

Webinar | January 25th at 2 pm EST

PLANT-ENTIONS

**Using Behavioral Science Principles To
Increase Fruit & Vegetable Consumption**



Presented by Dr. Jason Riis
PBH Chief Behavioral Scientist





WENDY REINHARDT KAPSAK, MS, RDN

**PRESIDENT & CEO
PRODUCE FOR BETTER HEALTH FOUNDATION**

MODERATOR

ABOUT PBH



OUR PURPOSE

The Produce for Better Health Foundation (PBH), a 501(c)3, is the only national non-profit organization 100% dedicated to helping people live happier, healthier lives by eating and enjoying more fruits and vegetables, in every form, each and every day.

PBH, along with its strategic partners, will elevate new fruit and vegetable consumption behaviors as a national priority – *accelerating growth and serving the public good.*

THE AWARD-WINNING HAVE A PLANT® MOVEMENT REACHES MILLIONS

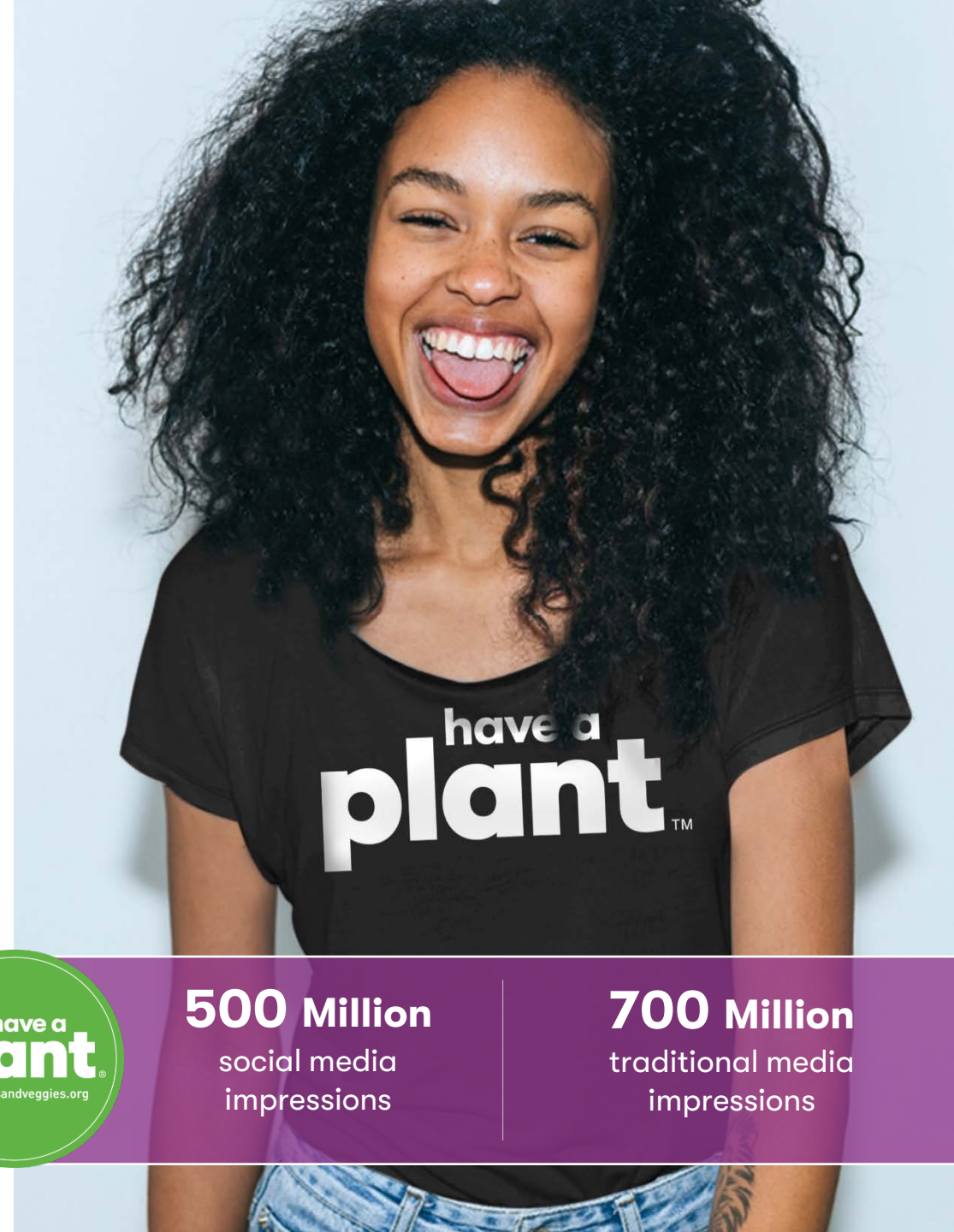
The award-winning **Have A Plant® Movement** is a way to inspire lasting behavior change by tapping into the emotional connection consumers have to the fruit and vegetable eating experience.

PBH is an undeniable resource for health & wellness professionals, given its trusted third-party credibility, breadth of nutrition and behavioral research, and strong consumer, influencer and industry reach.



