

# DIETITIAN'S DISH

A QUARTERLY NEWSLETTER BROUGHT TO YOU BY:  
YOUR MGH WEIGHT CENTER REGISTERED DIETITIANS



**THE IMPACT OF SLEEP ON HEALTH AND NUTRITION**

**HOW TO NAVIGATE STRESS**

**THIS IS THE SEASON FOR SWEETNESS**

**DESSERT RECIPES**

# The Impact of Sleep on Health and Nutrition



## Importance of Sleep

Sleep is a vital biological process that enables the body and mind to recharge and repair. Understanding the intricate relationship between sleep and nutrition is essential for anyone aiming to optimize their health. In our fast-paced world, sleep is often sacrificed for work, social activities, or screen time, leading to chronic sleep deprivation. Whether you're looking to manage your weight, boost cognitive function, or enhance overall well-being, prioritizing sleep is a crucial component of achieving optimal health.



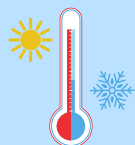
## Sleep and Weight Management

Research consistently shows that getting too little sleep is closely linked to a higher risk of obesity. People who sleep less than 7 hours a night are more likely to have higher body mass indexes (BMI) and a greater chance of weight gain. When we don't get enough sleep, it can disrupt our hormones, making us feel hungrier. Specifically, sleep deprivation raises the levels of ghrelin, the hormone that signals hunger, and lowers the levels of leptin, the hormone that signals fullness. This imbalance can lead to increased hunger and higher calorie consumption.

On the other hand, weight gain may lead to poor sleep quality, as obstructive sleep apnea (OSA) is frequently found in individuals who have obesity. This sleep disorder is linked to poor sleep quality, interrupted sleep, and increased daytime drowsiness. It also raises the risk of heart disease and can affect mental clarity.



## Creating the Perfect Sleep Environment



**Temperature:** A cooler room helps the body maintain a lower core temperature. People have different temperature preferences, so do what makes you feel comfortable.



**Light exposure:** Exposure to light, especially blue light from screens, before bedtime can disrupt the production of melatonin, the hormone responsible for regulating sleep. It is important to minimize screen time and to create a dark sleeping environment.



**Noise level:** A quiet environment is crucial for quality sleep. Consider using earplugs or white noise machines to block out disruptive sounds. Silence phone for sleep disruption.



**Bedding:** Comfortable and supportive mattresses and pillows are essential for good sleep. The quality of bedding materials can significantly impact sleep quality, affecting both comfort and temperature regulation.



## Sleep and Nutrition

As discussed earlier, the quality of your sleep plays a crucial role in regulating hunger and satiety hormones. Poor sleep can further elevate ghrelin and reduce leptin, exacerbating feelings of hunger and reducing feelings of fullness. When you're hungry, your brain tends to crave quick energy sources, often turning to foods high in refined sugars and fats. These choices provide a temporary energy boost but can lead to quicker return of hunger and, consequently, higher overall calorie intake.

On the flip side, the quality and composition of a person's diet have been found to significantly impact both the duration and quality of sleep. Diets low in fiber but high in saturated fat or sugar are linked to less restful sleep.



Research has demonstrated that inadequate intake of essential macronutrients—such as fats, carbohydrates, and proteins—as well as irregular eating patterns, like skipping breakfast, can negatively affect sleep quality. Additionally, the timing of meals and the consumption of items such as caffeine and alcohol are crucial factors in determining sleep quality. Evidence suggests that consuming these substances closer to bedtime can impair sleep quality and increase the risk of insomnia.

## Foods That Support and Disrupt Sleep

Eating foods high in tryptophan, melatonin, and serotonin may improve sleep quality. In adults, consuming tryptophan-rich foods has been linked to better sleep performance and longer total sleep time. Vitamins and minerals like B vitamins, magnesium, and zinc play a significant role in sleep quality. Addressing deficiencies in these nutrients has been shown to enhance sleep duration and overall quality. Maintaining a balanced diet that provides essential nutrients is crucial for achieving restful sleep and boosting daytime performance.



### Nutrients that promote sleep

- Melatonin: eggs, fish, nuts, seeds, berries, tomatoes, and peppers.
- Tryptophan: poultry, eggs, fish, milk, tofu and soy products, chocolate, and seeds.
- Magnesium: fish, nuts, seeds, legumes, fortified grains, spinach, and soy product.



