
HOW TO SLEEP
LIKE YOUR LIFE DEPENDS ON IT
HINT: IT DOES!
Even If You're a New Parent
Or a Shift Worker
ROBB WOLF
revolutionary solutions
to modern life

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Introduction

If you ask someone “What do you have to do to be healthy?” you’ll get answers like “eat well” and “exercise.”

There’s no doubt that what we eat and how we move are important for our health and both how long and how well we will live. But what if there is something that is perhaps *even more important* than exercise and diet? What on earth might that be?

Hold that thought for a moment while I share a short story…

My good friend Dr. Kirk Parsley is a retired Navy SEAL and worked as a physician with the West Coast SEAL Teams for a number of years.

When he started working with this group of elite war fighters he expected to see lots of overuse injuries. Don’t get me wrong, there were certainly instances of cranky knees and bad backs from too much running and dodgy parachute landings. But within a few weeks of beginning his work, Dr. Parsley described a phenomena he called “the SEAL Flu.”

People were not recovering from training, they had digestive problems, emotional highs and lows, and difficulty learning new skills critical to their jobs. It was more prevalent in the older SEALs but wasn’t uncommon for the young hard-chargers in their mid 20s.

One day, one of these young SEALS wandered into Dr. Parsley's office and said "Hey Doc, I need some help."

Kirk, being a bit of a smart-ass said to the young guy, "You look okay to me, what's the problem?"

To which the SEAL replied, "Well, my CO (Commanding Officer) just told me to come talk to you. You see, I just filled up a diesel truck with gasoline."

Kirk was a bit stumped about why this gaffe might land a seemingly healthy young sailor in his office and said, "I'm not sure I can prescribe anything that fixes that."

The young SEAL chuckled a bit uncomfortably and said, "Yea... my CO is pretty steamed about this. When he started grilling me about what I'd done wrong I was wracking my brain about how I could have made such a stupid mistake and the only thing I could think of was that I'm not really sleeping that well."

This perked up Dr. Parsley's ears a bit and he said, "Okay, how much are you sleeping?"

SEAL: Maybe an hour or two per night.

Dr. Parsley: Ok, that's easy, I'll prescribe some Ambien (a common sleep medication)

Seal: Yea, that's kinda the thing...I'm usually taking 3-4 of them right now (this is enough to kill most people)

Dr. Parsley: YOU ARE DOING WHAT?!?!?

SEAL: Yea...and I have several drinks to try and make it work better (the COMBINATION of Ambien and alcohol, especially in the amounts described, are enough to kill just about anyone who has not built up to this level. Well, honestly it's likely enough to kill a buffalo, but that's a story for another day.)

This was the beginning of Dr. Kirk Parsley unwinding the SEAL flu and becoming one of the world's leading sleep experts.

SO, BACK TO THE QUESTION OF WHAT IS MORE IMPORTANT THAN DIET AND EXERCISE? IT IS, APPARENTLY, SLEEP.

One can go weeks, perhaps even months, without food (depending on how much excess fat one carries). But it only takes about 10 days of no sleep for most people to DIE.

The Guiness Book of World Records will no longer certify people trying to stay awake (unbroken) as the past few attempts have all ended in fatalities. You can juggle flaming chainsaws or jump a motorcycle over the Grand Canyon, but trying to stay awake for extended periods of time is considered to be too dangerous.

These facts are a bit counter-intuitive for most people as we have developed a culture that glorifies folks who can "get by" on little to no sleep. We wear sleep deprivation like a badge of honor. Although there can be times in our lives when we need to forgo some shut-eye to get things done, in general we're just not getting enough sleep to keep us healthy and, to be honest, alive.

The Centers For Disease Control now recognizes disordered sleep, like that found in shift work, to be a known carcinogen (defined as 'a substance capable of causing cancer in living tissue'). Other research suggests that just a few nights of poor sleep can make us as insulin resistant as a type 2 diabetic.

I don't want to scare the pants off you about this (or make you lose sleep over the topic!), I want to perk your ears up about how important sleep is—not just for your health and longevity but also your performance and waistline.

