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Nutrition and Sleep: Fascinating Connections



Tricia Silverman, RD, MBA
Registered Dietitian, Fitness Instructor,
Wellness Coach
Tricia Silverman Wellness
tricia@triciasilverman.com
Tricia Silverman

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Session Description

Learn how sleeping well can help to control your cravings and weight. Discover foods, herbs, teas and minerals that can make you feel sleepier and others that may interfere with sleep. Get the eight great, sleep-tight tips.

Sources:

CDC

National Sleep Foundation

Dr. Breus: www.thesleepdoctor.com

"Both insufficient sleep and poorquality sleep make your body want to store fat, not burn it!"

-Dr. Michael Breus, aka the Sleep Doctor

Harvard Nurses Study and Sleep

Sleep restriction affects how you burn calories and increases your risk of putting on weight.

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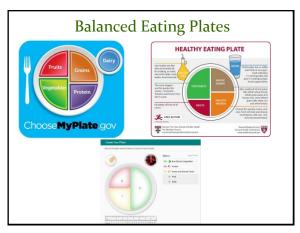
"The best way to decrease your weight is to increase good-quality sleep in conjunction with following a balanced weight-loss diet."

-Dr. Michael Breus, aka the Sleep Doctor

Eat a Balanced Diet

Following a balanced diet will supply you with the nutrients that you need for a good night's sleep.

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Poor sleep appears to increase your appetite.



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Lack of sleep may increase your cravings for sweets, carbs and high-fat foods.



More sleep, less opportunity to eat

Sleeping one hour more may reduce the opportunity to eat, which can result in weight loss.

-Obesity Reviews



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Shocking Sleep and Obesity Trends

In 1960, the obesity rate in US adults was 13.4% and people were sleeping an average of 8 - 8.9 hours a night.

In 2010, the obesity rate climbed to 35% and people were sleeping an average of 6.5 hours a night.

Sleep Apnea

- •Obesity is a significant risk factor for sleep apnea.
- •The more obese a person is, the greater their risk.
- Losing weight, sometimes even just a small amount, can lessen sleep apnea.
- •Reaching a normal weight may even cure it!!

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Sleep Stages

- 5 stages of sleep 4 stages are NREM (Non Rapid Eye Movement)
 - Stages 1 and 2 are lighter sleep Stages 3 and 4 are deeper sleep
- Physical restoration: Body heals, repair and regeneration of tissues
 REM (Rapid Eye Movement) Sleep
- - Mental Restoration
- 90 minute cycle to go through all the stages
- Need 4-5 cycles to restore your body (4 cycles is 6
 - 5 cycles = 7.5 hours sleep)
- 7-9 hours optimal

The 8-Great Sleep Tight Tips: Sleep Hygiene is key!

Have a sleep schedule

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- 2. Eliminate caffeine especially after 2 pm (some may need to eliminate it all together for best results)
- 3. Limit alcohol, especially 3 hours before bed
- 4. If exercise keeps you up, exercise in the earlier part of the day
- 5. Get some sensible sun in the early part of the day
- 6. Wind down 1 hour before bed, dim lights, turn off electronics.
- 7. Eat a balanced diet
- 8. Eat a varied diet

"Sleep deprivation decreases the motivation to exercise."

-Dr. Breus

National Sleep Foundation's Sleep Quality Recommendations

• Sleep latency: time it takes to fall asleep up to 30 minutes = good sleep quality 45+ minutes = poor sleep quality, except for older adults 60+ minutes = poor sleep quality, all adults

Awakenings

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1 or less = good sleep quality up to 2 per night = good sleep quality for older adults 4 or more = not an appropriate indicator for sleep quality

Wake up after falling asleep

≤ 20 minutes =good sleep quality ≥ 51 minutes or more does not indicate good sleep quality

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National Sleep Foundation's Sleep Quality Recommendations

- **Sleep efficiency** the ratio (percentage) of the total time spent asleep (total **sleep** time) in a night compared to the total amount of time spent in bed.
 - ≥ 85% indicates good sleep quality ≤ 74% does not indicate good sleep quality
- Naps: Taking 4 or more does not indicate good sleep quality. A nap greater than 100 minutes does not indicate good sleep quality

Alcohol and Sleep

- •Alcohol may make you sleepy, but interferes with the deep stages of sleep.
- •You may wake up more and find it hard to get back to sleep.
- •Decreases REM sleep

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Tea Time!

