

# The Myth of Willpower

Why Diets Don't Work  
and Why That's OK

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# Diets Don't Work...According to Dieters' Criteria

Mann et al., *Am Psych*, 2007

Tomiyama et al., *Pers Soc Psych Compass*, 2013

- You don't lose enough  
**Dieters lose  $\approx 10\%$  of starting weight**
- You don't keep it off long enough  
**Dieters regain all but  $\approx 2$  pounds**

# Diets Do Work...According to:

- The Government

**Success = lose 5% and keep it off a year**

- Diet Companies

**Business model depends on repeat customers**

# Willpower

- Actively inhibiting an impulse
- E.g., resisting those cookies
- I will use it synonymously with “self-control”
- Yes, I am ignoring distinctions between the two



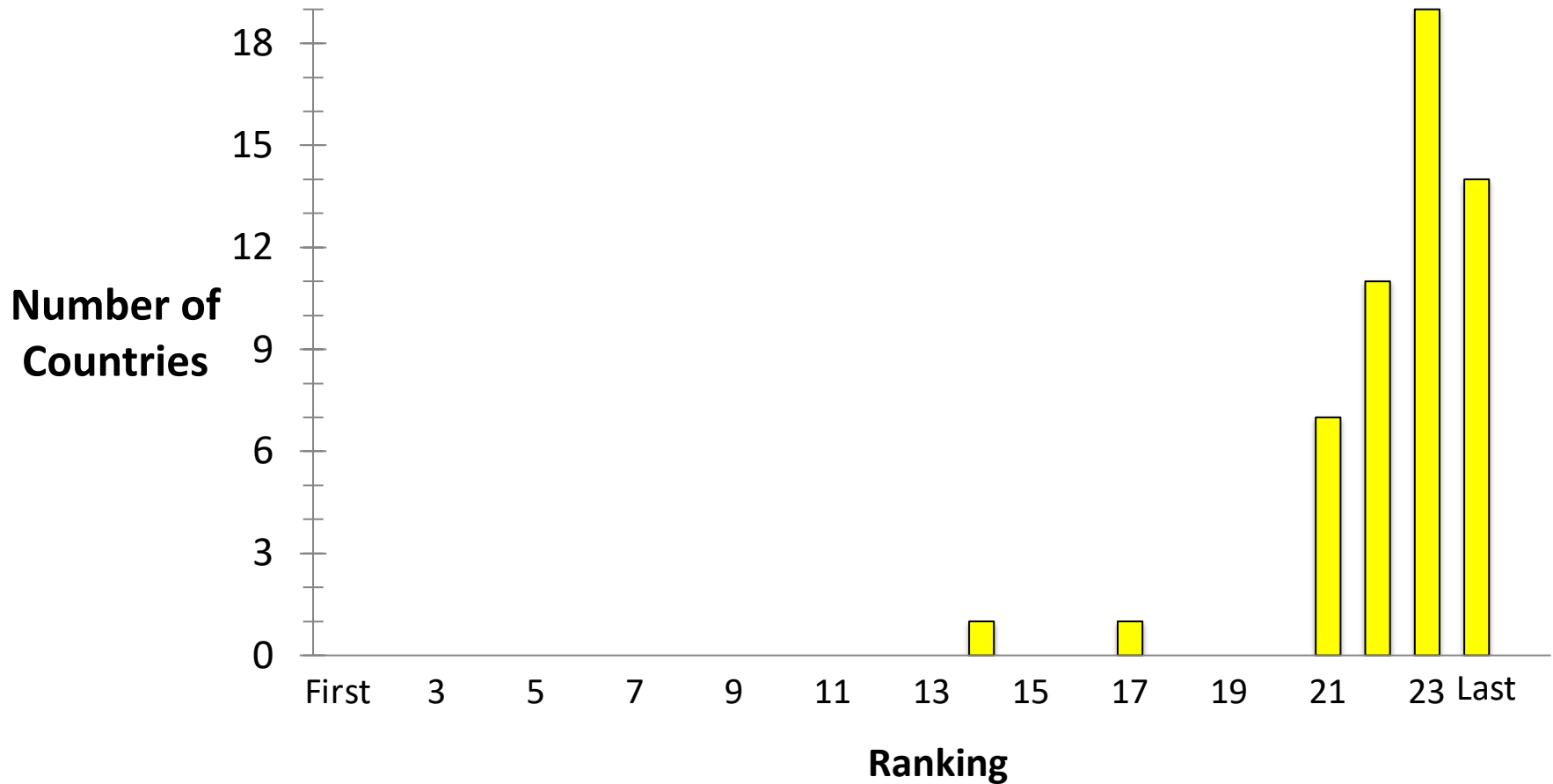
# Self-Report Rankings of 24 Strengths (U.S.)

