

# March 2014 Wellness Bulletin Board Kit



To: Oklahoma BCs & Wellness Contacts

From: OKHealth Wellness Program Staff

The March 2014 Wellness Bulletin Board Kit is all about **National Nutrition Month** and **Sleep Awareness**. Of course, Choose2Lose Challenge and ChooseFit Challenge continue!

We will continue to send helpful tips and tools each week of the challenge(s).

If you have not yet recruited a ChooseWell Coordinator (CWC) to lead your wellness activities, please do so. Call OKHealth if you need help! 😊 **405-522-1190, ext. 3, or email us at [wellnessgroup@omes.ok.gov](mailto:wellnessgroup@omes.ok.gov).**

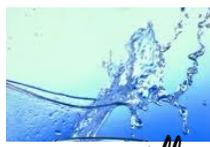
## Wellness Bulletin Board Tips:

1. Create the bulletin board in a break room or other high traffic area.
2. Use borders and handouts to fill the Wellness Bulletin Board.
3. Make your 'wellness board' agency-unique.
4. Use colored paper as the background.
5. Cut the handouts in different shapes and sizes.
6. OR, copy and distribute handouts to all employees.

Brought to you by OKHealth Wellness, Wellness for State Government Employees of Oklahoma



# March 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<b>National NUTRITION Month</b>						1 Peanut Butter Lovers' Day
2 National Sleep Awareness Week (2—9) 	3 National School Breakfast Week (3—7) 	4	5	National Frozen Food Day	Employee Appreciation Day <b>Thank you.</b>	8
9 National Colorectal Cancer Awareness Month	10	11	12 Plant a Flower Day 	13 Popcorn Lover's Day 	14	15 Incredible Kid Day 
16 	17 St. Patrick's Day 	18	19 Kick Butts Day: Campaign for Tobacco-Free Kids 	20	21	22 World Water Day 
Take a Walk in the Park Day 30	24	25 Pecan Day 	<b>ChooseFit Continues!</b> Exercise 3x for 30 min. Feb. thru March. 5 wks 	<b>Choose2Lose Continues!</b> Lose 2 lbs. per week or less! January thru March (12 weeks) 	29	<b>ChooseWell</b> <b>CHOOSE ZLOSE</b>

# A Simple Plan for Eating:

## Welcome to the Beginner Nutrition Plan

by Dr. Joseph Mercola

<http://www.mercola.com/nutritionplan/beginner.htm>



For two reasons, I feel it's best for most people to start at the beginner level of this nutrition program.

### Listen to your body!

This is one of the most important principles in this series of recommendations. If any food or supplement makes you sick in any way, stop it immediately!

### Step 1: Eliminate all wheat, gluten, and highly allergenic foods.

Gluten is the primary protein found in wheat. In my experience, there is an epidemic of hidden intolerance to wheat products.

### Step 2: At least one-third of your food should be uncooked (raw).

Valuable and sensitive micronutrients are damaged when we heat foods. If you're consistently feeling hungry, you're likely not getting sufficient amounts of the nutrients your body needs to thrive.



### Step 3: Eat more vegetables.

Nearly everyone would benefit from eating as many vegetables as possible within the

allowances of their nutritional type design limits, or their unique biochemical individuality. Please remember that you are unique; your body knows best, and will tell you what is an optimal type and amount for you.

### Step 4: Keep your vegetables fresh.

If you are unable to obtain organic vegetables, you can rinse non-organic

vegetables in a sink full of water with 4-8 ounces of distilled vinegar for 30 minutes. When storing fresh produce, be sure and squeeze as much air as you can out of the bag that holds the vegetables and then seal it. This will double or triple the normal storage life of your vegetables.



### Step 5: Limiting sugar and fructose is crucial.

Evidence is mounting that excessive amounts of sugar—all forms of sugar, but fructose in particular—is the primary factor causing not just obesity, but also many if not most chronic and lethal diseases.