Chamomile Tea and Valerian Tea may help promote sleep.



Caffeine

- •Caffeine can stay in your body as long as 15 hours and is linked to disturbed sleep.
- •Consider cutting back, or avoid and see how it affects your sleep.



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Caffeine

Pros

- Between 20 200 mg of caffeine May aggravate depression by may contribute to increased well-being, happiness, energy, alertness, and sociability
 - per caffeine expert (reported in Nutrition Action Newsletter- CSPI 3/08)
- Enhances memory and reaction
- In sleep-deprived, may perform complex activities better

Cons

- lowering serotonin levels
- Consumption within 3-5 hours will affect the sleep of most people. Can contribute to insomnia
- · Eliminate (coffee, tea, chocolate) for 2 weeks and see how you feel

Caffeine Guidelines

- Moderate caffeine intake does not appear to cause any significant health risk.
- The US Dietary guidelines lists moderate caffeine consumption as a limit of 400 mg per day (3-5 8oz cups of coffee), noting that most of the research on caffeine has been done on
- Six or more 8 oz. cups of coffee per day is considered excessive intake of caffeine.

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The amount of caffeine in some common foods and beverages is as follows:

Coffee, brewed - 40 to 180 mg. per cup Coffee, instant - 30 to 120 mg. per cup

Coffee, decaffeinated - 2 to 5 mg. per cup

Tea, brewed American - 20 to 90 mg. per cup Tea, brewed imported - 25 to 110 mg. per cup

Tea, instant - 25-50 mg. per cup

Cocoa - 2-20 mg. per cup

Chocolate, milk - 2-7 mg. per ounce

Chocolate - bittersweet - 5-35 mg. per ounce

Cola and other soft drinks, containing caffeine - 36 to 90 mg. per 12 ounces

Cola and other soft drinks, decaffeinated - o mg. per 12 ounces

-U. of Illinois Health Center website

Variety of foods

Having fewer foods in the diet associated with difficulty maintaining sleep

- Journal of Sleep Research

Eat a variety of foods

- -Produce from across the colors of the rainbow
- -Eat nuts, seeds, and beans
- -Different types within food groups to get a range of micronutrients

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Hot Cup of Milk

- •There is not a lot of evidence showing that a hot cup of milk is helpful for sleep
- •However, this is a remedy that has been passed down through generations, so it may be worth giving it a try

Calcium



- -May calm the nervous system
- -Associated with
 - -less difficulty falling asleep
 - -More restorative sleep





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Calcium Rich foods

low fat and fat free dairy products, salmon with bones, soy foods, leafy green vegetables, enriched food products, sardines, almonds

Vitamin D, the Mediterranean Diet and Sleep

- •Vitamin D
- -May help with maintaining sleep
- Mediterranean Diet associated with less risk for insomnia
 - American Geriatric Psychiatry
- More difficulty falling asleep with a higher intake of hexadecenoic acid, a saturated fat found in meat, cheese, milk and butter

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Chocolate, tomatoes, bananas and your sleep!

- Theobromine: Associated with daytime sleepiness • Sources: Cocoa/chocolate, tea
- Lycopene: May help with falling asleep

 sources: tomato, tomato products, red fruits and vegetables such as watermelons, pink grapefruits, apricots, and pink guavas
- Potassium: Associated with less daytime sleepiness

 sources: banana, sweet/white potato, spinach,
 beets, black/white beans, butternut squash,
 edamame, swiss chard, salmon
- Total Water (and less of other types of beverages) associated with healthy sleep, and less non-restorative sleep and less daytime sleepiness.

