

Sleep: a time management strategy

Increasing the amount & quality of time in your life

Harold L. Taylor




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Harold Taylor

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Sleep: a time management strategy: Increasing the amount & quality of time in your life

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Introduction

Can sleep really save time?

Well, I can guarantee you it will help extend the time you have available to get things done. And as I continue to write, speak professionally, and develop training programs now that I am in my eighties, I can almost speak from personal experience. I say *almost* since there are a lot of things besides sleep that contribute to brain health and longevity. But just as I tried practicing what I preach in order to slow the perceived passage of time – as described in my book *Slowing down the speed of life* – I have recently brought my sleep time from six hours a night to seven hours a night with equally good results.

I didn't always think this way. Years ago I had joined other time management consultants in recommending the opposite – sleep less and get more done. We urged our clients to set their alarms 15 minutes earlier each week until they noticed that they got tired by early afternoon, and then set it back to the last setting. We felt many people were getting more sleep than they needed (and some were), and that if they could get a head start on the day with an extra half hour or more of “prime time”, they could increase their personal productivity.

The night owls could usually be excused from this time tip since they already had extended their days.

This was before the holistic time management era – and before all the research now available on the role sleep plays in our health, longevity, and productivity. It was also before the information age, computers, and the digital age of speed in which we now find ourselves. Now, many people don't even have to get out of bed to start working – since they sleep with their Blackberries, iPads, or smart phones, which accompany them from bathroom to breakfast and from car to company or college.

Today there is little concern about sleeping too much; the concern is about sleeping too little. The lure of the Internet, computer games, social media, e-mail and text messaging keep us from going to bed early. And the stress of the day, the worry of unfinished tasks lingering in our thoughts, and the widespread view that sleep is an inconvenience to be tolerated but not enjoyed, keep us from sleeping soundly once we are there.

Gary Small, who writes the *Brain Bulletin*, and speaks on that topic, says that sleep deprivation is one of the risk factors in Alzheimer's. The June, 2014 issue of *Scientific American Mind* quotes neuroscientist Dwayne Godwin as saying that sleep helps clear the brain, flushing away waste products such as Alzheimer's-related proteins. One sleep scientist claims that sleep is one of the most important predictors of how long you will live – as important as whether you smoke, exercise or have high blood pressure.

And I claim that through adequate sleep, you can increase your personal productivity and effectiveness by at least 20 percent, reduce anxiety and stress, and increase your health and well-being in the process.

Invest the time necessary to read the balance of this brief book, and you'll see why I claim that sleep is one of the most important time management strategies for you and for your staff and clients.

Can sleep actually save you time? Perhaps I couldn't make this claim before the advent of electronic technology; because back in those days most people were generally getting sufficient sleep. But now, 62 percent of Americans report difficulty sleeping at least a few nights a week. About 90 percent of teens in the U.S. don't get enough sleep. And children who don't get enough sleep are often misdiagnosed with ADHD.

The average person now gets 90 minutes less sleep a night than a century ago. In my lifetime, the average amount of sleep we get has decreased from just over eight hours to 6.7 hours. (I recently read a figure of 6.5 hours, along with an explanation that this is the average amount of sleep people *say* they get but by the measurement of brain activity while these same people were sleeping, the *actual* figure was 6.1 hours.)

If you get less than six hours sleep a night you are considered to be sleep deprived. And even getting less than seven hours a night produces *sleep debt* that should be repaid by napping, which will also be discussed in this book.

Yes, taking longevity, dementia and any current health issues out of the equation, getting between 7 to 8 hours of sleep a night will increase your personal productivity as you will see as you continue reading. This assumes you are not already getting this much sleep. And I am referring to the amount of actual sleep you get, not the amount of time you spend in bed.

1 The importance of sleep

1.1 Benefits of a good night's sleep

Your body is programmed to spend one third of its life asleep – and to sleep in specific cycles of light sleep, deep sleep, and active brain sleep. Each cycle takes about 90 minutes and each has a specific assignment that affects thinking, memory, growth, your immune system and even your weight.

We spend about a third of our life sleeping for very good reason – or I should say reasons – many of which are yet to be discovered. But what we *do* know is that sleep allows us to learn new things and transfers the significant ones into our long-term memory. Sleep prepares and replaces damaged neurons, calms disease-triggering inflammation, and keeps us mentally sharp, creative and productive. It even controls the aging process, helps keep our weight down, lowers our blood pressure and impacts our overall health.

Another important benefit of sleep was reported in the February, 2014 issue of *Scientific American Mind*. Researchers at the *University of Wisconsin-Madison* found that sufficient sleep not only restores cognitive functioning, but also may fortify the brain over the long term. During sleep, activity is increased in genes involved in producing brain cells responsible for coating neurons with myelin, the brain's insulating material. This allows electrical impulses to travel quickly and efficiently to other neurons. Myelin deficiency is at the root of multiple sclerosis disease, and can contribute to symptoms such as fatigue, vision and hearing impairment and a loss of coordination.

A study published by the *National Academy of Sciences* reports that even an hour or two less sleep a night can negatively impact more than 700 genes required for repairing cell tissue.

Chiara Cirelli, a neuroscientist and author of the paper describing the above research, suggests that sleep helps cells regenerate and repair themselves by helping the body produce new myelin after it has deteriorated.

Sleep can also reduce stress levels, control blood pressure, and is even thought to effect cholesterol levels, which play a significant role in heart disease.

1.2 The consequences of sleep deprivation

A 2012 TEDMED conference called sleep loss one of health care's big challenges. Studies have shown that people who sleep fewer than 5 hours a night have an increased risk of developing Type 2 diabetes, the kind that tends to strike later in life.

When people become sleep deprived, their ability to utilize the food they consume drops by about one third. If people continue to be sleep deprived it accelerates the aging process. In one study, when healthy 30-year-olds who only got about four hours sleep per night for six days, parts of their body chemistry soon reverted to that of a 60-year-old – and it took about a week to recover.

Decreased sleep has been linked to breast & colon cancer, a deregulation of hormones that control appetite, heart attacks, coronary artery disease, strokes, a lowered immune system, premature aging – as well as irritability, anger, depression and mental exhaustion.

According to John Ratey, author of *Spark: the revolutionary new science of exercise and the brain*, one of the first symptoms of depression is sleep disturbance. In the same book he mentions that abnormal sleep patterns is also a common symptom of ADHD.

A lack of sleep seems to affect the activity of at least 5 different immune system fighters, including natural killer cells, which are specifically designed by your body to fight cancer.

A study of 68,000 women by *Harvard Medical School* found that women who sleep 5 hours a night are 32 percent more likely to gain 30 lbs. or more as they get older – compared to those who sleep 7 hours or more. (Even when the women who slept longer ate more, they still gained less than women who slept less.)

In one study of soldiers operating military hardware, a loss of one night's sleep resulted in a 30 percent loss of cognitive skill and a corresponding drop in performance.

1.3 Lack of sleep can lead to obesity

Researchers at the *University of Chicago* discovered that overweight dieters lost over 50 percent more weight when they averaged 7 hours and a half hours of sleep per night for two weeks than they did when they slept for only 5 hours a night. Too little time sleeping can also make you hungrier during the day. Sleep and metabolism are controlled by the same areas of the brain, and when you are sleepy, certain hormones go up in your blood and those same hormones drive appetite.

The *Mayo Clinic* in Rochester, Minnesota, also did a carefully controlled study in a laboratory setting where volunteers were closely monitored for three days to determine how much they normally ate and slept. Half of them were then allowed to continue their normal routine for another eight days, while the other half were allowed to sleep only two-thirds of their usual sleep time. Both groups were allowed to eat as much as they wanted.

Results showed that the reduction in sleep led to an increase in food consumption. The sleep-deprived group consumed an average of 549 additional calories on the days after their sleep was cut short compared to when they got their normal rest. Without compensating through additional exercise, this could add an extra pound to their weight in less than a week. It's interesting that there appears to be two epidemics currently occurring in North America – obesity and sleep-deprivation.

There are plenty of studies that show a relationship between sleep and eating habits. Lack of sleep robs us of self-control and the brain regions required for complex judgements, and decisions become blunted.