Hopefully I've grabbed your attention. Let's talk about what sleep is (and is not) and what we can do to get better sleep, no matter our situation.

ROBB WOLF

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What Is Sleep?

Ask a room full of people: “What is sleep?”

And you’ll likely get some chuckles, perhaps some smug looks (why, sleep is sleep of course!), but as time goes on the room usually gets pretty quiet. It’s not that easy of a topic to nail down as one might initially think.

Folks usually begin describing characteristics of sleep or perhaps calling it “rest” or “recovery.”

I've asked this to a room full of doctors many, many times and, ironically, their answers are not any better than if you asked a random assortment of people off the street. "What is sleep?" is a difficult question to answer as NO ONE really knows what sleep is, why we do it, or exactly what is going on in that process.

Here's a pretty good definition of sleep, as we understand it today:

1. Sleep is a process whereby there is a barrier between our consciousness and the outside world. Effectively, we cannot (for the most part) hear, see, feel, etc. what is going on around us.
2. We can be woken up.

That 2nd point is important to keep in mind since it makes the distinction between sleep and unconsciousness. For example, if we hit someone in the head with a brick, have them drink a bottle of whisky, or take Ambien (the prescription sleep aid), they will LOOK like they are asleep. But if we look at their brainwaves and physiology, they are not asleep, they are unconscious. Unfortunately, ALCOHOL, AMBIEN AND OTHER "SLEEP AIDES" DO NOT PRODUCE SLEEP. They do not restore us and it's becoming more and more clear that we are likely worse off using these concoctions versus going without.

So, although it's hard to pin down precisely what sleep is, we can better understand its importance by looking at what sleep does for or to us.

What Does Sleep Do?

Take a moment and think about these two very different scenarios: Imagine waking up after having an incredible night of sleep (think back perhaps to when you were a kid or teenager) and then think about a terrible night sleep (if you are a parent, just imagine a bad night of teething or colic).

Okay, what's the difference in how you feel and look at the world based on the good vs. poor sleep?

It's not a stretch to call it a "night and day difference," right? In the first example you are likely happy, motivated, ready to do just about anything. In the poor sleep example you are likely just barely hanging on. Your mind is slow, you feel achy and terrible, almost like you have a cold or the flu.

As you can see, it's tough to pin down exactly what sleep is. We can do a much better job of describing what sleep does for us, and by extension, understand why we feel terrible when we do not get enough.

Sleep does the following:

1. **RESTORES** our memory. Sleep is when we learn. If you need to perform repetitive tasks, have close attention to detail, sleep is critical to doing these things well.
2. **RESETS** our immune system. Have you noticed you get sick easier when you sleep poorly?
3. **REMOVES** toxins from our brain.
4. **IMPROVES** our insulin sensitivity and blood sugar.
5. **IMPROVES** our mood and mental outlook.
6. **HELPS** our body to heal from exercise or injury.

So, if we flip this around it's easy to describe what happens if we do not sleep well: Our memory is terrible, we do not heal from injuries, we tend to get sick frequently, our blood sugar control is poor and we tend to gain weight, we tend to be much more depressed and irritable, and we are much, **much more likely to make poor decisions and mistakes (think about driving, operating machinery, counting money etc).**

In short, everything we'd like to have happen in our lives is enhanced with good sleep, and unfortunately, the opposite is also true. IF YOU STRUGGLE WITH WEIGHT GAIN, HEALTH PROBLEMS, DEPRESSION OR A NUMBER OF OTHER ISSUES, CONSISTENTLY GOOD SLEEP IS LIKELY ONE OF THE MOST IMPORTANT THINGS YOU CAN DO FOR YOURSELF.

How Much Sleep Do We Need?

Exactly how much sleep we need is a contentious topic but the best answer is likely “it depends.”

Some people absolutely need more (or less) sleep to function well and feel their best. In general most people are in the 7.5-8.5 hr/night range.

Keep this in mind: That range is not just hours in bed, that is SLEEP.