**Step 6: Avoid Artificial Sweeteners.**

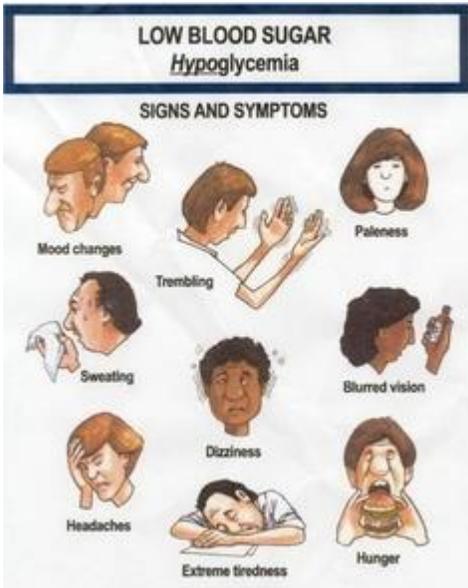
While all the sugars listed above are best avoided, NONE of them are as bad or toxic as artificial sweeteners.

Many people ask about Splenda, Equal or Nutrasweet (Aspartame). These artificial sweeteners need to be eliminated. Natural Stevia is a safe, natural alternative.



**Step 7: Avoid hypoglycemia.**

Eat every two hours until your insulin and leptin levels have stabilized. Eat some protein, such as an egg, piece of free range pastured chicken, turkey, fish, or some organic seeds, along with a vegetable such as a piece of celery, cucumber, or red pepper. This will help to stabilize your blood sugar. Even after your system has adjusted, it is wise to eat 4-6 meals a day.



By NovolinCare

**Key to Success—10 Recipes**

All you need to do is find at least ten recipes that you like. You may not believe this but that is all that most families use. It is vitally important to have variety. Do NOT rotate between just two or three meals or you will burn out and end the program. Variety is the key.

**Step 8: Learn to distinguish physical food cravings from emotional food cravings.**

If you are seeking sweets or grains because of an emotional challenge, you will want to consider using the simple and effective psychological acupressure technique, EFT, to rapidly help you control your emotional food cravings.



EFT is psychological acupressure. It is an inexpensive, simple and proven way to eliminate the negative emotions barring you from a full and healthy life. And the Emotional Freedom Technique -- or EFT -- is the most powerful form of this technique available.

**EFT Can Help You:**

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For two reasons, I feel it's best for most people to start at the beginner level of this nutrition program.

- There are several basic requirements in this beginning plan that will take time and patience to integrate into your daily life, and these requirements are essential to move on to my intermediate and advanced nutrition plans.
- You need to allow your body to adjust to lowered insulin/leptin levels.

### Listen to your body!

This is one of the most important principles in this series of recommendations. If any food or supplement makes you sick in any way, stop it immediately!

### Step 1: Eliminate all wheat, gluten, and highly allergenic foods.

Gluten is the primary protein found in wheat. In my experience, there is an epidemic of hidden intolerance to wheat products. There are frequently no obvious symptoms. Rice, corn, buckwheat and millet have glutes, but the glutes in these foods do not contain the gliadin molecule that can provoke the inflammatory reaction. Therefore, they are usually safe. Other safe grains include quinoa and amaranth.

When you eat a food that you're sensitive to, it causes a series of negative biochemical reactions in your body, especially in your digestive tract and immune system. However, it also decreases your serotonin levels, which can have a marked negative impact on your mood, and can cause you to turn to simple sugars and carbohydrates for relief.

For most people with gluten intolerance, by around 6 to 9 months of being gluten free, noticeable physical and mental/emotional changes will have taken place.

### Step 2: At least one-third of your food should be uncooked (raw).

Valuable and sensitive micronutrients are damaged when we heat foods. High heat and processing alters nutrient chemical composition. In fact, malnutrition -- nutrient deficiencies -- from consuming a highly processed diet is one reason why many people cannot lose weight, because it leads to overeating. If you're consistently feeling hungry, you're likely not getting sufficient amounts of the nutrients your body needs to thrive.



### Step 3: Eat more vegetables.

Nearly everyone would benefit from eating as many vegetables as possible within the allowances of their nutritional type design limits, or their unique biochemical individuality. Please remember that you are unique; your body knows best, and will tell you what is an optimal type and amount for you.

For example, an Eskimo simply can't eat as many vegetables as a Peruvian Indian can. Not only would they feel poorly, but



they'd likely develop a ravenous appetite matched only by their sweet cravings, as well as who-knows-what degenerative process and emotional imbalances.

