follow the chronorhythm I've outlined for you and consistently practice the strategies, you will be able to fall asleep within thirty minutes of bedtime. This will take some time to accomplish (maybe a week to ten days of consistency). The first two hours of sleep are the most important for you. During Phase One, your body is physically restored. All the tension of the day is released from your muscles and brain to repair and rebuild on a cellular level from bones to skin. During the first week on this schedule, insomniacs won't always be able to pass out within thirty minutes, but don't give up. Stick with it. I've helped hundreds of patients retrain their bodies this way. Don't watch the clock. This will only frustrate you and make you do the “mental math,” as Stephanie described above. If you are practicing stimulus control, use the stopwatch function on your phone, but don't check the time, just guess it.

2:30 A.M. TO 4:30 A.M.

Typical: “If I'm asleep, it's like skimming the surface. I wake up repeatedly and don't know if I fall back under.”

Optimal: Enter Phase Two. Not a lot goes on during the middle portion of the night. Phase Two is uncomplicated sleep. If you do wake up momentarily, don't let it upset you. **Wake-ups are completely normal.** We all wake for a few seconds at the end of every ninety-minute sleep cycle before beginning another one. Deep sleepers don't remember doing it, but it happens. Dolphins are light sleepers and more prone to wake-ups than most. **Change your perspective on those wake-ups.** They're to be expected—a healthy part of sleep. If you see them as normal, you won't

obsess about having them or view them as a sleep failure. Anxiety will be lessened and the wake-up periods will become shorter.

4:30 A.M. TO 6:30 A.M.

Typical: “I rarely see 4:00 a.m. on my clock. Even I am asleep then.”

Optimal: Enter Phase Three. During the final portion of the night, you get the bulk of rapid eye movement (REM) sleep, when you consolidate memory and effectively clear out the cobwebs in your brain. For short-sleeping Dolphins, two hours of Phase Three is a great goal.

6:30 A.M. TO 7:00 A.M.

Typical: “I wake up tired and vow to go to bed early tonight, if I can just get through the day on fumes.”

Optimal: Wake up refreshed. If Dolphins can get a solid six hours, with adequate time in all three phases of sleep, their bodies and brains are rested and fit to face the challenges of the day.

On weekends, get up at your scheduled wake time, even if you think you can sleep longer. Sleeping in is a trap for two reasons:

One: It won't do you any good. You need deep, physically restorative Phase One sleep (delta sleep), which you can get only at the beginning of the night. Extending the last third of sleep won't make you feel any better.

And two: Sleeping in will dismantle your carefully constructed chronorhythm. Remember, Dolphins thrive on consistency, which includes a consistent wake time every day, even on weekends and vacations. Otherwise, you'll push your whole day out of sync and you won't be able to fall asleep at midnight, setting off a chain reaction that you know all too well of not sleeping at night and dragging all day (this is called social jet lag). If you rise consistently and are active throughout the day, taking periodic walks, I guarantee that the quality of your sleep will be significantly improved and it will boost your day-to-day energy and sharpness far more than an extra hour of REM sleep on Sunday, which, by the way, is usually lighter sleep and not particularly refreshing.

EASY DOES IT

It seems like a lot of change, and it is. But if you adjust your schedule slowly, making one or two small shifts per week, you'll be able to incorporate and internalize them into your life seamlessly. You'll notice significant improvements in the overall quality of your life in just one month if you make steady changes week by week.

Week One

Establish a consistent wake time and bedtime.

Elevate your heart rate upon waking with exercise.

Wean yourself off caffeine after 1:00 p.m. It doesn't help you wake up, and it can affect your ability to fall asleep at night. Switch to herbal tea.

Check out the videos on www.thepowerofwhen.com.

Week Two

Continue with previous week's changes.

Eat protein for breakfast, a balanced lunch, and 60 percent carbs for dinner.

Cool showers in the morning and/or hot baths at night.

Week Three

Continue with previous weeks' changes.

Take an afternoon walk.

Have your important, intense, and heavy conversations in the late afternoon/early evening.

Week Four

Continue with previous weeks' changes.

Practice stress-busting activities including pre-dinner meditation and post-dinner sex.

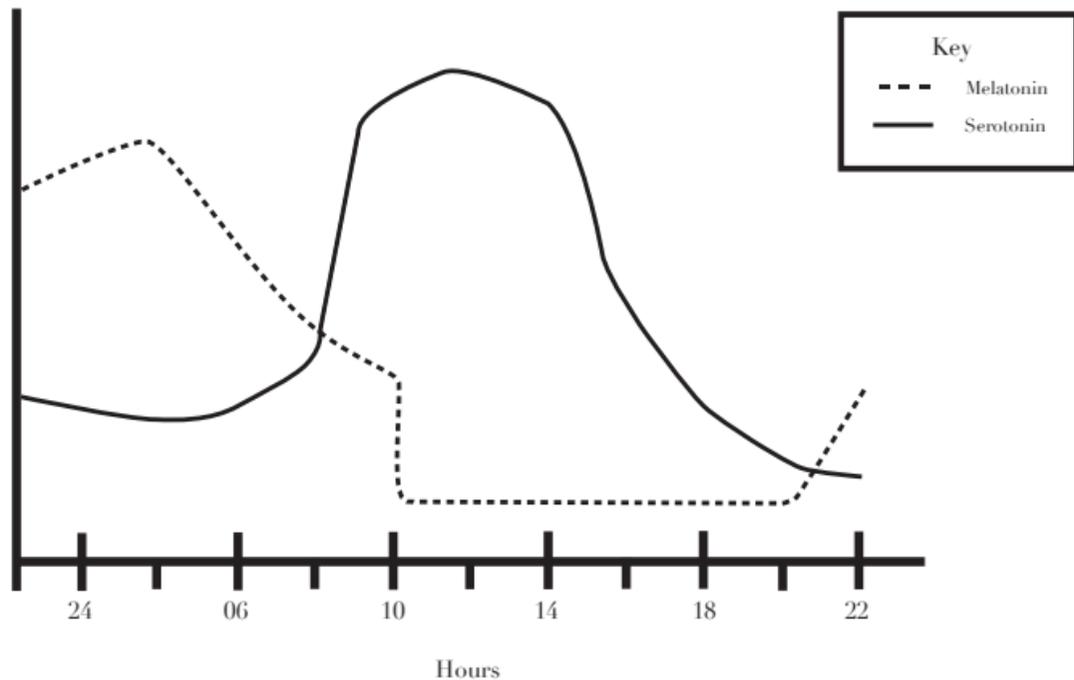
Power-Down Hour. Turn off all screens at 10:00 p.m.

Try stimulus control, or getting out of bed if you haven't fallen asleep in twenty minutes, sitting quietly in the dark for fifteen minutes, then returning to bed to try again.

Dolphin Daily Schedule

- 6:30 a.m.:** Wake up, no snooze.
- 6:35 a.m.:** Exercise on the floor of your bedroom or get dressed for a twenty-five-minute outdoor workout. If you work out indoors, try for ten minutes of direct sunlight during cooldown.
- 7:10 a.m.:** Cool shower, including one-minute meditation.
- 7:30 a.m.:** Breakfast, high-protein.
- 8:00 a.m.:** Get dressed and organized.
- 8:30 a.m.:** Out the door to work, or, for the self-employed, get right to it.
- 9:30 a.m. to 9:45 a.m.:** Coffee break.
- 10:00 to noon:** Creative thinking time. Daydream and journal for ideas. Make big-picture to-do lists, research, think.
- Noon to 1:00 p.m.:** Lunch. Do not skip!
- 1:00 p.m. to 4:00 p.m.:** DO NOT NAP. Do not drink coffee! If you feel tired, take a walk—outside, if possible. Sunlight exposure will help.
- 4:00 p.m. to 6:00 p.m.:** Peak alertness, most productive time. Tackle hard stuff.
- 6:00 p.m.:** Fifteen minutes of alone time to decompress.
- 6:30 p.m.:** Cook dinner, high-carbohydrate.
- 7:00 p.m. to 8:00 p.m.:** While eating your meal, have any intense, demanding, or practical conversations with family and friends. The carbs will buffer anxiety.
- 8:00 p.m.:** Sex, with a partner or by yourself.
- 8:30 p.m. to 10:30 p.m.:** Afterglow. The post-orgasmic flow of relaxing hormones will prime you for sleep. Get things done at home or online, or watch TV.
- 10:30 p.m.:** Turn off all screens and stop any mentally engaging activity. Read a novel, have light conversations. Take a hot shower or bath.
- 11:30 p.m.:** Go to bed. Practice “stimulus control” to combat insomnia-related anxiety. If you find that you are not falling asleep for an hour or more, move your bedtime later by thirty minutes.

Lion



For Lions, “sleep hormone” melatonin levels start to drop around 4:00 a.m., causing an early wake time. “Happy hormone” serotonin levels peak in the mid-morning, putting Lions in a good mood.

REALITY CHECK

The following schedule is how you'd organize your day in a perfect world. But real life is not perfect. Due to social or work situations that are out of your control, you might not be able to follow the schedule to the letter.

That's okay.

The worst thing you can do is say, "If I can't do X, Y, or Z at exactly the right time, the whole thing is thrown off, so forget it." Any changes will result in improvements to your health and happiness. It's not an all-or-nothing proposition. Ideally, you could do it all. Practically, you might not be able to. So do what you can now. Over time, as you notice positive changes, you might find that you can do a little more.

THE LION'S CHRONORHYTHM

5:30 A.M. TO 6:00 A.M.

Typical: "As soon as my eyes open," said Robert, "I have to get moving. It's like I'm catapulted out of bed. I put on my sneakers and run a few miles, sometimes in the dark."

Optimal: Wake up, eat, and hydrate. With surging cortisol levels, you can't sit still, and naturally, you think of moving. But exercise increases

cortisol levels and heart rate, making you even more alert. If you save exercise for the afternoon, however, you can get a much-needed energy boost when you're lagging. Instead of hitting the road when it's still dark out, go to the kitchen and eat breakfast, ideally within thirty minutes of waking. Drink two glasses of water after you eat. With a full stomach, you won't be tempted to exercise. Lions tend to make healthy choices, food-wise. I recommend a high-protein, low-carb breakfast for fuel at the start of a busy morning.

6:00 A.M. TO 7:00 A.M.

Typical: "I'm really hungry after my run. I'm hungry during my run! I run faster on the way back because I'm thinking about food. I eat first, then shower."

Optimal: Harness mental energy. Post-breakfast is an excellent time for Lions to sit down and contemplate the larger issues of life, like long-term career goals and the state of relationships. During those early-morning alone hours without distractions, your brain is primed for big-picture conceptual thinking. Make your to-do lists, and plan the day, week, months, and years ahead. Plot your path to world domination while the rest of the world is snoozing. Since you have the house (the block, the world) to yourself, you won't be bothered by others during a morning meditation practice. Taking a few minutes to not think about anything in particular can harness your energy as you burst forward into your day. So try it.

7:00 A.M. TO 7:30 A.M.

Typical: "I'm dressed for work and can't imagine sitting around at home, so I just head into the office. I'm there at least an hour before anyone else shows up. I use the time to clear my desk and get a jump on what's ahead."