A study of 13,284 teenagers found that those who slept poorly also made poor decisions.

On the positive side, you can view good sleep habits as a way of controlling your weight and getting the proper amount of sleep at the same time. It's certainly a lot less painful than most diet programs. As example, consider the study conducted at *Hendrix College* in Conway, Arkansas. 32 students kept diaries of how much sleep they got and which foods they ate over a 3-week period. The first week they ate and slept as they usually did; but on the second week they slept an extra two hours a day. The third week they went back to their normal routine. The students who got an extra two hours of sleep during week two ate nearly 300 calories a day less than in week one. When they returned to their normal sleep-deprived routine, they once again ate more food.

1.4 Sleep deprivation sometimes results in tragedy

In March, 1989 Exxon Valdez hit a reef off the coast of Alaska & spilled 10 million gallons of oil. The person in charge of the ship at the time had been awake for 18 hours prior to taking the helm.

A Union Carbide explosion killing thousands of people in India and a nuclear disaster at Chernobyl were both believed to be the result of sleep-deprived operators.

In January of 2011 an Air Canada flight from Toronto to Zurich made a sudden descent, injuring 14 passengers and two crew members when a fatigued pilot mistakenly believed the plane was on a collision course with another aircraft.

In 2006, a Comair jet crashed in a Kentucky field after taking off from the wrong runway, killing 49 people. The only air traffic controller on duty had slept for just two hours before his overnight shift.

Overwork, lack of sleep and energy-drain can cause driving accidents as well. The *National Highway Traffic Safety Administration* in the U.S. estimates that drowsy drivers cause 100,000 accidents, 71,000 injuries and 1550 fatalities each year, caused at least in part, to sleep deprivation. Sleepiness decreases attention and alertness by 50 percent. Nearly one in five drivers report drifting off behind the wheel on occasion. one in four drivers 18 to 29 years old report the same thing.

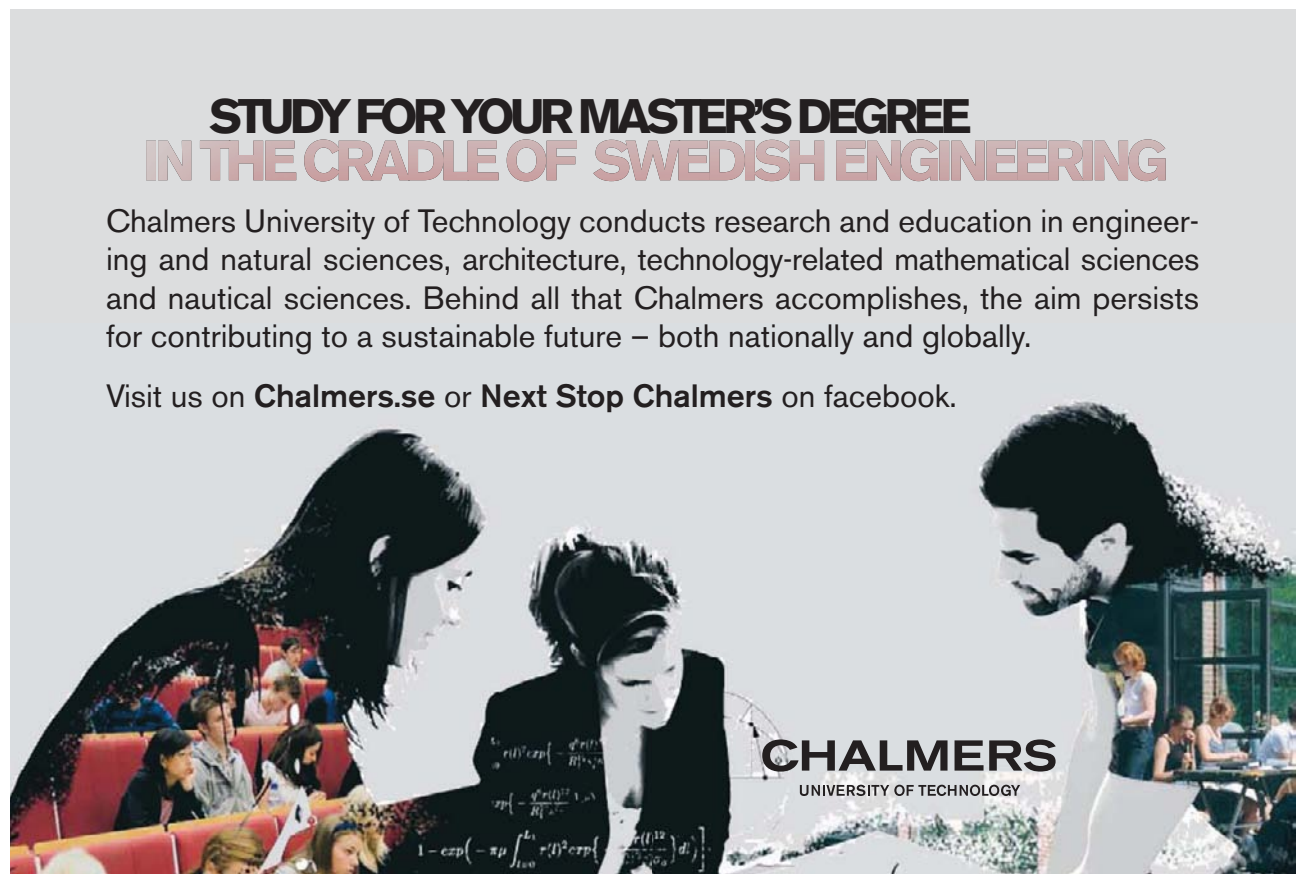
Studies show that motorists who get only 6 hours of sleep are more likely to cause a crash than those with a blood alcohol level of .05. If there were an equivalent of blood alcohol test for sleep-deprived drivers there would be a lot more arrests. Sleepiness affects both reaction time and decision making.

It's interesting that on the Monday following daylight savings time, accidents increase. And six months is a long time to wait to get caught up on an hour's sleep loss.

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2 Do you suffer from insomnia?

2.1 What is insomnia?

Insomnia is the inability to get the amount of sleep you need to wake up feeling rested, refreshed, energetic – without feeling tired throughout the day. It depends on the quality of the sleep you get, not the number of hours spent in bed. You may be spending 8 or more hours a day in bed; but if you feel drowsy and fatigued during the day, you may be suffering from insomnia.

Insomnia differs from one person to another, and it may be caused by a variety of things. It's more of a symptom than a problem.

2.2 Symptoms of insomnia

HelpGuide.org suggests that if you experience any of the following symptoms on a regular basis, you may be dealing with a sleep disorder:

- have trouble falling asleep even though you feel tired
- trouble getting back to sleep when awakened
- don't feel refreshed after a night's sleep
- feel irritable or sleepy during the day
- have difficulty staying awake when sitting still, watching television, or driving
- having difficulty concentrating during the day
- rely on sleeping pills or alcohol to fall asleep
- have trouble controlling your emotions

2.3 Causes of insomnia

The causes of insomnia can be physical, situational, psychological or any combination of these three factors. It could be caused by changes in environment – an unfamiliar bed or uncomfortable pillows, physical illness or pain, anxiety, stress or depression – or simply a case of having coffee or chocolate too close to bedtime.

There are hundreds of possible causes of insomnia but only the more common ones will be discussed in this chapter. Any medical problem, whether it be sleep apnea, arthritis or depression should be discussed with your doctor. Too many people suffer in silence without seeking help.

The risk of insomnia does increase with age. About one-third of people older than 65 have chronic insomnia; but this doesn't necessarily have to be the case. Many of us simply accept the old bromide, "You're not getting any younger," with no attempt to get to the source of the problem. It's a myth that older people don't need as much sleep. We need it; we just don't get it. Our cells don't stop being repaired or replaced simply because we get old. Although if we don't get enough sleep, it's possible they won't be.

As mentioned, it could simply be a case of eating too close to bedtime or drinking coffee before retiring. Sara Medick, author of *Take a nap – change your life*, suggests that there is a connection between the skyrocketing sales of coffee and the decline in sleep. Eight in ten Americans drink coffee, with an estimated 3 million drinkers added each year. The excessive use of caffeine raises blood pressure, causes irregular heart rate, accelerates breathing, increasing anxiety – and of course causes sleep disturbances.

