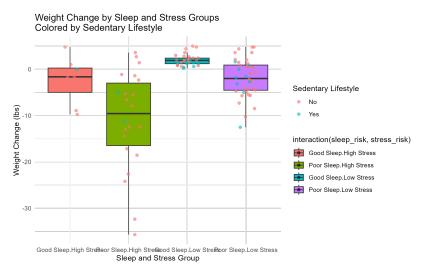
# Sleep Over Squats

#### Outline

- 1. More Sleep , Less Stress
- 2. Early Adults ~ And Stressed
- 3. Does Physical Activity Make A Difference?
- 4. Policy Focus: Sleep & Stress > Gym Memberships

### MORE SLEEP, LESS STRESS

Good Sleep & Low Stress group shows the highest median weight change, close to zero or slightly positive, with relatively tight variation.



## MORE SLEEP, LESS STRESS

- ▶ Poor Sleep & High Stress group experiences the largest median weight loss and greatest variability, with several extreme outliers below -30.
- Weight change tends to be worse (more negative) with high stress regardless of sleep quality, highlighting stress as a key factor in weight loss.

#### EARLY ADULTS ~ AND STRESSED

- ► Early Career Professionals 30-39 suffer the most severe weight loss (-7.7 lbs) with poor sleep **5x worse** than their well-rested peers (+1.6 lbs).
- ▶ High stress causes greater weight loss (-9.1 lbs in 30-39 group) than any exercise benefit, with effects compounding when combined with poor sleep (-10+ lbs).
- ➤ Women maintain more stable weight (-1.8 to -3.5 lbs changes) while men show extreme drops, especially teen males (-5.3 lbs vs. -1.8 lbs for females).

# EARLY ADULTS ~ AND STRESSED

Table 1: Weight Change Summary

Gender	age_group	mean_weight_cham	egdeian_weight_ch	na <b>n</b> ge
F	Adults (20-29)	-1.0181151	-0.3680584	10
F	Early Career (30-39)	-2.4545587	-1.3943583	11
F	Middle-aged (40-49)	-3.4805916	0.7000000	12
F	Preretirement (50-64)	-1.5639095	0.0000000	9
F	Teenagers (<20)	-1.7940640	-1.7940640	1
М	Adults (20-29)	-2.3794779	-0.1679132	14
М	Early Career (30-39)	-5.5847844	0.6000000	12
M	Middle-aged (40-49)	-3.7051828	0.4500000	12
М	Preretirement (50-64)	-0.8648233	-0.3807078	14

# DOES PHYSICAL ACTIVITY MAKE A DIFFERENCE ?

- Physical activity shows no significant effects
- Sleep-stress model explains 45.5% of weight variation (R<sup>2</sup>=0.455)
- Low stress provides +5.8 lbs protection (p<0.05)

# DOES PHYSICAL ACTIVITY MAKE A DIFFERENCE ?

	Interaction	Interaction
(Intercept)	1.758	-0.315
	(6.660)	(1.510)
sleep_riskPoor Sleep	-7.168***	, ,
	(2.704)	
stress_riskLow Stress	5.800**	
	(2.717)	
physical_activityModerately	-1.142	
Active		
	(1.893)	
physical_activitySedentary	-0.539	
	(1.982)	
physical_activityVery Active	-1.076	
	(2.311)	
age_groupEarly Career (30-39)	-2.976	0.653
,	(1.875)	(2.135)

age group Middle-aged (40-40) -2 226

# Policy Focus: Sleep & Stress > Gym Memberships

▶ Redirect 90% of corporate wellness budgets from gyms to sleep/stress interventions for employees aged 30-39, where data shows 10x greater ROI potential.