



Leaders

BOOK SUMMARIES

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The Power of Habit

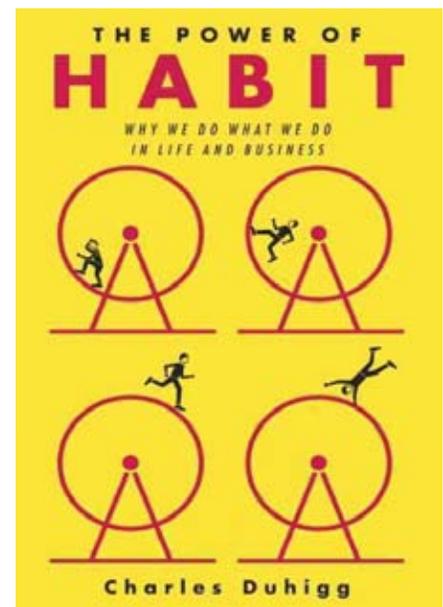
Why We Do What We Do In Life And Business

THE SUMMARY

Chapter 1: The Habit Loop—How Habits Work

Within the building that houses the Brain and Cognitive Sciences department at M.I.T. are laboratories that contain what, to the casual observer, look like dollhouse versions of surgical theaters. Inside these laboratories, neurologists are measuring the smallest changes in the brain activity of rats as they perform different tasks. These labs have become the epicenter of a quiet revolution in the science of habit formation, and the experiments unfolding there explain how you and I develop the behaviors necessary to make it through each day.

In one experiment a rat was placed in a T-shaped maze, with chocolate at one end. The maze was structured so that each rat was positioned behind a partition that opened when a loud click sounded. Initially, when a rat heard the click and saw the partition disappear, it would usually wander up and down the center aisle, sniffing and scratching the walls. When it came to the top of the T, it would turn randomly one way or the other. Eventually it would discover the reward. It looked very random, but brain activity told a different story. Each time a rat sniffed the air or scratched a wall, its brain exploded with new activity, as if it was analyzing each new scent, sight, and sound. The scientists repeated the experiment over and



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over, and over time the rats navigated the maze faster and faster.

Within their brains, something unexpected was happening: as each rat learned how to navigate the maze, its mental activity *decreased*. As the route became more and more automatic, each rat started thinking less and less. It was as if the first few times a rat explored the maze, it had to think hard, but after a few days of running the same route, it became automatic, so the brain activity declined.

This process, in which the brain converts a sequence of actions into an automatic routine, is at the root of how habits form. There are dozens, if not hundreds, of those habits at work in us every day. Some are simple, like putting toothpaste on a toothbrush; others, like getting dressed, are a bit more complex.

Habits emerge because the brain is constantly looking for ways to save effort. Left to its own devices, the brain will try to make almost any routine into a habit, because habits allow our minds to ramp down more often. An efficient brain allows us to stop thinking about basic endeavors like walking so we can devote mental energy to more complex and creative things.

In determining what activities to turn into habits, the brain spends a lot of effort looking for something—a cue—that offers a hint as to which pattern to use. For example, if a rat hears a click, it knows to use the maze habit. If it heard a different sound, it would pick a different response.

The process is actually a 3-step loop. First there is the cue, a trigger that tells your brain to go into automatic mode. Then there is the *routine*, which can be physical, mental, or emotional. Finally there is the *reward*, which helps your brain figure out if this loop is worth remembering. Over time this loop becomes more and more automatic, and eventually a habit is born.

Habits aren't destiny; they can be ignored, changed, or replaced. But the reason the discovery of the habit

loop is so important is that it reveals a basic truth: when a habit emerges, the brain stops fully participating in decision-making. It stops working so hard, so unless you deliberately *fight* a habit, the pattern will unfold automatically.

Habits never really disappear. They're encoded into our brain. The problem is that your brain can't tell the difference between good and bad habits! That explains why it is so hard to create exercise habits, for example. Once we develop a routine of sitting on the couch, rather than running, or snacking whenever we pass the refrigerator, those patterns remain inside our heads. The good news is that we can create new habits that take precedence over old ones.

