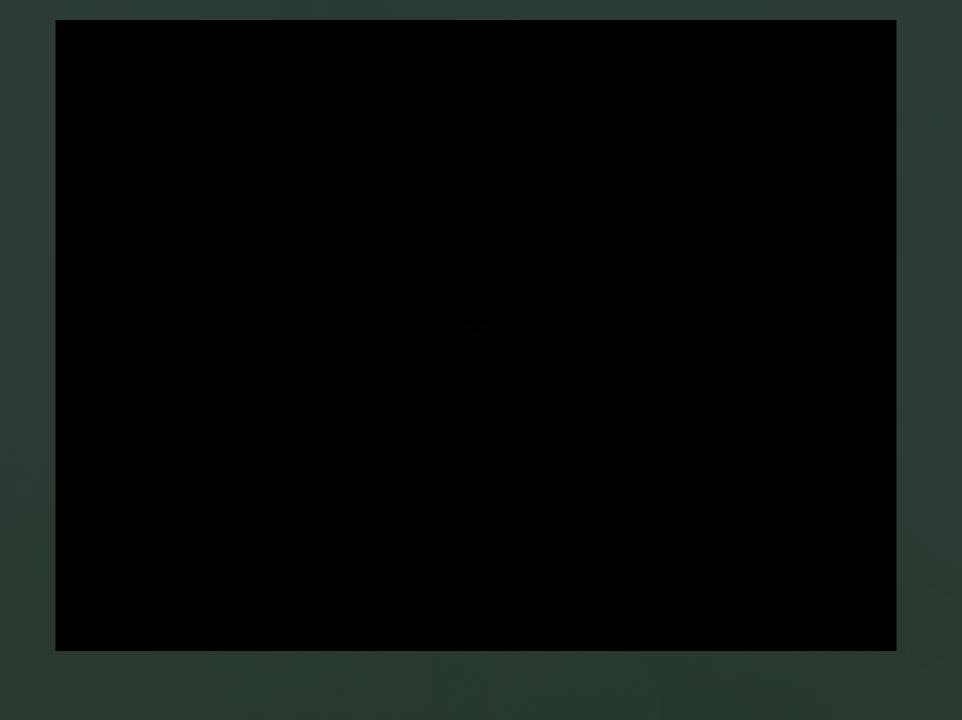
# The Secret Sauce of Weight Loss and Overcoming Food Addiction

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#### **Chronic Disease Facts**

- What is chronic disease?
  - A chronic disease is one lasting 3 months or more, by the definition of the U.S. National Center for Health Statistics.
     Chronic diseases generally cannot be prevented by vaccines or cured by medication, nor do they just disappear.
- Obesity
  - The prevalence of obesity was 39.8% and affected about 93.3 million of US adults in 2015~2016.
  - The prevalence of obesity was 18.5% and affected about 13.7 million children and adolescents.

More Facts...

- Heart Disease
  - About 610,000 people die of heart disease in the United
    States every year-that's 1 in every 4 deaths.
  - Heart disease is the leading cause of death for both men and women.
  - Every year about 735,000 Americans have a heart attack. Of these, 525,000 are a first heart attack and 210,000 happen in people who have already had a heart attack.

#### Even More Facts...

- Diabetes
  - More than 30 million people in the United States have diabetes, and 1 in 4 of them don't know they have it.
  - More than 84 million US adults—over a third—have prediabetes, and 90% of them don't know they have it.
  - 7<sup>th</sup> leading cause of death in the United States
  - In the last 20 years, the number of adults diagnosed with diabetes has more than tripled

#### Cancer Stats...

- Estimated numbers of new cancer cases and deaths in 2019 (In 2019, there will be an estimated 1,762,450 new cancer cases diagnosed, and 606,880 cancer deaths in the United States.)
- In early 2018, the American Cancer Society reported on the largest analysis of the trend so far in the *Journal of the National Cancer Institute*. They found people born in 1990 have double the risk of colon cancer and quadruple the risk of rectal cancer compared to people born around 1950.

#### Let's Define the Problem

- Why do we eat when we feel anxiety, stressed or depressed?
- How does food craving play role in formation of eating habits?
- When you understand the mechanisms there are opportunities to try new strategies.

#### What is Addiction?

Addiction occurs when the behavior continues despite negative consequences. Addiction is characterized by:

- Inability to consistently <u>Abstain</u>
- Impairment in Behavioral control
- Craving for rewarding experiences
- Diminished recognition that behavior is destructive
- A dysfunctional <u>Emotional</u> response

# Is our Modern Food Environment to Blame?

- Eating beyond satiety occurs in response to internal prompts (emotions such as stress) and external cues (walking by a bakery and smelling alluring aromas).
- Every day we are bombarded with commercials, social media, food at the grocery stores, and restaurants enticing us to eat highly palatable foods.
  - These foods are not found in a natural environment but are manufactured to tap into our natural reward-based learning system.
- This food environment encourages an eating behavior outside of our natural hunger cues and listening to our body's satiety signals.

