

Why is Behavior Change so Hard?

Understanding why people struggle to break unhealthy habits.



EXECUTIVE SUMMARY

There's no question: it's hard to help people make and maintain meaningful changes to their health and wellbeing.

With key health measures declining and chronic conditions on the rise, it's time to investigate why behavior change is so hard—and what that means for population health professionals.

In this paper, we look at:

—Why populations need healthy behavior change

—What 5 leading behavior change models tell us about behavior change

—The 9 common barriers that sabotage healthy behavior change

Your population needs a change.

Whether it's creating a regular exercise routine, cutting out junk food, reducing stress, or quitting an unhealthy addiction, almost everyone has some health behavior they would like to improve.

While the global wellness market is valued at more than \$1.5 trillion,¹ population health professionals continue to struggle with how to help people create better habits and consistently make healthier decisions in their everyday lives.

The numbers are startling:

→ **Nearly half of all Americans suffer from at least one chronic disease²**

such as heart disease, obesity, or diabetes.

→ **Heart disease kills 659,000 people in the US each year,**

making it responsible for one in every four deaths.

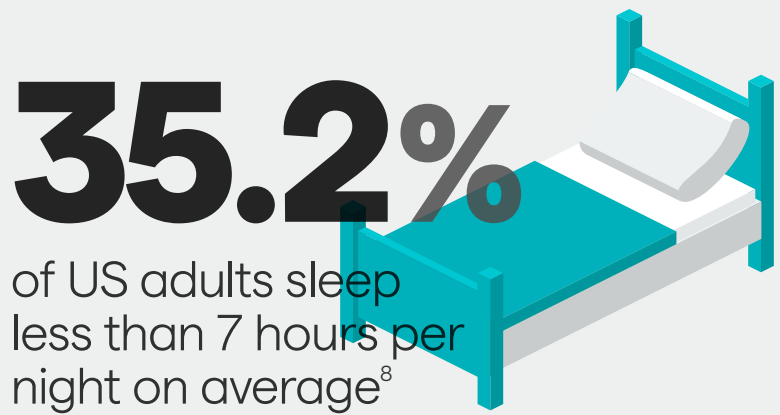
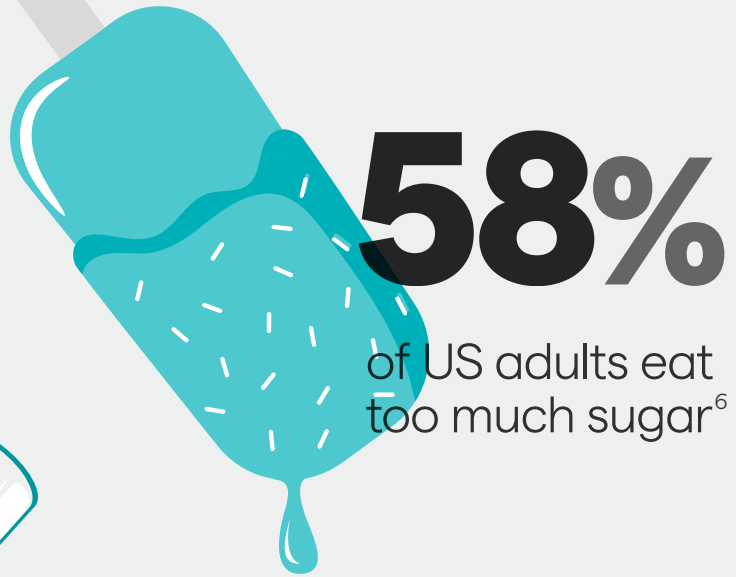
→ From 2000-2018, **obesity prevalence increased from 30.5% to 42.4%,**

with severe obesity nearly doubling from 4.7% to 9.2%.³

→ **About 1 in 10 people in the US suffer from diabetes,⁴**

up more than 700% from the 1950s.⁵

Behaviors like poor nutrition, sleep, activity, and long-term stress habits play a significant factor in the struggle against chronic disease.



of US adults aged 50 and older get no activity at all beyond daily living⁹



of US adults regularly experience physical symptoms caused by stress¹⁰

THE SCIENCE OF BEHAVIOR CHANGE

As evidenced by the state of health in the US, there's no silver bullet—no one method or model that seems to truly solve the challenge of behavior change on its own. And while each model has its limitations, there are patterns and common findings among the most popular behavior change models that can provide the tools needed to better understand how people form and change habits over time.