So, while we all need vegetables to stay healthy, the type and amount should be determined by your nutritional type, which is based on your individual biochemistry. For example, carbohydrate types need far more vegetables in their diet than protein types.

### Step 4: Keep your vegetables fresh.

If you are unable to obtain organic vegetables, you can rinse non-organic vegetables in a sink full of water with 4-8 ounces of distilled vinegar for 30 minutes.

When storing fresh produce, be sure and squeeze as much air as you can out of the bag that holds the vegetables and then seal it. The bag should look like it is vacuum-packed.

Fruits and vegetables release ethylene gas while ripening after harvesting or picking. This ethylene gas accelerates ripening, aging and rotting. Removing as much air as possible out of the bag can help decelerate this process. I do this by holding the bag against my chest and running my arm over the bottom of the bag to the top, which bleeds the air out of the bag.

This will double or triple the normal storage life of your vegetables.



### Step 5: Limiting sugar and fructose is crucial.

Evidence is mounting that excessive amounts of sugar—all forms of sugar, but fructose in particular—is the primary factor causing not just obesity, but also many if not most chronic and lethal diseases.

As a standard recommendation, I strongly advise **keeping your TOTAL fructose consumption below 25 grams per day.**

For most people it would also be wise to limit your fructose from fruit to **15 grams or less.**

At the heart of it all is the fact that excessive sugar consumption leads to *insulin and leptin resistance*, which appears to be the root of many if not most chronic disease. Insulin resistance has even been found to be an underlying factor of cancer.



If you received your fructose only from vegetables and fruits (where it originates) as most people did a century ago, you'd consume about 15 grams per day. Today the average is 73 grams per day which is nearly 500 percent higher a dose and our bodies simply can't tolerate that type of biochemical abuse. (See Chart of "Fructose in Fruits, Vegetables, Nuts, Seeds, Legumes and Grains" at Family Wellness hq:

<http://familywellnesshq.com/fructose-in-fruits-veggies-nuts-seeds-legumes-grains/>)

### **Step 6: Avoid Artificial Sweeteners.**

While all the sugars listed above are best avoided, NONE of them are as bad or toxic as artificial sweeteners.

Many people ask about Splenda, Equal or **Nutrasweet (Aspartame)**. These artificial sweeteners need to be eliminated. There are more adverse reactions to

Nutrasweet reported to the FDA than all other foods and additives combined. In certain individuals, it can have

devastating consequences. You should also avoid artificial chemicals like **MSG**.

If you are healthy you can use a few teaspoons of succanat, or better yet, dextrose (pure glucose with no fructose) intermittently. Natural **Stevia** is also a safe,

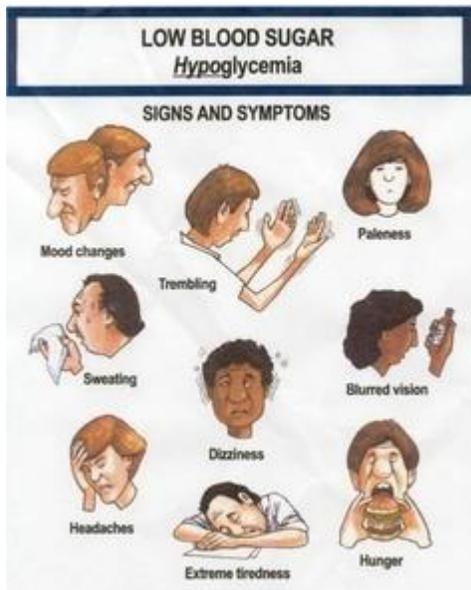
natural alternative. It is hundreds of times sweeter than sugar and has virtually no calories. Some don't like its taste, but other than that it is nearly the ideal sweetener.



### **Step 7: Avoid hypoglycemia.**

Most of us eat far too many grains and sugars, which cause us to have large amounts of **insulin circulating in our blood**. When you stop eating grains, high insulin levels will cause you to experience many symptoms such as dizziness, confusion, headaches, and generally feeling miserable.