According to the National Sleep Foundation, snoring is the primary cause of sleep disruption for about 90 million American adults. It is usually associated with overweight people, and could become worse with age. Loud snoring could be a symptom of obstructive sleep apnea and associated with high blood pressure and other health issues. It's a good idea to consult a doctor since untreated sleep apnea puts a person at risk for cardiovascular disease, headaches, memory loss and depression.

For people in business and those managing a home and family, the most likely reasons for insomnia are the expanding working hours, shrinking relaxation and renewal time, the increasingly stressful environment (accentuated by speed, electronic devices and the Internet) and the hopeless feeling of being overwhelmed and under-productive.

Stress is not compatible with sleep; it is increased by the lack of sleep, and in turn causes sleep disorders – a vicious spiral that must be stopped. Whether you do that by removing the source of the stress or reacting differently to it and taking the action necessary to dissipate it is up to you and depends on the situation. There are many weapons at your disposal to fight stress, including relaxation exercises, meditation, yoga, mindfulness, counseling and physical exercise to name a few.

Don't overlook the possibility of removing the source of stress by getting organized, deleting non-priority activities, managing your time, getting proper nutrition and physical exercise, and taking back control of your life. Make adequate sleep your number one priority.

2.4 The impact of aging on sleep


One of the myths of aging is that you need less sleep as you get older. Research has revealed that your sleep needs remain constant throughout your adult life. Sleep patterns may change inasmuch as older people tend to get sleepy earlier in the evening and wake up earlier in the morning; but they still require the usual 7 to 8 hours of sleep a night. Their circadian rhythm has changed, not their sleep requirements.

It is true that insomnia is higher among older adults. The National Sleep Foundation conducted a poll in 2003 that showed that 44% of older persons experience one or more of the nighttime symptoms of insomnia at least a few nights per week. This is due to such things as sleep disorders, the side effects of medications, physical illnesses, mental states and lifestyle changes – not age itself. Physical ailments that tend to increase with age and affect sleep habits include snoring and restless legs syndrome. Restless legs syndrome is a neurological movement disorder characterised by an irresistible urge to move the limbs. Its prevalence increases with age, and according to the National Sleep Foundation, about 45% of all older people have at least a mild form of periodic limb movement disorder.

2.5 Are you suffering from *thinksomnia*?

Busy schedules and 24/7 connectivity tends to encroach on sleeping time. Most people have experienced the impact of staying up late to finish a project or to check e-mails or to search on the Internet. And when they finally get to bed, falling asleep can be difficult as they replay the day's events in their minds, mull over problems encountered or start thinking about all the things that they have yet to do. I refer to this as *thinksomnia*, an inability to fall quickly asleep at night because of these ideas springing back into your mind once you are relaxed and unburdened by the activity of the moment. I define *thinksomnia* as *the inability to sleep due to the brain's attempt to bring order and closure to the day*.

The longer you work each day and the farther this extends into the evening, the greater the degree of *thinksomnia* experienced. Just as homework has been shown to have little or no academic benefits for elementary school children, working overtime has no benefits when it comes to personal productivity. But it does add more pressure to already stressed-out workers and infringes on family time, helps put your life out of balance, and fuels the flames of workaholism.



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3 How lack of sleep can impact your personal productivity

3.1 Longer working hours equate to shorter sleeping hours

Working long hours makes you good at one thing only, and that is working long hours. It does not increase either your efficiency or effectiveness. Any anticipated increase in personal productivity is usually offset by a slower work pace, additional errors, more frequent self-interruptions and distractions, decreased creativity, and a decline in energy and motivation. At the least, working overtime simply extends your current level of efficiency – or inefficiency – to cover a greater span of time. This is Parkinson's Law in action. And about the only thing you have to show for it is sleepless nights leading to sleep deprivation.

Total output does not vary directly with the amount of time worked. If you cut one third off your working hours for instance, you would not cut one third off your output. In fact, for those people working 12 hours a day, a reduction to eight hours may not result in any perceivable drop in output. Productivity, which is output per hour, might actually increase.

Insufficient sleep slows reasoning ability, logical thinking and reaction time as well as motor skills and manual dexterity. Performance suffers as well as your health. It lowers the tolerance for frustration & heightens interpersonal sensitivity. It impairs focus, problem solving and memory.

3.2 Watch the overtime

We know that not getting enough sleep has been associated with reduced blood flow to the brain, which leads to bad decisions. But putting a heavy demand on the brain through continually working on cognitive tasks without sufficient breaks can have a similar effect. That's why you're more easily distracted when you are tired, and have trouble remembering things. Always do your prioritizing and planning when you are fresh.

A survey conducted in the U.S. and Europe, surveying 500 managers and 500 employees, shows that employees are working earlier in the morning and later in the evening whether they are at the office or not. Reported in *CBS MoneyWatch*, the survey reported that the average person starts checking email at 7:42 a.m. but gets to the office at 8:18 a.m. 60 percent of employees check their work email after 6:30 p.m. and the average American worker puts in almost an hour of work before arriving at the office. 80% of bosses say it's okay to call staff in the evening.

Not only could working overtime interfere with sleep, but an article by Nicole Ostrow in the *Bloomberg News*, research shows that adults working 11 hours a day or more had 67 percent higher risk of developing coronary heart disease, the nation's leading killer, than those who worked 8 hours a day. Those who worked 10 hours a day had a 45 percent higher risk of heart disease than those who worked 8 hours a day. The study, reported in the *Annals of Internal Medicine*, followed 7,095 civil service workers in London who were ages 39 to 62 at the start of the trial. Their sleep habits, as well as their eating, exercising and stress levels are thought to be the factors that affect their risk for heart disease.

A separate study, which followed 2,123 British civil servants for six years, found that working long hours appeared to substantially increase a person's risk of becoming depressed. Employees who worked at least 11 hours a day had about two and a half times higher odds of developing depression than those who only worked seven or eight hours.

89 percent of Canadian workers complained about heavy workload in a 2011 *TowersWatson* study, up from 64 percent from a similar study conducted two years earlier. So heavy workloads are not uncommon, and the resulting stress also interferes with sleep. If job stress and lack of sleep are wearing you down, it is time to think about scaling back your activities,

Energy management is required in order to maximize your performance, retain your health and protect your brain. This involves both gaining the energy in the first place through such things as proper sleep, diet and exercise – and managing the energy through judicious use of your time.

If you are getting by on 5 hours a night, you may think you are unaffected by marathon work sessions, sleepless nights or the incessant interruptions of smartphones; but it is your cognitively-impaired brain that is telling you that. Hundreds of scientific studies and experiments could all be wrong; but I would never bet my life on it – or even my health.

3.3 Sleep reduces timewasters

From a time management and personal productivity perspective, adequate sleep is critical. Sleep lost literally cripples our thinking, lowers our ability to focus attention on projects and tasks, attacks our executive functions, including working memory and reasoning ability, and eventually affects our manual dexterity and motor skills.

Adequate sleep is essential to effective time management. Just as a lack of adequate communication might be the cause of interruptions and errors, so the lack of adequate sleep may be the cause of many time problems, including lateness, self-interruptions, procrastination, faulty listening, mental mistakes, poor decision-making and a lack of creativity, among others. That's why I refer to sleep as a time management strategy.

In the process of presenting hundreds of workshops and speeches during my 40 years as a trainer, I've learned that if you have to sacrifice a good night's sleep before a training session in order to review or memorize material, it pays to opt for the sleep. You already have enough information in your memory banks do a good job. But when you are sleep deprived, you not only can't recall the material you recently studied, you have difficulty recalling information from your long-term memory as well.

There is little doubt that sleep has restorative and memory supporting powers. And if you agree on a holistic approach to time management, you must include adequate sleep among the strategies for improving personal productivity. You will read more about this throughout this book.