500 Million
social media
impressions

700 Million
traditional media
impressions



Have a Plant®: The Plant-Forward Eating Guide

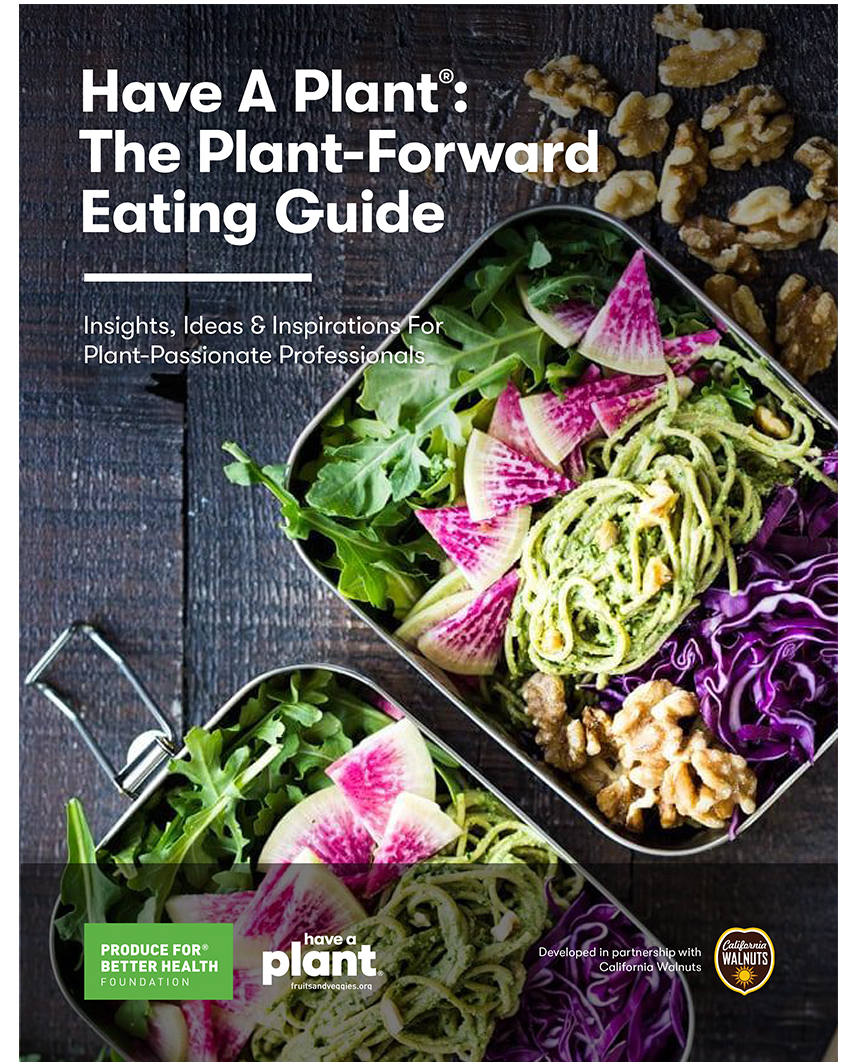
*Insights, Ideas & Inspirations for
Plant-Passionate Professionals*

Find the guide at:

www.fruitsandveggies.org/plantforwardguide

Turnkey resources are also available to put your
plans into action at:

www.fruitsandveggies.org/plantforwardtoolkit



PUBLIC TOOLKIT

**fruitsandveggies.org/
stateoftheplatetoolkit**



Housekeeping



1 CPEU available through the Commission on Dietetic Registration (CDR)

You will receive a link to the certificate of attendance, the webinar recording and PDF of the presentation within 48-72 hours.

Type your questions and/or comments into the Q&A section located at the bottom of your screen at any time during the webinar.



TODAY'S SPEAKER

Jason Riis

PBH Chief Behavioral Scientist

Most Americans **know they need to eat more fruits and vegetables to improve their health.**

PBH is helping people **feel inspired to want to eat more fruits and vegetables, making this action part of what they **do** every day.**