If you eat every two hours during your transition you will be able to avoid this temporary side effect. Eat some protein, such as an egg, piece of free range pastured chicken, turkey, fish, or some organic seeds, along with a vegetable such as a piece of celery, cucumber, or red pepper. This will help to stabilize your blood sugar. Even after your system has adjusted, it is wise to eat 4-6 meals a day.



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### Key to Success—10 Recipes

All you need to do is find at least ten recipes that you like. You may not believe this but that is all that most families use. You might have to try 10 recipes to find one that you and your family enjoy, but that's okay as it's all part of the process. It is vitally important to have variety. Do NOT rotate between just two or three meals or you will burn out and end the program. Variety is the key.

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# How Much Sleep Do You Need?

## Sleep Cycles & Stages, Lack of Sleep, and How to Get the Hours You Need



When you're scrambling to meet the countless demands of your day, cutting back on sleep might seem like the only answer. Who can afford to spend so much time sleeping, anyway? The truth is you can't afford not to. Even minimal sleep loss takes a toll on your mood, energy, and ability to handle stress. By understanding your nightly sleep needs and what you can do to bounce back from chronic sleep loss, you can finally get on a healthy sleep schedule.

### The power of sleep You can improve your sleep!

Many of us try to sleep as little as possible. There are so many things that seem more interesting or important than getting a few more hours of sleep, but just as exercise and nutrition are essential for optimal health and happiness, so is sleep. The quality of your sleep directly affects the quality of your waking life, including your mental sharpness, productivity, emotional balance, creativity, physical vitality, and even your weight. No other activity delivers so many benefits with so little effort!

### Understanding sleep

Sleep isn't exactly a time when your body and brain shut off. While you rest, your brain stays busy, overseeing a wide variety of biological maintenance that keeps your body running in top condition, preparing you for the day ahead. Without enough hours of restorative sleep, you won't be able to work, learn, create, and communicate at a level even close to your true potential. Regularly skimp on "service" and you're headed for a major mental and physical breakdown.

#### Average Sleep Needs By Age

Newborn to 2 months old	12 - 18 hrs
3 months to 1 year old	14 - 15 hrs
1 to 3 years old	12 - 14 hrs
3 to 5 years old	11 - 13 hrs
5 to 12 years old	10 - 11 hrs
12 to 18 years old	8.5 - 10 hrs

The good news is that you don't have to choose between health and productivity. As you start getting the sleep you need, your energy and efficiency will go up. In fact, you're likely to find that you actually get more done during the day than when you were skimping on shuteye.

## How many hours of sleep do you need?

According to the National Institutes of Health, the average adult sleeps less than seven hours per night. In today's fast-paced society, six or seven hours of sleep may sound pretty good. In reality, though, it's a recipe for chronic sleep deprivation.

There is a big difference between the amount of sleep you can get by on and the amount you need to function optimally. Just because you're able to operate on seven hours of sleep doesn't mean you wouldn't feel a lot better and get more done if you spent an extra hour or two in bed.

While sleep requirements vary slightly from person to person, **most healthy adults need between seven and a half to nine hours of sleep per night to function at their best.** Children and teens need even more (*see box at right*). And despite the notion that our sleep needs decrease with age, older people still need at least seven and a half to eight hours of sleep. Since [older adults often have trouble sleeping](#) this long at night, daytime naps can help fill in the gap.



The best way to figure out if you're meeting your sleep needs is to evaluate how you feel as you go about your day. If you're logging enough hours, you'll feel energetic and alert all day long, from the moment you wake up until your regular bedtime.

### **Sleep needs and peak performance**

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### **Think six hours of sleep is enough?**

Think again. Researchers at the University of California, San Francisco discovered that some people have a gene that enables them to do well on six hours of sleep a night. This gene, however, is very rare, appearing in less than 3% of the population. For the other 97% of us, six hours doesn't come close to cutting it.

# Myths and Facts about Sleep

**Myth 1: Getting just one hour less sleep per night won't affect your daytime functioning.** You may not be noticeably sleepy during the day, but losing even one hour of sleep can affect your ability to think properly and respond quickly. It also compromises your cardiovascular health, energy balance, and ability to fight infections.



**Myth 2: Your body adjusts quickly to different sleep schedules.** Most people can reset their biological clock, but only by appropriately timed cues—and even then, by one–two hours per day at best. Consequently, it can take more than a week to adjust after traveling across several time zones or switching to the night shift.