(Park, Peterson, & Seligman, *J Pos Psych*, 2006)

1. Kindness
2. Fairness
3. Honesty
4. Gratitude
5. Judgment
6. Love
7. Humor
- ...
22. Prudence
23. Modesty
24. Self-Regulation/Self-Control

# Self-Regulation's Ranking (out of 24 strengths) in 53 Countries

(Park, Peterson, & Seligman, *J Pos Psych*, 2006)



# Self-Control of Eating: Willpower

1. People of all sizes struggle with it.
2. It's easy to disrupt.
3. The things that disrupt it are common.

Distraction/Cognitive Load

Stress

Strong positive or negative moods

Sleep deprivation

Alcohol intoxication

Initial acts of overeating

# The Marshmallow Test



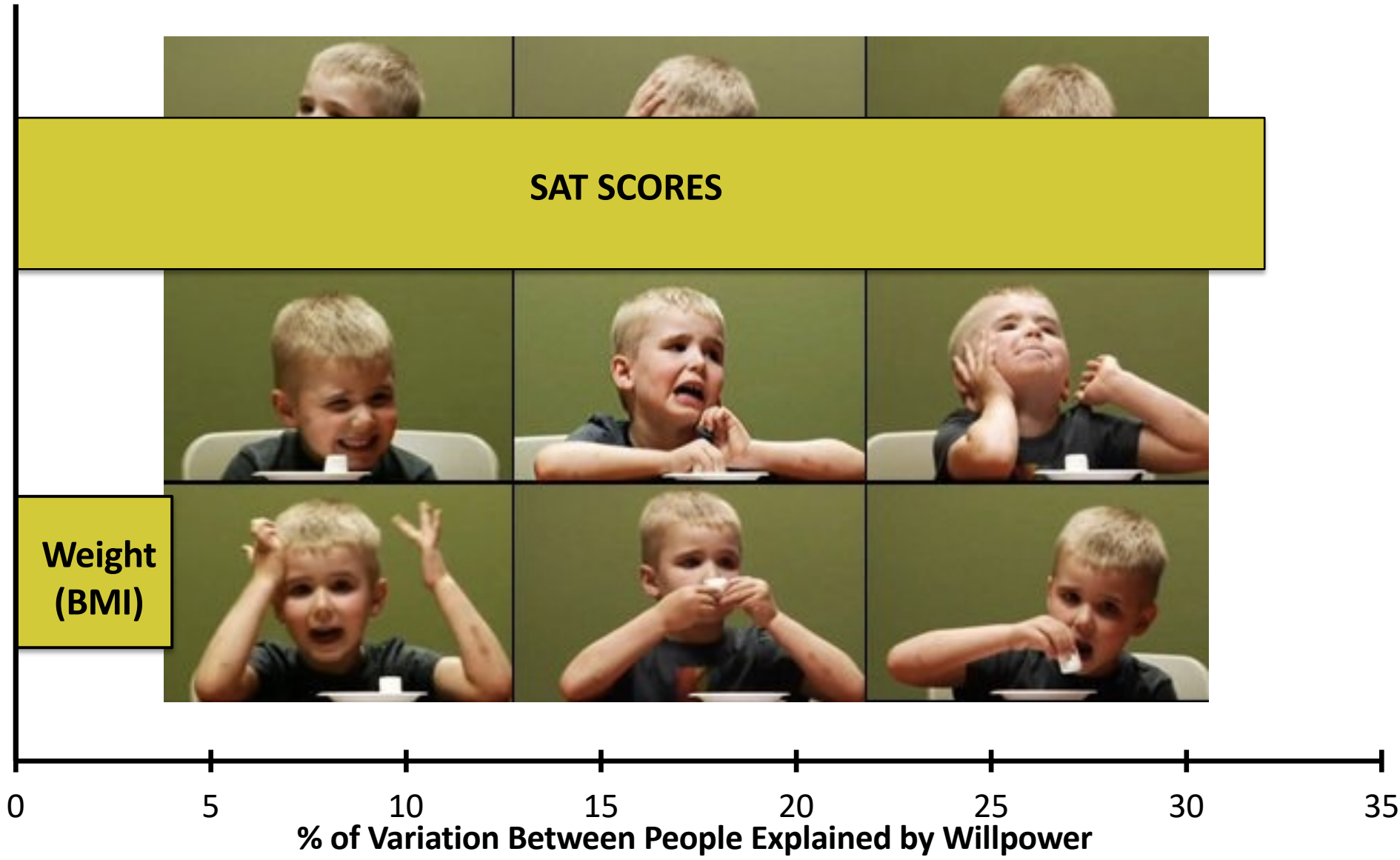


# How Important is Willpower?

(Measured with Delay of Gratification seconds; Mischel & Shoda, *various*)

Behavior	% of Variance Explained by Willpower
SAT Quantitative	32%
SAT Verbal	18%
Ego Resilience	28%
Social Competence	15%
Academic Competence	7%
Coping Competence	5%

# The Marshmallow Test



# How Important is Willpower?

(Measured with Tangney Self-Control Scale; De Ridder et al., *PSPR*, 2012)