The implications of the power of our habits are important for understanding our behavior. Habits, as much as memory or reason, are at the root of how we behave. We might not remember the experiences that create our habits, but once they are lodged within our brains, they influence how we act, often without our realization. They can emerge outside our consciousness, or be deliberately designed. They shape our lives far more than we realize; they are so strong that they cause our brains to cling to them at the exclusion of all else, including common sense.

Chapter 2: The Craving Brain: How We Create New Habits

In the 1980's a group of scientists was studying how monkey's brains work. In one test, when a monkey pulled a certain lever, it would get a reward of juice that dripped down a tube. The scientists discovered an interesting reality—as the monkey became more practiced at the behavior—as the habit became stronger and stronger—the monkey's brain began *anticipating* the juice. The brain pattern signaled "I got a reward" *before* the juice actually arrived. And when they changed the experiment and didn't give the monkey the reward, anger or depression would result. They began to crave the reward.

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This explains why habits are so powerful: they create neurological cravings.

They often develop so gradually that we aren't really aware of them and are blind to their influence. But as we associate cues with certain rewards, a subconscious craving emerges in our brains that starts the habit loop spinning. This is how new habits are created: by putting together a cue, a routine, and a reward, and then cultivating a craving that drives the loop.

For example, if you want to start a new habit like running each morning, it's essential that you choose a simple cue (like leaving your running shoes next to your bed) and a clear reward (a simple treat, a sense of accomplishment from recording your miles, endorphin rush, etc.) But studies have shown that a cue and reward aren't enough by themselves for a new habit to last. Only when your brain starts *expecting* the reward—craving the endorphins or sense of accomplishment—will it become automatic to lace up your jogging shoes each morning. The cue must trigger a craving for the reward to come. (It's not uncommon for a runner to crave the endorphin rush they get from running, which reinforces the habit).

Chapter 3: The Golden Rule of Habit Change: Why Transformation Occurs

Tony Dungy is considered one of the great football coaches of our time. He is the only coach in NFL history to reach the playoffs in 10 consecutive years and is the first African-American coach to win a Super Bowl. His coaching techniques have spread throughout the league and all of sports.

What Dungy focused on was helping his players develop new habits. Habits that would become so ingrained that they would be done automatically, habitually. By not having to think about what they had to do, they would be able to react faster and have an

advantage over their opponents. He didn't actually focus on creating new habits, but changing old ones. He focused on changing the routine, while leaving the cue and rewards the same. It took a while for the habits to develop, but once they did the team began to improve. In Dungy's second season, the Tampa Bay Buccaneers went to the playoffs for the first time in 15 years. In 1999, they won the division championship.

Even as they became a football powerhouse, a troubling problem emerged. They did really well, but during crucial, high-stress moments, everything fell apart. After losing a critical game, players said things like "Well, it was a critical play and I went back to what I knew." Dungy said that what they were really saying was they trusted our system most of the time, but when everything was on the line, that belief broke down. After the 2001 season, Dungy was fired after the team missed the Super Bowl for the second straight year. (They actually won it the next year, using his players, formations, and the habits he developed).

Dungy became the coach of the Indianapolis Colts the next year, and implemented the same system. The Colts also began to win, but the same pattern emerged. The Colts played a season of winning, disciplined football, and then choked under the playoff pressure.

In 2005, the Colts went 14-2, their best record in history. Then tragedy struck—Tony Dungy's son committed suicide. After his death, the team began to play differently. A conviction emerged among players about the strength of Dungy's strategy. Many felt they wanted to win "for coach." The year following the death of Jamie Dungy, the Indianapolis Colts won the Super Bowl for the first time. Somehow out of the tragedy, a belief emerged. One of the keys to breaking, or developing, a habit, is the belief that it is possible to do it.

A tragedy is not required for belief to emerge, although that is not an uncommon reality. Another way

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it happens is through social groups. When people join groups where change seems possible, the potential for that change to occur becomes more real. The most common way people change their lives is that they become part of a community that makes change believable. We now know that for habits to permanently change, people must believe that change is feasible, and belief is easier when it occurs within a community.

Chapter 4: Keystone Habits, or the Ballad of Paul O’Neill

In October of 1987, Paul O’Neill was introduced as the new CEO of Alcoa. He promptly confused everyone by saying that his #1 priority, and the way Alcoa’s success should be measured, was by looking at workplace safety. He didn’t talk about increasing profits, lowering costs, or raising shareholder value. One investor immediately ran to a phone, called his 20 largest clients, and told them to sell their Alcoa stock.

