

NUTRITION NEWSLETTER

Educating our community one
bite at a time



Spring 2018

Ingredients

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Sleep and Body Weight

Is sleep really *that* important? What happens when you do not get enough sleep? The explanation is actually more surprising than you think. There have been numerous research published identifying the relationship between the lack of sleep and weight gain. According to some, the less sleep you get, the more likely you are to be overweight. The average American today is sleeping less than a century ago (about 60-90 minutes less per night). At the same time, there has been a large increase in body weight. This observation is seen in adults as well as children. If less sleep can lead to weight gain, could the reverse be true? Is it possible to lose weight simply by sleeping more?

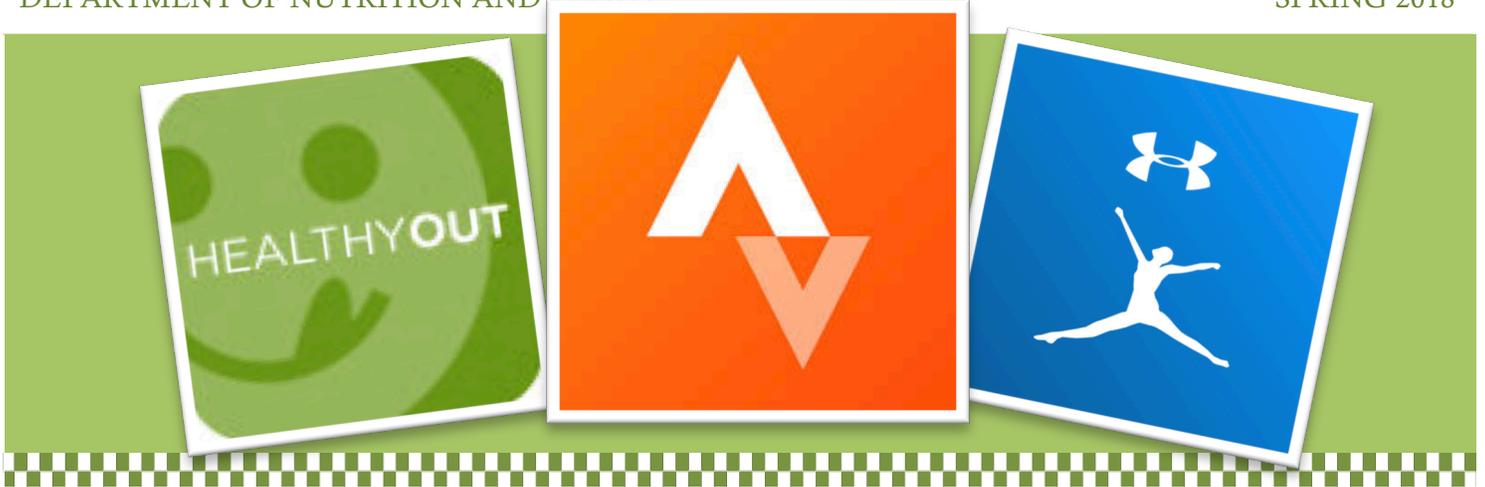
Although it is unlikely that you will be able to lose weight simply by sleeping more without making other dietary or lifestyle changes, getting adequate sleep may prevent you from gaining weight and may help you lose body fat. Kaiser Permanente Center for Health Research conducted a study on adult weight loss and reported that the participants who lost weight (about 10 pounds) and were successful at keeping it off were individuals who attended the counseling sessions, reduced their daily caloric intake by 500 calories a day, exercised 180 minutes or more a week, kept a food diary **and** slept between six to eight hours a night. They concluded that those who slept more had lower stress score and

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What's Our Secret?

One way to shorten the cooking time for many of dry ingredients is to soak them—ideally overnight. You may be familiar with pre-soaking dried beans, but did you know you could do the same for pasta? Place the pasta in a zip-lock-type bag or large pot/pan with enough water. Cover overnight (or if you forgot the night before, just do it in the morning before you head out to work, and it will be ready when you come home to make dinner). When ready, simply placed the pre-soaked pasta in boiling water and it will cook in a minute or two!



Ask the Nutrition Experts:

What's the Best Nutrition App?

Although I have a smartphone, I do not use as many of the free apps that are available. The only two nutrition/physical activity related app that I use: MyFitnessPal (MyFitnessPal.com) and Strava. Are they the best? Well, they are free and they give me the information that I want. A phone app like MyFitnessPal allows you to log your daily food intake along with your physical activity. It totals your calories and few other nutrients. It also allows you to import recipes to get a nutrient breakdown of your home-cooked meals. It has an enormous database for food, primarily because users add nutrition information to the database. However, since the information is self-entered, the nutrition information may not be accurate. MyFitnessPal also tracks your physical activity (from a large/long list of activities). Unfortunately, I find

(as with most fitness app) it overestimates the calories burned.

