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## Habit Forming

First, we make our habits. Then our habits make us.<sup>1</sup>

James Clear, author of *Atomic Habits*, writes, “Your life today is essentially the sum of your habits.” What we repeatedly do — what we spend our time thinking about and doing each day — forms our personality, the things we believe, and, ultimately, who we are.” *We are our habits.*

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One evening, as she was preparing dinner, Beverly Pauly mentioned to her husband, Eugene, that their son, Michael, was coming over to join them.

“Who’s Michael?” Eugene asked.

“Your child,” answered Beverly. “You know, the one we raised.”

Eugene looked at her blankly. “Who is that?” he asked.

This turned out to be the first sign that Eugene had contracted encephalitis. The virus had reached his brain, and had already begun inflicting catastrophic damage on the delicate folds of tissue where thoughts and dreams and memory are made. The onset of a raging fever sent Eugene into a coma for ten days.

Seemingly miraculously, he emerged with his nervous system intact; he could move his limbs and was responsive to light and noise. But the virus had destroyed a walnut-sized oval of his brain — the place where short-term memory resides.

Eugene was 71 years old, but he didn’t remember anything from after the time he was 42. And he couldn’t remember new information for more than one

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<sup>1</sup> For all the information on habits in this sermon, please see, especially, Charles Duhigg, *The Power of Habit*; James Clear, *Atomic Habits*; and Nir Eyal, *Hooked*

minute. Some mornings, he would get out of bed, cook himself bacon and eggs, then climb back under the covers. Forty minutes later, he'd get up and make himself a second breakfast ... and go back to bed. And then he'd do it again.

The Paulys moved to San Diego to be closer to their daughter. Eugene was completely disoriented. His doctors had warned that he would have to be monitored at all times; if he got out, he would never be able to find his way home, let alone tell anyone where he lived. Beverly took him for a walk each day — always along the same route — hoping to familiarize him with his new neighborhood. But then one day, while she was in another room, he wandered out on his own. Beverly was frantic and ran outside to look for him. He was gone.

Finally, circling back to the house, she found him sitting in front of the TV, watching — ironically — the history channel. Her tears confused Eugene. He didn't remember leaving, and couldn't fathom why she was upset. Then Beverly saw a pile of pinecones on the table. Eugene's fingers were sticky with sap. He had, indeed, moseyed on down the street and picked up some souvenirs ... and found his way home. Even without the capacity for memory, Eugene had learned a new habit.

As it turned out, this was the beginning of a breakthrough in the study of habit. The science is fascinating: When we're learning something new, our brains light up, working on full power as they analyze each new sight, sound, scent — sensation. But as the activity is repeated, a part of the brain called the basal ganglia stores our habits. Our brains are constantly looking for ways to save effort; they'll make any routine into a habit. As the rest of the brain quiets down, the basal ganglia proceeds on autopilot.

Every day, we rely on hundreds of cues from the basal ganglia. Unthinking, we hit the snooze button; squeeze toothpaste onto our toothbrush; put on our socks before our shoes. Most of us perform an intricate ballet every morning without a thought; habit frees our brains to chase other thoughts and waltz on out into our days.

A habit is processed as a four-step loop. It begins with a cue — a trigger that powers down our brains and lets us go on auto-pilot. That's followed by craving — physical, mental, or emotional. Next comes the response — what we do about the craving. And finally there's the reward — the payoff, which is really what it's all about — which reinforces the habit, signaling the brain that it can stop

making decisions. Cue, craving, response, reward; cue, craving, response, reward: over and over.

In Eugene Pauly's case, despite severe brain damage, the habit loop was still at work; the basal ganglia had escaped the ravages of encephalitis. Even though he couldn't remember that he'd already eaten breakfast, he still knew how to make it and eat it. Even though he had no idea where he was, he could find his way home from his morning walk. His doctor, Larry Squire, says, "All my life I was fascinated by memory. Then I met [Eugene], and saw how rich life can be even if you can't remember it. The brain has this amazing ability to find happiness even when the memories of it are gone."