Optimal: Have sex. After your cortisol and insulin morning jolt has leveled off, Lions should jump back in bed, but not for a quick nap. Morning testosterone in both men and women is highest within the first hour or two of waking, and sexual desire is strongest. It's the ideal time for Lions

to have a sexual encounter, with a partner or alone. Be warned: If your partner is a Wolf, you might lose a hand if you initiate sex at this hour. Bear partners might appreciate the affectionate wake-up. Morning orgasms also give you an early dose of oxytocin, which will fill you with peace and calm for hours to come. If you have kids who need help getting ready for school, make it a quickie and save your epic encounters for the weekends. (For more about sex and timing, see “Have Sex” on page 107.)

7:30 A.M. TO 9:00 A.M.

Typical: “I’m on fire in the morning. I can really grind. If I have a report to write or something to research, I can knock it out in a few hours.”

Optimal: Connect. If you’ve had a quiet morning of contemplation and sexual activity, you’ll have taken the edge off your considerable energy. You’ll still have plenty to spare, and you would do well to shine your morning light on others. Don’t rush off to work before anyone else gets there. Instead, connect with other people. If you live with others, stick around at home, where your energy and positive outlook will be contagious and improve the moods of your family members. If you live alone, write emails, Skype with your parents, or have a breakfast date.

9:00 A.M. TO 10:00 A.M.

Typical: “Nose to the grindstone. Everyone else at work trickles in and takes a while to get up to speed. Meanwhile, I’m cranking.”

Optimal: Impress and snack. Create opportunities to interact with colleagues and contacts first thing. You will be the star at a breakfast meeting. You won’t be too hungry, since you’ve already eaten, but order something small, about 250 calories, that’s 25 percent protein and 75 percent carbs (a yogurt with fruit, or a small bowl of oatmeal) and have coffee (three hours after waking, for a cognitive lift). A snack now will help you push your next meal into the early afternoon, which will extend your energy into the evening.

10:00 A.M. TO 12:00 P.M.

Typical: “I get hungry early in the afternoon, and I have to eat lunch. Ideally, I’d have lunch with colleagues, but they want to eat later and I just can’t wait.”

Optimal: Hold forth. If you are the boss or in a leadership role, call meetings for mid-morning, when you are best equipped, hormonally speaking, to make clear, strategic decisions. Mid-morning is your on-peak period, when your mind is sharp and analytical. The mental clarity lasts until noon, so squeeze the most out of this window of time to make your arguments, get your points across, solve problems, and find solutions. (If you have employees who are other chronotypes, learn how to work effectively with them in “Present Your Ideas,” page 251.)

12:00 P.M. TO 1:00 P.M.

Typical: “When everyone else is having lunch, I start to slow down. It comes on pretty strong. After revving so fast for hours, I kind of deflate. But I get some coffee and power through.”

Optimal: Eat lunch. Within an hour or two of having the midday meal, Lions (like Bears, Wolves, and Dolphins) experience an energy dip. If you ate on your old schedule, you’d be lagging earlier than the other types at a time when Bears are just entering their on-peak alertness. Not acceptable for Lions, who might be tempted to use coffee or energy drinks to regain their mojo. This is a physiological battle that you can’t really win — unless you shift your afternoon meal to one hour later. If you had a nine o’clock snack, as suggested above, you could hold off eating lunch until noon, keeping insulin low until early afternoon and allowing you to maintain your morning energy for a while longer. If you can go outside for lunch, the exposure to sunlight will aid in your efforts to stay wide-awake. As for content, avoid heavy carbs that will make you sleepy. Shoot for a balanced meal of one-third protein, one-third carbs, and one-third healthy fats: a big salad with grilled chicken or salmon, a sandwich with one piece of bread, a fajita bowl with brown rice.

1:00 P.M. TO 5:00 P.M.

Typical: “I’m running on fumes. I’ve been awake for ten hours already, and by afternoon, I can’t force myself to be ‘up.’ I might grab an energy drink or a protein bar to keep myself going.”

Optimal: Float. Lions aren’t known for their insight and creativity, but that might be because they squander their most innovative hours by forcing themselves to run on empty to solve strategic analytical problems. By afternoon, your analytical on-peak window is closed. Your problem-solving mojo is tapped out. Being off-peak is not necessarily a bad thing, as you have probably long believed. When Lions are tired and mentally fuzzy, they come into their creative and insightful powers. Stop trying to stay alert and on point. If you have freedom at work, this is the time to go purposely off point and think outside the box. Brainstorming meetings could yield innovative ideas.

Journaling is an excellent way to let your creative mind take over. Every afternoon, when you get a fifteen-minute break from work demands, take out an actual paper notebook and an actual ink pen, and doodle, scribble, or draw pictures or jot down whatever ideas float through your head. Turn your fuzzy focus to a particular subject, like your career or a relationship, but don’t narrow the focus. Allow your thoughts to just drift and present themselves. Who knows what brilliant notions might appear? For a video about how to start a journaling practice, go to www.thepowerofwhen.com.

5:00 P.M. TO 6:00 P.M.

Typical: “I’m done. Nothing left in the tank. I’m easily annoyed due to tiredness, and I’m hungry. Of course, no one else is hungry, and I wind up eating alone.”

Optimal: Exercise. Eating at this hour means a rise and fall of insulin, which will make you sleepier than you are already. Instead of eating at 5:00 p.m., exercise instead. Lions have a tendency to exercise at dawn because they’re up and have nothing else to do. But if you can hold off

working out until the evening, you'll get an energy boost by raising blood pressure, heart rate, and cortisol level when you really need it. Also, exercising when your body temperature is higher than first thing in the morning reduces the risk of injury—a major concern for health-conscious Lions. If the weather permits, catch the last rays of sunlight by exercising outdoors. If you shower afterward, make it another cool shower. When your core body temperature drops, as it does every late afternoon for you, you'll start to feel sleepy. Exercise followed by a cool shower will keep your core temperature up.

6:00 P.M. TO 7:30 P.M.

Typical: “So now my friends are ready to hang out. I’m not exactly the life of the party with my mood and energy rolling downhill. So I have a drink or two to change my frame of mind.”

Optimal: Have dinner and one drink. A 6:00 p.m. dinner date is completely reasonable. Since you have had a later lunch and a post-work workout, you can hold off until now for dinner and join your Bear friends for a meal. Avoid carbohydrates, which will elevate “comfort hormone” serotonin level and decrease your already dwindling cortisol level. A plate of pasta at 6:30 p.m. would affect you like a powerful sleeping pill. To prolong energy, eat protein for your final meal, or eat light to keep your blood sugar low and avoid a crash.

In good conscience, I can't advise anyone to start happy hour at 4:00 p.m., but that is when a Lion's metabolism best tolerates alcohol. If you start drinking at dinnertime, you can handle one or two glasses without feeling flattened. But do not drink after 7:30 p.m., or your body won't be able to metabolize the alcohol in your system before bed, and your sleep could be poor in quality or disrupted.

7:00 P.M. TO 10:00 P.M.

Typical: “Beyond done. I’ve totally hit a wall. I’ve been awake for fifteen hours and every cell in my body is telling me to go to sleep.”

Optimal: Live it up. Your lean and efficient sleep system would be telling you that it's time for bed now, but because you have subtly shifted your eating and exercise schedule to make sleep pressure less intense, you gain an hour or two of alertness before insulin, cortisol level, and blood pressure drop. Enjoy it! Don't rely on coffee or alcohol to keep you going. They won't work, and could ruin your sleep, which Lions need to conquer the world tomorrow.

If you're having a quiet night of relaxing at home, you can still socialize with family and friends online or on the phone. You bought yourself an extra hour of alertness for human interaction, so make the most of this time to connect and nurture your soul.

10:00 P.M.

Typical: "I'm down for the count."

Optimal: Downshift. I'd advise Lions to be in their home environment by 10:00 p.m. Prepare for 10:30 bedtime by turning off all blue wavelength light from phones, tablets, and monitors, or use the special light-bulbs I recommend at www.thepowerofwhen.com. Computer screens will suppress melatonin secretions and delay the onset of sleep—yes, even for Lions. It's okay to watch TV at this hour, as long as the monitor is at least ten feet away from your eyeballs.

10:30 P.M. TO 1:30 A.M.

Typical: "Completely out. A bomb could go off and I wouldn't know it."

Optimal: Enter Phase One. Since you are pushing your limits to stay up later than usual, you should fall immediately into physically restorative rest. Your brain waves are slower and deeper earlier in the night than those of other chronotypes. You even sleep more efficiently!

1:30 A.M. TO 3:30 A.M.

Typical: "Dead to the world."

Optimal: Enter Phase Two. During the middle portion of the night, you will have uncomplicated rest.

3:30 A.M. TO 5:30 A.M.

Typical: “Still out.”

Optimal: Enter Phase Three. During the last third of the night, you get the bulk of REM sleep when memory consolidation occurs. Wake up at your usual time refreshed and ready to conquer the world again.

EASY DOES IT

It seems like a lot of change, and it is. But if you adjust your schedule slowly, making one or two small adjustments per week, you'll be able to incorporate and internalize them into your life seamlessly. You'll notice significant improvements in the overall quality of your life in just one month.

Week One

Eat breakfast within thirty minutes of waking up.

Exercise in the early evening, not the early morning.

For a video about the timing of sun exposure and exercise, go to www.thepowerofwhen.com.

Week Two

Continue with previous week's changes.

Try making connections in the morning at home or at breakfast meetings (you'll have a snack) instead of pushing all interactions into the evening hours.

Shift lunch to 12:00 p.m.

Week Three

Continue with previous weeks' changes.

Shift dinner to 6:00 p.m.

Drink alcohol after 7:30 p.m. only one or two nights per week.

Week Four

Continue with previous weeks' changes.

Schedule important strategic meetings for the morning.

Schedule brainstorming meetings in the afternoon.

Lion Daily Schedule

- 5:30 a.m.:** Wake up, no snooze.
- 5:45 a.m.:** Breakfast: high-protein, low-carb.
- 6:15 a.m. to 7:00 a.m.:** Big-picture conceptualizing and organizing.
Morning meditation.
- 7:00 a.m. to 7:30 a.m.:** Sex. If you have kids who need help getting ready for school, make it a quickie.
- 7:30 a.m. to 9:00 a.m.:** Cool shower, get dressed, interact with friends or family before heading to work.
- 9:00 a.m.:** Small snack: 250 calories, 25 percent protein, 75 percent carbs. Ideally, have it at a breakfast meeting.
- 10:00 a.m. to 12:00 p.m.:** Personal interactions, morning meetings, phone calls, emails, strategic problem solving.
- 12:00 p.m. to 1:00 p.m.:** Balanced lunch. Go outside for sunlight exposure, if possible.
- 1:00 p.m. to 5:00 p.m.:** Creative thinking time. Listen to music, catch up on reading and journaling. In a workplace setting, lead or attend brainstorming meetings.
- 5:00 to 6:00 p.m.:** Exercise, preferably outdoors, followed by a cool shower.
- 6:00 p.m. to 7:00 p.m.:** Dinner. Keep it balanced—equal parts protein, carbs, and healthy fats. A carb-heavy meal like pasta might make you crash.
- 7:30 p.m.:** Last call for alcohol. A drink after this hour will knock you out.
- 7:00 p.m. to 10:00 p.m.:** Socialize on the town, or connect with loved ones online while relaxing at home. You bought yourself an extra hour, so make the most of it!
- 10:00 p.m.:** Be in your home environment by now. Turn off all screens to begin the downshift before bed.
- 10:30 p.m.:** Go to sleep.

