

Remadely - Market Research

Trends

<https://www.mobius.md/2019/03/20/11-mobile-health-statistics/>

mHealth is increasingly accessible

1. 81 percent of American adults have a smartphone, according to Pew Research. Smartphone ownership has increased rapidly since 2011 (then 35 percent) and is even higher for young people. 95 percent of teens have access to a smartphone and 45 percent say they're online "almost constantly."

2. There are now 318,000 mHealth apps available in major app stores. That number has nearly doubled since 2015 driven by increased smartphone adoption and ongoing heavy investment in the digital health market.

3. Over 60 percent of people have downloaded an mHealth app. Yes, that is a big number. These fall into two major categories with wellness being much more common (85 percent) than medical (15 percent).

<https://mindsea.com/app-stats/>

Consumers spent 130% more in health and fitness apps in 2019 than they did in 2017.

Exercising is another at-home activity that more consumers have been exploring since the pandemic forced the closure of gyms, sporting fields and rec centers.

According to Sensor Tower, health and fitness app downloads are up 47% year-over-year, and per App Annie, consumer spend last year was already up 130% from 2017. In 2019, consumers worldwide spent a total of \$1.5 billion in this category.

<https://www.medresponsive.com/blog/top-mobile-health-app-trends-for-the-healthcare-industry/>

Different types of health-tracking apps are available that people opt as a source of health information that fits in the palm of their hands. These types of apps have gained extraordinary popularity in recent years, as they have applications focused on maintaining a healthy diet.

For example, MyFitnessPal is one of the best apps for health tracking and motivation. Ranked as the number one health and fitness app on iTunes, this application pushes users to keep tabs on their diet programs through an easy-to-use database that offers nutrition information for over 5 million different foods.

<https://www.gminsights.com/industry-analysis/mhealth-market>

mHealth Market size was valued over USD 30.2 billion in 2018 and is expected to witness more than 38.5% CAGR from 2019 to 2025.

<https://www.verifiedmarketresearch.com/product/health-and-fitness-app-market/>

According to Verified Market Research, the global health and fitness app market was valued at USD 3.45 billion in 2019 and is projected to reach USD 15.60 billion by 2027, growing at a CAGR of 20.81 % from 2020 to 2027.

Rising demand for real-time data and increasing the focus of individuals to maintaining a healthier lifestyle are the major growth drivers for the health and fitness app market.

Health App Use Among US Mobile Phone Owners: A National Survey

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4704953/>

Weight Loss, Calorie Tracking, Nutrition, and Physical Activity

The majority of comments concerned the intersection of food intake, physical activity, and weight management. A major theme was that participants wanted apps to provide more specific and personalized recommendations, regarding exercises/activities and what to eat than are currently available. For instance, a number of respondents noted they wanted an app to assess their health history, and for the app to tell them what exercises they should do and what they should and should not eat. For instance, participants wanted an app to tell them the following: "Remind me what food I have to eat every single day," "Tell me when I am eating the wrong food," and "Suggest exercises, customize workouts to fit my goals and needs." Generally, they wanted apps that helped them reach specific exercise and nutrition goals rather than just "lose weight." Tracking was also an important theme, with participants wanting more accurate and easier-to-use methods of showing how

many calories they consume and burn daily. A number of participants also wanted the apps to help keep them motivated, particularly using humor and encouragement.

Pain Points

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4704953/>

Common reasons for not having downloaded health-related apps were lack of interest, cost, and concern about apps collecting their data.

These findings suggest that while many individuals use health apps, a substantial proportion of the population does not, and that even among those who use health apps, many stop using them. These data suggest that app developers need to better address consumer concerns, such as cost and high data entry burden, and that clinical trials are necessary to test the efficacy of health apps to broaden their appeal and adoption.

Demographics

<https://news.gallup.com/poll/269096/one-five-adults-health-apps-wearable-trackers.aspx>

About one in three Americans have at least tried digital health products.

Higher-income households, women, young adults among top users.

Most users say health apps, wearable trackers are helpful to health goals.

Nineteen percent of Americans say they currently use a wearable fitness tracker, with the same percentage saying they currently use a mobile health app.

Combining present use with the percentages of Americans saying they have used each of these devices in the past, about one in three Americans report at some point having worn a fitness tracker such as a Fitbit or smartwatch (34%) or having tracked their health statistics on a phone or tablet app (32%).

Roughly half of U.S. adults in upper-income households report being current or former users of both fitness trackers and health apps, whereas about one in three adults in middle-income households report having used these products -- and about one in four among those in lower-income households.

Fitness trackers and health apps are a bit more popular among women than among men. Meanwhile, adults younger than 55 are about twice as likely to have used these products as are adults aged 55 and older.

Gender and age differences are accentuated when considering both together -- nearly half of women younger than 50 report having used these products, while men aged 50 and older are the least likely among the four gender-age groups to report having used them.

Thirty-five percent or more of city and suburban residents report having used these products, while fewer than three in 10 residents of rural areas have used either one.

About three in four current or former users of wearable fitness trackers say they find them very (30%) or somewhat helpful (46%). Even more health app users (82%) say they find them very (29%) or somewhat helpful (53%).

More than one in four adults across the U.S. are currently measuring their steps, exercise, sleep or other personal health information as they go about their daily lives -- amassing a vast amount of data for companies that oversee the devices and applications they use.

[https://www.marketingcharts.com/industries/pharma-and-healthcare-111492#:~:text=A%20survey%20by%20Gallup%20reveals,trackers%20or%20mobile%20health%20apps.&text=Health%20app%20users%20are%20more,12%25\)%20to%20use%20them.](https://www.marketingcharts.com/industries/pharma-and-healthcare-111492#:~:text=A%20survey%20by%20Gallup%20reveals,trackers%20or%20mobile%20health%20apps.&text=Health%20app%20users%20are%20more,12%25)%20to%20use%20them.)

A survey by Gallup reveals that nearly half (45%) of Americans have at least tried digital health products such as fitness trackers or mobile health apps.

Health app users are more likely to be younger, with adults under the age of 55 about twice as likely (24-25%) as those 55 and older (12%) to use them. This difference might in part be explained by differences in smartphone ownership across generations.