Strava (Strava.com) allows me to track my physical activity (biking, running) using satellite navigation (while you are working out). Once you upload your activity, you can compare your results to others who completed the same route. It also allows me to compare my own workout to see if I have improved over time. (And yes, this is the same app that made headlines because it revealed the “heat map” of runners/joggers around military bases in Afghanistan.)

Other nutrition apps available can be useful. HealthyOut (healthyout.com) allows you to find healthy(ier) options at local restaurants by reviewing their menus. It also makes suggestions on how you can modify the menu item to make it

healthier. HealthyOut also allows you to search (restaurants) by your food preference/allergies/intolerance such as gluten-free options.

ShopWell (shopwell.com) helps you choose healthy foods when you go to the grocery store. It can help you identify the foods based on your individual (weight) goal and dietary restrictions (allergies/intolerance). It basically tells you what is in the food that you are buying. This app reads the food label and packaging for you so you do not have to.

Phone apps can be helpful in tracking food intake and physical activities. However, the best app is the one that will motivate you to make the best choices.



Kidney Stones: treating with diet

By Mary Angela Hart, Nutrition Student
&
D. Wassmer



Raising the urine pH to an alkaline level can minimize kidney stone formation.

To improve your health, never eat spinach, sweet potatoes, Swiss chard, blackberries, beets, nuts, beans, or whole grains again! What kind of crazy nutrition advice is this? It may sound outrageous, but this is frequently the advice given to patients who suffer from calcium oxalate kidney stones. To minimize their risk of recurrence, patients are told to adhere to a low-oxalate diet that limits or excludes hundreds of nutritious foods. The list of what must be restricted or avoided also includes tomato sauce, carrots, celery, potatoes, curly kale, all soy products and many spices such as black pepper, chili powder, curry powder, and cinnamon. As the patient tosses out their green smoothies and quinoa salad and then struggles to create a balanced diet out of nothing but cucumbers and cauliflower, they may begin to wonder if good nutrition is still feasible. Not only is avoiding oxalate-containing vegetables not necessary, eating a diet of plant foods was associated with a reduced risk.

Doctors from Harvard Medical School and Tufts University reviewed the latest literature regarding the *Nutritional Management of Kidney Stones* and concluded that much of the conventional nutritional advice will help calcium oxalate stone formers reduce their risk of recurrence. They recommend

maintaining calcium intake at around 1200 mg/day and limiting sodium to less than 2,000-3,000 mg/day. Their review also summarizes why excessive protein consumption should be avoided.

The doctors also support several common nutritional recommendations as being useful for stone formers including increasing fluid/water intake; increasing potassium, especially by increasing fruit and vegetable intake; following the Diet Approaches to Stop Hypertension (DASH) diet; increasing magnesium; and, avoiding excess vitamin C supplementation.

In 2009, Dr. Antonio Nouvenne and his team of doctors from the University of Parma in Parma, Italy, verified that the prescription of a normal-calcium, moderate-protein, low-sodium diet, when added to the existing low-oxalate guidelines, lowered the risk factors for recurring kidney stones significantly more than the low-oxalate diet on its own. The target for sodium within the study was set at an ambitious goal of less than 1900 mg/day. The normal-calcium and moderate-protein levels,

however, were more in keeping with current recommendations for the average healthy adult with calcium intake set at 1200 mg/day and protein at 0.8 g/kg of body weight.

Animal products do not contain oxalates but any excesses in protein could increase calcium excretion and lower urinary pH, both of which can add to the risk of kidney stone formation. Adding more calcium rich products to an otherwise low-calcium diet, however, could offer some protection against stone formation. In the digestive tract, calcium binds to oxalate from foods and prevents its absorption. This reduces the amount of oxalate that could reach the kidneys. When limiting spices, the patient might rely more heavily on salt to add flavor, but this increase in sodium has its own undesirable consequences. Excess sodium amplifies calcium excretion and stone risk in sodium-sensitive individuals.

A reduction in animal protein also limits the excretion of urate that can form stones.

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Sleep ~ con't from page 1

therefore were able to lose more weight and in most cases were better at keeping it off. So that leads to the question, is there something in sleep that helps the body lose weight?

There are some obvious reasons for the increased body weight seen in people who sleep less. With more hours awake, there is more time to eat. If you are up watching late night television, the commercials are enough to entice you to eat more. The type of food consumed during the late hours of the night is typically high fat, sugary and calories (i.e., chips, cake, cookies, ice cream, etc.). Not getting enough sleep also makes you tired during the day. To stay awake, you may end up snacking on extra calories. With daily consumption of these extra calories, it is easy to see how the weight can add up.