Most people rarely even spend that long IN bed, let alone sleeping. It takes time to wind down and fall asleep, normally we may roll over and wake up a time or two in the night...all of this subtracts from actual time asleep. So, depending on how much you toss and turn as well as how long it takes you to fall asleep, you may need a bit more time in bed than what you are usually allowing yourself.

Not sure exactly how long you need to sleep? Here’s a good test: If you were on vacation on a remote island with no electricity, just a campfire for light, and you had NO obligations...what time would you go to bed? How long would you sleep? What time would you wake up? Most people would go to sleep not too long after sunset, then sleep soundly for 7-9 hrs, awaking a bit before dawn.

This is your optimum, both in regards to amount of sleep, but also timing, which is our next topic.

Sleep Timing

Amount of sleep is important but so is the timing.

My grandmother, who grew up during the Dust Bowl and depression of the 1930s (born in Appleton, OK) had a never ending list of witty and helpful sayings for navigating life. She had a few that either directly or indirectly inform some ideal behavior regarding sleep:

The early bird gets the worm.

Nothing good happens after 10pm.

Most people have heard the first, some of you may have heard the 2nd (or something like it). Sleep timing is emerging as perhaps one of the most important areas of human health, and unfortunately, our modern world tends to not set us up for success.

Think about it...we've only had electric light for about 100 years. Prior to that we had several thousand years of little more than candles and oil lamps, and prior to the advent of those technologies, we had sunlight, moonlight, starlight, and the warmth of campfires. That's it.

Now, you may not think about light as having much of an effect on our sleep, but it is light exposure, primarily from the sun, that sets up our wake/sleep cycles (also called our circadian rhythm... which literally means our daily cycles).

Under ideal conditions we get outside early and often. Doing so allows sunlight to enter our eyes and communicate with the portion of our brain tied to sleep and metabolism (the hypothalamus). Interestingly, it is light during the day that both wakes us up and keeps us awake throughout the day.

Again, under ideal circumstances, as the sun goes down our exposure to light should also go down, and this is when our natural tendency to get sleepy would occur.

You may have heard of a product used for sleep called melatonin, which is a neurotransmitter that helps initiate the sleep process in your body. Exposure to light suppresses the release of melatonin.

This is obviously a good thing during the middle of the day when we'd like to be awake. This is a problem when we're exposed to bright lights, TV, computer screens, and smartphones in the evening, when we should be winding down and going to sleep. Bright lights in the evening suppress the release of melatonin in our brain and this prevents us from getting to sleep on time.

Now, you might be thinking "Hey! If I want to stay awake, all I need to do is surround myself with bright lights!" and you'd be correct. But keep in mind, short sleep and sleeping at suboptimal times increases our aging rate and our likelihood of developing cancer, type 2 diabetes, and a host of other problems like Parkinsons and Alzheimers. And not to beat this into the ground, but you will feel terrible with that short and mis-timed sleep and be less productive than you'd normally be.

Research suggests that folks who are consistently sleep deprived are as impaired as someone who is at or above the legal driving level for alcohol. For big projects and emergencies, I get it, you may need to gut it out and deal with the consequences of short or mistimed sleep, but we do not want to make this our everyday, normal way to approach sleep.

This brings up an important point, which is: what if your work or family obligations necessitate that you sleep at odd hours?

The Challenge of Shift Work

You're likely familiar with daylight savings time (at least if you live in the US). Each Spring the clock moves ahead one hour, in the Fall, it moves back one hour.

The purpose for this clock changing stems from our pre-electric light world in which farmers needed every advantage they could find to successfully get in their crops. By shifting the clock in this way, industrial revolution era farmers and workers were afforded more light at various times of year in which to get work done.

It was not until the advent of the electric light bulb that we saw the beginning of what we'd now call shift work. Shift work has revolutionized the work place as it has effectively doubled the amount of work that may be performed vs a standard work day.

Shift work is a critical feature of everything from entertainment to shipping to Police, Military, Fire and medical service. Let's not forget the shift work that is part and parcel with being a new parent.