**Myth 3: Extra sleep at night can cure you of problems with excessive daytime fatigue.** The quantity of sleep you get is important, sure, but

it's the *quality* of your sleep that you really have to pay attention to. Some people sleep eight or nine hours a night but don't feel well rested when they wake up because the quality of their sleep is poor.

**Myth 4: You can make up for lost sleep during the week by sleeping more on the weekends.** Although this sleeping pattern will help relieve part of a sleep debt, it will not completely make up for the lack of sleep. Furthermore, sleeping later on the weekends can affect your sleep-wake cycle so that it is much harder to go to sleep at the right time on Sunday nights and get up early on Monday mornings.

Adapted from: *Your Guide to Healthy Sleep (PDF)* The National Institutes of Health

# Signs and Symptoms of Sleep Deprivation

If you're getting less than eight hours of sleep each night, chances are you're sleep deprived. What's more, you probably have no idea just how much lack of sleep is affecting you.

## How is it possible to be sleep deprived without knowing it?

Most of the signs of sleep deprivation are much more subtle than falling face first into your dinner plate. Furthermore, if you've made a habit of skimping on sleep, you may not even remember what it feels like to be wide-awake, fully alert, and firing on all cylinders. Maybe it feels normal to get sleepy when you're in a boring meeting, struggling through the afternoon slump, or dozing off after dinner, but the truth is that it's only "normal" if you're sleep deprived.

## You may be sleep deprived if you...

- Need an alarm clock in order to wake up on time
- Rely on the snooze button
- Have a hard time getting out of bed in the morning
- Feel sluggish in the afternoon
- Get sleepy in meetings, lectures, or warm rooms
- Get drowsy after heavy meals or when driving
- Need to nap to get through the day
- Fall asleep while watching TV or relaxing in the evening
- Feel the need to sleep in on weekends
- Fall asleep within five minutes of going to bed

## The effects of sleep deprivation and chronic lack of sleep

While it may seem like losing sleep isn't such a big deal, sleep deprivation has a wide range of negative effects that go way beyond daytime drowsiness. Lack of sleep affects your judgment, coordination, and reaction times. In fact, sleep deprivation can affect you just as much as being drunk.

The effects include:

- Fatigue, lethargy, and lack of motivation
- Moodiness and irritability
- Reduced creativity and problem-solving skills
- Inability to cope with stress
- Reduced immunity; frequent colds and infections
- Concentration and memory problems
- Weight gain
- Impaired motor skills and increased risk of accidents
- Difficulty making decisions

- Increased risk of diabetes, heart disease, and other health problems

### **How sleep deprivation can add to your waistline**

Ever noticed how when you're short on sleep you crave sugary foods that give you a quick energy boost? There's a good reason for that. Sleep deprivation has a direct link to overeating and weight gain.

There are two hormones in your body that regulate normal feelings of hunger and fullness. Ghrelin stimulates appetite, while leptin sends signals to the brain when you are full. However, when you don't get the sleep you need, your ghrelin levels go up, stimulating your appetite so you want more food than normal, and your leptin levels go down, meaning you don't feel satisfied and want to keep eating. So, the more sleep you lose, the more food your body will crave.

# Paying Off Your Sleep Debt

Sleep debt is the difference between the amount of sleep you need and the hours you actually get. Every time you sacrifice on sleep, you add to the debt. Eventually, the debt will have to be repaid; it won't go away on its own. If you lose an hour of sleep, you must make up that extra hour somewhere down the line in order to bring your "account" back into balance.

## Sleeping in on the weekends isn't enough!

Many of us try to repay our sleep debt by sleeping in on the weekends, but as it turns out, bouncing back from chronic lack of sleep isn't that easy. One or two solid nights of sleep aren't enough to pay off a long-term debt. While extra sleep can give you a temporary boost (for example, you may feel great on Monday morning after a relaxing weekend), your performance and energy will drop back down as the day wears on.

## Tips for getting and staying out of sleep debt

While you can't pay off sleep debt in a night or even a weekend, with a little effort and planning, you can get back on track.

