# Nourish Your Sleep: How Nutrition Influences Rest Quality

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# Why is sleep important?

Sleep is essential for maintaining overall health and well-being. What happens when you sleep has an impact on how you feel when you wake up. During sleep, your body works to sustain optimal brain function while also maintaining physical health. Sleep is also beneficial for the growth and development of children and adolescents. Getting inadequate sleep can increase the chance of developing chronic (long-term) health problems like dementia, heart disease, type 2 diabetes, obesity and even cancers of the breast, colon, ovaries and prostate etc. Adequate sleep is crucial for optimal functioning, as it impacts our ability to think, learn, work, and interact with others.

# How does nutrition affect sleep?

The phrase "You are what you eat" highlights the significant impact of nutrition on your overall health and well-being. The foods you consume play a crucial role in various bodily functions, including:

- 1. Energy production
- 2. Hormone regulation
- 3. Immune system function
- 4. Cognitive function
- 5. Mood regulation
- 6. Sleep quality

A well-balanced diet provides the necessary nutrients, vitamins, and minerals to support these functions, while a diet lacking essential nutrients can lead to imbalances and negative impacts on your health, including sleep disturbances.

# Sleep-promoting nutritional elements:

## 1. Melatonin-boosting food

Melatonin also known as sleep hormone plays an important role in sleep onset and maintaining the circadian rhythm (sleep-wake cycle). The best sources of melatonin are fruits and vegetables, grains, nuts and seeds.

# 2. Serotonin and tryptophan

Tryptophan plays a crucial role in serotonin production and its deficiency can disrupt sleep patterns. The best sources of tryptophan are dairy



products, poultry, seafoods, nuts and seeds, legumes, fruits vegetables, grains.

Kiwifruit supports good sleep due to its high serotonin content, regulating the sleep-wake cycle. Rich in vitamins C and E, kiwi also provides antioxidant protection. Folate in kiwi prevents insomnia and supports melatonin secretion. Eating kiwi before bed can improve sleep quality, duration, and reduce awakenings.

# 3. Magnesium

Magnesium is a mineral that aids in relaxation and helps deactivate adrenaline. It also plays a crucial role in sleep. Difficulties falling and staying asleep have been directly connected to magnesium deficiency. Magnesium is also often referred to as mineral sleep. Excellent sources of magnesium are dark leafy greens, nuts and seeds, wheat germ, fish, soybeans, banana, avocados, low-fat yogurt.

## 4. Calcium

Calcium promotes the production of melatonin in the brain. Calcium deficiency can induce insomnia and difficulties falling asleep. Calcium-rich diets have been demonstrated to improve insomnia symptoms. The sources of calcium are dark leafy greens, low-fat milk, cheeses, yogurt, sardines, fortified cereals, soybeans, fortified orange juice, enriched breads and grains, green snap peas, okra, broccoli.

## 5. Vitamin B<sub>6</sub>

Vitamin  $B_6$  also helps to convert tryptophan into melatonin.  $B_6$  deficiency has been related to decreased serotonin levels and poor sleep.  $B_6$  deficiency has been

associated with symptoms of depression and mood disorders, including sleeplessness. Highest sources of  $B_{\epsilon}$  are sunflower seeds, pistachio nuts, flaxseed, fish, meat, dried prunes, bananas, avocado, and spinach.

## 6. Drinks



Warm milk, almond milk, valerian tea, chamomile tea, tart cherry juice, passion fruit tea, peppermint tea etc. are some drinks that contain essential vitamins and minerals that help aid with sleep.

## Sleep-disrupting nutritional elements

# 1. Caffeine

One of the stimulants that people take the most these days is caffeine. It is present in common drinks like tea, coffee, fizzy drinks, energy drinks, and chocolates. Caffeine disrupts sleep by binding to adenosine receptors, stimulating the brain, and increasing energy levels. These block the sleep-promoting effects of adenosine, delay sleep timing and reduce sleep quality. Regular caffeine consumption can lead to chronic sleep deprivation, affecting the body's natural sleep-wake cycle and causing problems falling asleep, staying asleep, or getting quality sleep. To minimize its sleep-disrupting effects, it's recommended to avoid caffeine for at least 4-6 hours before bedtime.

#### 2. Nicotine

Nicotine is a stimulant that is present in tobacco products. Cigarettes, e-cigarettes, and vapes are widely used in modern society. Nicotine usage is known to enhance sleep latency and fragmentation while decreasing sleep efficiency and quality. Smokers are more likely to develop sleep-related disorders and reducing nicotine usage can help offset the negative effects on sleep.

**3. Alcohol:** Contrary to common perception, drinking does not enhance sleep. Although it can induce drowsiness and speed up sleep, it can also interrupt sleep and prevent deeper, essential periods of sleep.

## 4. Reflux inducing foods

Consuming fried fatty foods, spicy foods and junk foods close to bedtime can trigger acid reflux and heartburn, resulting in nightly awakenings and poor sleep quality. It is also advised that meals be eaten at least two hours before bedtime, and that you do not lie down right after eating.

## How to eat better for sleep

- 1. Consumed a balanced diet.
- 2. Follow specific diet like Mediterranean diet or DASH diet.
- 3. Incorporate sleep-promoting foods.
- 4. Avoid late-night eating.
- 5. Eat your fruits and vegetables.
- 6. Eat at regular times.
- 7. Avoid reflux inducing foods.
- 8. Avoid heavy meals close to bed time.
- 9. Stay hydrated throughout the day but avoid excessive fluids before bedtime.
- 10. Listen to your body.

#### Conclusion

A well-balanced diet and a consistent sleep schedule are the foundation of a restful night's sleep. By incorporating sleep-promoting foods, avoiding sleep-disrupting substances, and maintaining a relaxing bedtime routine, you can improve the quality of your sleep and wake up feeling refreshed and energized. A good sleep is essential for physical and mental health, cognitive function, and overall well-being. By prioritising your sleep and nutrition, you can enhance your daily life, increase productivity, and live a healthier, happier life.

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