Key models include:

→ FOGG BEHAVIOR MODEL

This model shows that three elements—*motivation, ability, and a prompt*—must occur simultaneously for a change to occur. The model also defines the subcomponents of each element that impact the ability of an element to trigger, along with the compensatory relationship each element has with each other.¹¹

→ THE TRANSTHEORETICAL MODEL OF HEALTH BEHAVIOR CHANGE

This model defines behavior change by the six stages it takes to successfully replace an unhealthy habit: *precontemplation, contemplation, preparation, action, maintenance, and termination*. In addition, the model identifies ten processes of change that can be incorporated at each stage to improve the ability to move to the next stage.¹²

→ THEORY OF PLANNED BEHAVIOR

This model describes the role that intention plays in behavior change, along with the six factors that can impact intention: *attitudes towards the behavior to be changed, behavioral beliefs, subjective norms, social norms, perceived power, and perceived behavioral control*.¹³

THE SCIENCE OF BEHAVIOR CHANGE

→ **SOCIAL COGNITIVE THEORY**

This theory posits that learning is the result of a dynamic, reciprocal interaction between a person, their environment, and their behavior. It identifies six constructs that impact the initiation and maintenance of a behavior: reciprocal determinism, behavioral capability, observational learning, reinforcements, expectations, and self-efficacy.¹⁴

→ **SEQUENTIAL EFFECTS MODEL**

By determining the impact of sequential events on cognition, this model posits that people use sequential events in order to attempt to predict the impact of decisions, continually *adjust* perceptual and decisional processing, and *leverage* the knowledge of the recent past when encountering new experiences.¹⁵

When looking at key behavior change models holistically, it's easy to see that a person's intentions, psychology, and circumstances all play consistent roles in the success or failure of any behavior change efforts.

THE 9 BARRIERS TO BEHAVIOR CHANGE

From the behavioral research done to support these and other models, we may start to answer the critical question: *Why is behavior change so hard?*

Over the decades, nine common barriers to behavior change have repeatedly emerged.

By understanding these barriers, you can then make proactive, informed decisions about program design, processes, tools, and technologies that have the greatest opportunity to help your population make and maintain healthy behavior changes.

Barrier #

1

One size
fits none:

The barrier of overlooking context

A former athlete, a patient with hypertension, a new mother of twins, someone with heart disease in their family history and someone recently diagnosed with type 2 diabetes will all have very different starting points and strategies when beginning their health and wellbeing journeys.

As a result, a “one-size-fits-all” approach that uses templated advice, technology, or products likely won’t work for a significant amount of the people that try it. For example, one study comparing weight loss strategies found that the group who received a personalized weight management plan lost

an average of 6.2 kg (13.6 lbs.), compared to the 2.6 kg (5.7 lbs.) lost by those who used a standardized plan.¹⁶

And some personal factors don’t stay static. If the approach to behavior change doesn’t adapt along with the person as they make improvements, they are likely to experience a plateau that limits their overall results.

2

Barrier #

Choices, choices,
everywhere:

The barrier of choice overload

Whether it's looking down a grocery aisle or picking out an outfit, everyone has experienced the struggle of choice overload in their lives. It's no different when trying to achieve a health goal.

For example, someone trying to improve their health could begin an exercise regimen, become a vegan, begin intermittent fasting, take supplements, stop smoking, start meditating, or embark on

any number of strategies others have used. Not only are there endless options, but each option has its passionate defenders and its strident critics, not to mention millions of people sharing their anecdotal experiences on social media, review sites, and in the comments section of every article.