Marked differences can also be seen across Americans of different income groups. Among those living in households earning more than \$100k, some 26% use a health app and 31% use a tracker. For those whose income is below \$40k, usage is significantly lower (15% app, 14% tracker).

Health App Use Among US Mobile Phone Owners: A National Survey

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4704953/>

A little over half (934/1604, 58.23%) of mobile phone users had downloaded a health-related mobile app. Fitness and nutrition were the most common categories of health apps used, with most respondents using them at least daily. Common reasons for not having downloaded apps were lack of interest, cost, and concern about apps collecting their data. Individuals more likely to use health apps tended to be younger, have higher incomes, be more educated, be Latino/Hispanic, and have a body mass index (BMI) in the obese range (all $P < .05$). Cost was a significant concern among respondents, with a large proportion indicating that they would not pay anything for a health app. Interestingly, among those who had downloaded health apps, trust in their accuracy and data safety was quite high, and most felt that the apps had improved their health. About half of the respondents (427/934, 45.7%) had stopped using some health apps, primarily due to high data entry burden, loss of interest, and hidden costs.

Who uses phone apps to track sleep habits? Mostly the healthy and wealthy in US

<https://www.sciencedaily.com/releases/2018/01/180117085748.htm>

The profile of most Americans who use popular mobile phone apps that track sleep habits is that they are relatively affluent, claim to eat well, and say they are in good health, even if some of them tend to smoke.

In addition to the overall health and wealth of the majority of users, the results showed that more men than women track their sleep (35 percent versus 20 percent, respectively), and their average age skewed young, at 34. People with yearly incomes above \$75,000 and those who already use a health app to remind them about taking their medications were also more likely to track their sleeping habits. Sleep app users typically had between 16 and 25 health apps on their smartphones.

The most popular apps for sleep tracking (of 24 health apps identified in the survey) are Fitbit (10 percent), Lose It (3.5 percent), and Apple Health (2.6 percent).

"Sleep apps are very popular among a diverse group of Americans, and they have a lot of them to choose from," says Robbins.

<https://buildfire.com/app-statistics/#:~:text=Key%20Mobile%20App%20Statistics&text=21%25%20of%20Millennials%20open%20an,and%2030%20apps%20each%20month.>

21% of Millennials open an app 50+ times per day.

<https://mindsea.com/app-stats/>

Millennials and gen Z are the two most tech-savvy generations with rapidly growing purchasing power.

Roughly 37% of millennials list data usage as a key factor when deciding if they like a mobile app.

21% of millennials say they open their apps more than 50 times per day.

Gen Z spends 71% of their digital media time using smartphone apps.

What is a habit?

<https://www.lifehack.org/811885/do-you-really-understand-what-a-habit-is>

How do people form habits?

<https://www.lifehack.org/articles/productivity/8-tips-change-and-develop-habits.html>

The Biology

Habits form in a place what we call the subconscious mind in our brain.

Our brains have two modes of operation. The first one is an automatic pilot kind of system that is fast and works on reflexes often. It is what we call the subconscious part. This is the part that is associated with everything that comes naturally to you.

The second mode is the conscious mode where every action and decision is well thought out and follows a controlled way of thinking.

A fine example to distinguish both would be to consider yourself learning to drive or play an instrument. For the first time you try learning, you think before every

movement you make. But once you have got the hang of it, you might drive without applying much thought into it.

Both systems work together in our brains at all times. When a habit is formed, it moves from the conscious part to the subconscious making it difficult to control.

So, the key idea in deconstructing a habit is to go from the subconscious to the conscious.

Another thing you have to understand about habits is that they can be conscious or hidden.

Conscious habits are those that require active input from your side. For instance, if you stop setting your alarm in the morning, you will stop waking up at the same time.

Hidden habits, on the other hand, are habits that we do without realizing. These make up the majority of our habits and we wouldn't even know them until someone pointed them out. So the first difficulty in breaking these habits is to actually identify them. As they are internalized, they need a lot of attention to detail for self-identification.

The Psychology

Habits get engraved into our memories depending on the way we think, feel and act over a particular period of time. The procedural part of memory deals with habit formation and studies have observed that various types of conditioning of behavior could affect your habit formations.

Classical conditioning or pavlovian conditioning is when you start associating a memory with reality. A dog that associates ringing bell to food will start salivating. The same external stimuli such as the sound of church bells can make a person want to pray.

Operant conditioning is when experience and the feelings associated with it form a habit. By encouraging or discouraging an act, individuals could either make it a habit or stop doing it.

Observational learning is another way habits could take form. A child may start walking the same way their parent does.

What Can You Do To Change a Habit?

Sure, habits are hard to control but it is not impossible. With a few tips and hard-driven dedication, you can surely get over your nasty habits.

Here are some ways that make use of psychological findings to help you:

1. Identify Your Habits

As mentioned earlier, habits can be quite subtle and hidden from your view. You have to bring your subconscious habits to an aware state of mind. You could do it by self-observation or by asking your friends or family to point out the habit for your sake.

2. Find out the Impact of Your Habit

Every habit produces an effect – either physical or mental. Find out what exactly it is doing to you. Does it help you relieve stress or does it give you some pain relief?

It could be anything simple. Sometimes biting your nails could be calming your nerves. Understanding the effect of a habit is necessary to control it.

3. Apply Logic

You don't need to be force-fed with wisdom and advice to know what an unhealthy habit could do to you.

Late-night binge-watching just before an important presentation is not going to help you. Take a moment and apply your own wisdom and logic to control your seemingly nasty habits.

4. Choose an Alternative

As I said, every habit induces some feeling. So, it could be quite difficult to get over it unless you find something else that can replace it. It can be a simple non-harming new habit that you can cultivate to get over a bad habit.

Say you have the habit of banging your head hard when you are angry. That's going to be bad for you. Instead, the next time you are angry, just take a deep breath and count to 10. Or maybe start imagining yourself on a luxury yacht. Just think of something that will work for you.

5. Remove Triggers

Get rid of items and situations that can trigger your bad habit.

Stay away from smoke breaks if you are trying to quit it. Remove all those candy bars from the fridge if you want to control your sweet cravings.