Within a year of O’Neill’s speech, Alcoa’s profits hit a record high. By the time he retired in 2000, the company’s annual net income was five times larger than when he arrived. Someone who invested one million dollars on the day O’Neill was hired would have earned another million in dividends, and the value of their stock would have been five times higher when he left. What’s more, once his safety plan was implemented, Alcoa went from a company where almost every plant had at least one accident per week to one where some facilities went years without losing a workday to an accident. (That investor later said it was the worst piece of advice he gave in his entire career).

So how did O’Neill make one of the largest, stodgiest, and most potentially dangerous companies into a profit machine and a bastion of safety? By attacking one habit and then watching the changes ripple through the organization.

O’Neill believed that some habits have the power to start a chain reaction, changing other habits as they move through an organization. Some habits, in other words, matter more than others in remaking businesses and lives. These are “keystone habits,” and they can influence how people work, eat, play, live, spend, etc. Keystone habits start a process that, over time, transforms everything.

For Alcoa, this approach dramatically changed the company. The key to protecting their employees was understanding *why* injuries happened, and in order to do so they needed to study *how* the manufacturing process was going wrong. They then brought people in to educate their workers about quality control and the most efficient work processes, so that it would be easier to do everything right, since correct work is also safer work. In other words, to protect workers, Alcoa needed to become the best, most streamlined aluminum company on earth.

Keystone habits say that success doesn’t depend on getting every single thing right, but instead relies on identifying a few key priorities and fashioning them into powerful levers. After understanding how habits are developed, the question then becomes, where do you start? Understanding keystone habits answers that question: the habits that matter most are the ones that, when they start to shift, dislodge and remake other patterns. They have a ripple effect that changes other things.

For example, studies have shown the impact of exercise on daily routines. When people start habitually exercising, even just once a week, they start changing other, unrelated patterns in their lives (often unknowingly). They often start eating better, and becoming more productive at work. They use their credit cards less and feel less stressed. Exercise is a keystone habit that triggers widespread change. If you focus on changing or cultivating keystone habits, you can cause widespread shifts.

One of the reasons that keystone habits are powerful is that they give us “small wins.” Small wins are just

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what they sound like, and are a big part of how keystone habits create widespread change. Small wins have enormous power, an influence disproportionate to the accomplishments of the victories themselves. Once you get a small win, forces are set in motion that favor more small wins. Small wins fuel other changes by convincing people that bigger achievements are within reach.

Chapter 5: Starbucks and the Habit of Success—When Willpower Becomes Automatic

Travis Leach grew up in a home with two drug-addicted parents. It wasn't unusual for him to see one of them overdose. When he was sixteen, he dropped out of high school. He got a number of jobs but lost them, often from a lack of self-control. Eventually, at age 19, he got a job at Starbucks. Six years later, at age 25, Travis is the manager of two locations where he oversees forty employees and is responsible for revenues of more than \$2 million per year. His salary is \$44,000, he has a 401K, and no debt.

What changed? Travis would say it was the training that he received at Starbucks. He says it changed his life. Starbucks has taught him how to live, how to focus, how to get to work on time, and how to master his emotions. Most importantly, it has taught him willpower.

For Travis and thousands of others, Starbucks has succeeded in teaching the kind of life skills that others have often failed to provide. All of their more than one million current and previous employees spent at least 50 hours in Starbucks classrooms, and dozens more at home with workbooks and mentors. At the core of that education is an intense focus on an all-important habit: willpower. Dozens of studies show that willpower is the single most important keystone habit for individual success.

Students who exerted high levels of willpower were

more likely to earn higher grades, had fewer absences, spent less time watching TV and more hours doing homework. They outperformed their more impulsive peers on every academic-performance variable; self-discipline predicted academic performance more robustly than did IQ.

And the best way to strengthen willpower and give students a leg up is to make it into a habit. One researcher said, "Sometimes it looks like people with great self-control aren't working hard, but that's because they've made it automatic. Their willpower occurs without them having to think about it."