Even when only listening to medical experts, clinical evidence is always evolving, can appear contradictory from

one study to another depending on the experiment structure and hypothesis being tested, and may show that there is more than one path to achieving a goal—again creating choice overload.

When faced with too many choices, people run the risk of choosing nothing at all in order to avoid the mental impact choosing can cause. In a study of the impact of choices on self-control, research-

ers found that the act of making too many choices resulted in less physical stamina, reduced persistence in the face of failure, more procrastination, and less quality and quantity of arithmetic calculations.¹⁷

3

Barrier #

Opting in,
burning out:

The barrier of decision fatigue

What happens when someone overcomes the barrier of choice overload and decides how they want to change their behavior? Well, then they have to follow through. But with the average American already making more than 35,000 decisions a day,¹⁸ trying out a new healthy habit means adding to the pile by having to make an active decision to do the healthy behavior every time when faced with options.

This leads to decision fatigue, which impacts the ability to make the right decision with every subsequent decision that has to be made.

Decision fatigue can have a massive impact on the ability to make choices. For example, one study found that nearly one-third of adults (32%) said they are sometimes so overwhelmed and stressed about the coronavirus pandemic that they struggle to make basic decisions, such as what to wear or what to eat.¹⁹

Because people are so exhausted from navigating all the new ways of living in a pandemic, many find it difficult to make any decisions, much less select a workout or choose healthy food while grocery shopping at the end of a long day.

The good news is that once a new health behavior habit is formed, it can reduce or eliminate decision fatigue. But this works in both directions. At the same time that a new healthy habit is created, a person must also break an old, unhealthy habit—requiring decision-making that can increase decision fatigue.

Barrier #

4

Two sides of the coin:

The barrier of old habits

Old habits act as the brain's default state, allowing it to leverage familiarity to exert less energy, resulting in lower mental fatigue. Meanwhile, the new habit requires more energy and attention, while at the same time costing additional energy to make the conscious decision to not engage in the old habit.

The result: a person trying to change their health behaviors not only has to expend extra

effort creating the new habit, but also unlearn the old one, making it easier to choose the path of least resistance.

Even if the brain is willing, the body can have its own preference for old habits. One study found that 40% of the actions people perform in a day aren't decisions at all, but habits – things done on autopilot.²⁰ It's not surprising, since research shows 'muscle memory' exists at a DNA level.²¹

THE 9 BARRIERS TO BEHAVIOR CHANGE

Barrier

5

Old habits aren't only reinforced by the mind and body, but by a person's surroundings and lifestyle. Responsibilities at work, at home, and to others can't always be set aside, which can lead to less mental energy available to incorporate new health habits and overcome old ones.

Taking on the world: The barrier of social factors

Friends, family members, and social situations can also act as barriers to the health habits that a person may want to establish. For example, if someone wants to become more active but their friendships are based on online gaming, they may feel like they are missing out on fun when they go exercise. These people all act as influencers, and while they might not overtly stand in the way of a person's behavior change, they might not provide active support either.

The impact a new behavior can have on these relationships may make a person inclined to give up when the going gets tough.

Macro-level studies show the impact social determinants can have on health. In a cross-sectional study on cardiovascular disease, researchers discovered massive disparities in physical activity among US women based on social determinants such as race, education level, income level, and geographic region.²¹

A person's geographic location and income can also impact the ability to make a health behavior change. For example, 12.8% of US residents live in a food desert,²² making it difficult for these people to easily purchase fresh produce, while 43% of people lack the income to afford a healthy diet.²³

Barrier #



Are we
there yet?

The barrier of incremental progress

Most health behavior change takes place on an incremental time scale that is difficult to perceive. Because change takes place over months and years, not minutes or days, it's hard for people to know if what they are doing is working or worth continuing.