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Now to the heart of this sermon: The bad news is that the brain can't tell the difference between bad habits and good ones; habits are formed without our "permission." And they never disappear. Habits are encoded into the structure of our brains; once we've learned them, they're in there somewhere, waiting to be reignited.

The good news is that habits can be ignored, changed, or replaced. When we understand how they're formed — cue, craving, response, reward — we can make a decision to jump on or off the habit loop. And right about now, in these first days of January, is a really good time to reexamine our habits.

It's important to understand that everything is geared to the reward. We begin with the end in sight. To get there, there's the cue that triggers our brain to initiate the habitual behavior that predicts that reward.

Then craving kicks in. What we crave is the change delivered by the habit. Gamblers don't crave the cacophony of the casino; they crave the rush of the jackpot. Smokers don't crave smoking itself; they crave the feelings associated with smoking that provide a respite and relief from the present. No one craves the act of turning on the TV; they want to be entertained.

The response to the craving is buying poker chips, lighting up, powering up the remote — whatever we have to do to ignite the habit.

And then there's the reward ... and, again, it's always about the reward. The cue is about noting the reward; the craving is about wanting the reward; the response is about obtaining the reward. Rewards deliver relief. And rewards teach

us which actions are worth remembering in the future — which should become a habit.

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As America became wealthier, Americans began buying larger amounts of processed, sugary foods. But hardly anyone in this country brushed their teeth. When the government started drafting men to serve in World War I, so many recruits had ruined teeth that poor dental hygiene was listed as a national security risk.

Perhaps the greatest advertising executive of the last century, Claude C. Hopkins, revolutionized dental hygiene in America when he created a craving for a minty, frothy toothpaste called Pepsodent. We might imagine that the reward he promised was the Pepsodent smile, but we'd be wrong. It turned out that Pepsodent, unlike other toothpastes at the time, contained citric acid and mint oil — basically, irritants. When you finished brushing with it, there was a cool, tingling sensation on the tongue. As it turns out, Claude Hopkins wasn't selling beautiful teeth; he was selling a sensation.

Before it appeared, only seven percent of Americans had a tube of toothpaste in their medicine chests. Ten years after Hopkins' campaign went nationwide, that number jumped to 65 percent. By the end of World War II, soldiers' teeth were no longer a concern. And for 30 years, Pepsodent was America's bestselling toothpaste.

Today, almost all toothpastes contain additives whose sole job is to make your mouth tingle after you brush. The tingling doesn't do anything but convince us that the toothpaste is doing its job ... and reinforces the habit of brushing our teeth.

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So how do we replicate that phenomenon in our own lives? How do we break into new cue-craving-response-reward cycles? Or how do we break out?

Remember that reward drives habit; it's all about the payoff. So let's start by asking ourselves what a really fabulous reward would be — be very specific.

Then spark that craving; how can we make the craving for that reward irresistible? The craving will drive our habit loop.

Then ask, How can I make the cue obvious?

Inversely, if we want to eliminate a habit, we need to eliminate the cue so the habit loop will never start. If the craving is met in another way, we won't be motivated to act. And if we find another way to be rewarded, we'll quit the old habit.

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Although the roots of our bad habits may be complex and deep-seated, the research reveals that bad habits all come down to two things: stress and boredom. A key to replacing bad habits with good ones is learning better ways to mitigate our stress and boredom. Beyond that, here's the to-do list; four items:

\* First, visualize yourself succeeding — waking up early, eating clean food, being a non-smoker, being fit — whatever it is you want. Build an identity you love from the inside out. And remember, there was a time we didn't have the bad habits we have; think of it as returning to being healthy — returning to the best version of yourself.

\* Second, eliminate old triggers. If you can't stop after a cookie or two, avoid bakeries and don't have sweets in the house. If you smoke when you drink, ask a friend to meet you somewhere other than a bar. If you click on the TV the minute you plop down on the couch, put the remote on a high shelf in a different room and put a good book within reach. Change your environment to change the outcome.