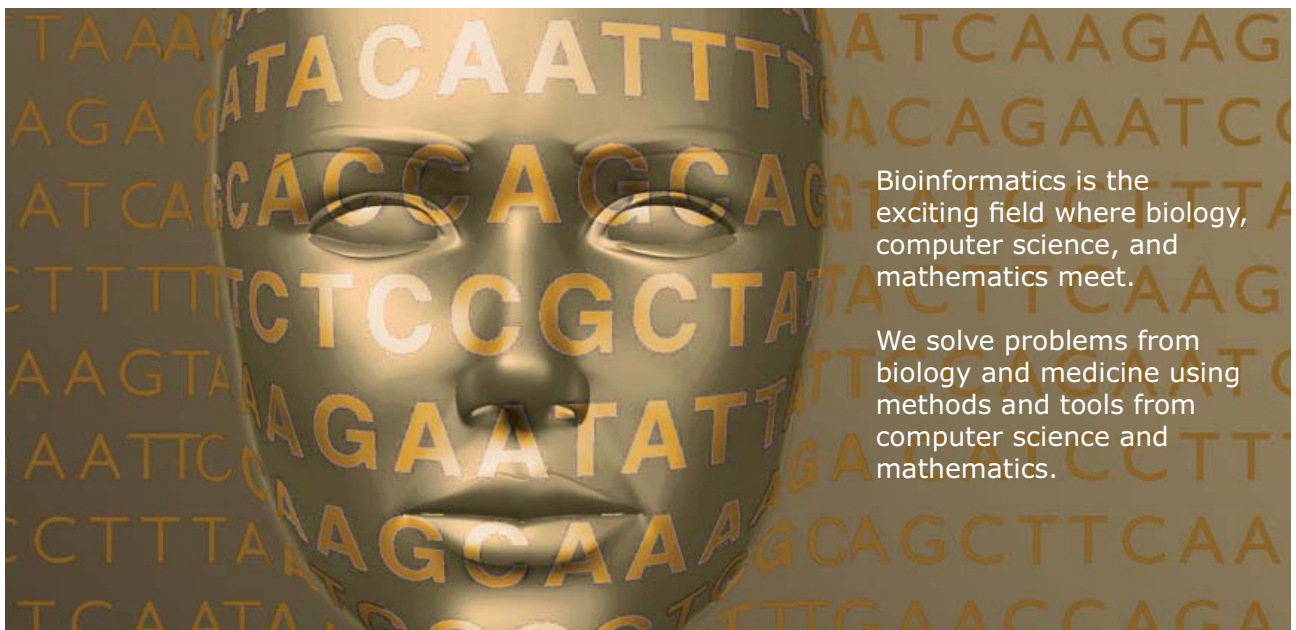
3.4 Sleep is needed for willpower

To restore willpower you have to get plenty of sleep. Well-slept people have more willpower than tired people. It is often highest in the morning and lowest at night. (Very few people break their diets in the morning; but how many people grab snacks and cheat on their diets before bedtime?)

Since willpower takes energy, food that gets converted to blood sugar can also improve willpower. Studies have actually shown that people's blood glucose levels drop after exerting willpower. So don't skip meals, take plenty of breaks during the day, avoid stress, and don't expend all your energy on marathon work sessions.



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3.5 Sleep is needed for decision-making

Sleep deprivation has a significant adverse effect on decision-making. In his 2012 book, *Extreme productivity*, Robert Pozen described an experiment that demonstrated this. Researchers devised a business game that involved continually facing decisions while new information was being added – requiring flexible thinking. Those who missed a night's sleep did a much worse job of adapting these business strategies than the control group did. The sleep deprived stuck to their existing strategies despite learning new information. At the end of the game, most players who had missed a night's sleep went bankrupt, while the control group managed to stay profitable.

As explained by Wray Herbert, in his book, *On second thought*, if we are overtired and mentally depleted, our brain switches automatically to its less effortful mode; it's just too difficult to crunch a lot of information and sort it intelligently if we lack the fuel for thinking.

David Rock, in his book *Your brain at work*, claims that the prefrontal cortex, the part of the brain responsible for thinking things through and making decisions, uses up metabolic fuel faster than people realize, and that we have a limited amount of energy resources for activities such as decision-making and impulse control. Making one difficult decision makes the next one more difficult.

An article appearing in the *New York Times* described the results of this energy drain on a parole board's decisions. After examining more than 1100 decisions over the course of a year, it was found that prisoners who appeared before the board early in the morning received parole 70% of the time; but those who appeared late in the day were paroled less than 10% of the time. In at least one incidence two prisoners were serving the same sentence for identical crimes and yet the one appearing at 8:50 a.m. was paroled while the one appearing at 3:30 p.m. was denied.

Ruling on case after case throughout the day caused decision fatigue and warped their judgment. And it can have a similar effect on all of us if we do not manage our energy as well as our time.

4 The impact of sleep on memory & learning

4.1 Sleep affects learning

There is little doubt that sleep has restorative and memory-supporting powers. Restorative of sleep is to learning as Stephen Covey's "sharpening the saw" is to productivity. It's during sleep that we process new information. If you don't get adequate sleep, you're not going to remember things well.

Sleep deprivation definitely impairs functioning of the brain-based executive skills. For example, a student scoring in the top 10% in grades dropped to the bottom 9 percent after only seven hours per sleep per night and seven hours 40 minutes on weekends.

A study reported by John Medina in his book *Brain rules*, gave students a math problem to solve and told him there was also a shortcut they might find while doing exercise. Then they showed the students the normal way to solve the problem. If they allowed 12 hours to pass and asked the students to solve more problems, about 20% discovered a shortcut. But if in that 12 hour period they also allowed about eight hours of regular sleep, the figure tripled to about 60 percent. Every time they repeated the experiment, the sleep group outperformed the non-sleep group by about 3 to 1.

Students frequently sacrifice sleep to get more done when the reverse is true. They get more done when they get more sleep. Studies show that only 9 percent of material studied before noon could be recalled eight hours later. Yet 56 percent could be recalled after eight hours of sleep. It's believed that during sleep, information is transferred to long-term memory – in addition to the replenishment of cells needed for a healthy immune system. So don't sacrifice sleep in order to get up earlier – unless of course, you get to bed earlier as well.

One study showed that people are far more likely to learn a new skill if they were taught the night before as opposed to being taught in the morning and tested that night. Dr. Marie Pasinsky, a neurologist from *Harvard Medical School* and author of *Beautiful brain, beautiful you*, suggests that we actually learn while we sleep. According to Dr. Mike Roizen and Dr. Mehmet Oz, you should prepare in advance, and review the material today that you want to recall tomorrow. It works best when you know the knowledge will be put to the test the next day. This motivates the brain to move the information from temporary storage in the hippocampus to long-term memory in the neocortex.