The goals for Bears:

- **Get adequate sleep and exercise *during the week*.**
- **Shift eating rhythms to speed up metabolism and shed pounds.**
- **Increase energy in the afternoons and evenings with strategic napping and activity.**

REALITY CHECK

The following schedule is how you'd organize your day in a perfect world. But real life is not perfect. Due to social or work situations that are out of your control, you might not be able to follow the schedule to the letter.

That's okay.

The worst thing you can do is say, "If I can't do X, Y, or Z at exactly the right time, the whole thing is thrown off, so forget it." Any changes will result in improvements to your health and happiness. It's not an all-or-nothing proposition. Ideally, you could do it all. Practically, you might not be able to. So do what you can now. Over time, as you notice positive changes, you might find that you can do a little more.

THE BEAR'S CHRONORHYTHM

7:00 A.M.

Typical: "The alarm goes off. I hit snooze a couple of times, and then I get up and start the day," said Ben.

Optimal: Wake up and have sex. In the early morning, your testosterone is high and your desire is strong. You might not be fully alert, but initiating sex upon waking is an excellent way to be active, elevate your heart rate, and raise core body temperature. Also, the boost of oxytocin in the morning will carry you through your whole day on a cloud of positive vibes, peace, and joy.

As an alternative to sex with or without a partner, elevate your heart rate immediately upon waking by putting on a pair of sweatpants and a t-shirt and walking around the block while you're still half asleep. If you wait to exercise until you're awake, you'll have the presence of mind to rationalize your way out of doing it. And you know exactly what I mean. If you can exercise outside, the exposure to sunlight will help you feel more alert. If you have kids who need help getting ready for school, do

five minutes of sit-ups and push-ups on the bedroom floor. Every little bit helps.

7:30 A.M. TO 9:00 A.M.

Typical: “I do the morning routine. Shower. Have breakfast and two cups of coffee and drive to work in a fog.”

Optimal: Have a healthy breakfast. It’s a good idea to eat within a half hour of waking to sync the master clock in your brain to the minor clocks in your stomach and digestive system. Bears usually reach for high-carb choices like cereal or a bagel. Eating carbs in the morning raises calm-bringer serotonin and lowers cortisol levels, which you need to get up and moving. **Avoid carbs at breakfast.** Have a protein-heavy meal instead, like bacon and eggs, yogurt, or a protein shake. Don’t be afraid to eat a hearty breakfast. People who eat the majority of their calories early in the day have a lower BMI than late eaters—even if they eat the exact same number of calories. To lose weight using the power of when, you will eat a big breakfast, a medium-sized lunch, a small afternoon snack, and a modest dinner, with zero late-night junk food binges. I’ll make it easy for you. You’ll see.

Also, avoid coffee at breakfast. I know it’s a deeply entrenched habit. But coffee doesn’t actually make you more awake first thing in the morning. It only makes you addicted to caffeine and jittery. Your commute will be safer if you get alertness from exercise, sunshine, and protein.

9:00 A.M. TO 10:00 A.M.

Typical: “I get to work and settle in. I make the rounds, talk to everyone, talk about what we watched on TV or what happened on the news. Not a lot gets done.”

Optimal: Get your day organized. That foggy feeling of sleep inertia that paralyzes productivity when you first arrive at work? It’s been eradicated with morning exercise or sex, sunshine, and a protein breakfast. Now you can actually plan your day in the first hour of work instead of wasting time.

10:00 A.M. TO 12:00 P.M.

Typical: “Finally, I start to feel fully awake. I’m already behind by then.”

Optimal: Crank. Your cognitive peak comes mid-morning. Instead of frittering away mental sharpness socializing, tackle taxing work now to get it done in record time. If it’s possible to close your office door or isolate yourself during this period, you can plow through paperwork. Have coffee now to further sharpen your alertness. One cup should be enough.

12:00 P.M. TO 1:00 P.M.

Typical: “My official lunch break. I love lunch. There are a bunch of options in walking distance, but I usually go right next door to a deli to get a sandwich.”

Optimal: Exercise, eat, exercise. If you can move for thirty minutes before lunch by taking a walk, you’ll speed up your metabolism to convert food to energy before you even take a bite, and decrease your appetite in one shot. Your meals should go in descending order by size, so your lunch should be half the size of breakfast and twice the size of dinner. If you’re used to a twelve-inch sandwich at Subway, make it a six-incher. Ideally, you’ll take another walk for ten minutes after eating, too.

1:00 P.M. TO 2:30 P.M.

Typical: “I feel okay at this time, energy-wise.”

Optimal: Take charge. If you were active during your lunch hour, you can stave off the afternoon energy dip for an hour or two and prolong your on-peak analytical powers. Make good use of them until the inevitable lull hits.

2:30 P.M. TO 2:50 P.M.

Typical: “I always lose steam and feel really sleepy. But I need to be on my game, so I have a Coke or a Red Bull. Or a candy bar. Snickers is packed with energy, right?”

Optimal: Power nap. The best time to nap is approximately seven hours or so after waking. If you wake up at 7:00 a.m., the ideal nap time is 2:00 p.m. If you work at a progressive company like Google or the *Huffington Post* that has “sleep pods” for employees, or you have a home office, lie down and close your eyes for twenty minutes. The short nap will restore you to morning levels of energy and alertness. Make sure you set an alarm so you don’t go longer than twenty minutes, or you’ll wake up groggy with a second dose of sleep inertia, and you’ll need another hour to shake it off. I know it’s not possible for most of us to plan a nap, but if you can, your blood pressure will decrease and afternoon productivity will increase. At the very least, power down mentally for ten minutes. Find a quiet spot and do some deep breathing or meditation.

3:00 P.M. TO 6:00 P.M.

Typical: “I start watching the clock at around 3:00, and can’t wait until I get to leave.”

Optimal: Interact—and snack! If you make the recommended micro-adjustments, this will be the best time to attend meetings, interact with customers or clients, write emails, and make phone calls. If you were active midday and took a power nap, you’ll be alert—able to concentrate on the needs and concerns of other people. Also, since it’s toward the end of the day, a Bear-dominant workforce is already thinking about happy hour or dinnertime. If you have innovative ideas or strategies to present to the others, including the bosses, it’s likely they’ll be open to suggestions now. Take advantage of their agreeableness and get your thoughts and ideas approved.

At 4:00 p.m., have a small snack of around 250 calories that’s 25 percent protein and 75 percent carbs (an apple with peanut butter, or cheese and crackers) for quick energy to last the final portion of the workday.

6:00 P.M. TO 7:00 P.M.

Typical: “Dinner! As soon as I get home, my stomach starts rumbling!”

Optimal: Exercise. At this hour, you're at your physical peak, able to access your maximum lung capacity and heart rate. Your hand-eye coordination is sharpest. As a friendly, sociable Bear, you can take advantage of your coordination high point by playing a team sport with friends. Join a post-work basketball league, take a class with a friend, or, if group sweating isn't your thing, use this Body Hour to run around and play with your kids or speed walk through errands.

Going in a completely different direction, this is also the best time for happy hour with friends. Your alcohol tolerance is high in the early evening, so you can lift a few glasses without getting too intoxicated. You'll also have time to metabolize the alcohol out of your system before it threatens to interfere with sleep.

7:30 P.M. TO 8:00 P.M.

Typical: "After a huge meal, all I really want to do is put on my sweatpants, sit down on the couch, and relax."

Optimal: Dinner and conversation. Dinner should be the smallest meal of your day, so have something filling, like soup or stew with a salad. Eating dinner one hour later than usual might seem like a challenge—you're hungry as a bear at 6:00!—but if you can delay the meal until 7:30 p.m., you'll be less likely to binge on junk food at 10:00 p.m. The main reason Bears tend to carry extra weight around their midsection is late-night visits to the fridge. If you can have the last bite of the night at or before 8:00 p.m., you'll speed up your metabolism, increase energy, and lose the belly fat. Eating within three hours of bedtime—late-night snacking—sends blood and heat to your core, which is a signal to the body to stay awake. The increase of digestion acids can cause heartburn when you lie down.

Also, if you don't overeat, and if you got exercise and sunlight several times during the day, as recommended, your good mood will continue. The day is more or less done, and now you are relaxed. Have potentially difficult conversations with family and friends now, when you—and other Bears—are catching a second wave of good vibes and positivity.

8:00 P.M. TO 10:00 P.M.

Typical: “On the weekends, my wife and I might be at a movie or a concert or have drinks with friends. But on weekdays, I’ll most likely watch TV, play computer games, or go online until bedtime—and make many trips to the kitchen for snacks!”

Optimal: Brainstorm. When alertness and concentration are low, creativity is at its peak. Brilliant ideas tend to come into our heads when we’re tired and groggy and doing just about anything besides sitting down and thinking really hard to try to come up with a brilliant idea. Your biological downtime is during the two hours before you get in bed. You don’t have to do much to let the ideas filter in. One great place to brainstorm is in the bathtub. Not only will the soothing heat set your mind to wander, it’ll reduce core body temperature, which will help you feel sleepy at bedtime. Other creativity boosters: reading, meditating, playing games, casual conversation.

10:00 P.M. TO 11:00 P.M.

Typical: “Still watching TV or online. Still snacking.”

Optimal: Power-Down Hour. At 10:00 p.m., shut down all screens. Staring at blue wavelength light on phones and tablets at this hour suppresses melatonin secretions and will keep you awake. Instead, read a book, stretch, meditate. Have more sex.

11:00 P.M. TO 12:00 A.M.

Typical: “We get in bed at 11:00 and might watch the late news. My wife and I look at our Facebook feed and talk about the stuff our friends posted. If I have the energy, I might roll toward her and start something.”

Optimal: Enter Phase One. Bears have a high sleep drive and need roughly eight solid hours a night. A belly full of snack food and the blue wave light influx could make it harder for you to fall to sleep. Any sleep-onset delay takes a toll. But, since you’ve already had morning sex and have powered down all screens, the only thing to do now in bed is go

to sleep. Thanks to being active throughout the day, and not having a late-night bowl of chips and salsa, you should be able to fall asleep quickly and deeply. The first portion of the night is when your body is physically restored. Your cells heal, recover, and rebuild.

1:00 A.M. TO 3:00 A.M.

Typical: “I’m usually asleep by midnight, except on Sundays, I might not pass out until 2:00.”

Optimal: Enter Phase Two. The second portion of the night is uncomplicated rest.

4:00 A.M. TO 7:00 A.M.

Typical: “Snoring, or that’s what my wife says.”

Optimal: Enter Phase Three. The third portion of the night is when you get the bulk of REM sleep. Muscles are inactive, making your throat narrower, which causes snoring. The excess weight you might carry is not helping in that department, either. While snoring, you’re consolidating memory and clearing the cobwebs. If you follow the chronorhythm, you’ll get a good three hours of the mental restoration you require to wake up refreshed and energized.

EASY DOES IT

It seems like a lot of change, and it is. But if you adjust your schedule slowly, making one or two small adjustments per week, you’ll be able to incorporate and internalize them into your life seamlessly. You’ll notice significant improvements in the overall quality of your life in just one month.

Week One

Set a consistent wake time and sleep time.

Shift your biggest meal from dinner to breakfast.

Go to www.thepowerofwhen.com to watch a video about waking up gently.

Week Two

Continue with previous week's changes.

Use early morning hours for practical work and the late evenings for creative brainstorming.

Socialize with colleagues in the afternoon instead of in the morning.

Week Three

Continue with previous weeks' changes.

Try to be active before and after each meal, even if it's just taking five-minute walks.

Don't eat or drink alcohol after 8:00 p.m.