AN ESTIMATED 40% OF TODAY'S WORKFORCE DOES SHIFT WORK. Although a touchy subject, for all the good and opportunity that shift work has brought hundreds of millions of Americans and billions of people worldwide, there IS a cost to this schedule.

Shift workers have increased rates of just about every health condition: diabetes, depression, cancer, obesity, suicide...the list goes on and on and can be frankly depressing. Our best understanding of the science is that there is no way to completely undo the challenges of shift work, but there are mitigating strategies that may be incredibly helpful in both feeling better and staying healthier.

Sleep Hygiene

Sleep hygiene is a fancy term for how we approach the going to bed process. This concept and the techniques I'll talk about are applicable to anyone and everyone but **are non-negotiable if one is a shift worker.** You've got to do as much of this stuff as you can if you are to reduce the problems associated with your shift work lifestyle.

Sleep hygiene involves a consistent approach to going to bed. It is effectively a ritual that will help you wind down and get ready to sleep.

1. COLD, DARK ROOM

Studies have found that the ideal sleeping temperature is 65-68*F. Now, this may seem a bit cool, but what folks tend to do is snuggle into their bedding and the relative temperature difference really helps one to relax and both fall and stay asleep. I'll mention a bit more about why a cool room is important when I talk about eating late in the day.

By dark room I mean like a broom closet at the bottom of a coal mine.

DARK.

If you need to blackout windows with heavy curtains (or aluminum foil), please, do it. I cannot tell you how many people have argued with me about this over the years but if I can get folks to black out their windows, put their alarm clocks in a drawer, set their phones across the room....they sleep better than they have in years.

Many folks ask if a sleep mask is good enough. It's not bad in a pinch, but again, I'd not make this big of a deal about this as I do if it were not worth the effort. **Black out that room.** If you want to experiment and you have a large closet, sleep in there for a night or two and just compare how well you sleep.

2. BRIGHT LIGHTS EARLY IN YOUR DAY

It may seem odd but YOU CAN BEGIN TO SET YOURSELF UP FOR SLEEP SUCCESS FIRST THING IN THE MORNING BY GETTING OUTSIDE AND GETTING LIGHT ON YOURSELF AND IN YOUR EYES. Just being outside is much much brighter than the most brightly lit room (even on an otherwise cloudy day).

For people following a normal sleep schedule (awake/working during the day, asleep at night) do your best to get outside early in the morning and try to get outside as often and as long as you can throughout the day. This will make you feel much better than being inside all day and will set up a solid wake/sleep cycle.

For the shift worker, this can be a problem. The sun is typically up during your sleeping hours. This is why the completely dark room is so important to sleep in. To attempt to get adequate "daytime" type light, some people use Seasonal Affective Disorder (SAD) lights in their relative morning. The price on these products has come down significantly over the past few years as awareness of the need for good wake/sleep patterns has increased. Sitting by a SAD light while you drink your coffee and have breakfast in your "morning" can really help to make you feel better.

3. MAKE THE EVENING BE DARK

Whether you are on a normal sleep schedule or shift work, your evening should be as dark as possible.

Try to avoid TV, computers, smartphones, and anything that is effectively shining a light into your eyes. For computers and smartphones you can usually set the screen to a warmer, more orange setting with programs like F.lux for computers and NightShift for Apple products (with similar settings on other phones). This may seem odd but remember, light entering the eye tends to reduce melatonin production and without that initiating step, you will have a tough time getting to sleep.

If you can, install dimmer switches in your house and pick lightbulbs that tend to be more orange in hue vs blue. In the evening, dial the intensity of the lights down such that it is about what you'd have if you were using candles to light your room.

Finally, you can use orange colored glasses like Blue Blockers to help further reduce light entering the eye. Our whole family does this and although it does not lead to a hopping daily social life, we do all have outstanding sleep.

4. EAT SEVERAL HOURS BEFORE BED

If you recall, one of my first sleep hygiene recommendations was a COLD, dark room. The cold part is important as when folks enter optimal sleep their body temperature naturally drops. Now, if we eat a large meal right before bed it can damage our sleep quality as our body temperature actually goes up while digesting.