KNOW

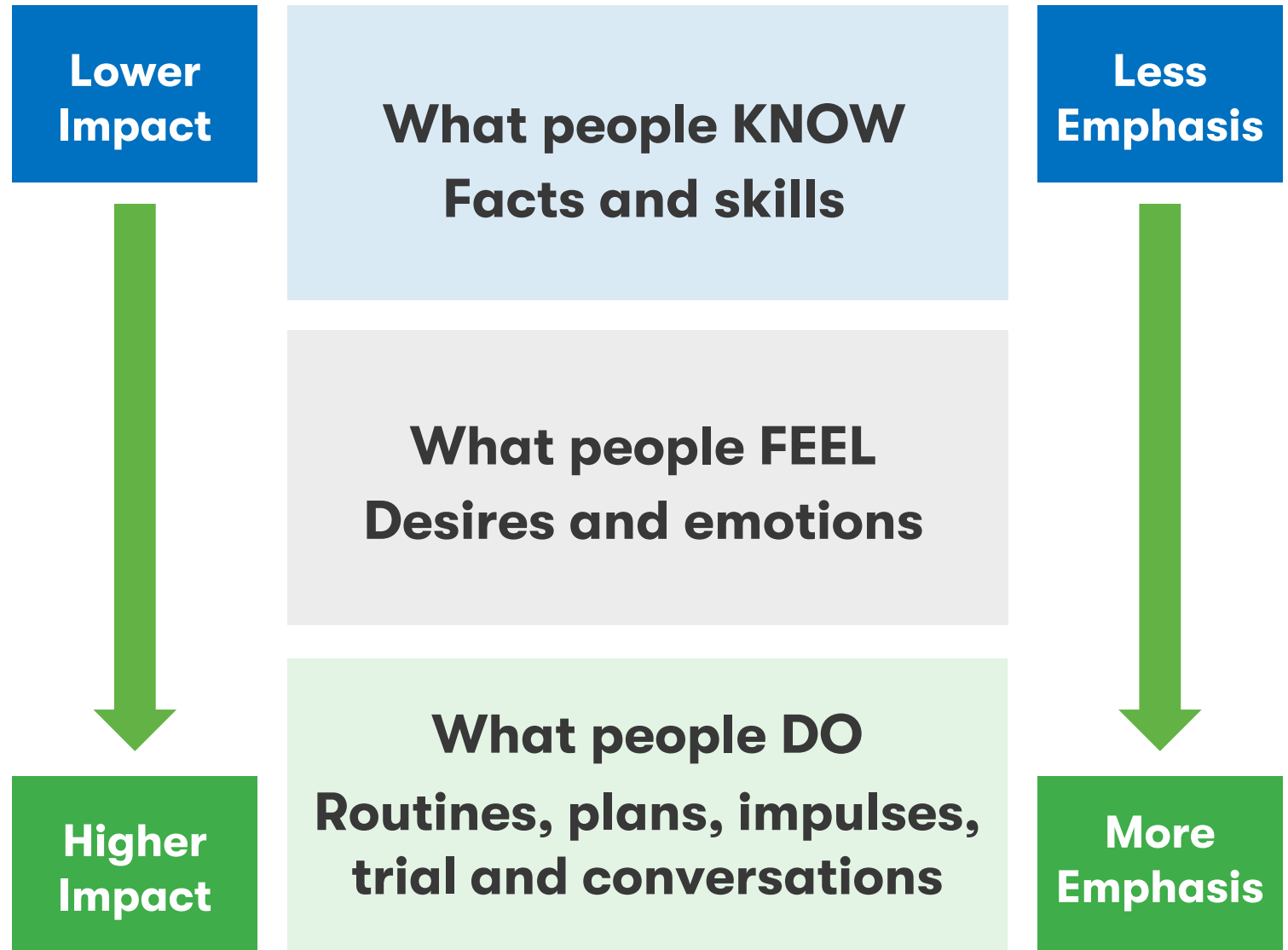


FEEL



DO

Shift From KNOWING To FEELING & DOING







“If you want people to do something, make it easy.”

***Richard Thaler
Nobel Prize Winner, 2017***



Help consumers make it easy to ...

See 	Grab 	Find 	Eat immediately 	Plan 
Keep Around 	Buy 	Get Into Their Mouth 	Get Into Their Kids' Mouths 	Swallow 
Like 	Clean 	Pack 	Remember 	Habituated 

Habits Are Systems.

“You do not rise to the level of your goals. You fall to the level of your systems.”

James Clear

Author of “Atomic Habits”



What Is A Habit?

Habits are automatic behaviors that we have internalized.

A habit is not what an action is, but rather how you perform the action.

Source: Wood, W. (2019) *Good Habits Bad Habits*, Farrar, Straus and Giroux. Pg. 25



A Large Percentage of Fruit & Vegetable Consumption Is Habitual.

“About 43% of what people do every day is repeated in the same context, usually while they are thinking about something else.”

Wendy Wood

Author of “Good Habits Bad Habits”



■ Habitual Behaviors

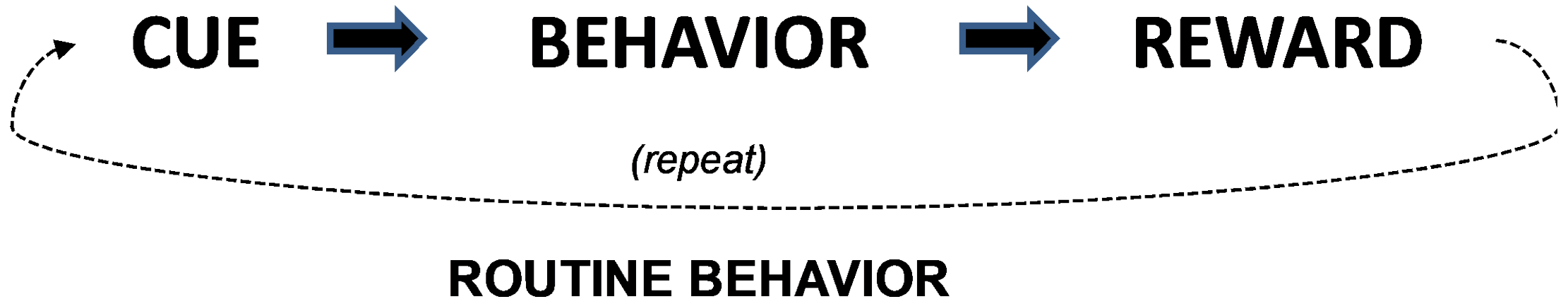
Fruit and vegetable habits are understudied.