6. Visualize Change

Our brains can be trained to forget a habit if we start visualizing the change. Serious visualization is retained and helps as a motivator in breaking the habit loop.

For instance, to replace your habit of waking up late, visualize yourself waking up early and enjoying the early morning jog every day. By continuing this, you would naturally feel better to wake up early and do your new hobby.

7. Avoid Negative Talks and Thinking

Just as how our brain is trained to accept a change in habit, continuous negative talk and thinking could hamper your efforts put into breaking a habit.

Believe you can get out of it and assert yourself the same.

3 Simple Things You Can Do Right Now to Build Better Habits

<https://jamesclear.com/good-habits>

Start with a habit that is so easy you can't say no.

- The most important part of building a new habit is staying consistent. It doesn't matter how well you perform on any individual day. Sustained effort is what makes the real difference.
- It doesn't matter if you start small because there will be plenty of time to pick up the intensity later. In the beginning, performance is irrelevant. Doing something impressive once or twice isn't going to matter if you never stick with it for the long-run. Make your new habit so easy that you can't say no.
- Prove to yourself that you can stick to something small for 30 days. Then, once you are on a roll and remaining consistent, you can worry about increasing the difficulty.

Take some time to understand exactly what is holding you back.

- You might think that you're the "type of person who doesn't like working out" or the "type of person who is unorganized" or the "type of person who gives in to cravings and eats sweets." But in most cases, you're not destined to fail in those areas. Instead of making a blanket statement about your habits, break them down into smaller pieces and think about which areas are preventing you from becoming consistent.

- Once you know the specific parts of the process that hold you back, you can begin to develop a solution to solve that problem.

Develop a plan for when you fail.

- You have to learn to not judge yourself or feel guilty when you make a mistake, and instead focus on developing a plan to get back on track as quickly as possible.
- Here are three strategies that might help...
 - Set schedules rather than deadlines.
 - Forget about performance and focus on building a new identity.
 - Make this your new motto: “Never miss twice.”
- Slipping up on your habits doesn't make you a failure. It makes you normal. What separates top performers from everyone else is that they get back on track quickly. Make sure you have a plan for when you fail.

15 Key Tips to Develop Good Habits

<https://weekplan.net/tips-to-develop-good-habits>

1. Start with Small Adjustments
2. Be Positive
3. Once you make the Decision, Commit to it
4. Identify All Your Triggers and Obstacles
5. Take Time to think what is holding you back
6. Create a Plan to Succeed with Failure in Mind
7. Get Support from your friends and family
8. Celebrate Your Small Wins
9. Work on your Environment
10. Focus on Building a Routine
11. Make a Journal to List your Wins and Mistakes
12. Have more Clarity
13. Replace Self-Judgment with Self-Compassion
14. Give Yourself Some Time
15. Focus on One Good Habit at a Time

How to build good habits - and actually make them stick

<https://www.washingtonpost.com/news/inspired-life/wp/2015/03/02/expert-ten-super-smart-ways-to-build-good-habits-and-make-them-stick/>

Humans are creatures of habit. And some of them don't make us very happy. So how can we change behavior, learn a new habit or make a fresh start? Christine Whelan, a

public sociologist at the University of Wisconsin-Madison and an expert with AARP's Life Reimagined Institute who studies happiness, human ecology and habits, provided some answers:

Christine Whelan's Top 10 Strategies for Changing Behavior:

- Start small. Choose one thing
- Make it SMART, specific and measurable
- Figure out what you'll be adding or subtracting to make room for it
- Ask why. Make sure it's really what YOU want, not what you feel you should
- Go public, or make a commitment strategy
- Get help from your community. Don't try to do it alone
- Automate
- Take Small Steps
- Celebrate those steps to boost self efficacy
- Stick with it, the longer the better

How long does it typically take people to form new habits?

<https://www.lifehack.org/667495/how-long-does-it-take-to-break-a-habit>

Habits arise through a process of triggering, actions, and rewards. A circumstance triggers an action. When you get a reward from the action, you continue to do that.

If you aren't intentional about actions and rewards, you'll develop bad habits. These lead to self-sabotage, failure, and poor health. On the other hand, good habits enable health, happiness, and dream-fulfillment.

The 21-Day Rule (or Myth?)

One of the earliest and most popular pieces of literature on the subject is *Psycho-Cybernetics* (1960) by Maxwell Maltz. Dr. Maltz who was a plastic surgeon wanted to understand how people viewed themselves. In particular, he was curious about how long it took for patients to get used to changes he made during surgery.

Based on observing his patients and reflecting on his own habits, he determined that it took at least 21 days for people to adjust. He used this information as the basis for many "prescriptions" in his self-help oriented *Psycho-Cybernetics*.

Since then, self-help gurus have latched onto the idea of taking 21-days to change habits. People began to forget that he said 'a minimum of about 21 days' instead of 'it takes 21 days to form a new habit.'

Give Yourself a Month?

Another popular belief in self-help culture states that habits take 28 to 30 days to form.

One proponent of this rule, Jon Rhodes, suggests:

"You must live consciously for 4 weeks, deliberately focusing on the changes that you wish to make. After the 4 weeks are up, only a little effort should be needed to sustain it."

This was a generally agreed-upon figure, but the 21-day rule popularized by readers of Maltz was more appealing to many people because it was easy to understand, and it was faster than the general 28-30 rule.

The Time-Frame for Changing Habits Varies

While the 21 and 28-day rules appeal to our desire to change quickly, a 2009 study from University College London suggests that the window for change can be much wider. The research, published in *The European Journal of Social Psychology*, followed habit-formation in 96 people over a 12-week period.

The UCL study looked at automaticity, which is how quickly people engaged in the actions they wanted to turn into habits. Researchers explained:

As behaviours are repeated in consistent settings they then begin to proceed more efficiently and with less thought as control of the behaviour transfers to cues in the environment that activate an automatic response: a habit.

The amount of time that it took for actions to become habits varied. Participants anywhere between 18 and 254 days to form a habit. The average number of days needed to achieve automaticity was 76 days.

Make Habits to Break Habits

Understanding the connection between forming new habits and getting rid of old ones makes the process easier.