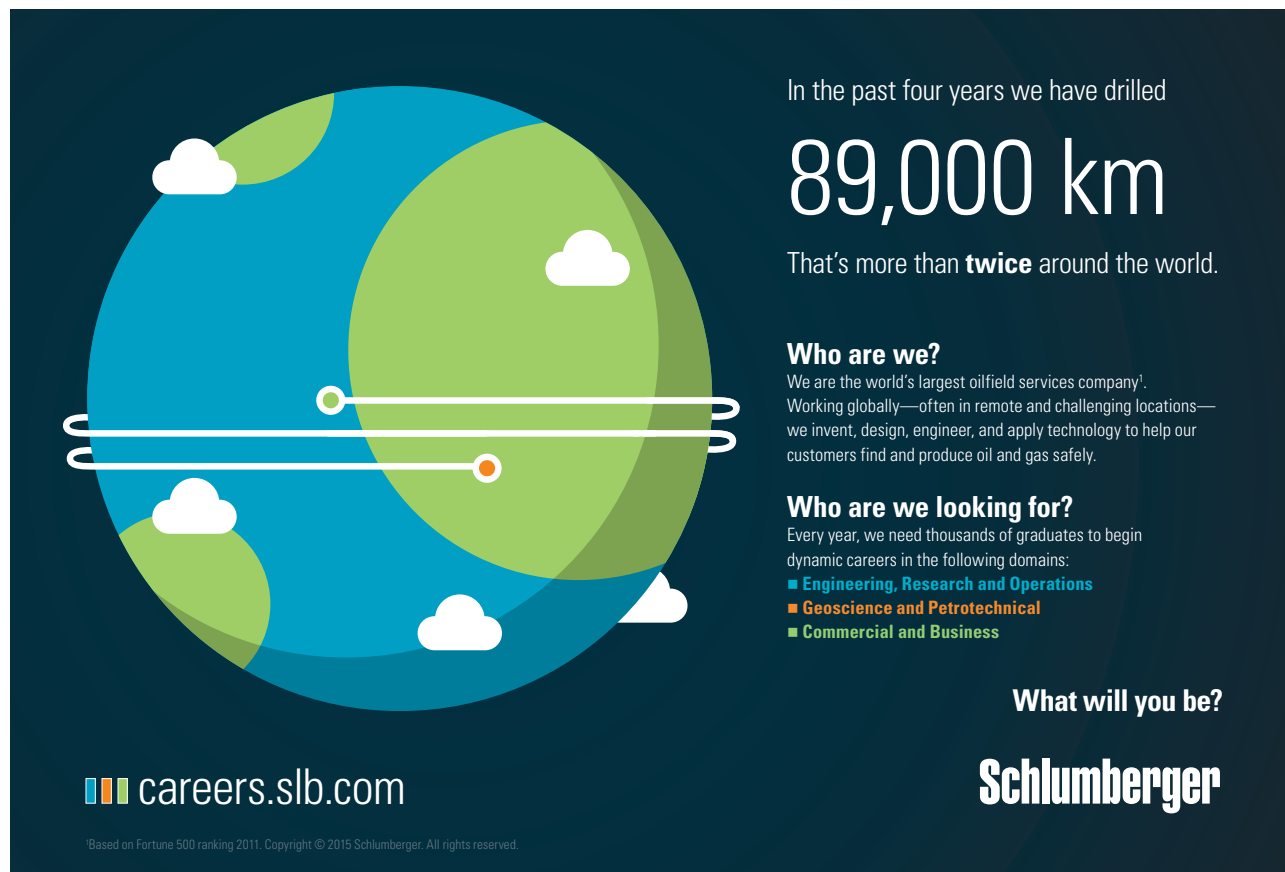
I'm not suggesting you hold your attempts to memorize information until the evening, although a combined evening session and morning review might be effective. But we also know that repetition is important in learning since it reinforces what was just taught, and it's always better to review a chapter in a book before you continue reading. So applied to memorizing, it might be wise to summarize the material you have learned just before a break and again before you go to bed at night.

I discuss more on memory in my book, *Boost your memory & sharpen your mind*.

4.2 Teens are the least likely to get enough sleep

According to the *National Sleep Foundation*, teens need an average of just over 9 hours of sleep a night for peak performance, health, and brain development, and yet they average fewer than 7 hours on a school night by the end of high school. Most are tired during the day. Hectic schedules, homework, after-school activities, family activities and the lure of social media and the Internet all help to prevent teens from getting the sleep they need.

Sleep deprivation is a serious matter for teens. They are unable to maximize the learning opportunities provided by the school system, cope with stress they encounter or make good decisions at a time when their executive skills are not fully developed. They also carry the risk of drowsy driving, emotional and behavioral problems, depression, poor impulse control and lower performance both scholastically and in athletics.



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4.3 Schools are beginning to adjust

Studies were done in schools to adapt hours to match the biological clocks of adolescents. In the U.S., school starting times were changed from 8 AM to 8:40 AM and in some cases to 9:40 AM. Student achievement improved by an average of one letter grade. In some studies, absenteeism went down as well as student depression and dropouts.

An article in the *Toronto Star* a few years ago described a pilot project starting that fall in one of the Toronto high schools. They planned to shift the entire school day so classes didn't start until 10 a.m. and would close at 4:13 p.m. This acknowledged the latest research showing that once puberty hits, the brain is wired to go to bed late and sleep in. It also hoped to take advantage of optimal learning time, which is late morning.

A follow-up at the time of writing this book in September, 2014, revealed that the school, *Eastern Commerce Collegiate Institute*, actually changed the hours to a 10 a.m. to 3:50 p.m. school day, with extracurricular activities starting at 8 a.m. to 8:30 a.m. instead of the usual 7 a.m. to 7:30 a.m. During the last two years, according to principle Jennifer Chan, students are arriving more alert, energetic and on time with higher scholastic achievement overall.

Everyone's internal clock is not set the same. Generally, teenagers are night owls and don't get sleepy until after the rest of us. Needless to say they do not operate on all cylinders early in the day. (Senior citizens are the opposite, being early risers.)

A similar project was started at the *UCL Academy* on Great Britain in September of 2012 with similar results. The school hours were changed to 10 a.m. to 5:30 p.m., and according to Headmistress Geraldine Davies, interviewed six months later, the youngsters were arriving more alert, ready to learn, and focused on their lessons. The pupils interviewed responded positively as well, saying they had time for a nourishing breakfast and were able to read through lessons before school started.

Academics in the U.S. have shown that forcing teenagers to wake before the body clock tells them to can stunt their academic growth.

A 2011 study involving 19 year olds from the U.S. air force found that those who started classes at 8:50 a.m. instead of 7 a.m. achieved better results in their exams.

5 How much sleep do we need?

5.1 Our sleep needs

Below is an indication of how much time sleep experts believe we actually need at various stages in our life. Of course, scientists disagree slightly but it gives a pretty good idea of our sleep requirements. And it's obvious that the majority of adults and teenagers don't get enough sleep.

Infants: 14 to 15 hours

Children 5 to 13 yrs. Old: 10 to 11 hours

Teenagers: About 9 hours

Adults: 7 to 9 hours

According to an article in *Woman's World* (May 16, 2011) people who sleep an average of at least 7 hours a night are nearly 50 percent less likely to develop small growths in the colon (that could become cancerous.) than those who average less than 6 hours. And a research team at *West Virginia's Faculty of Medicine* claims 7 is the magic number.

Most people think they need less than 7 hours a night, but according to the *American Academy of Sleep Medicine*, only 1 to 3 percent of the population actually needs less than 7 hours a night. The rest are sleep deprived. I could rationalize that I must be one of the 1 to 3 percent, because I always felt pretty good after 6 hours sleep, but as mentioned in the introduction, I wasn't willing to stake my health on it so I have increased it to 7 hours a day – and I feel great!

There is disagreement as to whether you can sleep too much. Some data indicates that you double your mortality rate if you get less than five hours or more than ten hours sleep a night. And the researchers at West Virginia's faculty of medicine say that sleeping more than 7 hours a night increases the risk of heart disease. But you might be sleeping too much for other health reasons, which could be the reason for the increased mortality rate.

Most doctors seem to recommend between seven hours and nine hours a night and not less than six. Seven seems to be number that crops up in research again and again so that's what I aim for. And I prefer to err on the plus side rather than the minus side of seven. People who get more than seven hours sleep a night are less likely to have calcium clogging their arteries. Calcified arteries were found in 27% of those who slept less than five hours a night.

There seems to be no disagreement about the effects of getting *too little* sleep. And according to the West Virginia research team mentioned above, sleeping less than five hours a night, including naps, more than doubles the risk of being diagnosed with angina, coronary heart disease, heart attack or stroke.

Some studies show that for elite athletes getting enough sleep is as important as training and diet. The *Stanford University* male basketball team, for example, slept 10 hours a night for six weeks and improved their shooting accuracy by 9 percent.

One article (Zoomermag.com, May, 2011) suggests that women need about twenty minutes more sleep a night than men since they are involved in decision-making and lateral thinking to a greater extent than men. But a man who has a more complex job with a greater energy demand might need more sleep as well.

5.2 Symptoms of sleep deprivation

After six hours of sleep or less you could experience sleepiness, a tired feeling, trouble concentrating, headache and even nausea. Warning signs could also include changes in your mood such as apathy, fatigue, anxiety, nervousness, irritability and depression. You could be more forgetful than usual, make more mistakes, drive more erratically and anger more easily.

Feeling sleepy or dozing off while reading or watching TV, having difficulty falling asleep at least three nights a week, having to use prescription medications to fall asleep, waking up feeling unrefreshed, having tingling, creeping feelings or nervousness in your legs when trying to sleep or finding that your sleep is interrupted during the night are all signs of sleep deprivation.

