

Manage your personal energy

Harold L. Taylor



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Introduction

Energy management is required in order to maximize your performance, retain your health and protect your brain. This involves both gaining and maintaining 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.

Although managing your time is important, if you have no energy, all the time in the world will not get the results that you want.

Your brain needs large amounts of energy just to carry out its normal functions. It is only about 2% of your body weight but consumes about 25% of the oxygenated glucose and other nutrients carried by the circulatory system.

In addition to its normal job, the brain is asked to concentrate for long periods of time, make decisions, and switch from one task to another while still focusing on what's important – all of which consume energy. And for the majority of people, it has to do this under stress and with inadequate sleep and nutrition.

Even when you sleep your brain is active, processing information, consolidating memories, and working on problems that have stymied you during the day.

Lack of energy reduces the strength of our executive skills – those brain-based skills required to execute tasks efficiently and effectively. When our brain is tired we tend to procrastinate, become easily distracted, lack focus, show poor judgment, make rash decisions, have little self-control, and become more susceptible to anxiety and stress.

Managing energy presumes you are building enough energy in the first place – through such things as adequate sleep, exercise and proper nutrition. Probably the biggest reason for an inadequate supply of energy is due to a lack of sleep. Sleep has taken the brunt of our need for additional time to do all the things we want to do – to the point where the average recommended sleep time of 7 to 8 hours a night is being short-changed by at least an hour.

People have difficulty believing that sleep has anything to do with energy, either physical or mental; yet look at the fastest creature on the planet – the cheetah. It can accelerate from 0 to 60 mph in just 3 seconds. But it spends 18 hours a day sleeping!

Assuming you have a sufficient amount of energy in the first place, you can manage it by avoiding such things as marathon work sessions, attempts to multitask, and reducing as many sources of stress in your life as possible – in addition to taking frequent breaks.

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 effortless mode; it's just too difficult to crunch a lot of information and sort it intelligently if we lack the fuel for thinking. If you're in the habit of composing email and carrying on a conversation with a coworker while eating lunch, for instance, you could be creating a brain drain.

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.

Making decisions and solving problems throughout the day requires a lot of energy. The frontal lobes of our brain are constantly weighing the pros and cons of every bit of information, trying to determine which ones are the best choice.

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 had 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. But with time, energy, and the habit of planning and proper prioritizing, you will increase your bottom line results.

1 Get in sync with your body's rhythm

1.1 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 had completely used up your supply of energy for the day, and yet an hour or two later you felt as energetic as ever. But by then the kids had stopped trying to get your attention and had been enveloped by their electronic games, and you were 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 levels throughout the day.

Starting in the mornings we tend to get sleepy every 90 minutes. 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 tasks requiring high energy after the 90 minutes, your performance suffers and you get a 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 listen to 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 moon has its phases, the flowers bloom at different times, and we have our cycles of waking, sleeping, and 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 120 minute cycles. There is no such thing as a “one size fits all” program for energy management. There can't be; because we are all unique. I doubt whether scientists have yet to find identical brain scans.

1.2 Work with your biological clock

Our internal organs operate in patterns called circadian rhythms that repeat during the 24 hour day. When these rhythms are out of sync it can affect your health not just your energy level, including everything from obesity and diabetes to heart problems and cancer.

Since our body is created to work in sync with the natural world, and our body clock relies on sunlight and darkness and periods of rest, our modern lifestyle – including late nights, artificial lighting and overuse of digital devices and stimulants – we are hard-pressed to maintain our health and energy at an optimum level.

Bright light in the morning sets the body clock for the day, while darkness puts the internal organs into their nighttime mode. But the bright light from computer screens is telling our bodies to start a new day, as does snacking at night, which simulates breakfast. No wonder our circadian rhythm is out of balance and we experience such things as insomnia, mood changes, digestive problems and low energy.

What can we do about it? Do all you can to live in sync with your biological clock. This means going to bed at a regular time each night, turning off digital devices an hour or more before retiring, making sure you are not exposed to light while in bed, avoiding late snacks at night, opening the window drapes and bathing yourself in light when you wake up, and starting the day off with breakfast. You should also avoid coffee, alcohol or other stimulants before retiring, get a minimum of 7 to 8 hours sleep, and if possible, take a nap in the afternoon – especially on days that you get shortchanged on sleep.

The more you are in sync with nature and your biological clock, the greater your energy reserves.

1.3 The role of sleep in energy management

An older strategy was to sleep one hour less and get more done. The newer strategy is the exact opposite: sleep one hour more and get more done. In the years that intervened, as Daniel Levinson expresses in his book, *The organized mind*, it has been shown by research that sleep is among the critical factors for peak performance, memory, productivity, immune function and mood regulation. And the average individual gets at least one hour less sleep today than he or she did 50 years ago.