Category of Behavior	% of Variance Explained by Willpower	Number of tests	Total N
School/Work Performance	13%	5	1546
Well-being/ Adjustment	11%	14	4328
Interpersonal Functioning	6%	17	5255

# Willpower Does Matter for Eating...

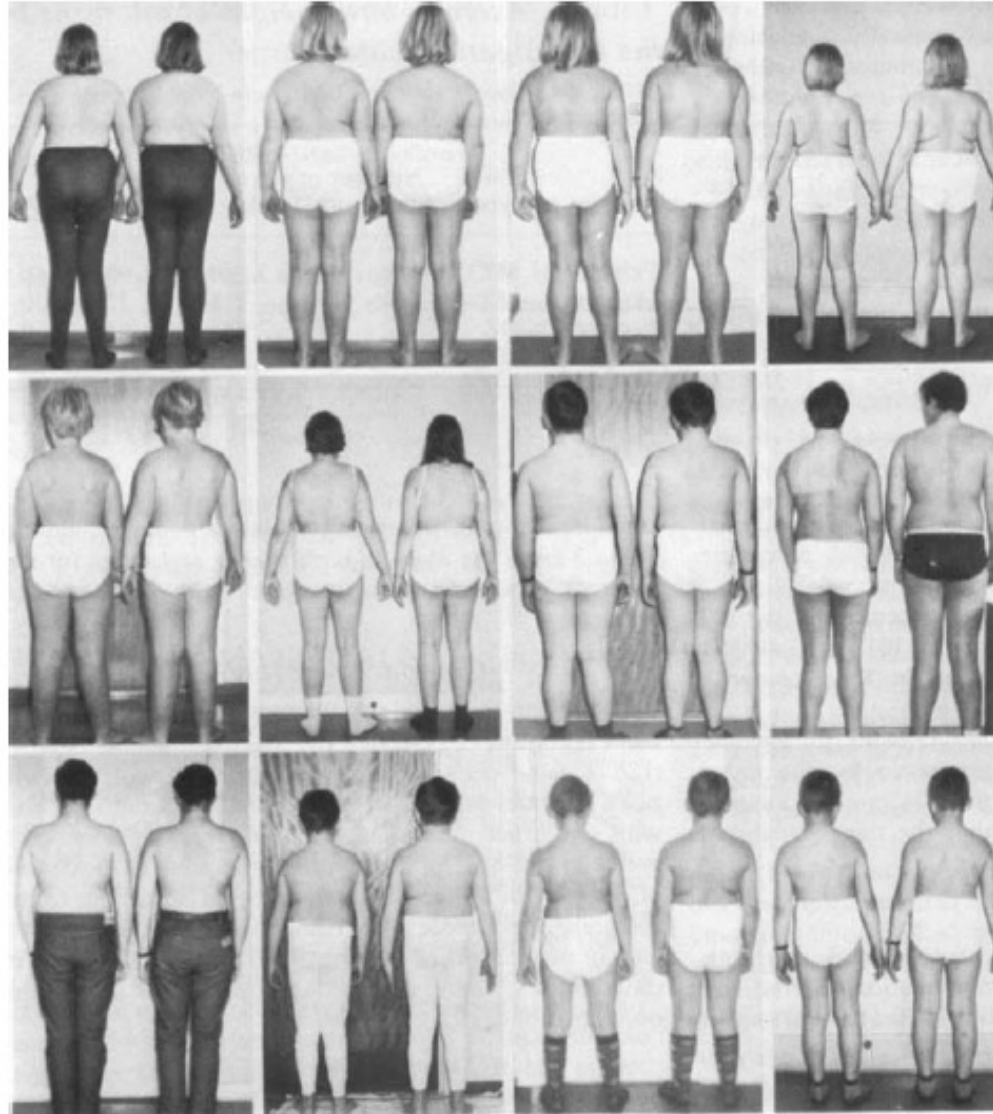
...Just not that much

Lapses of willpower

- are difficult to avoid in our environment
- happen quickly: there's always time
- erase previous successes