The more sleep deprived you are, the greater and more serious the side effects become, including lifestyle changes, eating habits and health problems such as obesity, high blood pressure and diabetes.

Your personal productivity, time management and organization skills will almost always be affected, as well as decision-making, problem solving and creativity.

6 Our internal clocks are more important than the ones on the wall

6.1 Our sleep cycles

Circadian clocks work on a 24-hour cycle and are responsible for fluctuations in blood pressure, body temperature and sleep-wake cycles.

An internal clock provides a regular rhythm to our waking and sleeping schedules. This automatic rhythm is a result of the continuing conflict between two opposing forces – the circadian arousal system, which try to keep us awake all the time, and a homeostatic sleep-drive system, which tries to keep us asleep all the time. The longer we are awake, the stronger the sleep-drive becomes, and the longer you are asleep, the stronger the arousal system become. Thus there is a balance established, which varies slightly from person to person. Generally, after being awake for about 16 hours, you tend to fall asleep.



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When we sleep, we do so in approximately 90-minute cycles throughout the night, each cycle consisting of 5 stages, the first four stages consisting of non-REM sleep, consuming about 75% to 85% of our total sleep time.

Stage 1. As you fall asleep, it is a very light sleep and you can be easily awakened. Your brain waves are mixed, but primarily theta waves, 4 to 7 cycles per second. The length of stage 1 varies, but usually lasts ten minutes or more.

Stage 2. This is considered the starting point of “real sleep,” although you are still fairly easily disturbed. Your temperature drops and your heart rate slows as do the brain waves, although they are mixed with bursts of faster waves called “spindles” plus a brain wave pattern known as K-complex. In total you will probably spend half your sleep time in this stage, though not all at once.

Stage 3. When you reach this stage you are in slow-wave sleep. Between 20 percent to 50 percent of stage 3 sleep consists of delta waves (1 to 3 cycles per second).

Stage 4. This is the deepest sleep (even deeper than stage 3) and it is more difficult to wake you up from this stage. It is believed to also be the stage where all the body’s repair work is being done.

Stage 5. This stage is called REM sleep, visually distinguished by its rapid eye movements. Your brain is highly active here and dreaming takes place. Your heart rate speeds up, blood flow to the brain increases, your breathing becomes faster and more erratic, and blood pressure rises. Learning and memory consolidation are believed to take place during REM sleep. About 20 percent of your total sleep time is spent in this stage. The first REM stage begins about 90 minutes into sleep and then the cycle begins again about every 90 minutes until you wake up.

6.2 Typical sleep cycle

Below is the order in which the various stages typically go through when you sleep. Note that you revisit stages 3 and 2 before going into REM (stage 5) sleep

Stage 1: About 10 minutes

Stage 2: 10 to 25 minutes

Stage 3: About 5 minutes

Stage 4: 20 to 40 minutes

Stage 3: 1 to 2 minutes

Stage 2: 5 to 10 minutes

Stage 5 (REM): About 10 minutes, with successive REM stages getting longer.

6.3 Work smarter by following your body rhythms

What most people don't realize is that the 90-minute "sleep cycles" described above run through the entire day. We obviously don't sleep during the day if we have slept during the night, but the cycles become waves of high and low energy and are referred to as *ultradian* rhythms. Our internal clocks are critical to our personal performance as well as our health and well-being. Our body has many internal "clocks," each operating independently but in constant communication with one another.

In a few of my books and articles and all of my seminars, I talk about scheduling projects in 90 minute segments. I have always known that I was more productive working in sixty or ninety-minute chunks of time, and I suggested all kinds of reasons for it – such as it was the maximum amount of time I could work without having to be interrupted or even interrupting myself. But I never knew until recently that ultradian waves of high and low alertness had actually been identified. One study of young violinists back in 1993 revealed that the best violinists all practiced the same way – in the morning in three segments of no more than 90 minutes with a break between each segment. The same thing was noticed among other musicians as well as athletes, chess players and writers.

I recommend that people find their high energy time in the morning and start working on their top priority for about 90 minutes. Then take a break of about 15 or 20 minutes before starting the next task. Following the second 90-minute work session there should be a break of at least an hour before resuming. (This could be lunch and a brief walk.) It will take time to get into the right pattern. You have to listen to your body to determine the best start time and the actual duration of your high-alertness cycle.

You don't necessarily have to take a coffee break, go for a walk or do stretches during your breaks as long as you switch to a different type of task. There are three basic types of activity – mental, physical and emotional. If you have been working on a mental task requiring intense concentration, cleaning your work area, filing or checking messages on Twitter or Facebook for twenty minutes might be just as relaxing to the mind.

The problem is that people have been fighting their natural body rhythms with coffee and other stimulants and developing inefficient working habits just as they have short-circuited their natural sleep cycles with late nights, artificial lighting and stimulating electronics.

6.4 Ride the waves of high energy

Have you ever felt completely exhausted after work with barely enough energy to flop on a couch after ordering a family-size pizza for dinner? You feel you have completely used up your supply of energy for the day, and yet an hour or two later you feel as energetic as ever. But by then the kids have stopped trying to get your attention and have been completely captivated by their electronic games, and you are left to waste this “second wind” on TV and social media.

If so, you’re not alone. Relatively few people have learned to take advantage of their natural body rhythms and surf the waves of high and low energy level throughout the day.

Starting in the mornings we tend to get sleepy every 90 minutes. As mentioned earlier, these 90 minute cycles are ultradian rhythms, which determine when we feel alert and productive. We perform best during these 90 minute cycles, with about a 20 minute “sleepy zone” in between.

If you force yourself to work on high energy tasks beyond the 90 minutes, your performance suffers and you get a very low return on your invested time. It makes sense that when you are concentrating on the same task for a long time, your brain needs a break. But a change in itself is relaxing, and doing low-energy work like checking e-mail is usually okay.

If we are to be productive at work and energetic during our personal or family time, we must heed our body clocks and not just the ones on the wall. The world was created with built-in cycles. The earth has its seasons, the flowers bloom at different times, and we have our cycles of waking, sleeping, hunger and so on. It has been found that our bodies even have clocks in our lungs, liver and pancreas, not just our brain. It may be discovered that we have a clock in every cell of our body.

For maximum health and performance, tune into your body. Once you develop a sleep schedule, stick to it. Missing sleep will result in a shifting of the ultradian rhythm. If you have to short-change your sleep one night, make it up by taking a nap during the afternoon “sleep zone.” Some of us are “larks” and others are “night owls. Some may have 90 minute high-energy cycles and some may have longer cycles. There is no such thing as a “one size fits all” program for time management. There can’t be; because we are all unique. I doubt whether scientists have yet to find identical brain scans.

7 How to get a good night's sleep

7.1 Preparing for sleep

According to Kalyankrishnan Ramakrishnan, an associate professor at the *University of Oklahoma Health Sciences Center*, exercise improves sleep as effectively as some medications. There is some doubt as to whether some sleeping pills are even safe to use. One study reported in the *BMJ Open Journal* found that regular sleeping pill users were 4.6 times likelier to die prematurely. And the *National Sleep Foundation* reports that 25 percent of Americans take some form of sleep medication every night.

According to literature on the subject of sleeping pills, it would seem that their safety and risks of addiction outweigh any benefits, and particularly for older people who have the added risks of falls and cognitive impairment.

On average, exercise appears to reduce the time it takes to get to sleep by 12 minutes and increases total sleep time by 42 minutes, according to a *Reader's Digest* article adapted from the book, *Sexy, Smart and Slim*. But you should not exercise within two hours of bedtime.

If you like to run in the mornings, compared to non-runners, runners report that they sleep more soundly and awaken more refreshed.



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You need to wind down an hour or more before you go to bed as well. For many people, technology has invaded their personal lives to the point that it keeps them awake. This not only keeps them checking email, texting and involved in social media and the Internet late into the evening but in many cases takes office work into the bedroom.

An article in the November 12, 2012 *Toronto Star* reported on a survey by *Infosecurity Europe* in London who found that 70 percent of the workers surveyed spent at least a half hour a day working in bed. Another survey by *Good Technology* revealed that half of the office workers polled were answering emails while in bed. The trend is encouraged by suppliers who are offering everything from pyramid pillows to laptop trays designed specifically for bed workers.