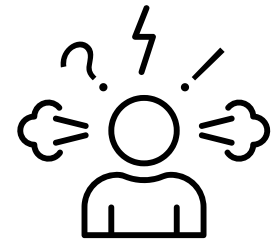
### Foods that disrupt sleep

- Foods and drinks containing caffeine
- Foods and drinks containing alcohol
- High-fat foods, especially saturated fat
- High-sugar foods
- Low fiber intake

#### References

1. Frank S, Gonzalez K, Lee-Ang L, Young MC, Tamez M, Mattei J. Diet and Sleep Physiology: Public Health and Clinical Implications. *Front Neurol.* 2017 Aug 11;8:393. doi: 10.3389/fneur.2017.00393.
2. Pattnaik H, Mir M, Boike S, Kashyap R, Khan SA, Surani S. Nutritional Elements in Sleep. *Cureus.* 2022 Dec 21;14(12):e32803. doi: 10.7759/cureus.32803.
3. Sejbuk M, Mirończuk-Chodakowska I, Witkowska AM. Sleep Quality: A Narrative Review on Nutrition, Stimulants, and Physical Activity as Important Factors. *Nutrients.* 2022 May 2;14(9):1912. doi: 10.3390/nu14091912.

# How to Navigate Stress?



## Understanding Stress

Stress happens when the demands on a person feel too overwhelming for them to handle, leading to physical, emotional, and behavioral reactions. While stress can be helpful for short-term tasks, like meeting a deadline, long-term stress can harm both mental and physical health. Recognizing signs of stress, such as feeling irritable, tired, or having changes in appetite, is important for managing it. By understanding how stress affects us, we can find better ways to deal with challenges and stay healthy.

## Why Learning to Manage Stress Matters?



Learning to manage stress is crucial for keeping both your mind and body healthy, boosting productivity, and improving your overall quality of life. Effective stress management helps you handle challenges better and supports a more balanced lifestyle. Coping strategies can include simple practices like deep breathing and exercise, as well as more involved approaches such as changing your thought patterns and seeking support from others.

## Strategies for Managing Stress

### Physical Activity



- Benefits: Exercise increases the production of endorphins, the body's natural stress reliever, and can reduce adrenaline and cortisol, stress hormones.
- **Examples:** *walking, jogging, running, dancing, weightlifting, yoga.*

### Mindfulness and Relaxation



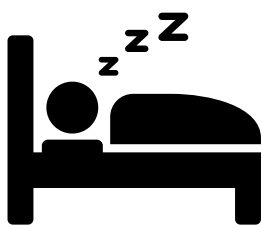
- Benefits: Helps reduce anxiety, depression, psychological distress and stress levels. May promote calmness.
- **Examples:** *deep breathing exercises, meditation or mindfulness practices.*

### Healthy Eating



- Benefits: Balanced nutrition supports overall well-being and helps stabilize mood.
- **Examples:** *consistent meals patterns with a balance of protein, carbs, and healthy fat; limiting caffeine and added sugar; staying hydrated.*

### Sleep



- Benefits: Quality sleep is essential for stress management and overall health.
- **Examples:** *establish a regular sleep schedule and create a relaxing bedtime routine and environment.*

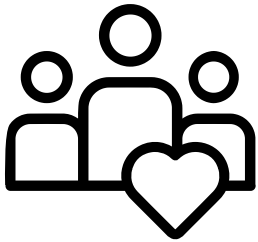
## Strategies for Managing Stress Continued

### Time Management



- Benefits: Helps reduce anxiety by organizing tasks and priorities.
- **Examples:** *break tasks into smaller steps; use planners or digital tools to track deadlines; prioritize important tasks and delegate when possible.*

### Social Support



- Benefits: Talking with friends, family, or counselors can provide emotional support and perspective.
- **Examples:** *regular catch-ups with friends or family; joining support groups or communities; seeking professional counseling or therapy*

### Hobbies and Activities



- Benefits: Engaging in activities you enjoy can provide a mental break and reduce stress.
- **Examples:** *reading, drawing, or playing an instrument; gardening or cooking*

#### References:

<https://my.clevelandclinic.org/health/articles/6392-stress-coping-with-lifes-stressors>