Habit-like fruit and vegetable behavior systems:

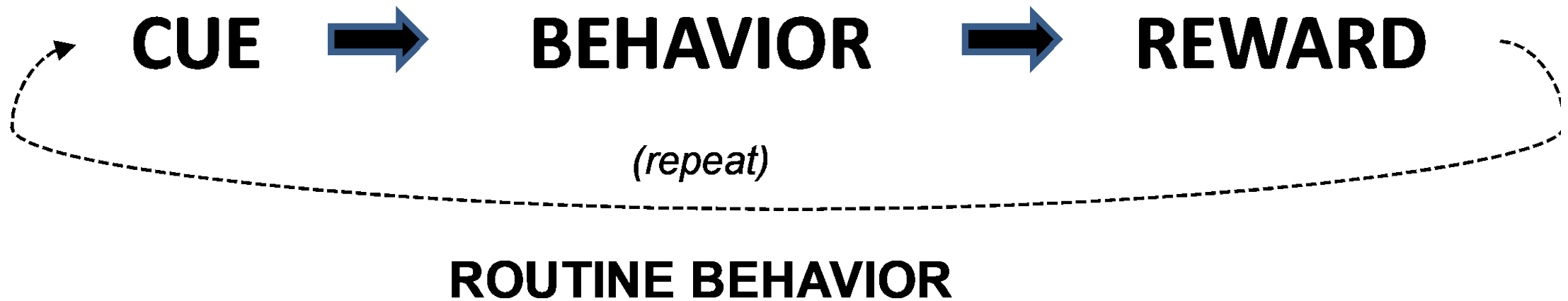
- Fruits often consumed at breakfast, but vegetables generally are not.
- Fruits are incorporated into and associated with desserts, but vegetables generally are not.
- Fruits and vegetables are often served as sides rather than the main dish.



How are habits formed?



It's behavior (doing), but we need to know a lot about how habits work to help people create them.



The automatic behavior is not automatic at first.

Habits form from repetition

At first, taking the train to work involves decisions



Intentions

**Time to leave home,
Find transit stop,
Route to take....**



With repetition, habit memories form...

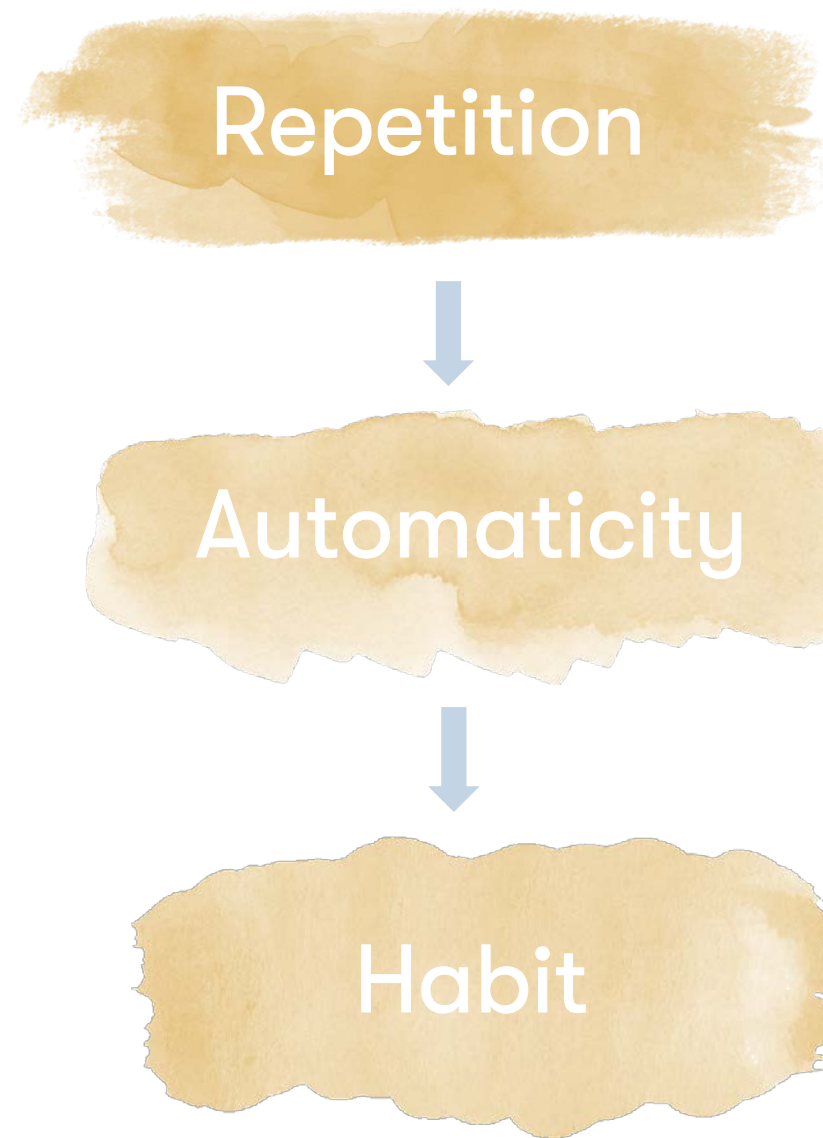
...Connecting rewarded responses with contexts (where/when/with whom)



Context->response; context->response; context->response; context->response....