Dr. Elliot Berkman, Director, Social and Affective Neuroscience Laboratory, Department of Psychology, University of Oregon, states:

“It’s easier to start doing something new than to stop doing something habitual without a replacement behavior.”

Quitting something cold-turkey is tough because you’ve wired yourself to want to do it. For example, quitting smoking is challenging beyond a physical nicotine addiction. The ritual of how a person prepares to smoke is another aspect that makes it hard to quit. In order to do away with this bad habit, the person needs to find something to fill the void left by the smoking ritual. The same goes for quitting drinking.

There’s such a wide range in the amount of time it can take for someone to turn an action into a habit. That’s because time isn’t the only factor you have to think about when it comes to changing behaviors. Dr. Thomas Plante, Director, Spirituality & Health Institute, Psychology Department, Santa Clara University and Adjunct Clinical Professor, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine explains:

“One important issue is how strongly do you really want to break the habit in question. Second, how established is the problem habit? It is easier to break a new habit than an old one. Third, what are the consequences of not breaking the habit?”

It’s one thing to make a generic goal to exercise more, but if you thoroughly enjoy being a couch potato, it’s going to be harder to get into the exercise habit. If you’ve had a bad habit for a long time, it’s much harder to ditch it because you’ve had more repetitions of that behavior.

If exercising more won’t do much to change your life, you might find it tough to be active. On the other hand, if your doctor tells you that you won’t live to see your child’s 18th birthday unless you start moving, you have more incentive to change.

Ann’s ideas: Know your why. Why do you need to build these habits? What does the end result look like? Imagine... What will your life look like without changing your bad habits?

Sleep Research

What factors contribute to high-quality sleep?

<https://www.helpguide.org/articles/sleep/getting-better-sleep.htm>

Tip 1: Keep in sync with your body's natural sleep-wake cycle

- Try to go to sleep and get up at the same time every day.
- Avoid sleeping in—even on weekends.
- Be smart about napping.
- Fight after-dinner drowsiness.

Tip 2: Control your exposure to light

During the day:

- Expose yourself to bright sunlight in the morning.
- Spend more time outside during daylight.
- Let as much natural light into your home or workspace as possible.
- If necessary, use a light therapy box.

At night:

- Avoid bright screens within 1-2 hours of your bedtime.
- Say no to late-night television.
- Don't read with backlit devices.
- When it's time to sleep, make sure the room is dark.
- Keep the lights down if you get up during the night.

Tip 3: Exercise during the day

- The more vigorously you exercise, the more powerful the sleep benefits. But even light exercise—such as walking for just 10 minutes a day—improves sleep quality.
- It can take several months of regular activity before you experience the full sleep-promoting effects. So be patient and focus on building an exercise habit that sticks.
- For better sleep, time your exercise right:
 - Exercise speeds up your metabolism, elevates body temperature, and stimulates hormones such as cortisol. This isn't a problem if you're exercising in the morning or afternoon, but too close to bed and it can interfere with sleep.
 - Try to finish moderate to vigorous workouts at least three hours before bedtime. If you're still experiencing sleep difficulties, move your

workouts even earlier. Relaxing, low-impact exercises such as yoga or gentle stretching in the evening can help promote sleep.

Tip 4: Be smart about what you eat and drink

- Limit caffeine and nicotine.
- Avoid big meals at night.
- Avoid alcohol before bed.
- Avoid drinking too many liquids in the evening.
- Cut back on sugary foods and refined carbs.

Tip 5: Wind down and clear your head

- Help yourself by setting aside specific times during the day for checking your phone and social media and, as much as possible, try to focus on one task at a time. You'll be better able to calm your mind at bedtime.
- A deep breathing exercise to help you sleep
 - Breathing from your belly rather than your chest can activate the relaxation response and lower your heart rate, blood pressure, and stress levels to help you drift off to sleep.
 - Lay down in bed and close your eyes.
 - Put one hand on your chest and the other on your stomach.
 - Breathe in through your nose. The hand on your stomach should rise. The hand on your chest should move very little.
 - Exhale through your mouth, pushing out as much air as you can while contracting your abdominal muscles. The hand on your stomach should move in as you exhale, but your other hand should move very little.
 - Continue to breathe in through your nose and out through your mouth. Try to inhale enough so that your lower abdomen rises and falls. Count slowly as you exhale.
- A body scan exercise to help you sleep
 - By focusing your attention on different parts of your body, you can identify where you're holding any stress or tension, and release it.
 - Lie on your back, legs uncrossed, arms relaxed at your sides, eyes closed. Focus on your breathing for about two minutes until you start to feel relaxed.
 - Turn your focus to the toes of your right foot. Notice any tension while continuing to also focus on your breathing. Imagine each deep breath flowing to your toes. Remain focused on this area for at least three to five seconds.

- Move your focus to the sole of your right foot. Tune in to any sensations you feel in that part of your body and imagine each breath flowing from the sole of your foot. Then move your focus to your right ankle and repeat. Move to your calf, knee, thigh, hip, and then repeat the sequence for your left leg. From there, move up your torso, through your lower back and abdomen, your upper back and chest, and your shoulders. Pay close attention to any area of the body that feels tense.
- After completing the body scan, relax, noting how your body feels. You should feel so relaxed you can easily fall asleep.

Tip 6: Improve your sleep environment

- Keep noise down.
- Keep your room cool.
- Make sure your bed is comfortable.
- Reserve your bed for sleeping and sex.

Tip 7: Learn ways to get back to sleep

- Stay out of your head (breathing exercises).
- Make relaxation your goal, not sleep.
- Do a quiet, non-stimulating activity.
- Postpone worrying and brainstorming.

<https://www.cancer.org/latest-news/how-to-get-more-sleep.html>

- Go to sleep at the same time each night, and get up at the same time each morning, even on the weekends.
- Don't take naps after 3 p.m, and don't nap longer than 20 minutes.
- Stay away from caffeine and alcohol late in the day.
- Avoid nicotine completely.
- Get regular exercise, but not within 2-3 hours of bedtime.
- Don't eat a heavy meal late in the day. A light snack before bedtime is OK.
- Make your bedroom comfortable, dark, quiet, and not too warm or cold.
- Follow a routine to help you relax before sleep (for example, reading or listening to music). Turn off the TV and other screens at least an hour before bedtime.
- Don't lie in bed awake. If you can't fall asleep after 20 minutes, do something calming until you feel sleepy, like reading or listening to soft music.
- Talk with a doctor if you continue to have trouble sleeping.