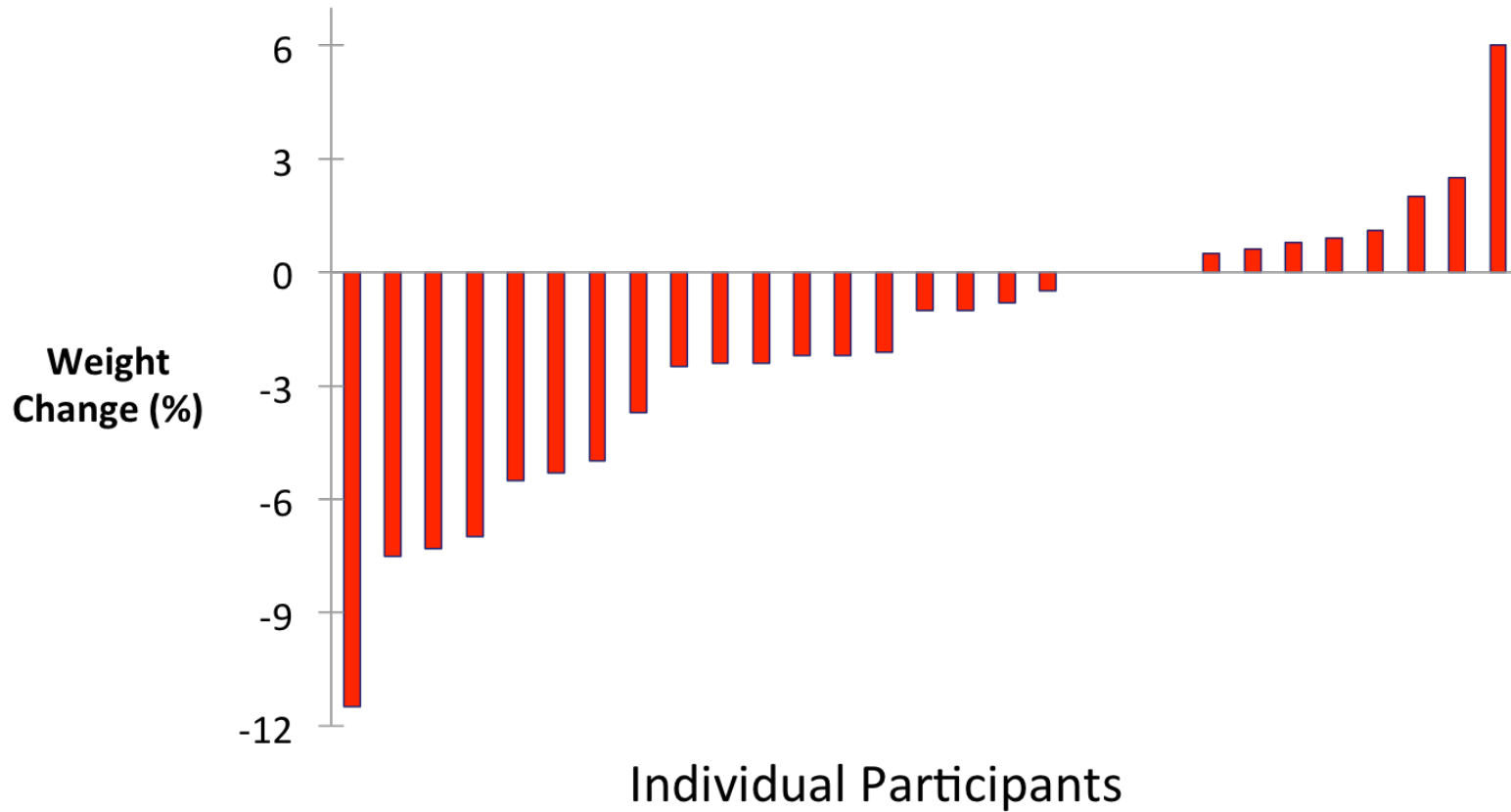


# Identical (monozygotic) twins



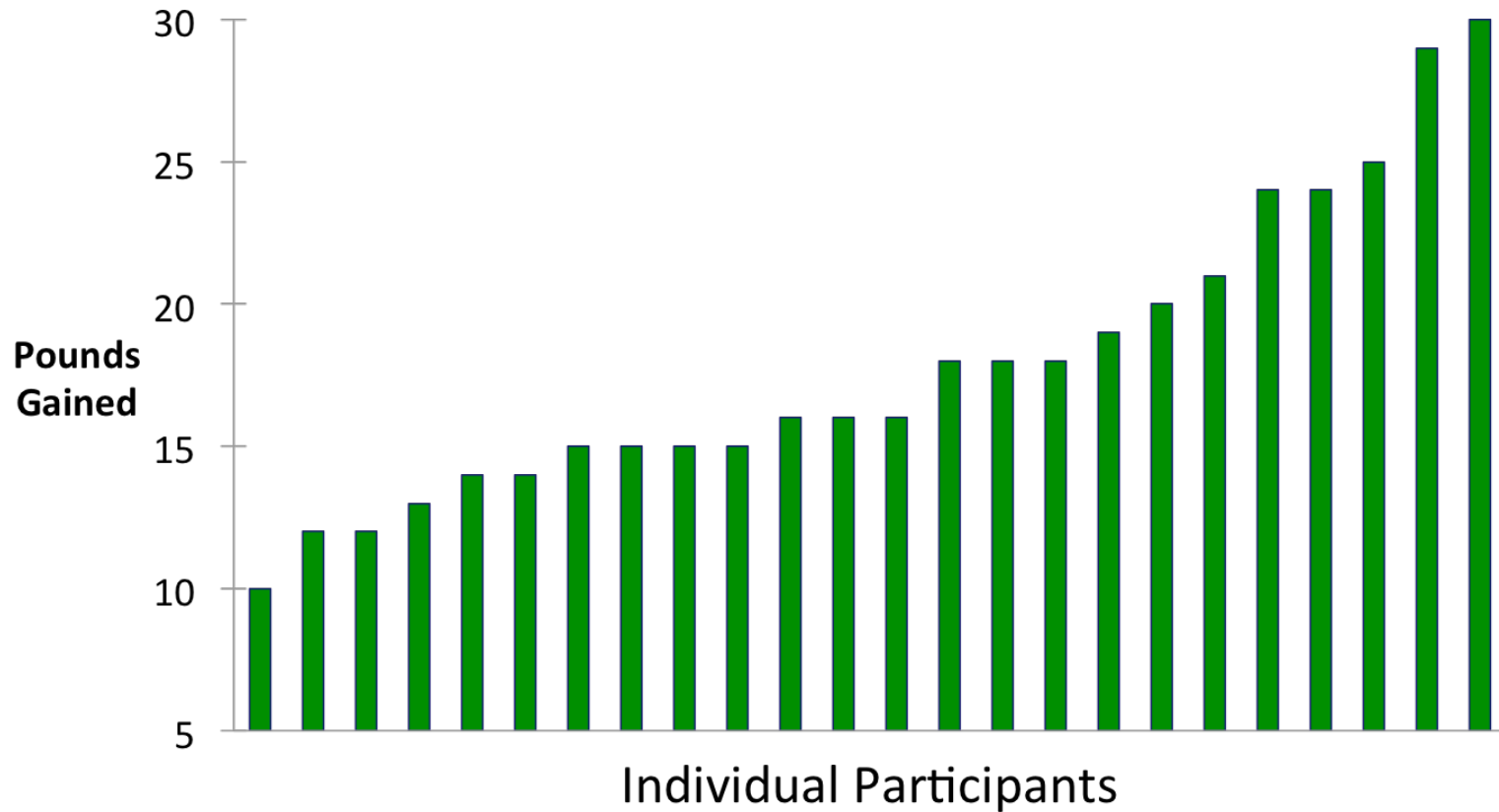
# Weight Change from Same Diet

(Munro et al., *Int J Behav Nutr*, 2011)