<https://www.health.harvard.edu/staying-healthy/exercising-to-relax>



# Tis the Season for Sweetness

## Apple and Pecan Crisp

Total: 50min

Servings: 8

### Filling

- 5 medium red apples (~800g) peeled and thinly sliced
- 1/4 cup pure maple syrup (60g)
- 1 Tbsp EACH: cornstarch and lemon juice
- 1 tsp EACH: cinnamon and vanilla
- 1/4 tsp salt

### Crisp topping

- 1 cup rolled oats (100g)
- 1/2 cup chopped pecans (56g)
- 1/4 cup packed brown sugar
- 1 tsp cinnamon
- 1/4 cup butter (56g) melted
- optional: a table spoon of low-fat greek yogurt



### Instructions

- Preheat the oven to 350 degrees F. Spray a 9-inch pie dish or 8x8 dish with cooking spray.
- In a large bowl, add the apples, syrup, cornstarch, lemon juice, cinnamon, vanilla and salt and toss to evenly coat.
- In a medium bowl, add all the topping ingredients and mix with a fork to combine.
- Add the apples to the prepared dish. Then add the crisp topping on top.
- Bake for 40-45 minutes, or until apples are soft and it's crisped to liking. You can broil for 1-2 minutes to crisp up the top even more, but watch it carefully so it doesn't burn!
- Serve with a table spoon of low-fat greek yogurt and enjoy!

Adapted from: [laurenfitfoodie.com](https://laurenfitfoodie.com)

<https://laurenfitfoodie.com/the-best-healthy-apple-pecan-crisp/>

# Lemon Cheesecake

Total: 35 min  
Servings: 12 cupcakes

## Ingredients

- 12 reduced fat vanilla wafers
- 8 oz low fat cream cheese, softened
- 1/4 cup sugar
- 1 tsp vanilla
- 6 oz fat-free vanilla Greek yogurt
- 2 large egg whites
- 3 tbsp lemon juice
- 1 tbsp lemon zest
- 1 tbsp all purpose flour
- blackberries for garnish



## Preparation:

- Preheat the oven to 350F.
- Line cupcake tin with liners. Place a vanilla wafer at the bottom of each liner.
- Gently beat cream cheese, sugar and vanilla until smooth using an electric mixer.
- Gradually beat in fat free yogurt, egg whites, lemon juice, lemon zest and flour. Do not over beat.
- Pour into cupcake liners filling half way.
- Bake 25 minutes or until center is almost set.
- Cool to room temperature. Chill a few hours in the refrigerator.
- Top with fresh berries

Adapted from: [skinnytaste.com](http://skinnytaste.com)

<http://www.skinnytaste.com/lemon-cheesecake-yogurt-cups/>

# Date-Pistachio Granola Bars

Total: 1hr 30min  
Sevings: 24 bars

## Ingredients

- 3 cups old-fashioned rolled oats
- 1 cup crispy brown rice cereal
- 1 cup finely chopped pitted dates
- ½ cup hazelnuts, toasted and chopped
- ½ cup unsalted pistachios, toasted and chopped
- ¼ teaspoon salt
- ⅔ cup brown rice syrup or light corn syrup
- ½ cup tahini
- 1 teaspoon ground cardamom



## Preparation

- Preheat oven to 325 degrees F. Line a 9-by-13-inch baking pan with parchment paper, leaving extra parchment hanging over two sides. Lightly coat the parchment with cooking spray.
- Combine oats, rice cereal, dates, hazelnuts, pistachios and salt in a large bowl.
- Combine rice syrup (or corn syrup), tahini and cardamom in a microwave-safe bowl. Microwave for 30 seconds. Add to the dry ingredients and stir until evenly combined. Transfer to the prepared pan and firmly press into the pan with the back of a spatula.
- For chewier bars, bake until barely starting to color around the edge and still soft in the middle, 20 to 25 minutes. For crunchier bars, bake until golden brown around the edge and somewhat firm in the middle, 30 to 35 minutes. (Both will still be soft when warm and firm up as they cool.)
- Let cool in the pan for 10 minutes, then using the parchment to help you, lift out of the pan onto a cutting board. Cut into 24 bars, then let cool completely without separating the bars, about 30 minutes more. Once cool, separate into bars.

Adapted from: [eatingwell.com](https://www.eatingwell.com)

<https://www.eatingwell.com/recipe/259655/date-pistachio-granola-bars/>