More time to eat can lead to excessive caloric intake but it is not the only reason for weight gain. Researchers found that people who sleep less also burn fewer calories. Sleep has its prescribed cycle and different stages of sleep. The best and deepest sleep in a cycle occurs during periods of rapid eye movement (REM). In addition, the brain is most active during REM sleep and this requires more energy and therefore, burns more calories than lying on the couch watching television! A typical person getting eight hours of sleep may go through three to five cycles of sleep per night. What is interesting to note is that the longer you sleep, the longer your period of REM lasts per sequential sleep cycle. In other words, when you get more sleep, you also get a higher quality of sleep due to longer and longer periods of REM sleep. When you get fewer hours of sleep, you miss out on the long periods of REM sleep. As a result, you get fewer and shorter cycles of sleep if you sleep five hours a night compared to more cycles of sleep (with longer REM sleep with each progressive cycle) when you sleep for eight hours a night. (The study did not examine sleep patterns with more than eight hours of sleep.) With fewer cycles, there is less REM sleep and you miss out on burning more calories. In addition, less sleep affects certain hormones. With fewer hours of sleep, the body depresses the level of growth hormone in the body. Growth hormones assist the body to lose body fat as well as grow muscles. With a lower level of growth hormone, the body has a harder time losing fat. In a controlled study, overweight participants on a calorie restricted diet were allowed to sleep for eight hours for two weeks followed by 5.5 hours of sleep the next two weeks. The results show that even though the amount of weight loss was the same for the two different sleep periods, the amount of body fat loss was significantly different. With adequate sleep, the participants lost 3.1 pounds of fat and 3.3 pounds of lean mass. With less sleep, the same participants lost 1.3 pounds of fat and 5.3 pounds of lean mass. The calorie-controlled diet prompted the participants to lose the same amount of weight. However, with a lack of sleep, the body has a harder time losing body fat and appears to retain the fat even with the low caloric intake.

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Kidney Stones ~continue from page 3

Raising the urine pH to an alkaline level can minimize kidney stone formation. This can accomplish by removing meat/animal products and eating more plant-based foods. The most alkaline-forming foods include most fruits and vegetables, whereas, the most acid-producing foods are animal products.

Every patient should seek professional guidance in the treatment of their particular stones, but they should also understand that the general guidelines of normal-calcium, moderate-protein, reduced-sodium, plenty of water and a variety of whole plant foods, fruits, and vegetables that provide vitamins and minerals, will keep them thriving.

Did You Know...

Acidity - Alkalinity Forming Food

To follow-up on Mary Angela Hart’s article on kidney stones, this table may be helpful for those who may want to increase the alkalinity of their urine to prevent further stone formations. Please note the pH listed does not represent the pH of the food itself but its ability to be acid or alkaline forming once it is digested and absorbed in the body. (Sources: www.fridgecheck.com; perfecthealthblog.com)

Eat Less



Eat More

pH	Examples of Food Item	
3	French fries, most deep fried foods, sausages, bacon, alcohol, soft drinks, carbonated drinks, energy drinks, aspartame	Acid forming
4	Cream cheese, pork, veal, shellfish, beef, pastries, buttermilk, cranberries, pasta, white vinegar, artificial sugar	
5	White rice, white bread, turkey, chicken, sugar, coffee	
6	Processed juice, dried fruits, brown rice, butter, yogurt, milk, eggs, fish, plums, cocoa, oats, tea	Neutral
7	Tap water, spring water, basmati rice	
8	Tomato, mushroom, turnip, bell pepper, radish, wild rice, olives, apricot, strawberries, pineapple, peaches, apples, bananas, almonds, tofu, apple cider vinegar	
9	Sweet potato, melons, lettuce, zucchini, avocado, okra, peas, eggplant, blueberries, grapes, kiwi, tangerines, mango, dates, figs, pears, beets, green tea	
10	Spinach, broccoli, artichokes, seaweed, lemons, red cabbage, cucumber, onion, cauliflower, asparagus, Brussels sprouts, collard greens, carrots, kale	
		Alkaline forming

What Changed for Me – From a CRC Student

By Alissa Frey; published in the Lodi News Sentinel

Family can be the biggest contributors to one’s success, and this is certainly the case for me. I started my plant-based journey towards the end of September 2017, however, it is not the first time I was introduced to the idea. I have a cousin who was the first in our family to “make the switch.” Family occasions were always fun, and with my cousin’s food preferences in mind, I found it more of a challenge than a burden,

to find alternatives we could all enjoy. We started tweaking what we served during the holidays, and one by one, each of our family dinners began to include some tasty plant-based alternatives to our “old standbys.” While I actually enjoyed the variety, at that point, I was not ready to give up animal products in my own diet. I was convinced that what I was eating was good for me, even

though the scale and multiple doctor’s visits told a different story. I decide during an extra credit assignment in my nutrition class, that I would embark on this plant-based journey and see for myself. Spoiler alert... That was more than 4 months ago, and I am still going strong!