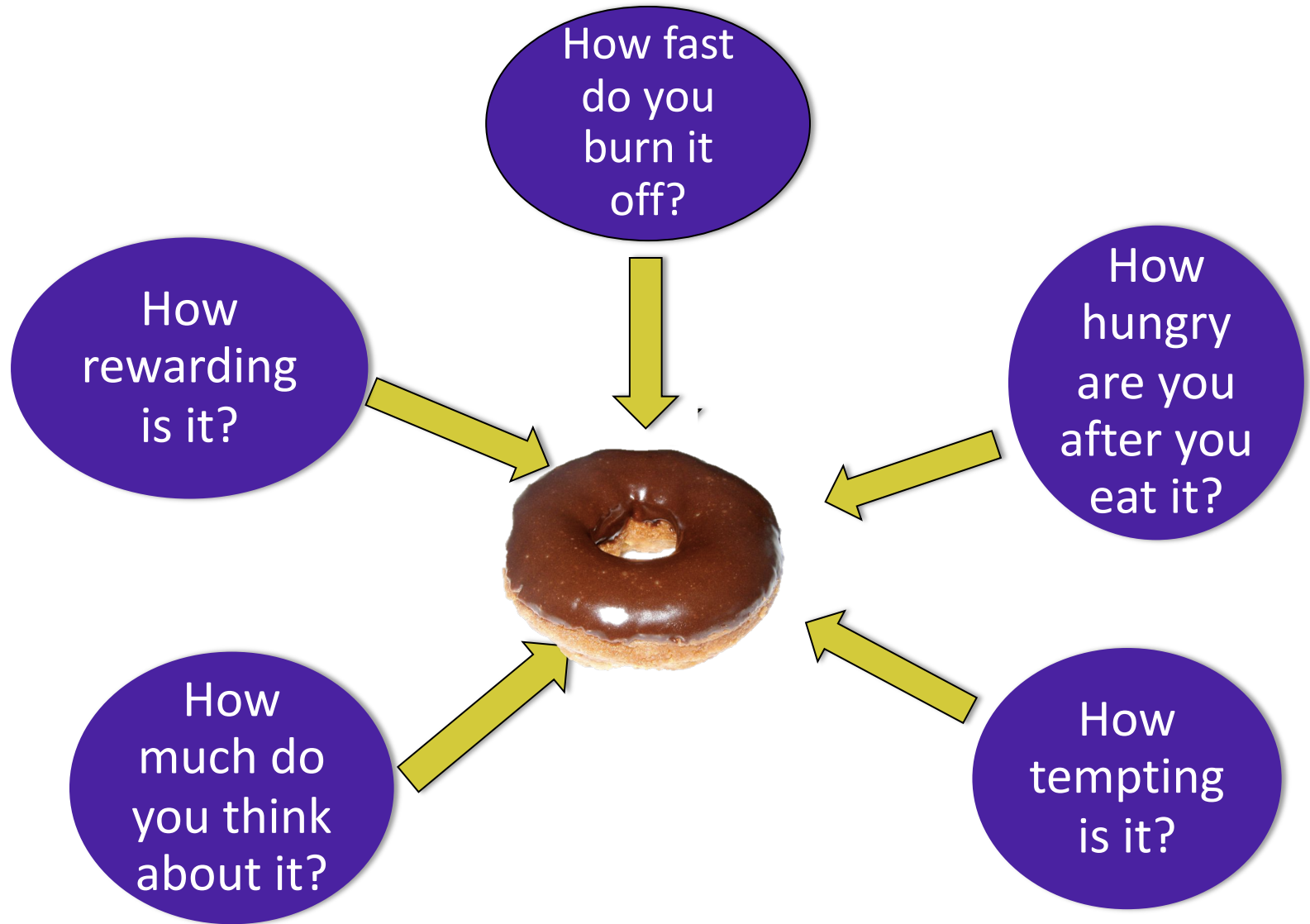
# Weight Change from Same Over-Eating

(Bouchard et al., *New Engl J Med*, 1990)

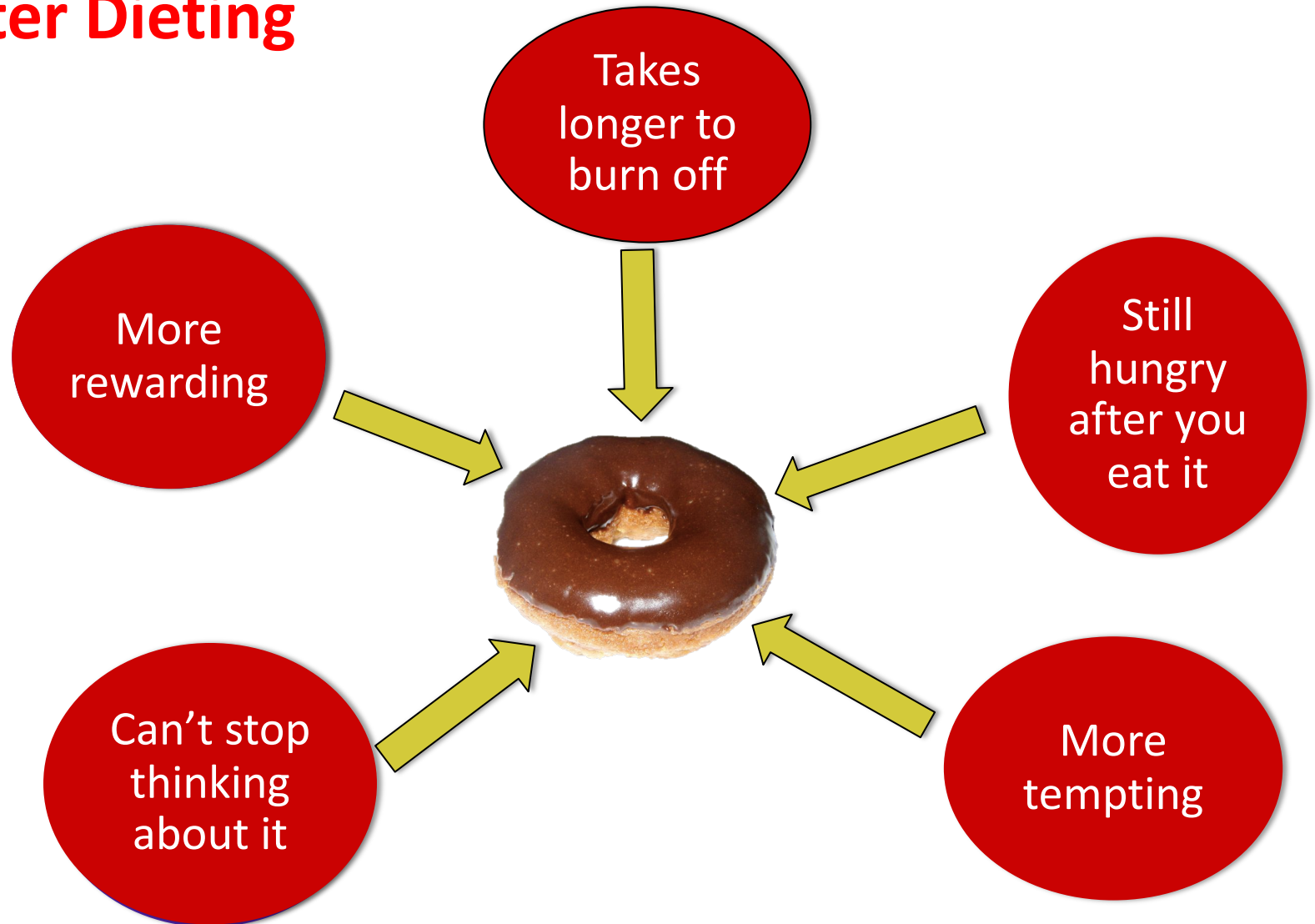




# Genetic Differences



# After Dieting



# Self-Control of Eating: Willpower

1. People of all sizes struggle with it.
2. It's easy to disrupt.
3. The things that disrupt it are common.
4. Calorie deprivation makes it harder.
5. It cannot be “harnessed.”
6. Better to avoid encountering temptations than to try to resist them