28 percent of iPhone users check or update Twitter before getting out of bed. According to Dan Tynan of *Jawbone*, people who use their laptops and smartphones in bed spend less time sleeping than those who don't – and that's having an impact on their productivity and overall well-being. A survey conducted by *Jawbone* revealed that on average, those who keep a laptop in their bedrooms, slept soundly for 37 fewer minutes than those who didn't. Smartphone users slept for only 13 fewer minutes.

A poll by the *National Sleep Foundation* revealed that during the hour before bedtime 60 percent of the women were doing household chores, 37 percent were taking care of children, 36 percent were doing activities with other family members, 36 percent were on the Internet, and 21 percent were catching up on work.

One *National Sleep Foundation* poll revealed that 95 percent of the respondents said they used some type of electronics in the hour before going to bed. Exposure to artificial light before going to bed can increase alertness and suppress the release of melatonin, a sleep-producing hormone. Electronics also creates stress by forcing on you a wholly artificial sense of urgency.

Walking, yoga and stretching are good, mild exercises to help calm you down before sleep. Or read a good book, listen to music or have a cup of herbal tea with honey or a glass of warm milk.

Dr. Andrew Rubman, director, *Southbury Clinic for Traditional Medicines*, that there's nothing like a bad case of indigestion to keep you awake at night. He urges people to eat properly, including getting enough fiber, avoiding hard-to-digest and spicy foods, and to avoid eating too close to bedtime. Although he says if you must have something, keep it light. A high-protein, low-glycemic snack, such as a banana with peanut butter or half a turkey sandwich on whole -grain bread can help encourage serotonin production.

Researchers at Taiwan's *Taipei Medical University* found that eating two kiwis one hour before bedtime for four weeks improved both sleep quality and quantity. Kiwi fruit contains high levels of antioxidants and serotonin, a hormone that helps you fall asleep and stay asleep.

Below are a bevy of suggestions to help improve your sleep habits.

7.2 Strategies for improving your sleep habits

1. Make sleep a priority. It's as important as exercise and diet.
2. Make your environment as comfortable as possible for sleep. This may involve a softer pillow, comfortable mattress and even the habit of wearing socks to bed or having relaxation tapes or classical music playing in the background.
3. Determine your required sleep time and add about a half hour to allow time for getting to sleep and getting up during the night.
4. Never go to bed earlier than your normal bedtime. If you are not sleepy, don't go to bed until you are.
5. Stick to a routine. Where possible go to bed and get up at the same time every day, including weekends. It helps regulate the body clock. When people try to catch up on sleep on the weekend the quality of the extended sleep is quite low.
6. Don't go to bed during the day if you're sleepy; take a power nap instead.
7. Skip the caffeine. Avoid coffee or other caffeine drinks at least six hours before bedtime. It can actually stay in your system for 12 hours. Avoid alcohol and cigarettes as well.
8. Go light on dinner. Heavy meals keep the digestive system working and delays of sleepiness. It's best to have a heavier lunch and lighter dinner.

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9. Use your bed for sleeping. It's not a good idea to use your bed for watching TV, checking your e-mail, working on your laptop or other activities not associated with sleeping or resting.
10. Control technology. Turn off your computers, laptops, smart phones, iPad's and other electronic gadgets at least two hours before bedtime.
11. Exercise daily. It's best to exercise earlier in the day but avoid strenuous exercise at least two hours before bedtime. You may feel tired immediately after exercising but over the course of the day people who exercise actually have more energy.
12. Keep the bedroom cool. Scientific evidence indicates that 65°F to 68°F is the ideal temperature for sleep.
13. Keep in the dark. Light inhibits the production of melatonin, the body's sleeping pill, so you might even turn off the night light.
14. Don't be a clock-watcher in bed. If necessary face the alarm clock the other way so you won't be tempted or disturbed by the fluorescent screen.
15. Crash early. The optimal bedtime is between 10 p.m. and midnight. It is generally recommended that you go to bed by 11 p.m.
16. Have a transition routine. Have a half hour or more of relaxation away from the bright lights and work activities. This could be light reading, walking, yoga or a warm bath.
17. Researchers at *Wesleyan University* found that sniffing lavender oil before bedtime increased slow-wave sleep, the deepest form of slumber, by 22 participants in study participants.
18. Don't linger in bed when the alarm clock goes off. More time in bed than needed increases the time that you're awake in bed and produces poor quality sleep.
19. Avoid shift work if possible. Working rotating shifts or in a regular sleep schedule weakens the circadian clock that regulates sleep. Even varying it by an hour is the equivalent of traveling across one time zone.
20. If you can't sleep, don't stay in bed. Don't spend too much time trying to sleep; it reduces the sleep drive. Read a book, listen to calming music or engage in relaxation exercises.
21. Make your bed. Terry Small reported in one of his bulletins that the *National Sleep Foundation* found that those people who make their beds tend to sleep more soundly than those who don't.
22. Organize your day, and go to bed with an uncluttered mind and the knowledge that you have the next day planned.
23. Don't stress yourself if you can't get to sleep right away; focus on relaxing, not sleeping. Stress itself can continue to keep you awake.
24. If thoughts of all the things you have to do or specific worries linger in your mind, write them down on paper so you can put them out of your mind.
25. Share any sleeping problems with friends as well as your doctor; talking about it usually helps, and you might get some useful suggestions from them.

