

# *Sleep and Nutrition:*

## A Two-Way Street



### OVERVIEW

Sleep affects nutrition and nutrition affects sleep. If we want to improve one, we need to pay attention to the other.

### HOW SLEEP AFFECTS NUTRITION

- Sleep deprivation results in more of the hormone that makes us feel hungry (ghrelin), and less of the hormone that makes us feel full (leptin).
- Sleep deprivation stimulates the reward-seeking part of our brain (and food is a big reward!)
- Lack of sleep increases production of stress hormones, such as adrenaline and cortisol. This can change how we eat and increase disease risk.
- During sleep, our body repairs and builds muscle, and breaks down fat for energy. Sleep deprivation may cause more muscle loss and less fat loss.



### HOW NUTRITION AFFECTS SLEEP

- A diet lower in fiber and higher in saturated fat and added sugar predicts lighter, less restorative sleep with more disruptions.
- A low nutrient-dense diet may jeopardize your body's ability to make the hormones and neurotransmitters needed for proper sleep.
- A Mediterranean-style diet is associated with less insomnia and healthier sleep durations.
- Caffeine increases adrenaline and blocks chemicals that initiate sleep.
- Alcohol may help you fall asleep faster, but your sleep quality can suffer.

# Strategies to Optimize Sleep and Nutrition

- Follow an eating pattern that emphasizes fiber and healthy fats, while minimizing added sugar and saturated fats.
- Eat a variety of nutrient-dense foods to ensure your body has what it needs to support your sleep.
- Eat consistently throughout the day - this supports your body's natural circadian rhythms. If you are trying to prioritize sleep, do not make dramatic changes to your eating patterns.
- Don't go to bed hungry or overeat close to bedtime - either one can disrupt your sleep. Especially avoid large, high-fat meals close to bedtime.
- Allow at least 6 hours between consuming caffeine and bedtime.
- Allow at least 3 to 4 hours between drinking alcohol and bedtime.



## BEDTIME SNACK IDEAS

- **Combine protein and complex carbohydrates to stabilize blood sugar** Blood sugar spikes and crashes can disrupt sleep.
  - Greek yogurt with berries
  - Banana with a spoon of peanut butter
  - Whole grain toast with almond butter
  - Cottage cheese with sliced peaches
- **Consume foods rich in tryptophan, magnesium and melatonin - nutrients that support sleep.**
  - Tryptophan-containing foods: eggs, milk, cheese, tofu, salmon, turkey, nuts and seeds
  - Magnesium-containing foods: avocado, whole grains, tofu, bananas, leafy greens, legumes, salmon, nuts and seeds
  - Melatonin-containing foods: tart cherries, milk, eggs, salmon, bananas