- **Aim for at least seven and a half hours of sleep every night.** Make sure you don't fall farther in debt by blocking off enough time for sleep each night. Consistency is the key.
- **Settle short-term sleep debt with an extra hour or two per night.** If you lost 10 hours of sleep, pay the debt back in



nightly one or two-hour installments.

- **Keep a Record** when you go to bed, when you get up, your total hours of sleep, and how you feel during the day. As you keep track of your sleep, you'll discover your natural patterns and get to know your sleep needs.
- **Take a sleep vacation to pay off a long-term sleep debt.** Pick a two-week period when you have a flexible schedule. Go to bed at the same time every night and allow yourself to sleep until you wake up naturally. No alarm clocks! If you continue to keep the same bedtime and wake up naturally, you'll eventually dig your way out of debt and arrive at the sleep schedule that's ideal for you.
- **Make sleep a priority.** Just as you schedule time for work and other commitments, you should schedule enough time for sleep. Instead of cutting back on sleep in order to tackle the rest of your daily tasks, put sleep at the top of your to-do list.

There are many **HEALTH RISKS** associated with lack of quantity and quality sleep.

o v e r  
**30%**

of the adult population suffers from **INSOMNIA**



Lack of sleep increases risk of

**heart attack** by

**45%**

Chronic sleep loss can lead to

**slower reaction times**

*and*

**increased blood pressure**

Lack of sleep causes a **WEAKENED IMMUNE SYSTEM**



leaving you more susceptible to disease & infection

**Increased risk of OBESITY**

Lack of sleep causes **depression & irritability**

Sleeping 5 or fewer hours a night may **increase MORTALITY risk** by as much as **15%**

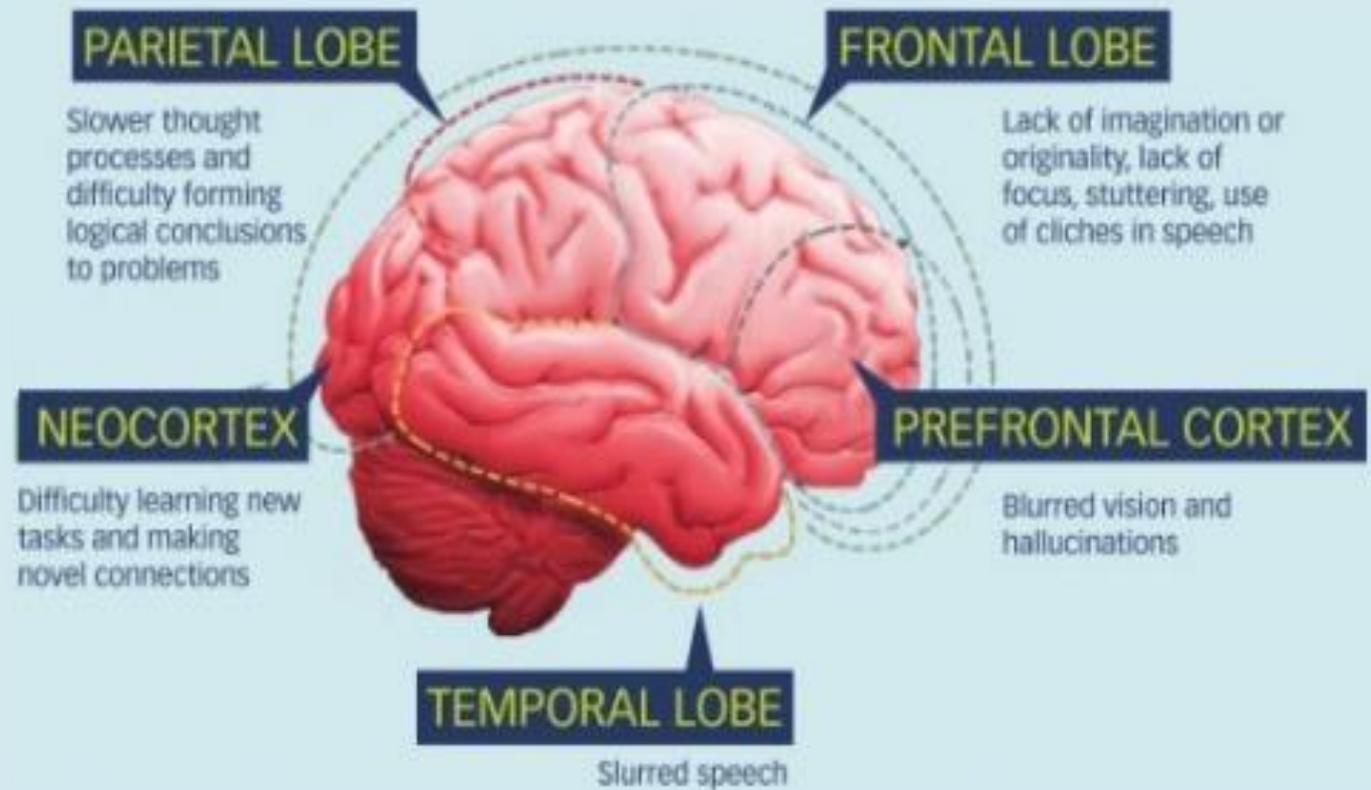
A few nights worth of **all-nighters** will give you more than just a groggy morning, they can **LOWER** your **GPA**