Even if you party late on the weekends, continue to wake up within forty-five minutes of your regular time.

Week Four

Continue with previous weeks' changes.

Have sex in the mornings instead of late at night.

Take a twenty-minute power nap at 2:30 p.m.

Bear Daily Schedule

- 7:00 a.m.:** Wake up, no snooze.
- 7:00 a.m. to 7:30 a.m.:** Sex or exercise to elevate the heart and get cortisol flowing. Do it outside preferably (the exercise, or the sex if you're daring). If you don't have time for a twenty-five minute workout, five minutes is better than none.
- 7:30 a.m.:** Breakfast, high protein, low carb. No coffee yet!
- 8:00 a.m. to 9:00 a.m.:** Go to work. You'll have a safer commute if you replace caffeine with exercise in the a.m. If you work at home, get right to it.
- 9:00 a.m. to 10:00 a.m.:** Plan and organize your day.
- 10:00 a.m. to noon:** Most productive period. Concentrate, be on task, and get things done. Coffee break.
- Noon to 12:30 p.m.:** Non-exercise activity — walking is ideal.
- 12:30 p.m.:** A medium-sized lunch. It should be half the size of breakfast and twice the size of dinner. Take a ten-minute walk after eating.
- 1:00 p.m. to 2:30 p.m.:** One more hour of alertness before the afternoon energy dip.
- 2:30 p.m. to 2:50 p.m.:** Power nap. If that's not possible, find a quiet place to do deep breathing exercises for a few minutes.
- 3:00 p.m. to 6:00 p.m.:** Peak mood. Use your positive attitude in meetings, make phone calls, and send emails.
- 4:00 p.m.:** Small snack, 250 calories, 25 percent protein and 75 percent carbs.
- 6:00 p.m. to 7:00 p.m.:** Exercise if you didn't this morning, or be informally active by playing with kids or running errands. Or have drinks with friends.
- 7:30 p.m.:** Dinner! A small meal that's filling, like soup or a bowl of stew with a salad.
- 8:00 p.m. to 10:00 p.m.:** Socialize (sober; don't drink after 8:00 if

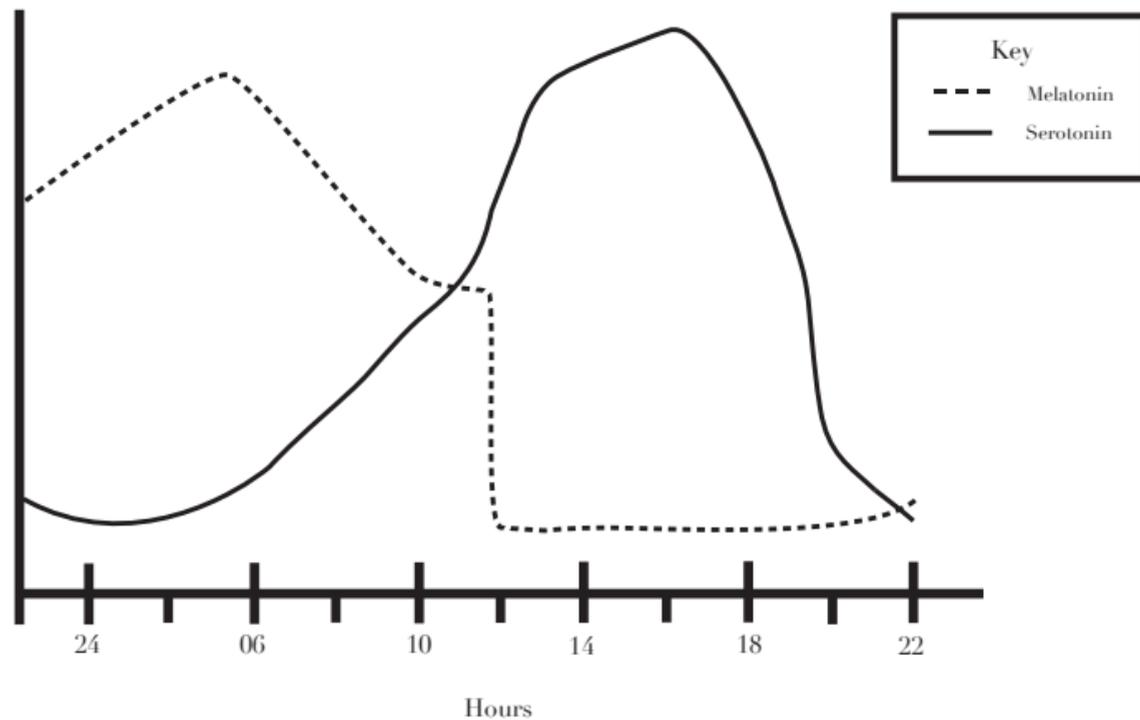
CHRONOTYPES

you want high-quality sleep). Have light conversations. Take a soothing hot bath and let your thoughts drift. Maybe a brilliant idea will float into your head.

10:00 p.m.: Turn off all screens. Meditate, stretch, relax.

11:00 p.m.: Go to bed.

Wolf



For Wolves, melatonin levels start to drop at 7:00 a.m. and don't fall off completely until noon. Serotonin levels peak in the evening, putting Wolves in a good mood at the end of the workday.

The goals for Wolves:

- **Improve efficiency during work hours.**
- **Shift eating rhythms to speed up metabolism.**
- **Increase number of hours of sleep per night.**
- **Stabilize mood swings for improved overall life satisfaction.**

REALITY CHECK

The following schedule is how you'd organize your day in a perfect world. But real life is not perfect. Due to social or work situations that are out of your control, you might not be able to follow the schedule to the letter.

That's okay.

The worst thing you can do is say, "If I can't do X, Y, or Z at exactly the right time, the whole thing is thrown off, so forget it." Any changes will result in improvements to your health and happiness. It's not an all-or-nothing proposition. Ideally, you could do it all. Practically, you might not be able to. So do what you can now. Over time, as you notice positive changes, you might find that you can do a little more.

THE WOLF'S CHRONORHYTHM

7:00 A.M. TO 7:30 A.M.

Typical: As Ann said, “I wake up to the alarm and hit the snooze button two or three times. It’s like I’m still dreaming when I throw back the covers to start the day.”

Optimal: Drift. Set two morning alarms. The first wakes you up. The second goes off twenty minutes later. During those twenty minutes, lie in semiconsciousness and ride the last waves of REM sleep while your mind consolidates and restores. In this half-dreaming state, you are firing on all cylinders creatively and might drift into a brilliant idea. When the second alarm goes off, quickly jot down or voice-memo anything that crossed your mind. Word to the wise: If you use voice memo, speak slowly. Another benefit of a twenty-minute drift: At 7:00 a.m., your body temperature has not risen sufficiently yet for movement (remember you’re on a slightly different schedule than the rest of the world). Waiting in bed will give you time to heat up, making your morning easier to take. You might be thinking: *I don’t have time to drift.* Buy those twenty minutes by not showering in the morning (more on that later).

7:30 A.M. TO 8:30 A.M.

Typical: “I can’t eat a bite in the morning. The thought makes my stomach turn.”

Optimal: Eat breakfast. In post-fast starvation mode, your body needs energy. If you don’t give it nutrition, it will turn to another source — your own muscles. First, drink twelve ounces of water to quick-start your metabolism, heating up your digestion and core, helping to wake you up. Then eat some protein. A hard-boiled egg, protein shake, or cup of yogurt is fast and easy. Multiple studies prove that a good breakfast prevents overeating later in the day.

Do not drink coffee! Your cortisol and insulin levels are already high and doing their job to get you up to speed. Caffeine only makes you jittery

in the morning when your “wake-up” hormones are flowing. Want proof? Ann has three cups and is still groggy for hours, but she says she is afraid that if she cuts back, her fog will last longer and be worse. This might be true for a day or two. But then the fog will clear. Caffeine also suppresses appetite, and Wolves must learn to eat within an hour of waking.

8:30 A.M. TO 9:00 A.M.

Typical: “My commute is a blur. It’s like I’m driving through brain fog.”

Optimal: Move. Even if you drive or take a train to work, get some outdoor movement time in first. Five to fifteen minutes of direct sunlight in the morning signals to the brain that it’s time to wake up and stops the production of melatonin, the cause of the fog. Exercise also heats you up and increases cortisol and adrenaline circulation. A time-wise trick to sneak in sun and movement in the morning is to park your car a few blocks away, walk to a subway stop that’s one farther than your usual stop, walk to the end of the driveway and get the paper, take your dog for a walk, or simply walk to the end of your street and back. Make sure you are breathing deeply. It helps set things in motion.

9:00 A.M. TO 11:00 A.M.

Typical: “Still in a fog, but it’s slowly lifting. I can’t concentrate, so I just drink more coffee. I read blogs, return emails, chat with friends and coworkers.”

Optimal: Consolidate. By mid-morning, melatonin secretions have stopped, and your heart rate and blood pressure finally surge. The sleepy feeling dissipates by 10:00 a.m. If you’ve eaten breakfast and avoided coffee, you should be able to be productive. Since you’re still off-peak, use the time to consolidate and plan what you will do when you shift to on-peak to hit the ground running. Listen to your previously recorded voice memos and flesh out some ideas. It’s the ideal time to gather your thoughts.

On weekends, when you have more flexibility, mid-morning is the ideal time for sex. Testosterone hits its daily peak and libido is abundant. Since I don’t recommend sleeping in on the weekends, a good morning

routine would be: Wake at 8:00, eat at 9:00, sex at 10:00, coffee at 11:00. I'm not saying this is possible or preferable every weekend morning. People without kids or commitments aren't going to want to jump out of bed, especially if they stayed up late the night before. But while sleeping until noon on Sunday might feel good, it will wreck your bio-time for days after. Make your choices with full understanding of the consequences.

11:00 A.M.

Typical: "Still trying to clear my head."

Optimal: Coffee break. Your morning cortisol release has run its course, so caffeine will do you some good now. Drink it black. No need to add sugar and cream or throw in some cookies or a doughnut. Carbs will slow you down with a spike in blood sugar and insulin. One cup should be plenty. If you usually have had four to six cups by now, be sure to see my video on caffeine fading at www.thepowerofwhen.com.

11:15 A.M. TO 1:00 P.M.

Typical: "So hungry! I'm first out the door to get something to eat at noon and have anything with melted cheese on it. Since I skipped breakfast, I get a cookie for dessert."

Optimal: List and lunch. A Wolf's mental alertness is on the rise. If you had lunch now, you'd interfere with that biochemical alertness. Take care of busywork tasks, the things that don't require too much concentration or insight but still need to get done. Hydrate to push your hunger back a little and be productive. If you must snack, make it pure protein, like a protein bar, mixed nuts, or Greek yogurt. Keep it small!

1:00 P.M.

Typical: "So full from eating too much and too fast."

Optimal: Lunch. Before you eat, take a short walk to stimulate your metabolism. Choose a meal that is one-third carbs, one-third protein, and one-third healthy fat (a salad with grilled chicken or shrimp, a sandwich with one piece of bread, a fajita bowl, sushi) to keep your energy level up.

CHRONOTYPES

A low-glycemic lunch sets the stage for your most productive part of the day, especially if you are in a creative field. You'll hit the ground running and will be able to get a lot done. If possible, eat with colleagues or friends. Your mind is active now, and you'll be articulate and witty.

2:00 P.M. TO 4:00 P.M.

Typical: "Now I feel tired again. A crash from the sugar at lunch? Nothing a fourth cup of coffee won't fix."