At the same time, studies show that slow and steady wins the race. For example, one experimental goal-setting intervention program successfully reduced sitting time by 51.5 minutes per day by the end of the program.²⁴

7

Life is short...
and long:

The barrier of hyperbolic discounting

Any one specific instance of unhealthy behavior—a single doughnut, one cigarette, or a missed workout—has little impact on a person's overall health. Everything is fine in moderation. It's decades of consistent, cumulative unhealthy activities that lead to a significant health event.

The long-term reward of healthy behavior change, such as the absence of a heart attack thirty years from now, is difficult to conceive. However, the instant gratification of a salty snack or bingeing a show instead of going on a walk is real and satisfying. This is called hyperbolic discounting—the preference for immediate rewards over those that come in the future, even if the future reward is larger.

People who already exhibit poor health behaviors may be predisposed to hyperbolic discounting. Dozens of studies have shown that smokers, illicit drug users, and problem drinkers all discount hypothetical future monetary rewards compared to control groups.²⁵

Barrier #



Pobody's nerfect: **The barrier of relapse**

Just as no journey is accomplished by moving in a straight line, no overall goal is accomplished without experiencing setbacks along the way. When a lapse happens—be it a skipped meditation session, staying up far past bedtime, digging into the snack cupboard at work, or bumming a cigarette—it can erode a person's confidence in their overall ability to change, leading to a pattern of relapse.

But relapse is a fact of any behavior change. For example, one study of weight loss participants found that 96.4% of people who lost significant weight (average percentage weight loss from maximum weight was $26.6 \pm 10.7\%$) still experienced small re-gains averaging $.7 \text{ kg/y}$.²⁶



Playing
a game
that can't
be won:

The barrier of poor goal setting

In their eagerness to get healthier, many people jump right into action without determining their goals or how to measure success. Even if they do set a goal, it might be fuzzy, hard to measure, overly optimistic, or lack a due date.

But the way people set goals can have a significant impact on their ability to achieve them. In a study of the impact of goal setting on improving diet quality for patients with chronic kidney disease, researchers found that participants who set one to two diet-related SMART goals were

able to achieve significant improvements in their Alternate Healthy Eating Index score (+6.9 points), vegetable (+1.1 serves;) and fiber intake (+4.2 g;) within three months of setting a fruit and/or vegetable goal compared with those who did not.²⁷

Changing the approach to health behavior change

Even at the best of times, behavior change is challenging, with the brain, body, influencers, and the modern world all working against someone who is trying to improve their health.

There's simply no magical, easy answer to better health. It's all about making better choices every day: eat healthier, get active, get better sleep, and reduce stress.

For population health professionals, the challenge isn't giving the prescription to make better choices, but helping people make behavior change doable and sustainable.

Because a small change can have an outsized impact on the quality and longevity of life decades down the line, the easier a program or intervention makes it to incorporate better health behaviors, the healthier the population will be.

By understanding the science of behavior change—what is required and what gets in the way—population health professionals can design programs and interventions in a way that drives better outcomes for their organization.

HOW FITBIT CAN HELP

We've been helping people create healthy habits and change health behaviors for 15 years. Our products and services are built on proven behavior change science, understanding that health is very personal and change starts with an individual's own preferences, values and motivations. We help people break down change into small, manageable steps so they can achieve small wins that build into larger triumphs. Our devices, software and social experiences work together seamlessly around a shared user journey which provides structure, and creates a link between health behaviors, biometrics and outcomes.

[Learn more about how to help your population change health behaviors.](#)

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ABOUT FITBIT ENTERPRISE

Fitbit Enterprise, now part of Google, works with payers, partners and employers to empower people to live healthier lives.

Fitbit's personalized health and wellbeing experience easily integrates into a wide variety of health interventions and wellbeing programs—including embedded health plan benefits, condition management point solutions, research studies and corporate wellness programs—and helps to extend and enhance their impact by driving higher participation levels, increasing physical activity, and helping to improve outcomes.

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