Willpower isn't just a skill. It's a muscle, like your arms or legs. It gets tired, and it can be made stronger. In one study, people joined a 4-month money management program. They set goals and made commitments, including logging details of their spending. Although difficult at first, eventually they worked up the self-discipline to do it consistently. As might be expected, their finances improved. Surprisingly, they also smoked fewer cigarettes, drank less alcohol and caffeine, ate less junk food, and were more productive at work. It was like the exercise studies: as people strengthened their willpower muscles in one area, whether in the gym or a money management program, that strength spilled over into everything else. Once willpower became stronger, it touched everything.

What Starbucks did was turned self-discipline into an organizational habit. They discovered that their worker's willpower faltered when stressful situations emerged. So the company developed training materials that spelled out routines for employees to use when they hit rough patches. They taught them how to anticipate pressure points and plan ahead how to handle them. That is how willpower becomes a habit: by choosing a certain behavior ahead of time, and then following that routine when a pressure point arrives.

For some people, developing willpower seems easier than for others. Some, like Travis, were able to create

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willpower habits relatively easily; others struggled, no matter how much training they received. What made the difference? As researchers studied that question, it became apparent that the greater the sense of control people felt, the easier it was to exercise willpower.

In one study, students were put in a room with a plate of warm, fresh cookies. One group was treated kindly, were asked not to eat the cookies, and were told why—that the researchers were measuring their ability to resist temptation. The other group was simply ordered not to eat the cookies and were told nothing else.

In both cases the students ignored the cookies. But the students who were given orders had to use much more willpower than those who understood what was going on. This is an important insight for companies and organizations: giving employees a sense of being in control can radically increase how much energy and focus they bring to their jobs.

Chapter 6: The Power of a Crisis— How Leaders Create Habits Through Accident and Design

Sometime around 2006, an 86-year old man was wheeled into the operating room at Rhode Island hospital. As a result of a fall, he had developed a subdural hematoma. Blood was pooling within the left portion of his cranium, causing those parts of the brain that controlled his breathing and heart to begin to falter. Unless the blood was drained, he would die.

While once one of the nation's leading medical institutions, Rhode Island Hospital had developed into a dysfunctional organization, with serious divisions between the nurses and physicians. The surgeons had a reputation for arrogance, and the nurses had developed informal rules—habits—to help avert possible problems. They developed a color code to let each other know which doctors were nice, and which

would “bite your head off” if you contradicted them. They also developed ways to double-check the orders of error-prone physicians. Rhode Island Hospital had a corrosive culture, which made serious problems possible.

When the man was wheeled into the operating room, a nurse discovered that the chart didn't say whether the hematoma was on the right or left side. Rather than allow the nurse to take the time to check the brain scans, the surgeon grabbed the chart, wrote “right side” on it, and initiated the surgery, believing that there wasn't enough time to wait. After drilling into the skull and removing a piece, they discovered they had opened up the wrong side—the hematoma was on the left. They reattached the bone they had removed, turned him over, and operated on the correct side. Afterwards the patient was taken to ICU, but never regained consciousness. Two weeks later he died.

The case went to court, where it was ruled that the precise cause of death was impossible to determine. The hospital paid a settlement, and the surgeon was barred from ever working at Rhode Island Hospital again.

Nurses later claimed that such an accident was inevitable, since the hospital's institutional habits were so dysfunctional. Every organization has institutional habits; some are developed intentionally, and some just grow, often the result of dealing with other problems, rivalries, or fear. These habits, or routines, are enormously important, because without them, most companies would never get any work done. Routines provide the hundreds of unwritten rules that companies need to operate.

Sometimes, even destructive habits can be transformed by leaders who know how to seize the right opportunities. Sometimes a crisis can be the impetus for new habits to be developed.

Over the next three years after the elderly man had the botched skull surgery, several other incidents

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occurred at Rhode Island Hospital. Another surgeon made a similar error, operating on the wrong side of a patient's head; another time a surgeon operated on a patient's wrong finger; another time a drill bit was left inside a man's head. The media took note, and a sense of crisis emerged at the hospital. Some administrators feared the hospital would lose its accreditation.

Under the leadership of Dr. Mary Reich Cooper, the new chief quality officer at the hospital, Rhode Island Hospital decided to use the crisis to promote changes. They shut down the surgery unit for a full day (a huge expense), and put the entire staff through an intensive training program. They installed video cameras in operating rooms and updated their surgical systems. Some of those changes had been suggested earlier, but were never implemented. But once a sense of crisis gripped the hospital, everyone became more open to change. Since 2009, when the new safety procedures were fully implemented, no wrong-site errors have occurred. The Hospital has begun to receive awards for quality care. And most importantly, the nurses and doctors say that Rhode Island Hospital feels like a completely different place.