Optimal: Crank. Wolves' workday really starts now. For two hours after lunch, you can get things done, but you are still not at peak alertness yet. That won't happen for hours.

4:00 P.M.

Typical: "Now I'm hitting my stride."

Optimal: Snack. It's been three hours since you last ate, and it's four hours until dinnertime. Have a snack to tide you over, but be careful about portion size. Too much could spiral you into an insulin crash and ruin your afternoon productivity.

4:15 P.M. TO 6:00 P.M.

Typical: "By the time I'm finally sharp and hitting my stride, the day is almost over. Everyone else is killing time until they can leave, and I'm just getting started. I race through, like trying to do a full day's work in two hours."

Optimal: Interact. Your energy rhythm is flowing. Compared to Lion, Dolphin, and Bear colleagues and friends who are lagging, you are on fire at the end of the day and will outshine them in meetings and in one-on-one discussions. Now is the time for Wolves to present ideas to the boss and colleagues.

6:00 P.M. TO 7:00 P.M.

Typical: "I'm bouncing off the walls. Delayed effects of the pot of coffee? I rush home, throw dinner together, and eat with the kids."

Optimal: Exercise. Wolves get an evening energy surge. Your reaction time, muscle strength, flexibility, and heart and lung efficiency are at their maximum. Use them. Take a long walk. Go to the gym. Walk the dog or take the kids to the park.

I understand that this is the “traditional” dinner hour, but Wolves have to break that mind-set. It’s not healthy for them to eat this early. If you have kids, dinner will have to be on a staggered schedule. Feed the kids first, focus on them, and wait to have your meal at an appropriate bio-time. If you don’t have kids, exercise instead of eating. Activity is a natural appetite suppressant. After a few days of delaying dinner, your stomach will adjust and hunger won’t be an issue.

7:00 P.M. TO 8:00 P.M.

Typical: “The kids do their thing and my husband hits the couch. But I’m ready for some fun. I try to rally friends to meet me for a drink or go to a movie.”

Optimal: Bond. Unencumbered Wolves should cool down after a workout by meeting friends or having a pre-dinner drink or social hour. Wolves with kids can help them with homework and play games with them. Although concentration might be a little difficult while cortisol is flowing, you can use your energy advantage to show loved ones you care.

8:00 P.M. TO 9:00 P.M.

Typical: “Wine o’clock. It’s something I look forward to and it does help me calm down when my mind starts racing at night.”

Optimal: Have dinner. In the late evening, early nighttime, your senses—especially taste—are most acute. Having dinner on the late side will be more satisfying for you and will prevent late-night snacking that packs on pounds. Drink your wine before and during the meal, but stop when you finish to give your body time to metabolize the alcohol before bed (drinking before bed can disrupt sleep). Or avoid wine and stay hydrated with water.

9:00 P.M. 11:00 P.M.

Typical: “Wine makes me hungry, so I’ll have a snack or two while surfing the Internet or chatting online. I’m not reaching for cut veggies and fruit. More like the junk food or leftovers.”

Optimal: Have fun (including sex). You’ll be in the best mood all day, making it the perfect hour for relaxed or practical conversations with family and friends. Your body temperature is peaking, making you responsive to sexual activity. Sex brings physiological benefits to nearly every system in your body and releases hormones that bond you with your partner and make you feel happier for hours. Because you’ll probably stay awake for a while afterward, you will benefit from these hormones instead of squandering them while asleep. The aerobic activity will quash hunger, making you less likely to snack late at night. Post-sex, do some household business. You’ll have patience for work queries, annoying social correspondence, and balancing the budget.

11:00 P.M. TO 12:00 A.M.

Typical: “I’m probably online still, watching a show or reading articles, snacking. I start to worry that I should get to bed soon, but I feel wide-awake.”

Optimal: Unplug. Using screens sends blue light into your eyeballs, suppressing melatonin release, keeping you awake. So finish up your emailing and shut down all screens. Spend the hour before bed meditating, reading, and stretching. In this meditative state, you will have your second creative peak of the day.

Showering or bathing at night not only buys you twenty minutes of drifting time in the morning, it will also help you fall asleep. Passive heating—taking a hot bath or shower—helps lower core body temperature, signaling to the brain to release melatonin, the key that starts the engine of sleep.

12:00 A.M.

Typical: “I lie in bed, listening to my husband sleeping. It’s stressful not to be able to fall asleep, and I worry about what tomorrow will be like.”

Optimal: Go to bed. By adjusting your eating and showering, coffee and alcohol patterns, exercise and screen time, you'll be able to fall asleep by 12:30 a.m. or thereabouts. It might take a couple of weeks, but you'll get there.

12:30 A.M. TO 2:30 A.M.

Typical: "Staring at the ceiling."

Optimal: Enter Phase One, when physical restoration occurs. Your body heals and damaged cells are repaired.

2:30 A.M. TO 5:00 A.M.

Typical: "Most likely asleep, thanks to the Ambien I took an hour ago."

Optimal: Enter Phase Two. The middle portion of a night's sleep is when your body and brain have uncomplicated rest.

5:00 A.M. TO 7:00 A.M.

Typical: "Finally, deeply out right before I need to wake up."

Optimal: Enter Phase Three. During the final portion of the night, you'll get the bulk of REM sleep. The brain's restoration and consolidation of memory takes place now. If sleep is delayed at the beginning of the night, you won't get enough REM sleep at the end, limiting its creative benefits and the total hours of brain restoration and organization.

EASY DOES IT

It seems like a lot of change, and it is. But if you adjust your schedule slowly, making one or two small adjustments per week, you'll be able to incorporate and internalize them into your life seamlessly. You'll notice significant improvements in the overall quality of your life in just one month.

Week One

Eat breakfast.

Get five to fifteen minutes of direct sunlight within an hour of waking.

CHRONOTYPES

Wean yourself off morning coffee. Go to www.thepowerofwhen.com for an instructional video.

Week Two

Continue with the previous week's changes.

Delay coffee until 11:00 a.m. at the earliest.

Delay dinner until 8:00 p.m.

Week Three

Continue with the previous weeks' changes.

Shift shower time from early morning to late night.

Make good use of your morning time by planning for the day ahead.

Week Four

Continue the previous weeks' changes.

Exercise in the evening.

Unplug all electronics by 11:00 p.m.

Wolf Daily Schedule

- 7:00 a.m.:** Wake up to first alarm. Drift until second alarm twenty minutes later. When you get up, quickly write down or voice-memo any ideas.
- 7:30 a.m. to 8:00 a.m.:** Get dressed, morning routine time.
- 8:00 a.m.:** Eat a high-protein breakfast. Grab ten minutes of direct sunlight. No coffee!
- 8:30 a.m. to 9:00 a.m.:** Get out the door and into the sunlight. A short morning walk to the car or train will help you wake up.
- 9:00 a.m. to 11:00 a.m.:** Use the morning to consolidate and get organized. Your peak hours are yet to come, so prepare yourself now for your productive hours later.
- 11:00 a.m.:** Coffee break, no snack. Carbs will only slow you down.
- 11:15 a.m. to 1:00 p.m.:** Knock off all busy work tasks that don't require too much concentration or insight.
- 1:00 p.m.:** Balanced lunch. Your brain and power of speech are sharp now. At lunch with colleagues, you'll be impressive and charming.
- 2:00 p.m. to 4:00 p.m.:** Tackle hard tasks that require concentration.
- 4:00 p.m.:** Snack of 250 calories, 25 percent protein, 75 percent carbs.
- 4:15 p.m. to 6:00 p.m.:** Connect and interact with others. While their energy is waning, you're wide-awake and alert. Take advantage and attend or call meetings, make phone calls, and send emails.
- 6:00 p.m. to 7:00 p.m.:** Exercise while your body is all warmed up for performance and safety from injury.
- 7:00 p.m. to 8:00 p.m.:** Post-workout happy hour, pre-dinner social hour with friends. Homework hour with kids. You are up for anything now, so go do it.
- 8:00 p.m. to 9:00 p.m.:** Dinner. By delaying the meal until now, you'll head off bingeing later on. Carbs will help calm you down for sleep.

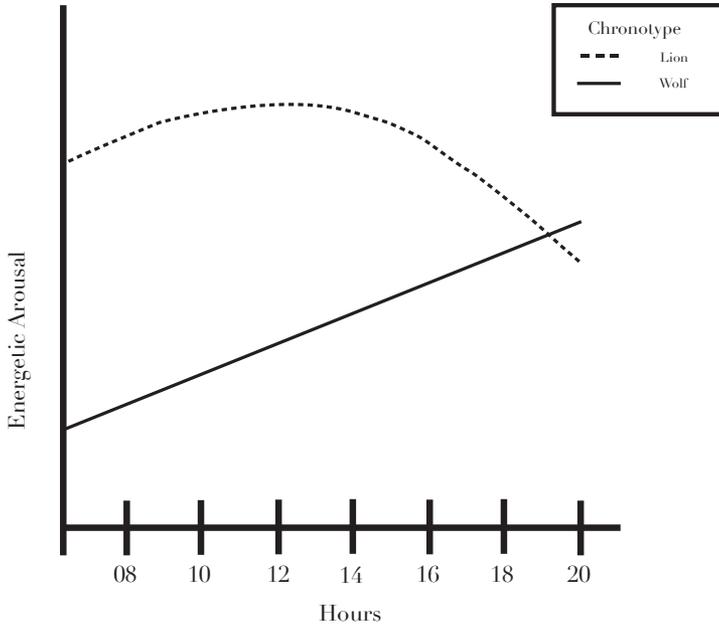
CHRONOTYPES

9:00 p.m. to 11:00 p.m.: Best mood of the day, and time for fun, including sex.

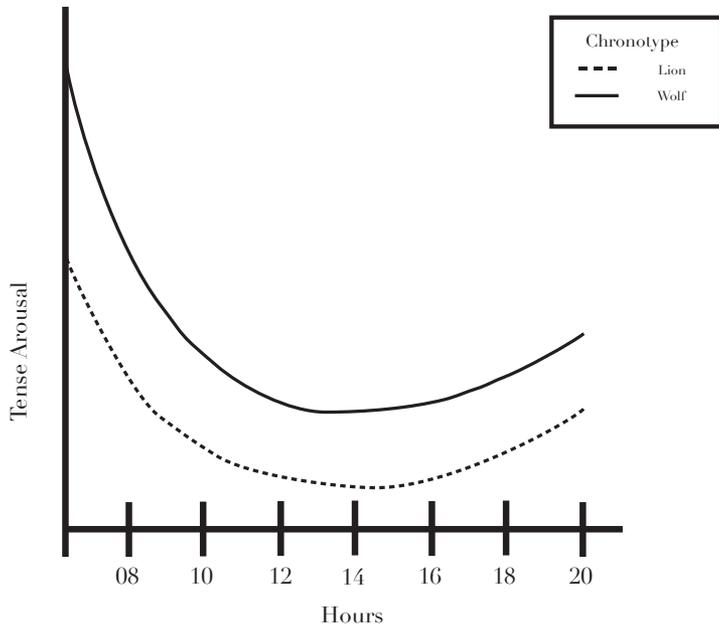
11:00 p.m.: Turn off all screens. Relax, meditate, read, stretch, take a hot shower or bath.

Midnight: Go to bed.