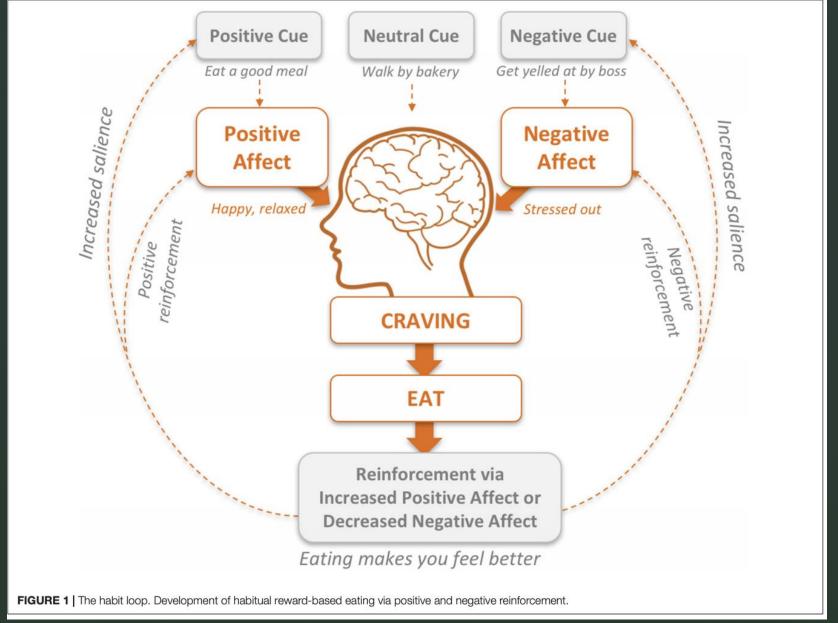
## But Why Can't We Stop?

- The overeating is considered normal in our culture.
- Continual exposure to cues to eat when we are not hungry and to eat beyond our body's needs, may tap into our reward-based learning system and cultivate habits of overeating.
- This in turn leads to eating when stressed, fatigued, depressed or anxious and not because we are physically hungry.

# What is Reward-Based Learned Eating?

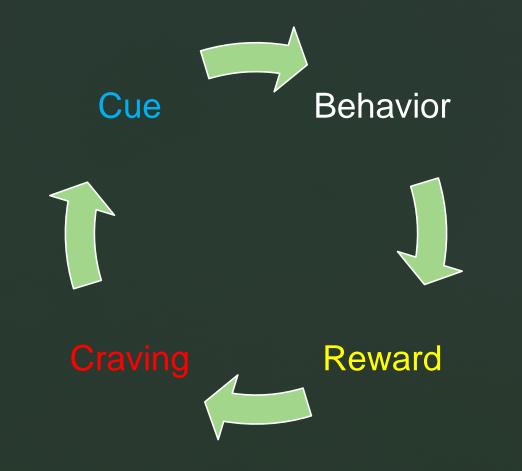
- Our primitive caveman brain is built to help us survive.
  - See food, eat food, remember where and how to get food means living to see another day.
- How does our brain do this?
  - Operant conditioning is reinforcement or associative learning.
  - This involves negative and positive reinforcement...removing pain or receiving a reward increases the likelihood of the behavior being repeated in the future.
  - The reward reinforces the behavior, and our brains attach an emotional memory to that reward yielding behavior, increasing the odds it will be performed again.

# The Habit Loop



Brewer JA, et al. Can Mindfulness Address Maladaptive Eating Behaviors? Why Traditional Diet Plans Fail and How New Mechanistic Insights May Lead to Novel Interventions. Front. Psychol.9:1418. doi: 10.3389/fpsyg.2018.01418.

# Simply Put a Habit Loop is...



# Why Willpower Rarely Works

- The most common strategy for weight loss is caloric restriction but research shows less than ideal results beyond 24 months.
- Up to 60% of individuals regain all or more of the weight they originally lost.
- Dietary restriction stimulates hormones to increase our appetite, thus making it nearly impossible to stick to it long term with our limited willpower reserve.
- Willpower requires the ability to resist short term pleasures for delayed gratification of reaching a goal.

## Why Willpower fails us...

- The use of willpower creates internal friction, because we WANT to consume a highly palatable food (caveman brain wants it now) in an environment that is continually targeting us BUT we have weight loss goals.
- Eventually we will be tired, mentally exhausted, anxious, lonely, and we will give in if given the opportunity.
- Willpower focuses on avoidance of parts of the habit loop or substituting behaviors but NEVER dismantles the habit loop.

# How Can Dismantle the Habit Loop?

- The answer is MINDFULNESS coupled with a WHOLE FOOD PLANT BASED DIET.
- "Mindfulness can be defined as the awareness that arises when paying attention in the present moment, on purpose and non-judgmentally." Jon Kabat-Zinn, Mindfulness expert.
- "Being mindful" means allowing experiences to unfold with curiosity rather than with attempts at control, which may enable healthier management of issues relating to emotion driven cravings.

#### How Does Mindfulness Work?

- Mindfulness decouples the association between craving and the behavior
- You learn to pay attention to and be with the craving instead of acting upon it or fighting it with a limited willpower supply.
- You move closer to emotions, thoughts and body sensations that come with cravings.
- Once you discover how cravings are driving the act, you can then tap into the reward-based learning system to gain mastery over them.

#### In Other Words...

 Mindfulness may lead to reductions in cravings over time through EXTINCTION, rather than SUPPRESSION.

## 4 Steps You Can Take

- 1. Becoming Aware: becoming aware of such behaviors and their triggers or cues.
- 2. Developing Clarity: evaluating outcomes develops clarity of the actual rewards that an individual receives from the behavior.
- 3. Build the Healthy Habit: This process will also bring awareness to the positive physical and psychological effects of eating a whole food plant based diet. You also gain the ability to understand true hunger.

# Finally, the Freedom of Choice

4. Supporting Intuitive Self Care: The final stop is developing the ability to make unforced, embodied choices about food.

#### Let it RAIN...

#### RAIN

- Recognize the craving.
- Allow it to exist.
- Investigate what it feels like in the body.
- Note the associated sensation from moment to moment.

## Special thanks to...

 Dr. Judson Brewer, you can learn more about his incredible mindfulness research at drjud.com.

# Questions?