Each day presents new experiences, and I couldn’t have asked for a better support system
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What Changed for Me - continue



than the one I found in my family! Once I accepted the challenge, it was easy for me to get excited about it. Having love and support from my family is really important to me, because I would definitely feel a bit lost without them. It can be much easier to give up on my goals if I did not have anyone to push me to be the best I can be. I look forward to spending time with them, including Super Bowl Sunday! I have been working on my own recipe for one of my favorite sandwiches, and I cannot wait to share it! If you are unfamiliar with jackfruit, this is the perfect recipe to try! Jackfruit is a tropical fruit that can weigh 80 or more pounds! When it is cut in its unripe form, it can be used in savory dishes to replicate “pulled pork” or “pulled chicken.” Thankfully, you will not need to pull out a machete, since jackfruit is canned in water and is showing up on supermarket shelves. Not only did I make BBQ jackfruit sandwiches with coleslaw on top, but I also decided to go all out and make my own BBQ sauce and creamy dressing for the coleslaw, from scratch! It took quite a few adjustments, but once I perfected this recipe

(below), I shared it with my family and neighbors, and everyone gave it a “thumbs up!”

“Pulled” Jackfruit

Ingredients

20 oz can of unripe “young” jackfruit canned in water (available at Trader Joe’s)
1 cup of “Frey-style” BBQ sauce (or your favorite brand/recipe), more to taste

Procedure

1. Simmer jackfruit in a saucepan with 1 cup of water until tender and easy to shred with a fork.
2. Mix 1 cup of BBQ sauce to the shredded jackfruit, adding more BBQ to taste.
3. Serve on top of bun and add cole slaw.

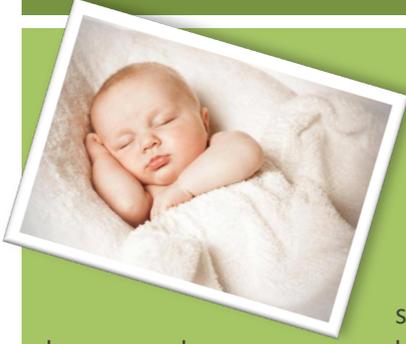
Alissa’s Creamy Cole Slaw

Ingredients

½ cup vegan mayonnaise
½ cup of unsweetened almond milk
½ tsp of onion powder
1 tsp of date syrup (or maple syrup)
1.2 TBSP of lemon juice
1 TBSP of apple cider vinegar
12-16 oz package slaw mix (shredded red & green cabbage with carrots)
½ cup of green onions (sliced)
¼ cup of sesame seeds (black or white)

Procedure

1. Combine dressing ingredients and pour over shredded cabbage, being careful not to over dress the slaw.
2. Top with green onions and sesame seeds.



Sleep ~ continue from page 4

When you are deprived of sleep, you are forcing your body to work without adequate rest. As a result, your body is under more stress. In response, the body will secrete more cortisol, a stress hormone. Cortisol causes you to feel hungry, prompts you to eat more and adds to the weight gain.

hunger and your

eat more. Leptin is the opposing hormone and it signals you to stop eating when you are full. The level of leptin decreases causing you to eat more without feeling full when there is a lack of sleep. As a result, the two hormones work in unison to make you eat more, causing weight gain.

Not only does lack of sleep affect hunger and appetite, it also disrupts your body's ability to metabolize carbohydrates (sugars). Your body normally breaks down carbohydrates into sugar (glucose). Every living cell uses glucose as a source of energy. Insulin transfers the glucose from the bloodstream into the individual cells. When there is inadequate sleep, your body has a harder time secreting insulin. In a research study, young, healthy subjects were allowed three nights of eight hours of sleep per night followed by six nights of four hours/night and ended with seven nights of twelve hours/night. The results showed that the subjects experienced a significant alteration in their ability to metabolize glucose during the sleep deprivation days. Without sleep, the subjects decreased their insulin secretion by 30%. The subjects experienced elevated blood sugar similar to insulin resistance or type 2 diabetes patients. The glucose and insulin levels returned to normal when the subjects slept for twelve hours/night suggesting that the body may need more than eight hours a night to function at its best.

You can help yourself fall asleep quickly by limiting your intake of caffeinated food/drinks, especially during the late afternoon (too close to bedtime). Exercise is a very good thing, but it is best to avoid exercising too close to bedtime. It is recommended that you should not exercise less than four hours before bedtime. Keep your bedroom dark, cool, quiet and comfortable to promote sleep. In this over-extended and over-committed society, sleep is the easiest thing to cut back on. However, doing so is not good for your health. In fact, before you decide if you should sign up for another commitment, I suggest you sleep on it.

Feedback? Comments? Questions? Contact us!

We love to hear what you think about our newsletter.

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