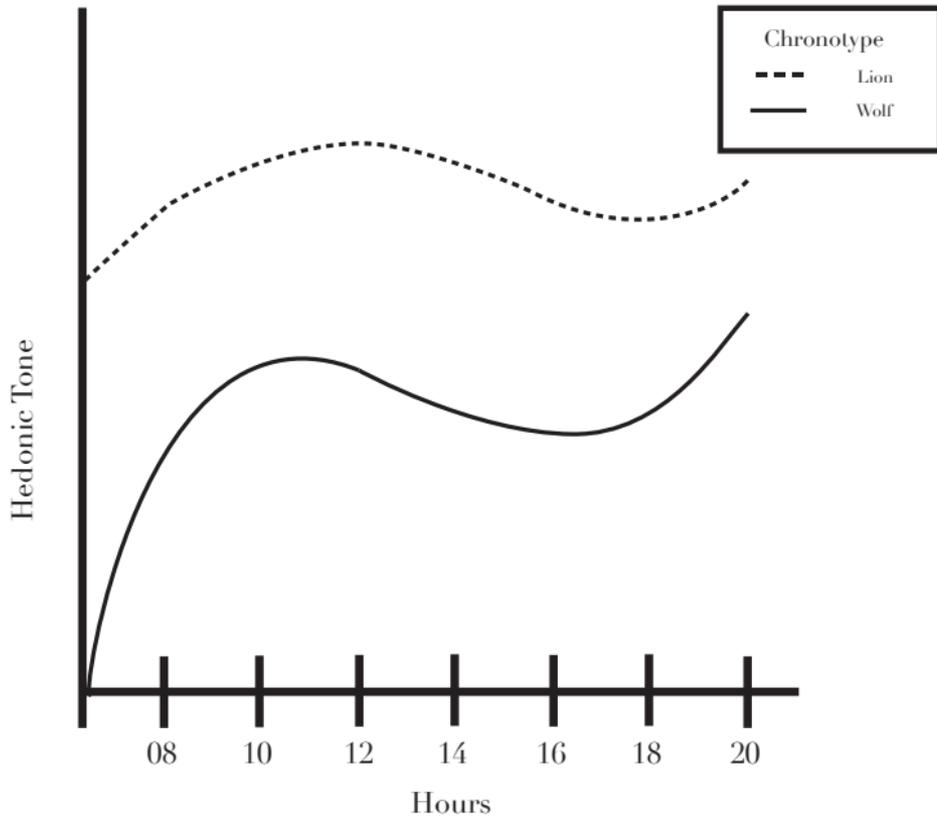
Relationships



Lions' energy levels start high and then decline gradually from midday until bedtime. Wolves' energy levels start low and don't peak until well after Lions have already gone to bed.



Lions' anxiety/tension levels start and stay lower than Wolves' all day long.



Lions' hedonic tone—how pleasant their mood is—starts and stays higher than Wolves' all day long. Wolves' moods have greater fluctuation than emotionally stable Lions'.

Fight with Your Partner Compatibility Chart

For productive discussion that leads to positive resolution:

You	Dolphin Partner	Lion Partner	Bear Partner	Wolf Partner
Dolphin	7:00 p.m.	7:00 p.m.	5:00 p.m.	7:00 p.m.
Lion	7:00 p.m.	9:00 a.m.	3:00 p.m.	5:00 p.m.
Bear	5:00 p.m.	3:00 p.m.	5:00 p.m.	5:00 p.m.
Wolf	7:00 p.m.	5:00 p.m.	5:00 p.m.	8:00 p.m.

REALITY CHECK

The bio-timing of sex isn't always compatible with life. Unless you have a very secluded office space, having a quickie or masturbating at 10:00 a.m. is not advisable for Wolves. You might be so used to having sex immediately before sleep that the idea of morning sex is distasteful. Or, you might love the idea of morning sex but find you can't fit it into your schedule. That's fine. No worries. Just be aware that sex might be more satisfying and healthful at certain times. That doesn't mean it's not satisfying or healthful at other times. I'd never want anyone to have *less* sex simply because they feel compelled to stick to their chronorhythm. Spontaneity is just as important as testosterone, if not more so. If you're in the mood, go for it.

Sexual Chronotype Compatibility Charts

The following three charts—one for heterosexual couples, one for gay male couples, one for gay female couples—is based on a study¹⁵ by

THE BEST TIME TO DO EVERYTHING

researchers at the University of Warsaw of 565 subjects between the ages of eighteen and fifty-seven. The times in each box are **self-reported preference times for sex based on desire, not convenience**. The most important distinction is that women of all chronotypes feel a stronger need for sex between 6:00 p.m. and midnight, and Lions only report strong desire in the early mornings. Men of all chronotypes, on the other hand, feel a strong need for sex in the morning and evening. Even Wolf men were into it at 9:00 a.m. Male Lions, even exhausted, would have sex at midnight.

In the heterosexual box, I have evening as the number one choice, because if it's equally appealing to men to have sex in the morning or the nighttime, they might as well defer to the female preference of evening. Since men tend to prefer morning sex, the male gay couple chart includes morning times; the opposite applies for the female gay couple chart, with the one exception of female Lions.

Heterosexual Couple	Male Dolphin	Male Lion	Male Bear	Male Wolf
Female Dolphin	8:00 p.m./ 8:00 a.m.	8:00 p.m./ 7:00 a.m.	10:00 p.m./ 8:00 a.m.	8:00 p.m./ 9:00 a.m.
Female Lion	7:00 p.m./ 7:00 a.m.	6:00 p.m./ 6:00 a.m.	8:00 p.m./ 7:00 a.m.	7:00 p.m./ 8:00 a.m.
Female Bear	8:00 p.m./ 7:30 a.m.	9:00 p.m./ 7:30 a.m.	10:00 p.m./ 7:30 a.m.	10:30 p.m./ 8:00 a.m.
Female Wolf	9:00 p.m./ 9:00 a.m.	9:00 p.m./ 9:00 a.m.	10:00 p.m./ 9:00 a.m.	11:00 p.m.

Male Gay Couple	Dolphin	Lion	Bear	Wolf
Dolphin	8:00 a.m./ 8:00 p.m.	7:00 a.m./ 8:00 p.m.	8:00 a.m./ 10:00 p.m.	9:00 a.m./ 10:00 p.m.
Lion	7:00 a.m./ 8:00 p.m.	6:00 a.m./ 6:00 p.m.	7:00 a.m./ 9:00 p.m.	9:00 a.m./ 9:00 p.m.
Bear	8:00 a.m./ 10:00 p.m.	7:00 a.m./ 9:00 p.m.	7:30 a.m./ 10:00 p.m.	10:00 a.m./ 11:00 p.m.
Wolf	9:00 a.m./ 10:00 p.m.	9:00 a.m./ 9:00 p.m.	10:00 a.m./ 11:00 p.m.	11:00 a.m./ 11:00 p.m.

Relationships

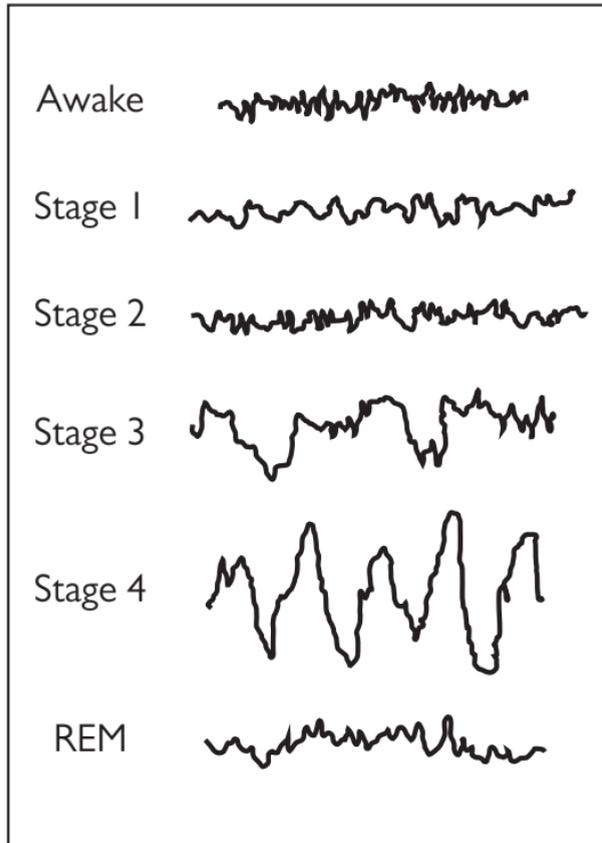
Female Gay Couple	Dolphin	Lion	Bear	Wolf
Dolphin	8:00 p.m.	8:00 p.m./ 8:00 a.m.	9:00 p.m.	10:00 p.m.
Lion	8:00 p.m./ 8:00 a.m.	6:00 p.m./ 6:00 a.m.	9:00 p.m./ 7:00 a.m.	9:00 p.m./ 9:00 a.m.
Bear	9:00 p.m.	9:00 p.m./ 7:00 a.m.	7:30 p.m.	10:00 p.m.
Wolf	10:00 p.m.	9:00 p.m./ 9:00 a.m.	10:00 p.m.	11:00 p.m.

THE BEST TIME TO TAKE A PILL

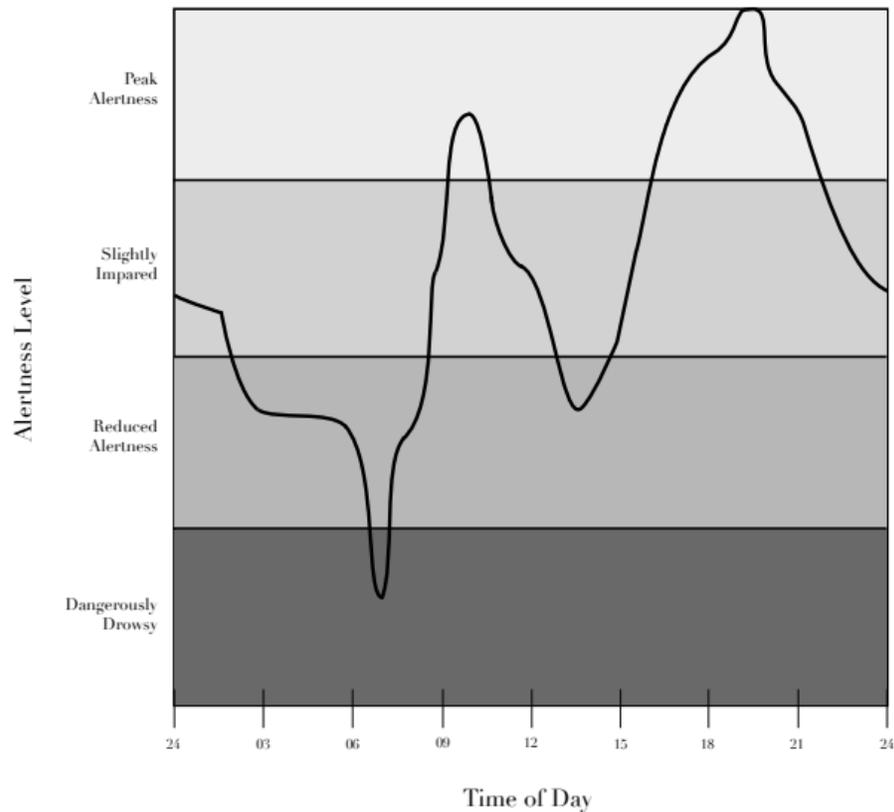
People take their medication at various times, based on habit: “with meals to avoid stomach upset,” at bedtime or first thing so they remember to dose, and so forth. Sometimes, those habitual or logical dosing routines are, coincidentally, on good bio-time. In other cases, doing what you’ve always done isn’t helping you.