The key to creating new habits is repetition.

Repeating the action leads to automaticity, which is the defining feature of habits.



Repetition is hella important.

For an action to become a habit, consumers have to repeat the heck out the behavior at the same time and in the same context.

“It can take two to three months to form a simple habit—to make something so automated that you don’t have to think about it, you just do it.”

*Wendy Wood
Author of “Good Habits Bad Habits”*



Why don't we study habits?

Problem: we underestimate habits

Lure of phenomenology:

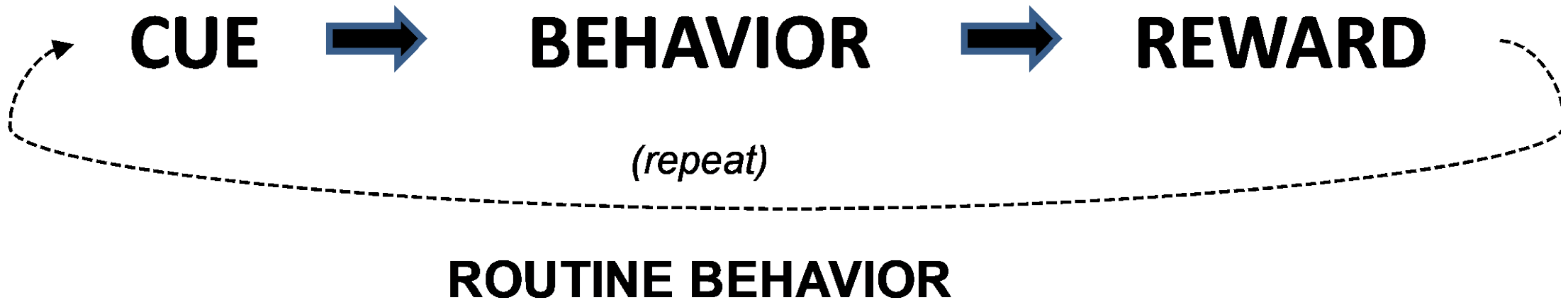
- When explaining actions, we overvalue introspections, our own thoughts, feelings, and emotions (Pronin, 2009)
 - Salient, feel meaningful

Habits are understudied. PBH is helping.

A new study to be released this year, begins to answer questions like:

- Do consumers work on their FV habits?
- Do consumers understand importance of habits vs. willpower?
- Do consumers reward themselves for FV consumption?
- Do they know how important repetition is in habit formation?
- Do they feel automaticity when shopping or consuming FV?

Habits are understudied. PBH is helping.



1. Cues

What can trigger
the behavior
(almost
automatically)



Piggybacking

Compelling Correlations:

- 90% of regular exercisers associate a location or time cue with exercise (*Tappe et al., 2013*)
- Medication adherence is higher among those with regular, pill-taking routines (*Brooks et al., 2014*)



Piggybacking

Experimental Evidence:

- Habit formation interventions that encourage people to **add** a behavior to a routine they already engage in (e.g., adding flossing to a regularly-scheduled tooth-brushing routine) work better than those that simply encourage a new behavior (e.g., flossing) (*Alison Phillips, Leventhal, & Leventhal, 2013; Judah, Gardner, & Anger, 2013*)



Which cues can we piggyback on?

- Morning routine
- Lunch
- Commute
- ...



2. Behaviors

Which behaviors can become habits?



STORIES

Habits: The Ultimate Way To Make Eating Fruits & Vegetables Easy

By [Jason Riis](#)



Making habits easy

1

Pick a simple behavior



2

Choose a common context



3

Repeat repeat repeat!



4

Find a reward



STORIES

Eat Fruits & Vegetables First: A Great Way To Make It Easy To Eat More Fruits & Vegetables

By [Jason Riis](#)

Eating fruits and veggies FIRST

A great way to make eating fruits and veggies easy is by eating/serving them first.

Simple intervention of school cafeterias serving bell peppers to students while they waited in line.

Kids consumed 6 times more vegetable servings when offered while they waited!



Source: Elsbend, S. L., Reicks, M. M., Mann, T. L., Redden, J. P., Mykerezi, E. & Vickers, Z. M. (2016). Serving Vegetables First: A Strategy to Increase Vegetable Consumption in Elementary School Cafeterias. *Appetite*, 96, 111-115.

Are you doing something to get people to make a habit of eating fruits and veggies first?

A question for dietitians and other nutrition communicators

Simple suggestions for helping consumers eat fruits and/or veggies first

Consumer Habit

Have everyone eat a fruit and/or veggie while preparing the rest of the meal.

How can you support this habit?

Encourage purchase of packaged, pre-cut, single fruit or veggie serving that parents can hand to children while they are cooking.



Simple suggestions for helping consumers eat fruits and/or veggies first

Consumer Habit

Call it an appetizer or the “pre-dinner power chomp” to make it fun.

How can you support this habit?

Create a list of great FV to consume first.



Good behaviors to habitualize

- FV first
- Half plate FV
- Favorite FV at each lunch (and dinner)
- Fruit with breakfast (piggyback)
- Veggie w lunch/dinner/commute (piggyback)
- Creating FV snack packs
- Shop FV first
- Eat your favorite FV more often



3. Reward

How can we
reward the
behavior?