<https://www.health.harvard.edu/sleep/8-secrets-to-a-good-nights-sleep>

1. Exercise

Going for a brisk daily walk won't just trim you down, it will also keep you up less often at night. Exercise boosts the effect of natural sleep hormones such as melatonin, Dr. Carlson says. A study in the journal *Sleep* found that postmenopausal women who exercised for about three-and-a-half hours a week had an easier time falling asleep than women who exercised less often. Just watch the timing of your workouts. Exercising too close to bedtime can be stimulating. Carlson says a morning workout is ideal. "Exposing yourself to bright daylight first thing in the morning will help the natural circadian rhythm," she says.

2. Reserve bed for sleep and sex

Don't use your bed as an office for answering phone calls and responding to emails. Also avoid watching late-night TV there. "The bed needs to be a stimulus for sleeping, not for wakefulness," Dr. Carlson advises. Reserve your bed for sleep and sex.

3. Keep it comfortable

Television isn't the only possible distraction in your bedroom. Ambience can affect your sleep quality too. Make sure your bedroom is as comfortable as possible. Ideally you want "a quiet, dark, cool environment," Dr. Carlson says. "All of these things promote sleep onset."

4. Start a sleep ritual

When you were a child and your mother read you a story and tucked you into bed every night, this comforting ritual helped lull you to sleep. Even in adulthood, a set of bedtime rituals can have a similar effect. "Rituals help signal the body and mind that it's coming to be time for sleep," explains Dr. Carlson. Drink a glass of warm milk. Take a bath. Or listen to calming music to unwind before bed.

5. Eat—but not too much

A grumbling stomach can be distracting enough to keep you awake, but so can an overly full belly. Avoid eating a big meal within two to three hours of bedtime. If you're hungry right before bed, eat a small healthy snack (such as an apple with a slice of cheese or a few whole-wheat crackers) to satisfy you until breakfast.

6. Avoid alcohol and caffeine

If you do have a snack before bed, wine and chocolate shouldn't be part of it. Chocolate contains caffeine, which is a stimulant. Surprisingly, alcohol has a similar effect. "People think it makes them a little sleepy, but it's actually a stimulant and it

disrupts sleep during the night," Dr. Carlson says. Also stay away from anything acidic (such as citrus fruits and juices) or spicy, which can give you heartburn.

7. De-stress

The bills are piling up and your to-do list is a mile long. Daytime worries can bubble to the surface at night. "Stress is a stimulus. It activates the fight-or-flight hormones that work against sleep," Dr. Carlson says. Give yourself time to wind down before bed. "Learning some form of the relaxation response can promote good sleep and can also reduce daytime anxiety." To relax, try deep breathing exercises. Inhale slowly and deeply, and then exhale.

8. Get checked

An urge to move your legs, snoring, and a burning pain in your stomach, chest, or throat are symptoms of three common sleep disrupters—restless legs syndrome, sleep apnea, and gastroesophageal reflux disease or GERD. If these symptoms are keeping you up at night or making you sleepy during the day, see your doctor for an evaluation.

<https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/sleep/art-20048379>

<https://www.headspace.com/sleep/how-to-sleep-better>

<https://www.sleepfoundation.org/sleep-hygiene/healthy-sleep-tips>

<https://www.healthline.com/nutrition/17-tips-to-sleep-better#1.-Increase-bright-light-exposure-during-the-day>

<https://www.sleepfoundation.org/sleep-hygiene/how-to-determine-poor-quality-sleep#:~:text=Generally%2C%20good%20sleep%20quality%20is,hours%20for%20your%20age%20group.>

What makes sleep high-quality?

<https://www.sleepfoundation.org/sleep-hygiene/how-to-determine-poor-quality-sleep#:~:text=Generally%2C%20good%20sleep%20quality%20is,hours%20for%20your%20age%20group.>

Sleep quality is different from sleep quantity. Sleep quantity measures how much sleep you get each night, while sleep quality measures how well you sleep.

- Measuring sleep quantity is simple, as it's quick to determine if you're getting the recommended amount of sleep per night (usually defined as 7-9 hours for adults). Measuring sleep quality is a little more of an art than a science.

Generally, good sleep quality is defined by the following characteristics:

- You fall asleep soon after getting into bed, within 30 minutes or less.
- You typically sleep straight through the night, waking up no more than once per night.
- You're able to sleep the recommended amount of hours for your age group.
- You fall back asleep within 20 minutes if you do wake up.
- You feel rested, restored, and energized upon waking up in the morning.

Reasons for Poor Sleep Quality

Any number of things could be contributing to your poor sleep quality. Some potential causes include poor sleep hygiene, stress, sleep apnea, or another chronic health condition or sleep disorder.

Poor Sleep Habits

Poor sleep habits, like having an irregular sleep schedule or consuming too much caffeine or alcohol, can interfere with your sleep quality. In a study of nursing students, smoking and daily coffee consumption were two of the largest factors associated with poor sleep quality. Alcohol also disturbs your sleep, even though it's considered a sedative¹⁰.

Stress and Anxiety

Poor mental health, whether from increased stress or a depression or anxiety disorder, also contributes to poor sleep quality. Problematically, sleep deprivation and the resulting insomnia worsen these conditions¹¹, creating a vicious cycle.

Chronic Health Conditions

Certain chronic health conditions¹² are associated with poor sleep patterns and less sleep overall. These include chronic lung diseases, asthma, acid reflux, renal disease, cancer, fibromyalgia, and chronic pain. Unfortunately, as with stress and anxiety, poor sleep quality can exacerbate the symptoms and discomfort felt with these conditions.

Sleep Apnea

A person with sleep apnea experiences temporary lapses in breathing during their sleep, resulting in gasping, choking, and snoring sounds. Even if they don't

consciously wake up, their brain has to kick start breathing again, disrupting sleep quality. Sleepiness and lack of energy¹³ are two of the most common complaints of individuals with sleep apnea.