In the chart below, I specify general times—“before breakfast” or “bedtime”—for taking various medications instead of breaking down dose timing for each chronotype and each medication. By now, you know your bedtimes and mealtimes by heart. Plan accordingly. **As always, consult your doctor before you make any changes to your existing medication routine. This is not medical advice, but more a conversation-starter for your next appointment.**

Drug	Bio-Time Dosing
Antihistamines	evening
Aspirin	bedtime
ACE inhibitors and ARBs	bedtime
Acid reflux drugs	before breakfast
Beta-blockers	bedtime
Corticosteroids	afternoon, to reduce overnight inflammation
Heartburn pills	after dinner
Multivitamin	after breakfast
NSAIDs	four hours before maximum pain
Osteoporosis drugs	an hour before breakfast
Probiotics	with breakfast
Rheumatoid arthritis drugs	bedtime
Statins	bedtime



A chart of brain wave length and amplitude during the stages of sleep, from the National Institutes of Health



Alertness fluctuates throughout the day, peaking for Bears in mid-morning and early evening.

When you sleep in, you throw your body out of its natural circadian rhythm and cause **chrono-misalignment rhythm**. The symptoms are:

- Tiredness
- Irritability
- Restlessness
- Poor concentration
- Sleep inertia

Calculate your sleep time by counting backward from your wake time by seven and a half hours (90 minutes x 5 complete cycles = 450 minutes) plus twenty minutes (fall-asleep time), or a total of 470 total minutes. Or, wake time – 470 minutes = bedtime. Apply this simple formula to get on **the calculated rhythm for Lions and Bears:**

Lion: 6:00 a.m. – 470 minutes = **10:10 p.m.**

Bear: 7:00 a.m. – 470 minutes = **11:10 p.m.**

A formula is only as good as your ability to comply with it. Lions and Bears are likely to be able to stick with this rhythm as long as they don't commit bedtime self-sabotage, which I'll discuss in a few pages.

Dolphins and Wolves, however, will have a hard time falling asleep in the twenty-minute window allotted in the formula above, which raises the question, "If you can't fall asleep fast enough to get five complete cycles, should you just stay awake for another ninety minutes and settle for four?" The answer: not exactly, but sort of.

Sleep

One of my hard rules for patients in my clinical practice is “Don’t get in bed unless you are tired.” The Dolphin chronorhythm is devised to help them settle down in the pre-bed hours so that they can relax. But on some nights, “tired and wired” will dominate “tired,” and they won’t feel the slightest bit sleepy at bedtime. If they get in bed anyway, not falling asleep right away could set off **the anxiety/insomnia rhythm** that will keep them up all night.

Instead of setting themselves up to fail at getting five complete cycles, Dolphins should shoot for four. (Actually, Dolphins might be completing five compressed cycles into the time it takes a Bear to complete five. There is a theory that insomniac sleep cycles are shorter than a full ninety minutes, and that’s why they need less sleep to be functional.) Give yourself twice as much time—a full forty minutes—to fall asleep. During those forty minutes, you might use a cognitive behavioral strategy to fall asleep called Bed Restriction (see box on page 188) or try a relaxation exercise, meditation, or deep breathing. Go to www.thepowerofwhen.com for video instructions about relaxation strategies.

(Ninety minutes x four cycles) + forty minutes = 400 minutes. The formula for Dolphins is: Wake time – 400 minutes = bedtime. **Their calculated rhythm:**

Dolphin: 6:30 a.m. – 400 minutes = 11:50 p.m.

(Forty minutes of fall-asleep time + twenty minutes of drift time) + (ninety minutes x four cycles) = 420 minutes. The Wolf formula: Wake time – 400 minutes = bedtime. **Their calculated rhythm:**

Wolf: 7:00 a.m. – 400 minutes = **12:00 a.m.**

BED RESTRICTION

The goal: Program your mind to associate “bed” with “sleep” so that when you get in it, you crash quickly.

The strategy: Bed restriction will cause increased sleep deprivation. This, in turn, causes an overflow of adenosine. The overflow helps Wolves boost their natural sleep drive and fall asleep quickly. I also use this technique with Dolphins, but they often need to be monitored more closely. In short, do not get in bed *for any reason other than sleep and sex*. No reading, thinking, TV watching in bed at all. Don't even sit on the edge of the bed while you're putting on your shoes.

Troubleshooting:

1. **“What about lying awake in bed with the lights out when I have insomnia?”** Restrict that time in bed, too. If you have been lying awake for twenty minutes, get out of bed and sit in a chair for fifteen minutes while counting your breaths or doing progressive muscle relaxation (first relaxing your toes, then your ankles, and so forth—until you reach your forehead and scalp; video instructions at www.thepowerofwhen.com). Then return to bed to try to sleep again. Repeat as needed, even if you're in and out of bed for several cycles before finally falling asleep.

Sleep

2. **“How long before this works?”** A week to ten days. If you can commit to using the strategy, you will soon be falling asleep quickly with amazing regularity. In my fifteen years of practice, having worked with hundreds of patients, I can count on one hand the number of people who didn't respond to this strategy, and they had severe secondary health conditions that complicated the problem.
-

- **The liver.** Not only is the liver the body's filtration system, it also controls glycogen (sugar), cholesterol, and bile production and distribution.

- **The pancreas** is in charge of insulin and the ebb and flow of blood sugar.
- **The gastrointestinal tract** keeps time moving food along and absorbing nutrients that every cell in our bodies needs to stay healthy and do its job.
 - **Muscles.** We don't automatically think of muscles as a metabolic organ, but when your body releases fat and sugar for energy to, say, climb some stairs or blink an eye, they go to the muscles to be consumed.
 - **Fat cells.** Each fat cell in your body produces hormones that tell you when you're hungry or full, among other digestive and metabolic jobs.

BANANA TEA

Most of us know that bananas have magnesium. You might not know that the peel has three times more magnesium than the fruit itself. Since magnesium helps calm the nerves, Banana Tea is the perfect nighttime drink.

Ingredients:

1 ripe banana

2.5 cups boiling water

Instructions:

1. Thoroughly wash the banana to remove dirt, bacteria, and pesticides. It's best to use organic bananas.
 2. Cut $\frac{1}{4}$ inch off the top and bottom ends of the banana.
 3. Leave the peel on and cut banana in half, lengthwise.
 4. Place the two banana halves into boiling water and boil for ten minutes.
 5. Strain banana water into a cup.
 6. If desired, add a drop of honey or cinnamon before drinking.
-

THE BEST TIME TO ASK FOR A RAISE

Thursday or Friday afternoon. To fine-tune the timing by chronotype, I've created the chart below to find the nexus of your boss's pleasantness peak and your activation peak, favoring the boss's mood as the more important factor. Also, this doesn't take into account what's happening at work, the deadlines and crises that might pop up. And, since no one wants to be asked for anything with one foot out the door, ask at least one hour before the end of the workday.

Ask for a Raise Compatibility Chart

You ↓	Dolphin Boss	Lion Boss	Bear Boss	Wolf Boss
Dolphin	4:00 p.m.	3:00p.m.	5:00 p.m.	5:00 p.m.
Lion	3:00 p.m.	1:30 p.m.	3:00 p.m.	3:30 p.m.
Bear	3:30 p.m.	2:00 p.m.	4:00 p.m.	4:00 p.m.
Wolf	4:30 p.m.	3:30 p.m.	4:30 p.m.	5:00 p.m.

Data was also calculated to determine **the daily mood shift rhythm** for successful cold calling, or the best time of day to connect with a person:

- **7:00 a.m. to 8:00 a.m.:** Very early morning is the worst time to connect, and it's not hard to understand why. Only Lions are in work mode at that hour.

- **8:00 a.m. to 10:00 a.m.:** First thing in the morning is a great time to connect due to morning procrastination. Dolphins, Bears, and Wolves aren't yet at their peak focus and concentration, so they'll pick up the phone and waste time chatting for a minute.

- **10:00 a.m. to 2:00 p.m.:** The heart of the workday is *not* a good time to connect, especially if reaching out to Bears. They're at peak performance from 10:00 a.m. to 2:00 p.m. and are focused on their own work.

- **2:00 p.m. to 4:00 p.m.:** Bad time to call, due to the post-lunch cortisol level dip that puts everyone (except Lions) into an afternoon lull.

- **4:00 p.m. to 6:00 p.m.:** The hands-down best time to connect is in the late afternoon, when the post-lunch dip has subsided. Dolphins, Bears, and Wolves have an uptick in energy and mood and will be open to listening to your pitch.

- **6:00 p.m. to 7:00 p.m.:** Don't bother. Obviously, people are ready to leave the office, if they haven't left already.

	Dolphin	Lion	Bear	Wolf
“On” Times to Make a Decision	10:00 a.m.–2:00 p.m.; 4:00 p.m.–10:00 p.m.	6:00 a.m.–11:00 a.m.; 2:00 p.m.–9:00 p.m.	8:00 a.m.–1:00 p.m.; 3:00 p.m.–11:00 p.m.	12:00 p.m.–2:00 p.m.; 5:00 p.m.–1:00 a.m.
“Off” Times to Make a Decision	9:00 p.m.–6:00 a.m.; 2:00 p.m.–4:00 p.m.	10:00 p.m.–6:00 a.m.; 11:00 a.m.–2:00 p.m.	1:00 p.m. to 3:00 p.m.; 12:00 a.m.–8:00 a.m.	1:00 a.m.–12:00 p.m.; 2:00 p.m.–5:00 p.m.

Don't believe that "sleeping on it" helps you solve puzzles and problems? You can see just how profound the insight rhythm is yourself by taking the Remote Associates Test (RAT) before bed and then retesting yourself in the morning.

RAT was created in 1962 by University of Michigan professor Sarnoff Mednick, PhD, and holds up as an excellent assessment of creativity and mental agility. How it works: Each RAT question⁶ shows you three seemingly unrelated words and asks you to provide a fourth word that links them together:

Easy

Cottage/Swiss/cake _____ 7

Cream/skate/water _____ 8

Loser/throat/spot _____ 9

Medium

Sage/paint/hair _____ 10

Boot/summer/ground _____ 11

Fly/clip/wall _____ 12

Hard

Animal/back/rat _____ 13

Foul/ground/mate _____ 14

Tail/water/flood _____ 15

THE DARK TRIAD

Great name for a hit TV show, right? Dark triad is actually a psychological term. It refers to three traits that, in the same person, make a human monster.

Psychopathology: remorseless, impulsive, callous.

Narcissism: prideful, egomaniacal, not empathetic.

Machiavellianism: manipulative, deceitful, exploitive, scheming.

Here's a very short version of a standard Dark Triad Personality Test.⁴ Indicate if you agree or disagree with the following statements:

1. It's not wise to tell your secrets.
2. I like to use clever manipulations to get my way.
3. Whatever it takes, you must get the important people on your side.
4. Many group activities tend to be dull without me.
5. I like to get revenge on authorities.
6. Payback needs to be quick and nasty.

The more strongly you agree, the darker your personality.

The bad news for Wolves: Research⁵ has found that, regardless of gender, you are most likely to have these traits.