How long should you have between "dinner" and bedtime? At least two to three hours is ideal but in truth the longer the better.

However, if you are waking up hungry in the middle of the night, you are perhaps going too long or we need to look at the food quality of your dinner. I'll look at food and its potential effects on your health in a later section, but a low carb meal of protein and veggies will tend to keep your blood sugar normal and thus facilitate a better night sleep.

5. AVOID BOOZE

Most people want to throw rocks and sticks at me when I suggest that they avoid alcohol before bedtime. It's quite common that folks get into a habit of having a few drinks before bed to "help them unwind." If you recall the story about the young SEAL taking the huge amounts of Ambien AND hammering down a good number of drinks each night...he was unconscious, but not asleep.

When we look at the brain waves and what happens to the physiology of folks who drink alcohol before bed, it's not good. We do not get into deep sleep, which is where most of our recovery happens. I'm not suggesting you become a teetotaler, but if you can, similarly to your food, space your alcohol consumption away from bedtime, it'll make a huge difference in your sleep quality, health, and how you feel.

6. STIMULANTS

The two most commonly consumed stimulants in the world, caffeine and nicotine, play pivotal roles in the lives of billions of people every day. I'm going to give you some "good news/bad news" about both of these substances and how I'd recommend incorporating them into your routine.

CAFFEINE

✔ The good news

A large number of studies suggest that coffee and tea consumption are associated with longer lives and reduced rates of diseases ranging from cancer to diabetes and Parkinson's. In my personal case, I suspect coffee in particular has saved the lives of many people as I'm likely to have murdered a good number of folks were it not for my morning cup-o-joe!

✖ The bad news

Many people have taken otherwise healthy beverages (coffee, tea) and added so much sugar and other junk that they are no better than a candy bar. Energy drinks certainly fall in this category. At a minimum, please, use sugar free sweeteners or try to develop a taste for this stuff as nature made it.

As to sleep: if you find it difficult to sleep, and you're having caffeine late in your day, this may be the problem. People vary significantly in how they handle caffeine.

For example, I am what's called a "slow metabolizer." My genetics are such that it takes a LONG time for caffeine to leave my system. This means it's easy for me to overdo caffeine compared to someone who is a fast metabolizer. If I have coffee much later than noon I may have problems sleeping well that night. You likely know your body in this regard, so keep in mind you may need to modify your caffeine intake to allow for better sleep.

If you are a shift worker this becomes a tough problem as you likely consume caffeine to not just stay awake during work, but to help you drive home safely.

My best advice here is to play with the amount and timing of your caffeine intake. Perhaps a half or quarter cup of coffee is enough to keep you alert late in your shift, but does not disturb your sleep? This is a highly individual thing but worth tinkering with.

NICOTINE

✖ The bad news

Nicotine is typically consumed in some kind of tobacco product. It's pretty clear that cigarettes, chew, and snuff all increase cancer potential dramatically and have a host of other negative health consequences.

✔ The good news

In the case of nicotine, tobacco is the problem, not the nicotine. If you smoke or chew I'm going to beg you to switch to nicotine gum or lozenges. These products DO NOT increase your cancer risk and do not carry the other health risks of smoking and other tobacco products.

When I first presented this material to SEALs at a Naval Special Warfare event the military doctors at the event wanted to string me up by my toes. Was I REALLY suggesting that these warriors USE nicotine?! Yes, but selectively and not in the form of tobacco. I brought a stack of research with me and gave it to these folks and they grudgingly accepted that I was not telling folks something crazy.

Nicotine is a stimulant but it is quite different from caffeine. It clears from our systems faster AND it tends to not negatively affect sleep. I could make a case that for the shift worker, if you need to stay alert near the end of your work period (and to drive home) nicotine gum or lozenges are possibly a better option than a cup of coffee or an energy drink containing caffeine.

This may sound odd (borderline insane) but all I ask is you give this some consideration and try these recommendations. If you have NOT used nicotine products before, start at a very low dose (1-2mg) as it can make one feel quite ill otherwise.