A company with dysfunctional habits can't change simply because a leader orders it to. Rather, wise executives seek out moments of crisis, or create the perception of crisis, to cultivate the sense that *something* must change, until everyone is ready to overhaul the patterns they live with each day.

Chapter 7: How Target Knows What You Want Before You Do

Shortly after he began working for Target as a data expert, Andrew Pole was approached by some colleagues from the marketing department. They had a simple question: "Can your computers figure out which of our customers are pregnant, even if they don't want us to know?" Pregnant women and new parents are considered the holy grail of retail. There

is almost no more profitable, product-hungry, price-insensitive group in existence.

It isn't just about diapers and wipes. Parents with infants are so tired that they will buy everything they need wherever they purchase their bottles and formula. Groceries, cleaning supplies, towels, underwear, etc.; the sky is the limit. And once a new parent starts shopping at Target, they'll keep coming back for years. Figuring out who was pregnant could make Target millions of dollars.

Most people have consistent shopping habits. They buy the same cereal and deodorant at the same place, week after week. Habits reign supreme—except when they don't. There are certain times when people are more likely to deviate from that habit, and the most likely time is when they go through a major life event. When someone gets married, or moves into a new home, things change. And the biggest life event for most people is having a baby. There's almost no greater upheaval for most customers than the arrival of a child. As a result, new parent's habits are more flexible at that moment than at almost any other time in an adult's life. So for companies, pregnant women are gold mines.

By analyzing purchasing habits, Andrew Pole was able to identify whether women were pregnant, and even what trimester they were in. After applying his program to every shopper in the Target database, he came up with hundreds of thousands of women who were likely to be pregnant and that Target could inundate with ads, coupons, etc. However, they realized that women might not like the idea that Target knew so much about their personal lives. The question then became, how do you market to them? How do you help them develop new shopping habits without offending them?

One Target executive summarized their approach this way: "We could send everyone a unique ad booklet with coupons for everything they bought last week. But we found that some pregnant women reacted badly to that kind of targeting. Instead we started

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mixing in all these ads for things we knew pregnant women wanted with other things we knew they wouldn't be interested in. We'd put an ad for a lawnmower next to diapers, or wineglasses next to infant clothes. That way it looked like all the products were chosen by chance. And we found that a woman would use the coupons as long as she didn't think she had been spied upon."

Basically, Target sandwiching the diaper coupons between the non-pregnancy products made the ads seem anonymous, familiar, and comfortable. Target camouflaged what they knew. The lesson is this—if you dress a new something in old habits, it's easier for the public to accept it.

The YMCA found the same thing in another arena. They thought that people wanted fancy exercise equipment and sparkling facilities, and they spent millions building weight rooms and yoga studios. But when they analyzed the data they gathered from over 150,000 member satisfaction surveys, it turned out that while good facilities might attract people, it was something else that got them to stay. The data said that retention was driven by emotional factors, such as whether employees knew their names or said hello when they walked in. It seems that people often go to the gym looking for a human connection, not a treadmill! It's the same thing that Target learned—to sell a new habit (exercise) wrap it in something that people already know and like, such as the instinct to go places where it's easy to make friends.

Chapter 8: Saddleback Church and the Montgomery Bus Boycott—How Movements Happen

In 1955, Rosa Parks changed the course of the Civil Rights Movement when she refused to give up her seat on the bus. She actually wasn't the first black person in Montgomery to make that choice, but her arrest galvanized a social movement. Her experience highlights the power of social habits—the behaviors

that occur, unthinkingly, across dozens, hundreds, or thousands of people which are hard to see as they emerge but which contain a power to change the world. Social habits are why some initiatives become world-changing movements, while others fail to ignite.

At the root of movements is a 3-part process that historians and sociologists say shows up again and again. A movement starts because of the social habits of friendship and the strong ties between close acquaintances. It grows because of the habits of a community, and the weak ties that hold neighborhoods and clans together. And it endures because a movement's leaders give participants new habits that create a sense of identity and a feeling of ownership.