## A Couple Things You May Be Thinking Now

1. But I know Person X who lost a ton of weight and kept it off forever.
2. Yikes! Obesity is dangerously unhealthy and now we are stuck with it?

# The Relationship Between Obesity and Health

Evidence is from correlational studies

Many potential confounding factors

- Being sedentary
- Weight cycling (yoyo dieting)
- Weight Stigma
- Under-use of the medical system
- SES

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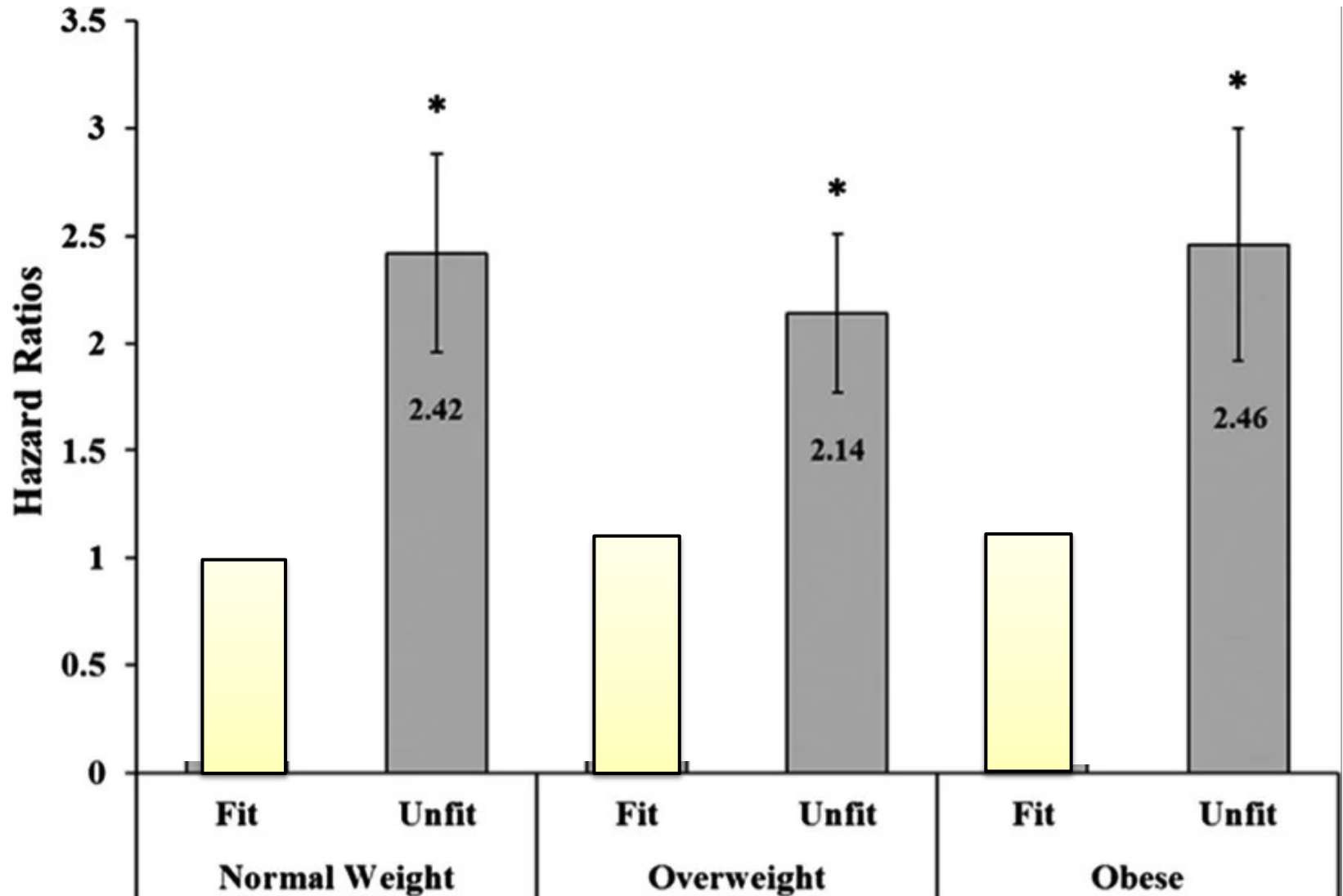
- Being sedentary
- Weight cycling (yoyo dieting)
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The correlations are weak; inconsistent