7. DIET AND EXERCISE

Remember how I dismissed diet and exercise at the beginning of this article? Yea...well, they're pretty important after all! I have written two, large books on nutrition at this point, so there can be a lot of details if we want to get into the weeds. This is already a long article and I want to keep this as simple as possible for you, so I'll break things out like this:

a) You work a normal schedule but are overweight, diabetic or prediabetic.

You need to reduce your carbohydrate intake. I know, the USDA says we need to eat 12 servings of grains per day. I'm going to throw out a controversial notion: the Government gets a lot of things wrong. A lot. They lie outright to protect various special interests, they get things wrong due to incompetence and although Americans have been eating more carbs over the past 60 years (as per USDA/US Medical suggestions) we are fatter and sicker than ever. Find an Atkins book or whatever low carb resource you desire and stick to it. Try to do some exercise everyday, preferably some weights and walking.

b) You are a shift worker.

If you are a shift worker the dietary and exercise recommendation above are non-negotiable. You've got to do these, by hook or crook.

The fact that your sleep schedule is altered means you are more insulin resistant and your blood sugar is higher just about no matter what else you do. All the sleep hygiene strategies are important, critical in fact, but they are not enough. You've GOT to reduce simple sugar and refined carb intake. If you do this you will get close to having the health of folks on normal shift. It will not be perfect, but you will look, feel, and perform far better than you would otherwise.

This change may be difficult. It will likely mean changing some things that you've done for years. I want you to live as long and healthy of a life as you can...smart diet and exercise are critically important to offsetting the damaging effects of shift work.

I'm not much of a motivational speaker...my best offering here is you need to find a compelling "why." Why do you want to do this? See your kids or grandkids grow up? Not be a burden on your family? Think about why a change like this that may be worth it, write that on a piece of paper and put it in your car, refrigerator, etc. "I want to see my grandkids graduate high school." Put that everywhere and it will help you manage the tough times when your willpower may be weak.

Tips For Different Work / Sleep Schedules

Below you will find some common shift schedules. I'll detail how to prioritize the above material to help you improve your sleep and health.

Early Morning Shift	3:00AM – 1:00PM
1	A low carb diet is a must on this schedule. Try to make the last meal happen 3 hrs before bed.
2	Dark room to sleep
3	Blue Blockers and low lights during "wind down" before bed
4	Melatonin (1-3 mg) 30-45 minutes before bed
5	SAD light upon waking
6	SMART stimulant use (no caffeine within 6 hrs of bedtime ideally)

Day Shift 9:00AM – 6:00PM

This schedule is fairly close to a "normal" circadian rhythm but there are things you can do to improve your sleep.

1	Low carb dinner, preferably early
2	No stimulants late in the day
3	No alcohol within 3-4 hrs of bedtime
4	Melatonin (1-3 mg) 30-45 minutes before bed
5	Dark room
6	Blue Blockers and low light levels in the evening
7	Get outside early in your day as much as you can

Afternoon - Night Shift 3:00PM – 1:00AM

1	Diet. A low carb diet is a must on this schedule. Try to make the last meal happen 3 hrs before bed
2	Dark room to sleep
3	Blue Blockers and low lights during "wind down" before bed
4	Melatonin (1-3 mg) before bed
5	SAD light upon waking
6	SMART stimulant use (no caffeine within 6 hrs of bedtime ideally)

Evening - Night Shift	6:00PM – 4:00AM
1	Diet. A low carb diet is a must on this schedule. Try to make the last meal happen 3 hrs before bed
2	Dark room to sleep
3	Blue Blockers and low lights during “wind down” before bed
4	Melatonin (1-3 mg) before bed
5	SAD light upon waking
6	SMART stimulant use (no caffeine within 6 hrs of bedtime ideally)

Night Shift	11:00PM – 8:00AM
1	Diet. A low carb diet is a must on this schedule. Try to make the last meal happen 3 hrs before bed
2	Dark room to sleep
3	Blue Blockers and low lights during “wind down” before bed
4	Melatonin (1-3 mg) before bed
5	SAD light upon waking
6	SMART stimulant use (no caffeine within 6 hrs of bedtime ideally)

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