There are many types of reward

- Money
- Social reward
- Taste experience

Note: Intermittent reward may be more effective than consistent reward.

Reward can be social. Can you create tags or themes people can post as reward? *#HabitStarter*

A question for dietitians and other nutrition communicators

Social reward counts. People enjoy taking and sharing pics. That can be a reward.

Example post:

Plant-packed grocery full of fun fruits
and healthy veggies.

Pictures of your kids picking out veggies

#VeggieHaul #haveaplant

*Note: Intermittent reward works. So they don't
have to post each time!*



Social reward counts.

Example post:

Kids helping parents plan, prep and prepare fruits and vegetables.

#VeggieChef #haveaplant



Social reward counts.

Example post:

A fun and delicious dinner featuring friends and plant-packed dishes.

#VeggieDinnerParty #haveaplant



We understate the importance of habit



THE SCIENCE OF MAKING
POSITIVE CHANGES THAT STICK



WENDY WOOD

"Wendy Wood is the world's foremost expert in the field, and this book is essential."
—ANGELA DUCKWORTH, *New York Times*-bestselling author of *Grit*

Experimental test of explanations for choices

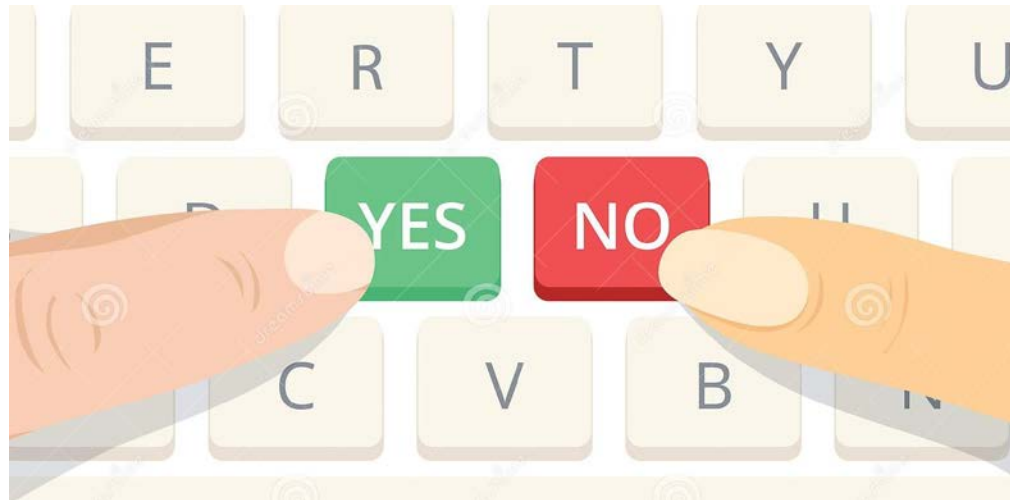
Habit vs. mood

Manipulated two possible influences on responding

1. Participants recalled happy, sad, or neutral memory
2. Formed habit through key press task
 - Strong habit: 90% of trials “m” key
 - Weak habit: 50% “m” key, 50% “z” key



Are you willing to complete 40 additional trials (~5 minutes) as a favor to us (without additional compensation)?