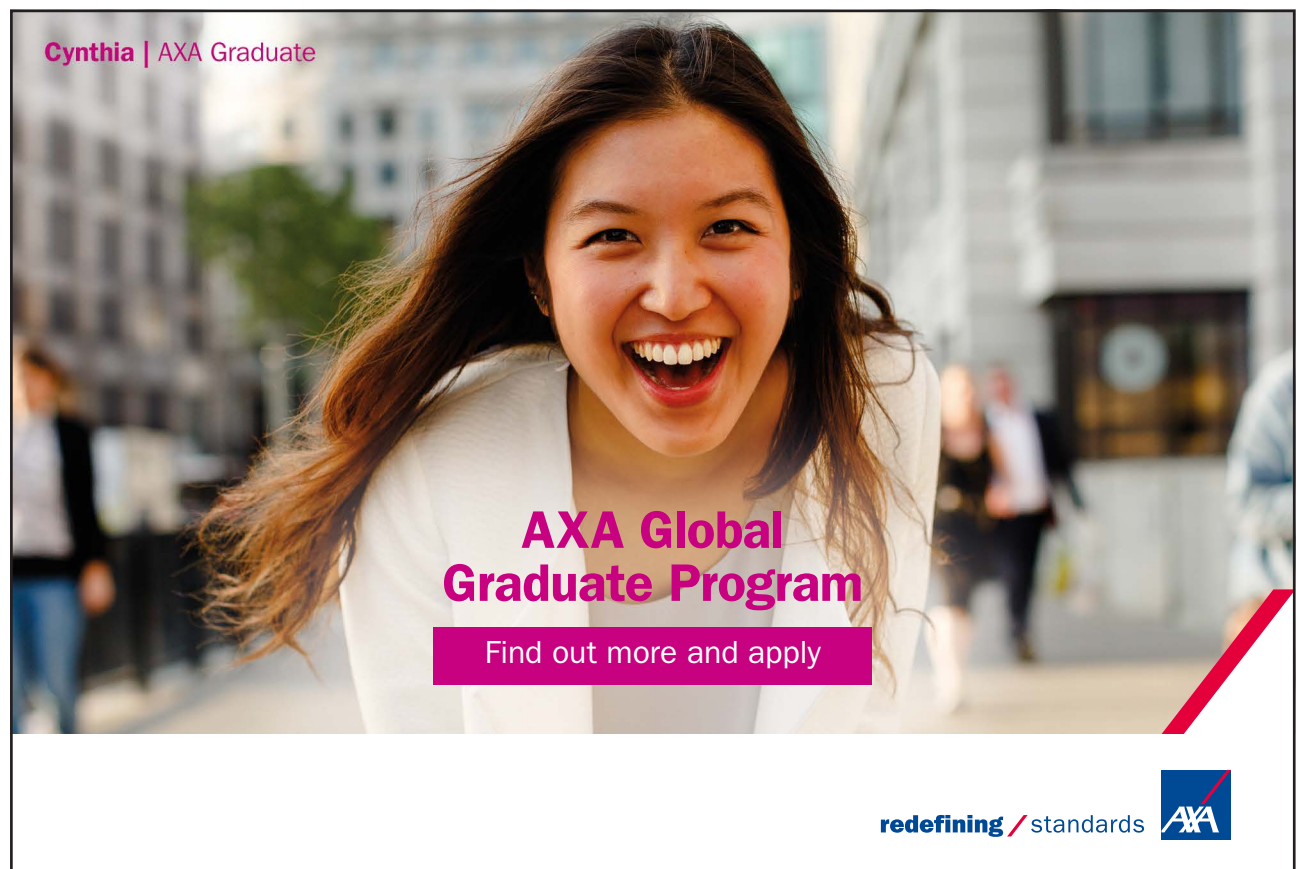
7.3 Sleep inertia

If you have trouble getting up in the morning, it is probably due to sleep inertia. Like the law of physics, a body that is at rest tends to stay at rest and you could feel groggy, awkward and disoriented when you first wake up. Unfortunately our brains don't switch on like a light bulb, and some of us may not be operating on all cylinders for an hour or more. This wake-up stage could be as bad as being legally drunk – or the equivalent of going without sleep for 70 hours.

The symptoms of sleep inertia were first noticed scientifically in the 1950s when it was discovered that Air Force pilots dozing in their cockpits before being called to duty were more likely to make mistakes during the first five to ten minutes after being woken from sleep. Memory, manual dexterity and complex decision making are all negatively affected by sleep inertia.

Sleep inertia was believed to have been the cause of the Air Canada flight mentioned earlier that suddenly took a nosedive when the first officer, having just awoken from a nap, mistakenly thought the plane was on a collision course with another aircraft.

If you have trouble fully waking up in the morning even after the alarm clock goes off, you might want to take a shower first thing, have a good breakfast and a cup of coffee, turn on the lights or open the curtains to let the sun shine in or go for a walk.



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7.4 Larks, night owls and humming birds

It's important to recognize that everyone's biological clock is not the same. Larks are at a full head of steam by mid-morning and probably produce their most creative work before noon. But don't expect them to be fully awake for an evening meeting. And never expect them to be creative at that time. "Owls," on the other hand are usually most alert around 6 p.m., and frequently do their best work in the evening.

According to John Medina, in his book *Brain Rules* (2008), it's not a case of being one or the other. Most people are in between a lark and an owl and you could be anywhere on the continuum. Only about 10 percent of us are larks, 20 percent are night owls, and the rest are somewhere in between.

There is a core period, somewhere in the middle of the day, where all groups are operating on all cylinders. So unless you know how everyone's biological clock is calibrated, it is probably best to schedule brainstorming sessions or arduous projects half way through the day. Oh, but avoid the "nap zone" somewhere between 1 p.m. and 3 p.m. According to Medina, 3 p.m. is "when the brain wants to take a nap, and doesn't really care what the owner is planning to get done at that time."

Morning people, according to *The Secrets of Our Body Clocks* by Susan Perry and Jim Dawson, tend to have less flexible circadian rhythms so they benefit more from a structured daily routine. You could actually track your alertness and body temperature to determine how much of a *morning person* you really are. A morning person will usually have a temperature that rises fairly sharply in the morning, reaches a plateau by early afternoon, and begins its descent before 8:00 p.m. in the evening.

Or more simply, reflect on your behavior. If you go to bed early and wake up early, jump out of bed in the morning raring to go, do your best work early in the day and wake up just before your alarm goes off every morning, you are probably a "morning person".

But don't expect everyone else to be the same way. These biological rhythms are innate, and we should organize our lives so as to work with them, not against them.

7.5 To nap or not to nap, that is the question

Opinions vary, since napping tends to weaken the sleep drive and you might not get quality sleep a night; but Sara Mednick, author of *Take a nap: change your life*, makes a strong case for napping in the afternoon. The need for a nap seems to be woven into our DNA but the push for productivity after the Industrial revolution, hourly wages, and digital distractions seem to have made the "siesta" unpopular – although an estimated 7 percent of the workers in big cities in Mexico and Spain still nap during the day.

One thing is certain; it's not the heavy meal at lunch time that makes you sleepy, it's your circadian rhythm, and it has been proven that a nap will improve your alertness and productivity. NASA scheduled in-flight naps that improved performance of pilots on extended flights. And naps at strategic times might very well have avoided many disasters such as the Union Carbide explosion and the Exxon Valdez oil spill.

It might not be a good idea to nap just because you feel tired or fatigued, but only if you are sleepy. I don't nap on a regular basis (although my solo condo office allows me to do so) but only when I feel the need to recharge my batteries. And even then it is limited to a half hour to an hour maximum. It should be used to complement your evening's sleep, not replace it. Everyone's circadian rhythm is different, and I believe you should tailor any sleep strategies to whatever works best for you.

7.6 Something to sleep on

Although the focus in traditional time management training programs has been on external time management or "clock" time, the greatest improvement in personal productivity is possible only through internal control. You can have an organized environment, clear goals and the top priorities scheduled in your planner or PDA and still fail to accomplish much of significance.

Weak "executive skills" such as initiating work, staying on task, controlling impulses, and regulating emotions can sabotage any time management strategy – whether it is planning, prioritizing or scheduling.

But willpower, self-discipline, attentiveness, focus, and other internal time management strategies can be developed. And sleep plays an important role in their development. Working *with* your biological clock instead of *against* it will make it easier to accomplish more with less effort. These are all important aspects of holistic time management, which to date has frequently been downplayed or ignored.

8 Resources

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An advertisement for Linnaeus University. The background is a bright yellow-orange color. On the left, there is a black speech bubble with the word 'Scholarships' in white script. Below it, the text 'Open your mind to new opportunities' is written in a large, black, serif font. Underneath this, a paragraph in a smaller black font describes the university's international profile and student life. At the bottom left, the 'Linnaeus University Sweden' logo is displayed. On the right side, there is a photograph of a student performing a backflip in a modern, glass-walled building. In the top right corner of the ad, 'Lnu.se' is written in black. At the bottom right, a black box contains white text listing various academic programs: Bachelor programmes in Business & Economics, Computer Science/IT, Design, and Mathematics; Master programmes in Business & Economics, Behavioural Sciences, Computer Science/IT, Cultural Studies & Social Sciences, Design, Mathematics, Natural Sciences, and Technology & Engineering; and Summer Academy courses.

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National Sleep Foundation. www.sleepfoundation.org.

Take a Nap! Change your Life. www.takeanap.info

New Harbinger Publications (for relaxation programs) www.newharbinger.com.

Health. www.health.com

9 About the author

Harold Taylor, CSP, CEO of Harold Taylor Time Consultants Ltd., was a manager in industry for 12 years and a teaching master at Humber College of Applied Arts & Technology in Toronto, Canada for eight years before launching his own business as a professional speaker and trainer. He has now been speaking, writing and conducting training programs on the topic of effective time management for over 35 years. He has written 18 books, including a Canadian bestseller, *Making Time Work for You*. He has developed over 50 time management products, including the popular *Taylor Planner*, which has sold in 38 countries around the world. He has had over 300 articles accepted for publication.

A past director of the *National Association of Professional Organizers*, Harold Taylor received their *Founder's Award* in 1999 for outstanding contributions to the organizing profession. He received the CSP (Certified Speaking Professional) designation in 1987 from the *National Speakers Association*. In 1998 the *Canadian Association of Professional Speakers* inducted him into the Canadian Speaking Hall of Fame. And in 2001, he received the first *Founder's Award* from the *Professional Organizers in Canada*. The award has been named in his honor.

In 2014, Harold formed an Internet training company, *Mindsontime.com*, to conduct mastermind programs, teleseminars and webinars on time management, organizing and leadership – with a focus on the application of recent research findings to increase personal productivity and well-being.

Since 1981, when he incorporated the original time management company, he has personally presented over 2000 workshops, speeches and keynotes on the topic of time and life management.