Whole Grains

- •Structure:
 - •Bran, germ, endosperm
- •Examples: Whole Wheat, Oats, Rye, Barley, Amaranth, Quinoa, Kamut, Spelt, Millet, Brown Rice, Popcorn

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Serotonin

Serotonin is a neurotransmitter

- •calms you, reduces anxiety, and may promote drowsiness
- •Boost serotonin by consuming carbrich whole grain breads, cereals, grains, and pasta
- •A carb-rich snack an hour before bed may help promote sleep

Tryptophan

- •an amino acid
- •a precursor for serotonin
- Include tryptophan rich foods in the diet.
 - Protein rich foods such as fish, poultry, nuts, beans and dairy products contain tryptophan.
 - Protein can be stimulating, so opt for carbrich portion-controlled snacks before bedtime

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Copper and zinc deficiencies may affect your sleep.

Copper Rich Foods

pecans, sesame seeds, cashews, peanuts, cremini mushrooms, soy products, barley, sunflower seeds, garbanzo beans

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Zinc Rich Foods

lean beef (however limit red meat), spelt, scallops, sesame seeds, pumpkin seeds, oats, yogurt

Iron

Iron deficiency can trigger restless legs syndrome, which can affect your sleep. Check with your doctor to see if you may be deficient

Iron rich foods: lean beef (however limit red meat), beans, sunflower seeds, tofu, whole grains, oysters, light tuna, chicken, turkey, raisins, fortified food products such as cereal

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Magnesium Rich Foods

Magnesium may increase good quality sleep





Magnesium rich foods: nuts, sunflower seeds, whole grains, spinach, beans, bananas, dairy products, raisins

B Vitamins

- •B vitamins play a role in various mechanisms that affect sleep
- •Some foods with B vitamins: whole grains, cereals, nuts, potatoes, broccoli
- •If you take B vitamins in supplement form, take early in the day as they may have a stimulating effect

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Tart Cherries

Small studies have found that tart cherry juice reduced the severity of insomnia in study participants. This may be due to the presence of natural melatonin in cherries

Are night sweats interfering with your sleep?

Soy foods may reduce hormone-related night sweats. Try edamame (soy beans), roasted soy nuts, tempeh, tofu, soy milk, and soy-based veggie burgers

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Spices for better sleep

Nutmeg, turmeric, garlic, parsley, dill, sage and basil may promote sleep



Sleepy Snack Ideas

Changing what you eat at night may help you get better sleep. Portion controlled high-carbohydrate snacks boost levels of the brain's sleep chemical serotonin without overloading your digestive system.

For better sleep, try eating one of the following an hour before bed. (Those with blood sugar control issues should check with their physicians first.) 25-35 grams of carbohydrate eaten without much protein can have a mood-boosting or sleepiness-enhancing effect. This is not recommended for diabetics as the carbs alone may spike blood sugars.

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Sleepy Snack Ideas: 25 - 35 g carb

*Two slices Sprouted Wheat® bread w/ ½ T jam

*¾ Cup Kashi Heart to Heart Honey Toasted Oat Cereal®

*1½ Cup Cheerios®

*One Matthew's® Whole Wheat English muffin w/ 1 T Apple Butter

*½ T fruit spread on whole grain crackers

*1-2 Brown Rice Cakes with jam

*Half of a whole-wheat English muffin with honey

*Two cups of air-popped popcorn

*A frozen whole-wheat waffle, toasted, with maple syrup

*Half a cup of whole wheat pasta topped with marinara sauce

*A 4-ounce baked potato topped with salsa

*A few whole grain crackers and a piece of fruit

Some Snack Ideas Adapted from Real Age.com

Contact info:

tricia@triciasilverman.com

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