Undiagnosed Sleep Disorder

Because they occur in your sleep, some sleep disorders go undiagnosed until a person seeks care for other symptoms like poor sleep quality, or a sleep partner alerts them to the symptoms. For example, individuals with periodic limb movement disorder (PLMD) experience involuntary jerking movements in their legs while they sleep, resulting in reduced sleep quality¹⁴, and fatigue and poor concentration during the day. Individuals with narcolepsy likewise often suffer from poor sleep quality, and experience daytime fatigue¹⁵.

What are the benefits of high-quality sleep?

<https://www.helpguide.org/articles/sleep/getting-better-sleep.htm>

Sleeping well directly affects your mental and physical health. Fall short and it can take a serious toll on your daytime energy, productivity, emotional balance, and even your weight.

https://www.healthline.com/nutrition/17-tips-to-sleep-better#_noHeaderPrefixedContent

A good night's sleep is just as important as regular exercise and a healthy diet.

Research shows that poor sleep has immediate negative effects on your hormones, exercise performance, and brain function (1Trusted Source, 2Trusted Source, 3Trusted Source, 4Trusted Source, 5Trusted Source).

It can also cause weight gain and increase disease risk in both adults and children (5Trusted Source, 6Trusted Source, 7Trusted Source).

In contrast, good sleep can help you eat less, exercise better, and be healthier (2Trusted Source, 8Trusted Source, 9Trusted Source, 10Trusted Source).

Over the past few decades, both sleep quality and quantity has declined. In fact, many people regularly get poor sleep (11Trusted Source, 12Trusted Source).

If you want to optimize your health or lose weight, getting a good night's sleep is one of the most important things you can do.

Resources that Melanie Provided:

This Is the Type of Exercise You'll Want To Get for Better Sleep in 2021

https://www.wellandgood.com/strength-training-sleep/?utm_source=WG_daily&utm_medium=email&utm_campaign=012921_EE_new

Research shows that people who get enough physical activity during the day sleep much better at night than those who don't. Aerobic exercise is a great way to set yourself up to sleep well. But don't sweat it if jogging isn't your thing—cardio isn't the only type of exercise that helps you sleep like a baby.

In a recent study, published in *Preventive Medicine Reports*, the authors looked at data gathered from more than 23,600 German adults. After analyzing the participants' strength training exercise habits and sleep quality, they found that any muscle-strengthening exercise is associated with a reduced prevalence of "poor" or "very poor" sleep.

"Most of the evidence on physical activity and sleep quality is based on studies assessing the effects of aerobic moderate-to-vigorous physical activity (like brisk walking, cycling, and jogging). Emerging clinical evidence suggests that muscle-strengthening exercise (like push-ups and using weight machines) may also be beneficial for sleep quality," write the study authors. "To our knowledge, this study provides the first population-level evidence favorably linking muscle-strengthening exercise to sleep quality."

There are a couple things to know about this new connection between strength training and sleep. First of all, you don't need to do a lot of it to potentially experience improved sleep quality. This study found it only takes small-to-moderate increases in muscle-strengthening exercise. Additionally, it opens the door for anyone who isn't a fan of cardio. "Muscle-strengthening exercise offers an alternative form of physical activity/exercise among those with poor quality sleep, who might find it difficult to engage in and/or not enjoy aerobic exercise," wrote the study authors.

Amazon Care Habit Building Challenges

If/Then Planning Challenge

If/then planning looks at likely scenarios and plans for how you'll work through them.

Here are a few steps to help you start planning:

Determine the most likely "if" scenarios where new habits may get hard to keep.

Set your plan of action or "then" statements.

Give yourself a break if your if/then planning doesn't stick. Life happens!

Here are some examples:

If you're trying to go to bed earlier but know you're likely to watch Schitt's Creek after dinner, commit to turning off the TV after a set number of episodes.

If you find yourself drinking less water than you wanted to, commit to a specific water bottle and a set number of refills you'll drink daily.

Habit Stacking Challenge

We're more likely to form a new habit if it doesn't require too much motivation at first.

One way to think small is by habit stacking which is when you hitch a new habit to something you do every day. Ready to give it a go?

Identify the new habit you want to try.

List out 3-5 things you do every day.

Select one thing you do every day and pair it with your new habit. Attempt to do that 5 times in one week.

Here are some examples:

Want to get more fruit and veggies in your diet? Try a fast smoothie with your coffee.

Planning to start meditating? Focus on your breathing in the shower.

Looking to improve sleep? Turn all screens off when you start your bedtime routine.

Temptation Bundling Challenge

Temptation bundling: pairing something you enjoy with something you want to do more of.

Why is it so hard to keep resolutions? One reason research tells us is that we run away from punishment and toward reward. Rather than punishing yourself when you fall short, try temptation bundling.

Identify a few things you enjoy regularly doing.

List what you want to do more of this year.

Pair one thing you like with one thing you want to do more of. Aim to bundle these things together at least three times over the next week.

For example, if your goal is to get more fresh air, reserve your favorite podcast for outdoors only. If you want to build stretching into your routine, try taking a few minutes while watching TV.

5 Bedtime Stretches That Will Help You Actually Get to Sleep

https://www.self.com/gallery/bedtime-stretches-better-sleep?utm_source=nl&utm_brand=self&utm_mailing=SLF_Daily_012621&utm_campaign=aud-dev&utm_medium=email&bxid=5c930c2c24c17c329b018a95&cndid=4440521&hasha=5e90205181602379988436ed850faf5f&hashb=670756326a7925d3a5210699581928c5a23beff1&hashc=9b650a556bf838a5a61c25f4994041ac157c9f2cf44f9dab6c176db8d9fb0d16&e_src=slf_news_tiu&utm_term=SLF_Daily_GenericOpens

“Static stretching is an ideal way to unwind and de-stress after a long day,” registered yoga teacher Jessica Matthews, doctor of behavioral health, assistant professor of kinesiology at Point Loma Nazarene University in San Diego, and author of *Stretching to Stay Young*, tells SELF.