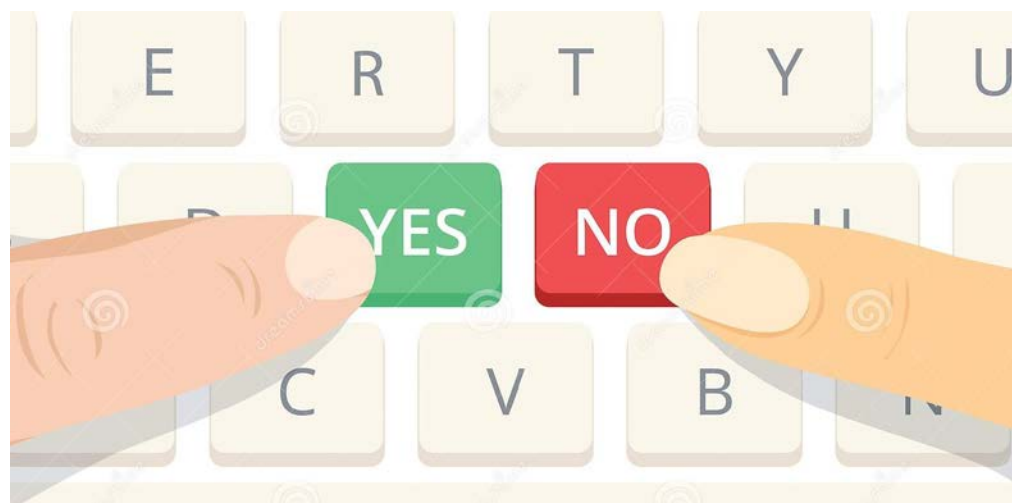


**Are you willing to complete 40
additional trials (~5 minutes) as a favor
to us (without additional
compensation)?**

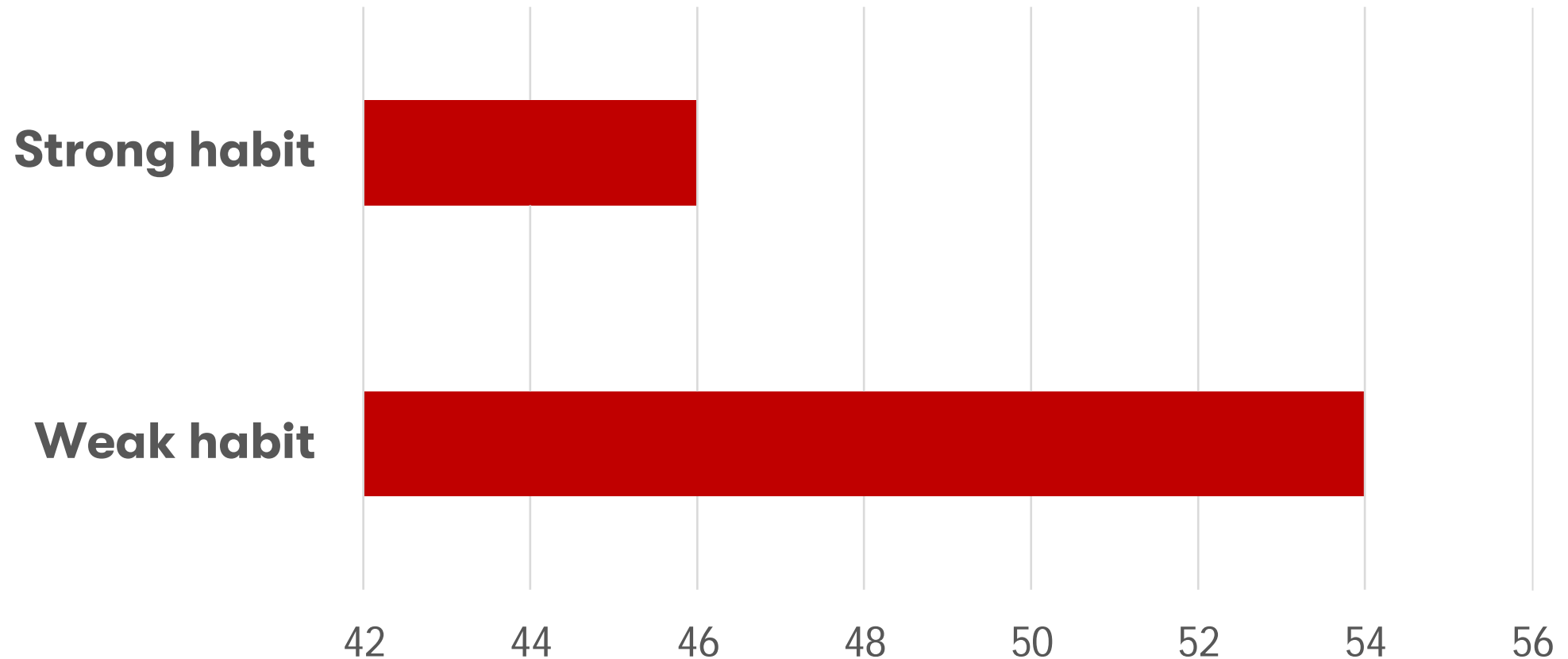
no

yes

Are you willing to complete 40 additional trials (~5 minutes) as a favor to us (without additional compensation)?