reduction in sleep can **reduce the ability** to consolidate recently formed **MEMORIES**



Lack of sleep can lead to **poor concentration** and **shortened attention span**

**66%** of students have pulled an **all-nighter**



Lack of sleep causes your brain to **SLOW** or **SHUT DOWN** completely

# THE COST OF SLEEP DEPRIVATION



Students at Boston College  
feel as though there is

**NEVER ENOUGH TIME FOR SLEEP.**

And BC is not alone, nationally  
**77%** of students report not  
getting enough sleep.



## TOP 5 REASONS BC STUDENTS DO NOT GET ENOUGH SLEEP



Academics



Clubs & Leadership



Athletics



Social Activities



Roommates

**Getting sleep may not be at the top of your  
priorities, but it should be.**

# Stages of Sleep

## REM sleep and non-REM sleep

All sleep is not created equal. Sleep unfolds in a series of recurring sleep stages that are very different from one another in terms of what's happening beneath the surface. From deep sleep to dreaming sleep, they are all vital for your body and mind. Each stage of sleep plays a different part in preparing you for the day ahead.

**There are two main types of sleep:**

- **Non-REM (NREM) sleep** consists of four stages of sleep, each deeper than the last.
- **REM (Rapid Eye Movement) sleep** is when you do most active dreaming. Your eyes actually move back and forth during this stage, which is why it is called Rapid Eye Movement sleep.

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### The Stages of Sleep

#### Non-REM sleep

**Stage N1 (Transition to sleep)** – This stage lasts about five minutes. Your eyes move slowly under the eyelids, muscle activity slows down, and you are easily awakened.

**Stage N2 (Light sleep)** – This is the first stage of true sleep, lasting from 10 to 25 minutes. Your eye movement stops, heart rate slows, and body temperature decreases.

**Stage N3 (Deep sleep)** – You're difficult to awaken, and if you are awakened, you do not adjust immediately and often feel groggy and disoriented for several minutes. In this deepest stage of sleep, your

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brain waves are extremely slow. Blood flow is directed away from your brain and towards your muscles, restoring physical energy.

#### REM sleep

**REM sleep (Dream sleep)** – About 70 to 90 minutes after falling asleep, you enter REM sleep, where dreaming occurs. Your eyes move rapidly, your breathing shallows, and your heart rate and blood pressure increase. Also during this stage, your arm and leg muscles are paralyzed.

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## Understanding the Sleep Cycle

### Quality sleep and your internal clock

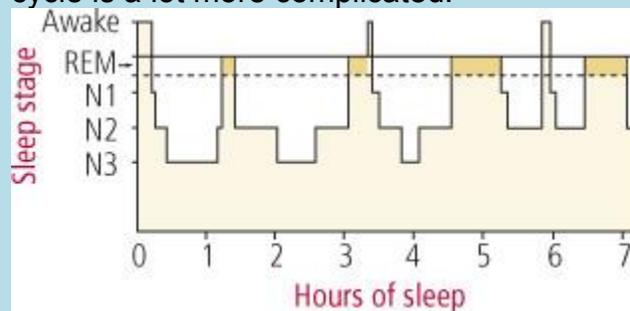
Your internal 24-hour sleep-wake cycle, otherwise known as your biological clock or circadian rhythm, is regulated by processes in the brain that respond to how long you've been awake and the changes between light and dark. At night, your body responds to the loss of daylight by producing melatonin, a hormone that makes you sleepy. During the day, sunlight triggers the brain to

inhibit melatonin production so you feel awake and alert.