With static stretching, she explains, your muscle is stretched to the point of mild tension or discomfort, and then held without movement for an extended period of time, usually about 30 seconds (or longer if it feels good). While static stretching isn’t the safest way to prep your body for your actual workout—as we reported previously, research suggests that it may have a negative impact on muscle strength and inhibit explosive movements (like jumping and sprinting)—it’s super helpful for relaxing your mind and body.

That’s because the slow, purposeful movement provides the perfect opportunity to breathe slowly and focus on your breath, Matthews says.

“Slow, rhythmic, diaphragmatic breathing in and out through the nose allows for enhanced relaxation, as this type of mindful breathing elicits the relaxation response,” says Matthews. Our bodies’ relaxation response helps counter the

physiological effects of stress by decreasing its hallmark symptoms, like high blood pressure, muscle tension, and high respiration rate, she adds.

In the long-term, rituals like nightly bedtime stretches and regular meditation can also be great for managing stress and all of the potential health consequences that come along with it.

“Performing the yoga-inspired stretches below along with mindful breathing provides an opportunity for both the mind and body to relax in order to set the stage for a restful and rejuvenating night’s sleep,” says Matthews. Think of it as a moving meditation.

On that note, your breath does play an important role in how relaxing these stretches will be—consider it your guide for stretch intensity. “If at any point you find that you are restricting or holding your breath when performing a stretch, use that as a cue to reduce the intensity of the stretch to the point where you can once again breathe naturally and freely,” Matthews says.

Oh, and you might want to add a hot bath or shower before your stretching regimen, she suggests. Not only will it seriously up the relaxation factor, but it’s safer and more effective to stretch muscles that are a little warm, she says.

By taking the time—just five minutes!—to do these bedtime stretches and wind down before you go to sleep, you may find it’s a bit easier to let go of the stress of the day and drift off to dreamland.

1. Child’s Pose
2. Thread the Needle
3. Sphinx Pose
4. Knee-to-Chest Stretch
5. Supine Twist

A 6-Point Plan for a Better Night’s Sleep

https://goop.com/wellness/health/how-to-sleep-better-at-night/?ref=newsletter&nl_ptrk=Edit2-Edit-Wellness-sleepbetter&utm_source=Emarsys&utm_medium=Email&utm_campaign=20210121-newsletter-thursday-ShopperAll&utm_content=heavy%20meta-Edit2-&sc_uid=NiX62whu5Q&sc_src=email_266269&sc_lid=16863495&sc_llid=61177&sc_eh=670756326a7925d31

Consistent, good-quality sleep is associated with many positive markers of long-term health, from lower incidence of chronic diseases to better overall quality of life.

1. **Make your bed:** It all starts with your bed. Is it a source of frustration and dread or a sleep sanctuary you can't wait to settle into? Sometimes, all it takes to swivel from the former to the latter is a little bedding makeover.
2. **Night Light:** Our phones, televisions, and computers typically emit blue light that, if we're using them well into the night, can prolong our wakefulness signals and potentially disrupt sleep. Many devices have now been built and programmed with options to limit this exposure. For example, handheld Apple devices allow you to toggle on the Night Shift feature, which warms up the colors on your screen, and you can download add-ons like f.lux to your computer to do the same. A pair of blue-light glasses can also help reduce exposure by filtering out blue light before it gets to your eyes—we like to pop them on sometime in the afternoon, around 2 or 3 p.m. If you can, try easing up on electronic device use as you get closer to bedtime. Not only because of the potential negative effects of blue light but because of the potential effects of engagement with your devices and their content. In the hours leading up to bed, keep the lights low, leave electronic devices outside the bedroom, turn any lighted clocks away from the bed, and opt for analog activities—maybe it's knitting, reading a novel, piecing together a jigsaw puzzle, or swapping foot massages with a partner. If ambient light is keeping you from sleep, consider installing blackout blinds or wearing an eye mask to bed.
3. **Cause for Alarm:** It's the conversation we have to have: If you're going to get consistent sleep, you need to go to bed and wake up at consistent times. While an occasional late night certainly won't kill you, good sleep habits have a positive snowball effect worth pursuing. Consistent sleep patterns help maintain healthy circadian rhythms. And healthy circadian rhythms promote better, more consistent sleep. Now that you're leaving the phone outside the bedroom at night (right?), you'll need an alarm clock. It's not just your bedtime that matters. The timing of other daily activities—especially ones that keep you awake—plays a role, too. Like your last cup of coffee (aim for a 2 p.m. caffeine cutoff) or a cardio workout. Everybody is different, so there's no one-size-fits-all prescription. While older research shows that evening exercise makes it tougher to fall asleep and stay asleep, more-recent studies suggest that vigorous exercise within an hour of bedtime can make it harder to fall asleep but that the sleep quality that follows tends to be better than if a person hadn't exercised at all. Fit in your cardio well before bed if you can—but if nighttime is your best option, don't skip it. Consider keeping a log of your

caffeine intake, exercise, and bedtime for a week or two, comparing yesterday's habits to how rested you feel today. You might find a link.