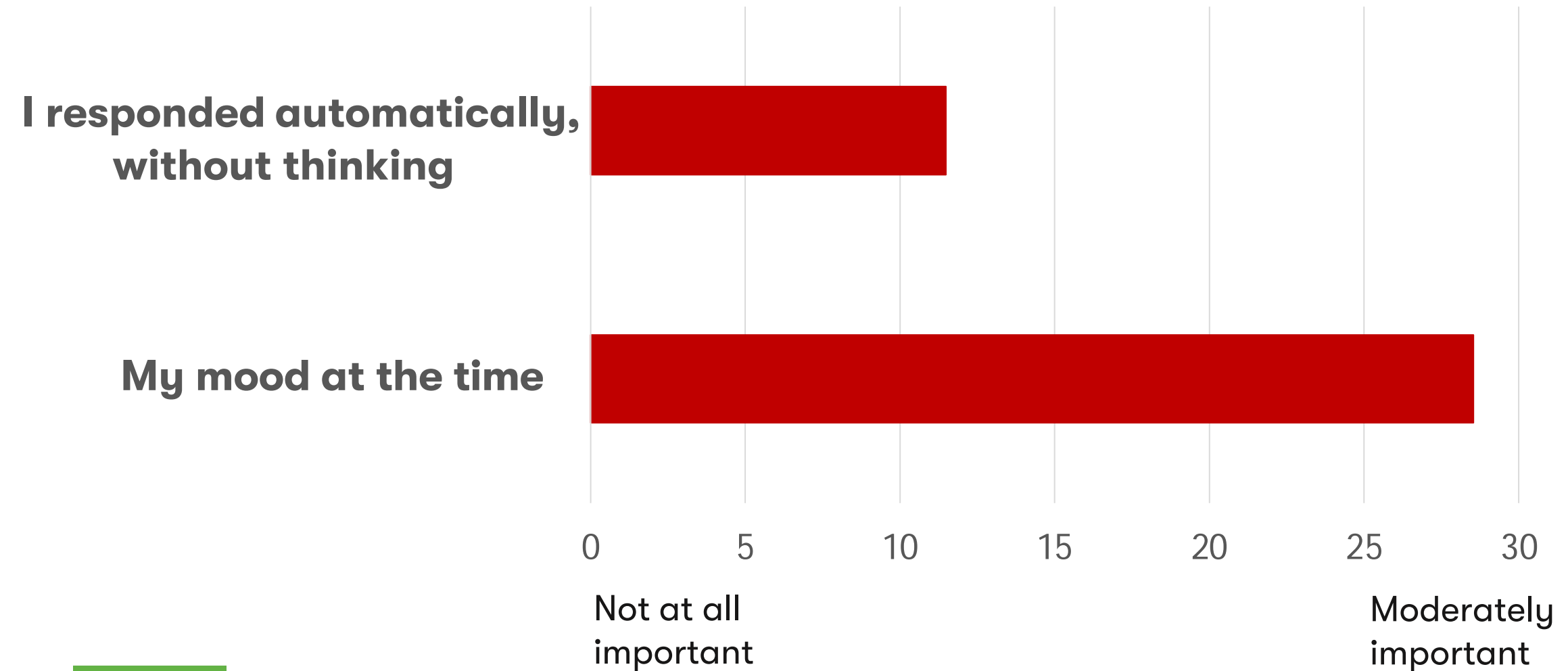


Habit to hit M/No button reduced % agreeing to help



No effect of mood manipulation on helping

But...attributed helping more to mood than to habit



- **Habit, not mood guided behavior**
- **Attributions** stronger to **mood** than to habit
- Replicated with an ecological momentary assessment study of **daily coffee drinking**
- Both **fatigue and habit** determined coffee drinking
- Attributed coffee drinking primarily to **fatigue**

Helping people get started with new habits



How to help people form habits

1. **Know** the power of habit
2. **Know** what to piggyback on
3. **Know** the right behaviors for habits
4. **Feel** the reward
5. **Feel** the automaticity
6. **Do** it. Repeat, repeat, repeat
7. **Do** it. Make it easy (and enjoyable)

Know the power of habit

People underappreciate the power of habit on their own behavior and on other's behavior.

THE SCIENCE OF MAKING
POSITIVE CHANGES THAT STICK



WENDY WOOD

"Wendy Wood is the world's foremost expert in the field, and this book is essential."
—ANGELA DUCKWORTH, *New York Times*–bestselling author of *Grit*

Know what to piggyback on

Specific times and place where there is already a consistent routine



Know the right behaviors for habits

- **Specific behaviors**
- **Easy behaviors**

Examples:

- **Prepare FV snacks**
- **Eat FV first at meals**



Feel the reward

There should be some pleasure immediately after the habitual behavior.

**The pleasure can be social.
(Taking and sharing pictures)**

The pleasure can be intermittent



Feel the automaticity (or lack of it)

Habits are automatic behaviors that we have internalized. A habit is not what an action is, but rather how you perform the action.

Ask: Are any of your FV behaviors “automatic”?



Do it. Repeat, repeat, repeat.

“It can take two to three months to form a simple habit—to make something so automated that you don’t have to think about it, you just do it.”

Wendy Wood

Author of “Good Habits Bad Habits”



Do it. Make it easy.

“If you want people to do something, make it easy.”

*Richard Thaler
Nobel Prize Winner, 2017*





Q&A

HELP SUPPORT FRUIT & VEGGIE CONSUMPTION!

If you enjoyed today's Health & Wellness webinar and would like to support our overall mission of increasing fruit and vegetable consumption, we encourage you to make a **tax-deductible donation** today.

As a 501(c)3 non-profit organization, your donation helps us deliver programming, including our monthly health and wellness webinars, actionable research, future-focused education, a comprehensive digital ecosystem, and inspirational resources that helps millions discover the joy of eating fruit and vegetables each and every day. **TOGETHER – with your support – we are creating happier, healthier lives!**

To donate, add the Donations app to Zoom:

<https://pldg.to/RiLcYw>

Or donate with your phone:

Text HAVEAPLANT to 707070 (US only)

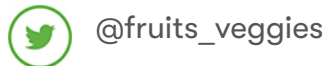
JOIN THE MOVEMENT



have a
plant[®]
fruitsandveggies.org

Show your support by taking and sharing the Have A Plant[®] pledge at fruitsandveggies.org. While you're there, check out the useful resources to equip you with the tools you need to enhance your nutrition knowledge and empower consumers to enjoy more fruits and vegetables every day.

Follow PBH's social channels to keep up to date on all the insights and inspiration. #haveaplant



September is National Fruits & Veggies Month and each year we celebrate Have A Plant[®] during this monumental moment.

2022 is just around the corner, start planning now!

Find inspiration for keeping the celebration going with our 2021 National Fruits & Veggies Month Toolkit!



<https://fruitsandveggies.org/nfvmtoolkit>

A catalog of PBH's past webinars is available at fruitsandveggies.org/expert-professionals/webinars.

Continuing professional education units (CPEU) are available for live and pre-recorded webinars.



THANK YOU

We live at the center of produce,
partnership and passion.

**WE ARE SO HAPPY
YOU'RE WITH US!**