\* Third, choose new triggers. Instead of eating something you'll regret, call a friend; choose connection. Instead of cracking open another beer, drop to the floor and do some push-ups; choose fabulous arms. Instead of buying yet another useless object you don't need, open Instagram and look at amazing photos; choose beauty, and save up to travel.

\* And fourth, join forces. Quit together, or start something together. Hold each other accountable, show up for each other, and celebrate your victories. Use social media to find people who want to live the way you want to live, and start living.<sup>2</sup>

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For those of you who are familiar with Alcoholics Anonymous and other Twelve-Step Programs, you will recognize these strategies. Alcoholism, of course, is much more than a habit; it's a physical addiction, a disease with psychological

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<sup>2</sup> James Clear, *How to Break a Bad Habit and Replace It with a Good One*. Please see [jamesclear.com/how-to-break-a-bad-habit](http://jamesclear.com/how-to-break-a-bad-habit)

and often genetic roots. But A.A. doesn't really address the disease; it addresses diseased behavior. Charles Duhigg, author of *The Power of Habit*, writes, "What A.A. provides ... is a method for attacking the *habits* that surround alcohol use. [It] is, in essence, a giant machine for changing habit loops."<sup>3</sup> In fact, "A.A. succeeds because it helps alcoholics use the same cues and get the same reward, but it shifts" the craving and the response. Specifically, Step Four — making a "searching and fearless ... inventory" of ourselves — is actually creating a list of all the cues, the triggers, that set off drinking to excess. Step Five — admitting "the exact nature of our wrongs" — is a way of looking hard at all the ways and all the times everything spiraled out of control.<sup>4</sup>

The physical effects are often the least rewarding part of intoxication; being drunk rarely makes the "reward" list for alcoholics. What they crave is relaxation, the blunting of anxiety, escape, emotional release, and, sometimes, companionship. A.A. offers all of this in the form of meetings and the companionship of a sponsor.

No matter how long they've been sober, any alcoholic knows they're only one drink away from being right back in the mess and mayhem. The old cues and rewards — trigger and payoff — are permanently wired-in, just waiting to be activated. Only by changing the craving and the response can the habit loop be remade. Nathan Azrin, one of the developers of habit reversal training, says, "It seems like it should be more complex. The truth is, the brain can be reprogrammed. You just have to be deliberate about it."

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There's just one more thing to add to this mix, for now: *belief*. Scientists hate this part; belief is not a testable hypothesis. Scott Tonigan, a researcher at the University of New Mexico, says, "I wouldn't have said this a year ago — that's how fast our understanding is changing — but belief seems critical. You don't have to believe in G\*d, but you do need the capacity to believe that things will get better." It turns out that the people who have the most success in recovering from addiction — replacing self-destructive habits with life-giving ones — come to believe they can cope with the challenges of living without their fix, believe they can get better, believe in a program of recovery. We might even consider believing that there's something at work in our lives that's more powerful than the person who's looking back at us when we gaze into the mirror.

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<sup>3</sup> Charles Duhigg, *op cit*, p. 69. For the studies on the effects of AA, please see pp. 68-77

<sup>4</sup> Based on the work of Scott Tonigan, a researcher at the University of New Mexico

Lee Ann Kaskutas, a senior scientist at the Alcohol Research Group, adds, “There’s something really powerful about groups and shared experiences. [We] might be skeptical about [our] ability to change if [we’re] by [ourselves], but a group [ — coming together to help one another change — ] will convince [us] to suspend disbelief. A community [ — especially a spiritual community — ] creates belief.”<sup>5</sup>

Beloved spiritual companions,

First, we make our habits —  
cue, craving, response, reward —  
and then our habits make us.

Let’s begin a good habit or end a bad one.

Start with payoff —  
visualize yourself succeeding;  
consider triggers —  
out with the old and in with the new;  
and figure out what’s going in between.  
Join forces.  
Start living.

Together, may we suspend disbelief  
and come to believe  
that things can and will get better —  
believe in our power  
to change our lives  
and our world  
for good.

*Let’s make our lives tingle!*

*Amen.*

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<sup>5</sup> Scott Tonigan and Lee Ann Kaskutas are quoted in Duhigg, *op cit*, p. 85