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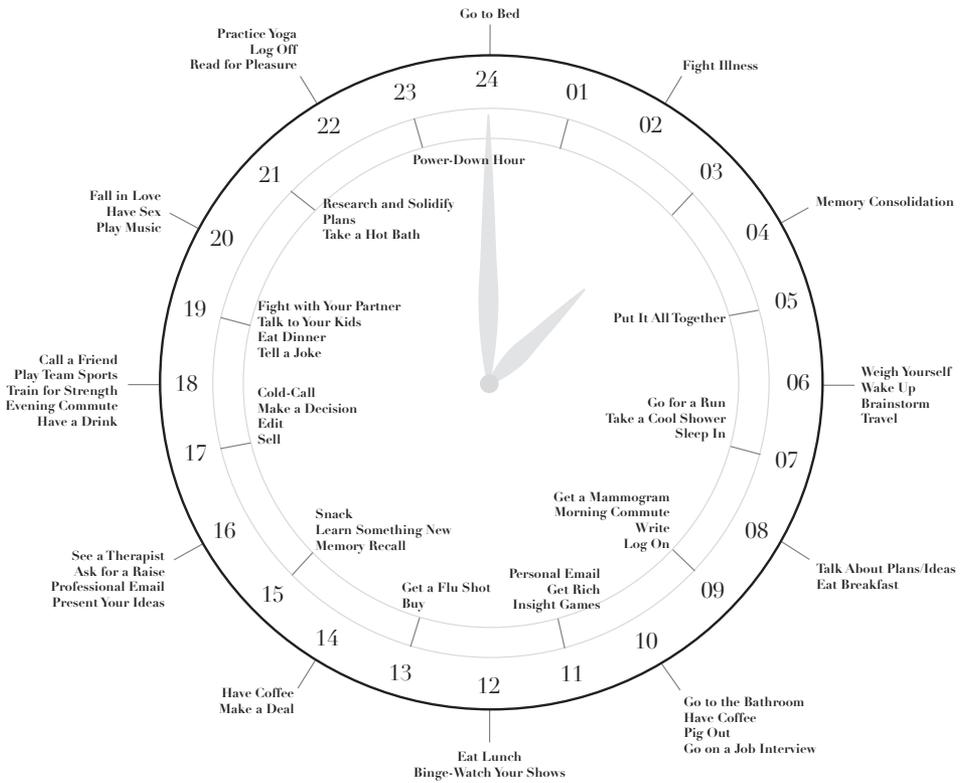
The good news for all chronotypes: The most compelling and fascinating TV characters, the ones we love to binge-watch, exhibit the traits in spades. When we line up the TV characters' traits with their chronotypes, expect the villains to be night creatures.

Take the above test again, but this time, pretend that you are... Walter White of *Breaking Bad*, Don Draper of *Mad Men*, Cersei Lannister of *Game of Thrones*, or Frank Underwood of *House of Cards*.

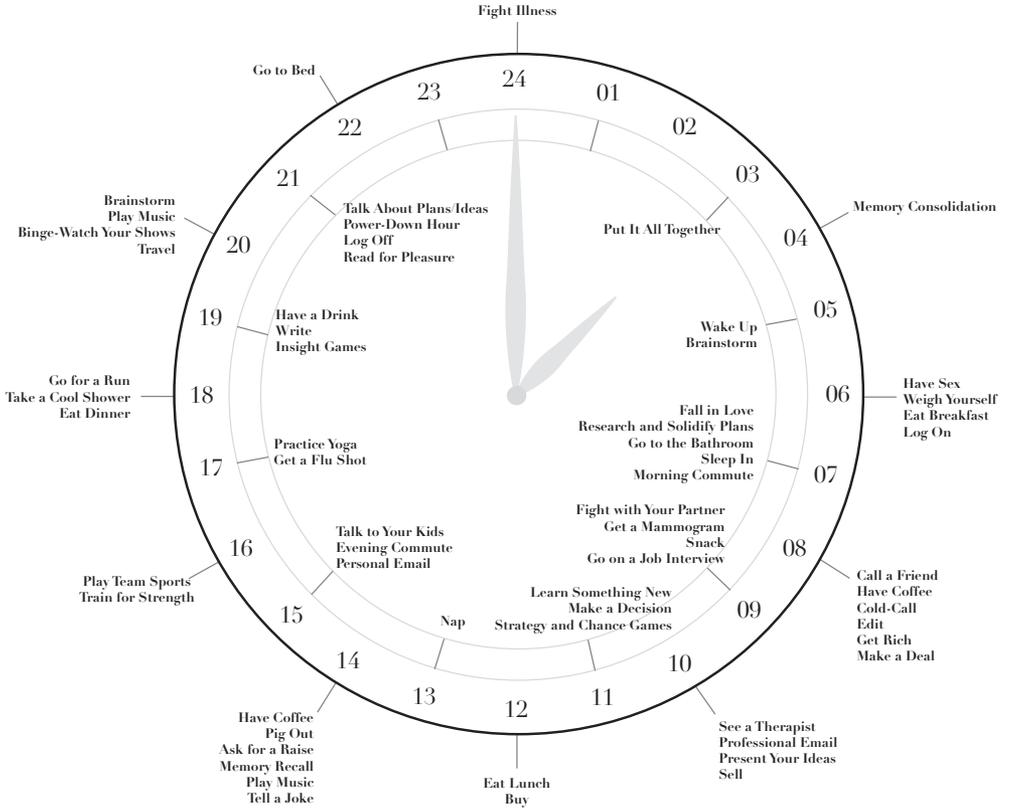
See what I mean? Dark triad characters are evil, selfish, devious, manipulative, unscrupulous—and compulsively watchable.

Master Clocks

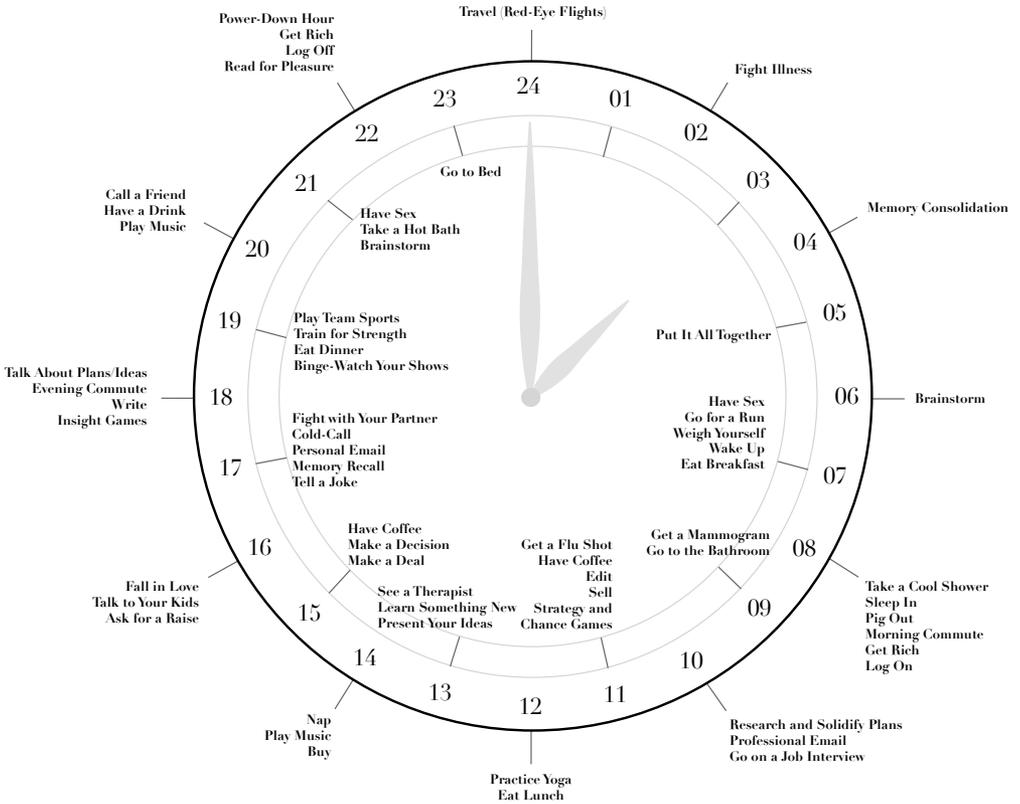
Dolphin Master Clock



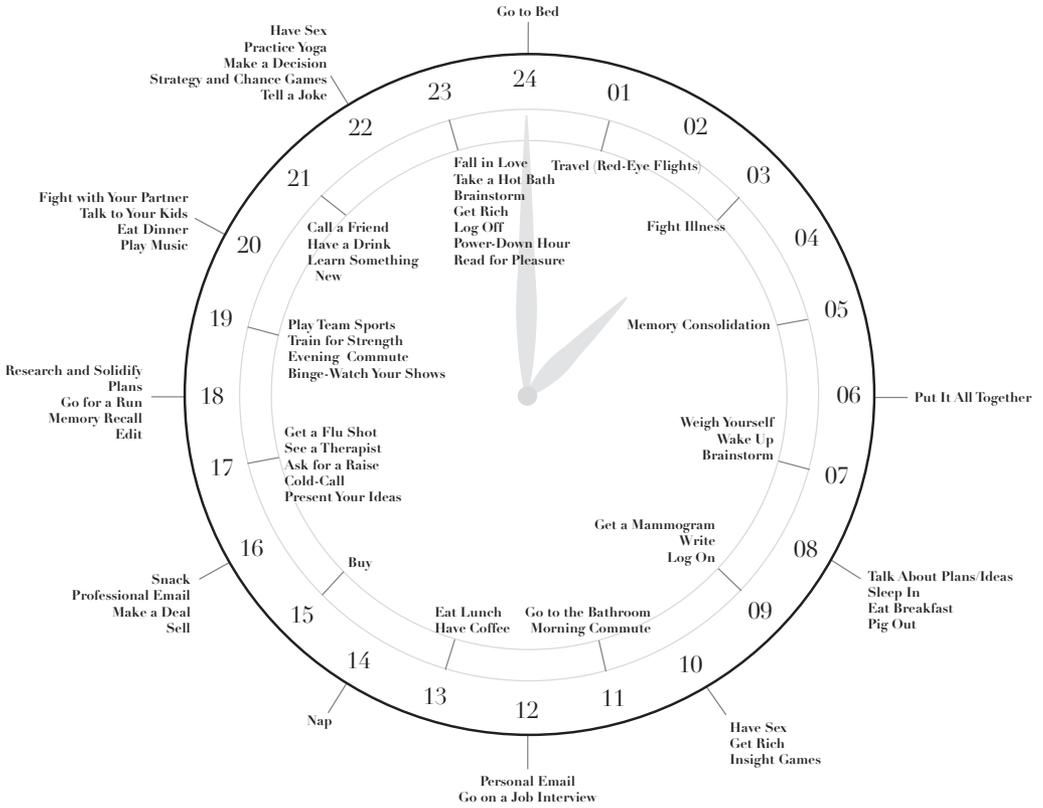
Lion Master Clock



Bear Master Clock



Wolf Master Clock



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Chapter 5: A Perfect Day in the Life of a Wolf

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19. In ancient times, they didn’t use “BC.”
20. Day fifty-nine. Since the flowers double every day, it’d be half covered the day before it was fully covered on day sixty.
21. Bob is twelve; his father, thirty-six. Four years ago, Bob was eight and his father was thirty-two.
22. Monday: Bill, tacos. Tuesday: Dave, steak. Wednesday: Carl, pizza. Thursday: Eric, fish. Friday: Andy, Thai.
23. Anna, Charlie, carnation. Isabel, Tom, daffodil. Yvonne, Ken, lily. Emily, Ron, rose.
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