Your internal clock can be disrupted by factors such as nightshift work, traveling across time zones, or irregular sleeping patterns—leaving you feeling groggy, disoriented, and sleepy at inconvenient times. The production of melatonin can also be thrown off when you're deprived of sunlight during the day or exposed to too much artificial light at night—especially the light from electronic devices, including TVs, computers, tablets, and mobile phones.

### The architecture of sleep

You may think that once you go to bed, you soon fall into a deep sleep that lasts for most of the night, progressing back into light sleep in the morning when it's time to wake up. In reality, the sleep cycle is a lot more complicated.



*When you chart the sleep stages over the course of the night, the result looks like a city skyline—which is why it is called "sleep architecture"*

During the night, your sleep follows a predictable pattern, moving back and forth between deep restorative sleep (deep sleep) and more alert stages and dreaming (REM sleep). Together, the stages of REM and non-REM sleep form a complete sleep cycle. Each cycle typically lasts about 90 minutes and repeats four to six times over the course of a night.

The amount of time you spend in each stage of sleep changes as the night progresses. For example, most deep sleep occurs in the first half of the night. Later in the night, your REM sleep stages become longer, alternating with light Stage 2 sleep. This is why if you are sensitive to waking up in the middle of the night, it is probably in the early morning hours, not immediately after going to bed.

### Having a hard time getting up when your alarm goes off?

Even if you've enjoyed a full night's sleep, getting out of bed can be difficult if your alarm goes off when you're in the middle of deep sleep (Stage N3). If you want to make mornings less painful—or if you know you only have a limited time for sleep—try setting a wake-up time that's a multiple of 90 minutes, the length of the average sleep cycle. For example, if you go to bed at 10 p.m., set your alarm for 5:30 (a total of 7 ½ hours of sleep) instead of 6:00 or 6:30. You may feel more refreshed at 5:30 than with another 30 to 60 minutes of sleep because you're getting up at the end of a sleep cycle when your body and brain are already close to wakefulness.

### The importance of deep sleep and REM sleep

It's not just the number of hours in bed that's important—it's the quality of those hours of sleep. If you're giving yourself plenty of time for sleep, but you're still having trouble waking up in the morning or staying alert all day, you may not be spending enough time in the different stages of sleep.

Each stage of sleep in the sleep cycle offers benefits to the sleeper. However, deep sleep (Stages 3 and 4) and REM sleep are particularly important. A

normal adult spends approximately 50% of total sleep time in Stage 2 sleep, 20% in REM sleep, and 30% in the remaining stages, including deep sleep.

### **Deep sleep**

The most damaging effects of sleep deprivation are from inadequate deep sleep. Deep sleep is a time when the body repairs itself and builds up energy for the day ahead. It plays a major role in maintaining your health, stimulating growth and development, repairing muscles and tissues, and boosting your immune system. In order to wake up energized and refreshed, getting quality deep sleep is essential. Factors that can lead to poor or inadequate deep sleep include:

- **Being woken during the night** by outside noise, for example, or in order to care for a crying baby.
- **Working night shifts or swing shifts.** Getting quality deep sleep during the day can be difficult, due to light and excess noise.
- **Smoking or drinking in the evening.** Substances like alcohol and nicotine can disrupt deep sleep. It's best to limit them before bed.

### **REM sleep**

Just as deep sleep renews the body, REM sleep renews the mind by playing a key role in learning and memory. During REM sleep, your brain consolidates and processes the information you've learned during the day, forms neural connections that strengthen memory, and replenishes its supply of neurotransmitters, including feel-good chemicals like serotonin and dopamine that boost your mood during the day.

To get more mind and mood-boosting REM sleep, try sleeping an extra 30

minutes to an hour in the morning, when REM sleep stages are longer. Improving your overall sleep will also increase your REM sleep. If you aren't getting enough deep sleep, your body will try to make that up first, at the expense of REM sleep.