When Parks was arrested, it sparked something within the community. Rosa Parks was deeply embedded in the community, so when she was arrested, the habits of friendship ignited a social protest. She was a member of dozens of social networks, so had friends throughout the city. When her friends learned of her arrest, they organized a bus boycott. Many expected the protest to be a one-day event; small protests pop up every day around the world, and most fizzle out. No one has enough friends to change the world.

That's why the second aspect of the social habits of movements is so important. The boycott became a society-wide action because of peer pressure—an influence known as "the power of weak ties"—that made it difficult to avoid joining in. There is a certain communal expectation that develops that is very hard to resist. Indeed, if you ignore the social obligations of your neighborhood, if you shrug off the expected patterns of your community, you risk losing your social standing. In Rosa Parks' case, much of Montgomery knew someone who knew her; simple friendship and loyalty pushed people to support the boycott. And for those who didn't know her, the number who did created tremendous social pressure to join the boycott.

The third element is best seen in the development of Saddleback Church, led by Pastor Rick Warren. Thirty

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years after Warren started the church it is one of the largest ministries in the world, with more than 20,000 parishioners, and thousands of other churches that model their efforts on his ministry. At the core of his church's growth and success is a fundamental belief in the power of social habits.

Warren created a series of curriculums, used in church classes and small group discussions, which were explicitly designed to teach members new habits. Giving everyone new habits has become a focus of the church. Warren put it this way: "Once we do that, the responsibility for spiritual growth is no longer with me, it's with you. We've given you a recipe. We don't have to guide you, because you're guiding yourself. These habits become a new self-identity, and at that point, we just need to support you and get out of your way."

This is the third aspect of how social habits drive movements: for an idea to grow beyond a community, it must become self-propelling. And the surest way to achieve that is to give people new habits that help them figure out where to go on their own.

In short, movement happens when friends begin to act in concert, and grows through the "weak ties" of those who are peripherally connected to the initial group. It grows further as communal expectations draw in more people, and gets established as people develop new habits that propel them forward.

Conclusion

William James once wrote that the will to believe is the most important ingredient in creating belief in change. And one of the most important methods for creating that belief is habits. Habits, he noted, are what allow us to "do a thing with difficulty the first time, but soon do it more and more easily, and finally, with sufficient practice, do it semi-mechanically, or with hardly any consciousness at all." If you believe you can change—if you make it a habit—the change

becomes real. This is the real power of habit: the insight that your habits are what you choose them to be. Once that choice occurs, and becomes automatic, it's not only real, it starts to seem inevitable, the thing, as James wrote, that bears us "irresistibly toward our destiny."

The Pastor's Perspective

I have long believed in the power of habit. I believe that developing habits is one of the most powerful things we can do to shape our lives. Once we develop them, they take on a life of their own, and work to our advantage (at least the ones that we intentionally develop). What I love about this book is the detailed breakdown of how habits are developed.

In particular I made note of the idea of "keystone habits." They are the habits that have a ripple effect, impacting more areas than just the specific habit area itself. I've long taken that approach to developing habits, but didn't have a name for it. I think in terms of leverage—what habits have the most leverage. Same idea.

One of the things I have observed when mentoring or discipling people is that getting them to understand and act on the keystone habit idea often releases hope or confidence in people. Intuitively they get the idea that there can be a ripple effect, and it increases their commitment to building that particular habit. It's a powerful tool to use in helping people change their lives and grow into the people they are supposed to be.

I used that very idea at the beginning of the year. As I looked at the changes I wanted to make this year, I realized that there was one particular habit that would affect everything else the most: my sleep patterns. I have never gotten a consistent 8 hours of sleep a night, which I realized affected my energy levels (which hindered my ability and desire to exercise), affected what I ate (often eating extra to get an energy

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boost), when I ate (late at night) and ultimately my weight (eating unhealthy food at night and not exercising is not a good diet plan!)

So I set one goal for myself for this year: get 8 hours of sleep, every night. Half way through the year, I can feel the difference. I definitely have more energy, and it is wonderful to not feel tired all the time. I'm also exercising more regularly. For me, sleep is a keystone habit, and I see the power in it.

I encourage you to identify keystone habits yourself, and implement them—I think you'll benefit.