Only highest levels of obesity are reliably linked to poor health outcomes

Strongest evidence is for diabetes and osteoarthritis

# Fitness matters more than fatness



# Why Are We Attributing Health Problems to Weight?

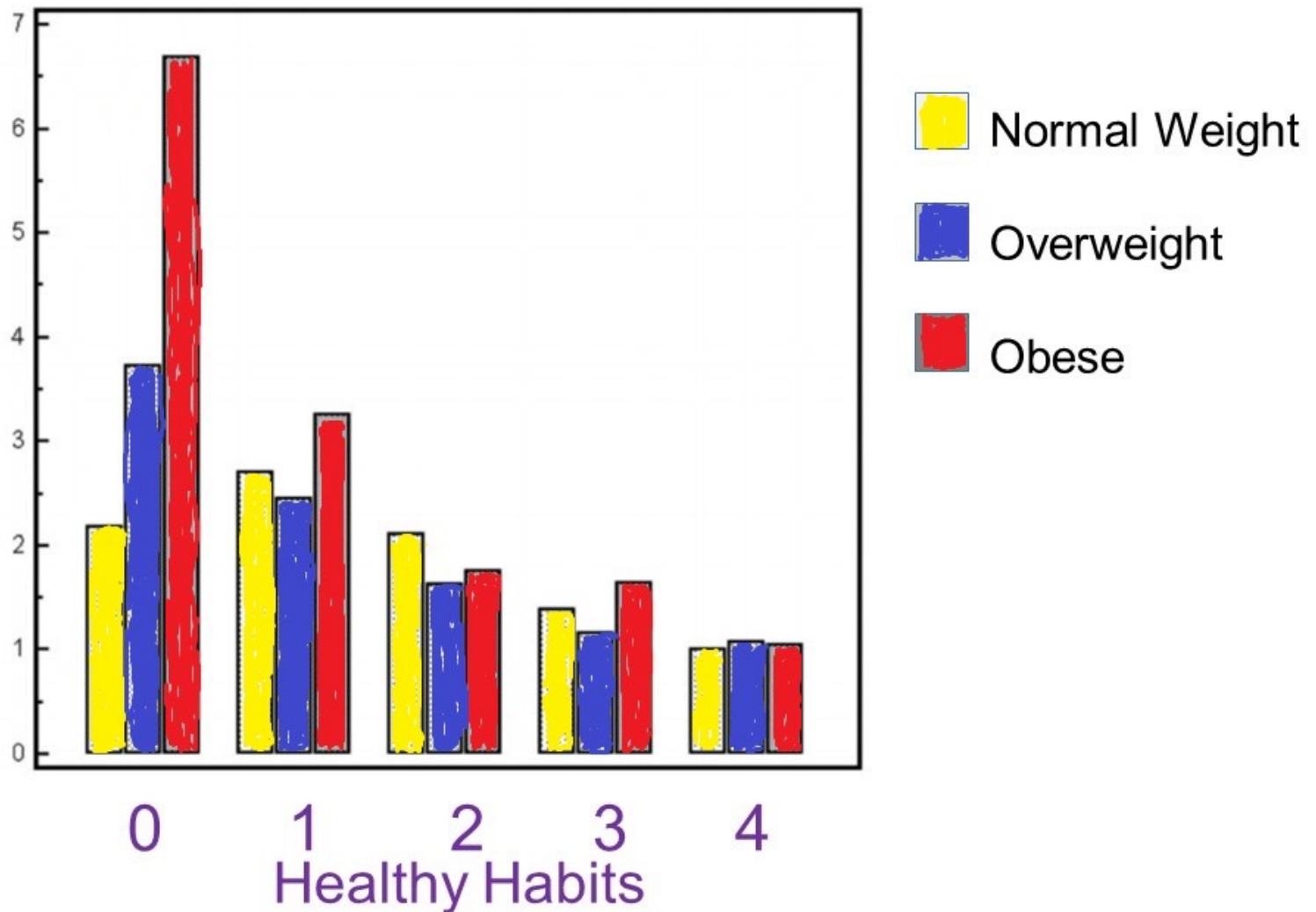
- When you start exercising, your health improves **before** you lose any weight.
- Exercise improves your health even if you don't lose **any** weight at all.



# Four Healthy Habits

1. Eat 5+ servings of fruits/vegetables per day
2. Exercise regularly: 12+ times per month
3. Drink no more than 1 alcoholic drink/day\*
4. Don't smoke

# Risk of Death by Number of Healthy Habits



# Handy Take-Home Messages

1. Weight regain after dieting is not due to a weak will.
2. Dieting makes willpower harder.
3. Relying on willpower is a bad strategy.
4. Good self-control means making sure you don't need to use self-control.
5. Behaving in healthy ways makes you healthier, even if it doesn't make you thinner.

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