4. **Sound Solutions:** If bumps in the night tend to shake you awake, a simple pair of earplugs can be a temporary solution. Rafael Pelayo, MD, a holistic sleep medicine doctor at Stanford University's Sleep Medicine Clinic, recommends against them in the long-term: Earplugs block out all noise, so using them regularly can build hypervigilance and even greater sensitivity to sound, which can lead us to depend on them in order to get any sleep at all. Instead, Pelayo recommends white noise. White noise is a steady humming that combines all audible frequencies at equal volume, which helps mask disruptive sounds in your environment—like the house settling, a car alarm blaring down the street, or your partner's occasional snore—so they don't seem so jarring. House and ceiling fans are an easy source of white noise, so they're a good option for the warmer months, when you might have one on anyway. The rest of the time, opt for a white noise machine with an internal fan, which drowns out ambient noise without the breeze.
5. **Breathe Easy:** Breathing difficulties often cause poor sleep quality. If you wake up with a dry mouth, this might be you—mouth breathing mostly occurs when we aren't able to get enough oxygen through our nose. For those whose allergies are the culprit, some easy modifications can make a significant difference. First, address your triggers: If you're sensitive to your pets, don't let them sleep on the bed. If your home has a mold issue, take a look at your options for professional remediation. Wash your bedding regularly and try adding a dust mite cover to your mattress. Second, consider adding a quality air purifier to the bedroom. Look for one that can remove a high level of particulate matter from the air. (This is usually shown as the clean air delivery rate, or CADR—a measure of how much smoke an air purifier can remove from its environment.) If you've been caught snoring or have just been a little stuffed up lately, it's incredible what Nasal Aid can do. This little device physically holds open the nasal passages to allow better breathing while you sleep, which may reduce snoring and lead to better overall sleep quality. It's reusable, adhesive-free, and made of thin spring-tempered steel wire that can be adjusted for your greatest comfort. Just press the free ends up your nose and doze off.
6. **Peace Meets Quiet:** At the end of the day, meditation can help wind things down. It doesn't have to be complicated. You might close your eyes and let your attention settle on the natural rhythm of your breath or visualize clouds drifting across an open sky. Or try a body scan: Starting at your toes and working your way up, bring your focus to one muscle at a time, identifying any tension and allowing it to release. If you prefer something guided, Headspace

has an excellent library of sleep meditations. A meditation coloring book is another great option. The ones from The Coloring Method draw on traditional meditation methods and are easy to use: Just fill in a series of simple images, breathe deeply, and recite the given mantra or affirmation in your head. Another book to keep at your bedside? A journal. If you're lying awake and unable to stop yourself from running through tomorrow's to-do list or devising clever comebacks to a rude remark that's already passed, turn on a light and write it all down. Once those thoughts are on paper, it's easier to give yourself permission to drop them; you don't need to spend mental energy storing them in your mind anymore. It's one of the simplest and most effective strategies we've tried for settling a ruminating mind.

Use the 3-6-5 Method for Meditative Breathing To Help You Sleep Better Every Night of the Year

https://www.wellandgood.com/3-6-5-method-breathing-sleep/?utm_source=WG_daily&utm_medium=email&utm_campaign=011921_EE_new

According to Stephanie Gailing, an astrologer and wellness consultant who shares information about the 3-6-5 method in her book *The Complete Book of Dreams*, many of us rapidly inhale and exhale, with more than 12 breaths per minute—and that's not necessarily helping our ability to drift off peacefully come bedtime. "It's been found that slower, more mindful breathing can have impacts on the nervous system, helping to tamp down the activity of sympathetic nervous system, which is often associated with being in [a state of] hyperarousal and fight-or-flight [mode] and activating parasympathetic nervous-system activity," she says. To wit, the 3-6-5 method uses mindful, slowed-down breathing to basically help the body chill out throughout the course of the day.

To practice it, commit to doing the practice three times per day, taking six full breaths per minute, and for a total of five minutes. If this sounds similar in spirit to the tranquilizing 4-7-8 technique, that's fair; the endgame of achieving better sleep by way of reducing stress is the same. But 3-6-5 can be a better option for those who'd rather treat breathwork for sleep as ongoing interval training rather than a right-before-bed sprint. That is, instead of one long session, this method takes three rounds at different levels.

"For many people, doing practices like paced breathing is easier to do in short stints than in longer-duration practices," Gailing says. "So doing it three times a day, for five minutes may be easier for some people than doing it for a longer period of time. The

3-6-5 reflects the ideal of doing it every day [of the year], and the benefits that having it be part of your self-care routine may yield.”

How to practice the 3-6-5 method of meditative breathing for better sleep

1. Find a comfortable position

“You want to be as relaxed as you can be, since not only is that the aim of this practice, but also, in the beginning, taking longer breathes may take some getting used to,” Gailing says. “Find a comfy chair, or sit on your bed or meditation cushion. Some people do like to lie down, as they feel more relaxed that way.”

2. Have a method for tracking your breaths

“You can use a breathing app for pacing, or just count the seconds on your own,” Gailing says. “Some people find it less stressful to set a timer for five minutes rather than counting their breaths. Yet if you find that counting enhances your mindfulness, you can take that approach.”

3. Breathe slowly and deeply into your diaphragm for five seconds, and then exhale slowly for five seconds

So again, if math’s not your strong suit, this step ultimately leads you to doing six full breaths a minute. Do this for five full minutes, and you’re golden!

4. Repeat two more times at different in your day

And there you have it! The rule of threes helps you essentially punctuate your day with the practice. You can start it after waking up, fit in a round of breaths after lunch, and end your day with one, right before your head hits the pillow. The benefits don’t end at the technique being a sedative: Breathwork meditations offer a host of physical- and mental-health benefits, too. “Any practice—such as paced breathing—that helps us to rebalance the nervous system...will help us become more resilient to stress,” says Gailing.

So, why not give it a shot? If easier days and restful nights are on the table, might as well carve out some time to 3-6-5 yourself to sleep.

Superhero Products, Books, and Apps for Forming New Habits

https://goop.com/wellness/health/how-to-form-healthy-habits/?ref=newsletter&nlp_trk=Story4-Edit-Wellness-healthyhabits&utm_source=Emarsys&utm_medium=Email&utm_campaign=20210105-newsletter-tuesday-ShopperAll&utm_content=the%20annual%20goop%20detox-Story4-&sc_uid=NiX62whu5Q&sc_src=email_223694&sc_lid=13504676&sc_lid=63123&sc_eh=670756326a7925d31

A good night's sleep is all about consistent habits: Get some exercise during the day, make sure you have a mattress and pillow that are right for you, avoid screens for a couple hours before bed, limit your caffeine and alcohol intake, and turn down around the same time every night (among other sleep tips). Some of these are easier said than stuck to.

The ultimate kick-starter for good sleep hygiene is a bed that you can't wait to tuck yourself into—and which makes all those sleep rituals feel totally worth it.

Perhaps the best way to optimize good habits is by making a habit of thinking about them. That's where this journal comes into play: Every day, you take note of how you felt about your habit performance, what you'd like to remember about what went well and what might not have, and what you can do tomorrow to get you closer to your goal. There's a space for daily gratitude notes, too—some needed perspective on days that didn't go as planned.