The expectation of individuals that they should sleep soundly for seven or eight hours prompts many to seek out sleeping pills, which have been shown to be addictive and have side effects – including interference with memory consolidation – and causes them to be drowsy and unrested in the morning. The National sleep Foundation reports that 25% of Americans take some form of sleep medication every night.

In one study, sleeping pills only allowed individuals to sleep 11 minutes longer a night, and poor quality sleep at that. And according to literature on the topic of sleeping pills, it appears that the risks outweigh any benefits. One study, reported in the BMJ Open Journal, found that regular sleeping pill users were 4.6 times likelier to die prematurely.

Thomas Wehr, a scientist at the U.S. National Institute of Mental Health, showed that without artificial light, people tend to fall asleep about two hours after the room goes dark, sleep for about four hours, stay awake for an hour or two, and then sleep for another four hours. Whether you take two minutes or two hours to fall asleep, it's still normal. Not everyone has the same sleep cycle, and it's the amount of time you sleep, not the amount of time you spend in bed, that is critical.

Seven hours of sleep a night is considered to be a healthy minimum and anything less than six hours is considered to be sleep deprivation – along with its adverse effects. One of these effects is to leave you with less energy, and less likely to perform at your peak, and therefore less productive.

If you value your energy, health, time, and personal productivity, you should also value your sleep – and you should see it as an important strategy in getting more accomplished in the time at your disposal. Sleeping off the job will keep you from sleeping on the job.

Since adequate sleep also has a bearing on your longevity, it could very well increase the total time at your disposal as well.

1.4 The impact of sleep deprivation

In addition to the impact that sleep deprivation has on the functioning of a multitude of biological processes, it also has a significant adverse effect on decision-making. One study of 13,284 teenagers found that those who slept poorly also made poor decisions.

In his 2012 book, *Extreme Productivity*, Robert Posen described an experiment that demonstrated this impact on decision-making. 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.

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.

An article in the October, 2015 issue of Scientific American discussed research showing that sleep deprivation impairs both physical and mental health – negatively impacting the central nervous system, immune system and endocrine system. Sleep itself does not create energy; but it seems to enhance the performance of these systems. And it's interesting to note that anyone who lives for months without sleep will die.

For a full discussion on sleep, its importance to your personal productivity and health and well-being, and how you might increase the quantity and quality of your sleep, refer to my book *Sleep: a time management strategy*, Bookboon, 2014.

1.5 Work with your energy cycles

When we sleep, we do so in approximately 90-minute cycles throughout the night, each cycle consisting of five stages – four stages of non-REM sleep (about 75 percent to 80 percent of our sleep time) and one stage of REM sleep (about 20 percent to 25 percent of our sleep time). The first REM stage begins about 90 minutes into sleep and then the cycle begins again about every 90 minutes until you wake up.

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What most people don't realize is that these 90-minute "sleep cycles" run through the entire day. We obviously don't sleep during the day, 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 several years ago 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 brain.

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

1.6 Are you a lark or a night owl?

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 difficult projects half way through the day. But avoid the "nap zone" somewhere between 1 pm 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".

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.

In addition to working in sync with your biological clock, limiting your work sessions to about 90 minutes and taking advantage of your prime time, you must maximize the amount of energy at your disposal. And in addition to sleep, there are many other sources of energy that you can tap into. We will discuss these in the next few chapters.

1.7 A nap a day keeps brain-drain at bay

Sleep is still not fully understood but it is known to re-energize the body's cells, clear waste from the brain and support learning and memory, according to John Peever, director of the Systems Neurobiology Laboratory at the University of Toronto, and Brian Murray, director of the sleep laboratory at Sunnybrook.

Sleep helps the brain and body to recuperate after a hard day at the office, and since most people seem to be getting insufficient sleep, daytime napping will help boost alertness, mood and cognitive functioning. A 20 minute nap appears to be the best, and naps of an hour or more are not recommended. The best time is thought to be between 2 p.m. and 4 p.m. since it is usually easier to fall asleep at this time.

If you consistently get 7 to 8 hours sleep a night, napping is probably not necessary; but if you have a job that requires a lot of mental and or physical energy, it is recommended. It may be impossible, depending on your job; but a 20-minute nap beats a 20-minute coffee break hands down.

Opinions vary, since napping tends to weaken the sleep drive and you might not get quality sleep at 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. Even NASA scheduled in-flight naps that improved performance of pilots on extended flights.

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2 Tap into the major energy sources

2.1 Sunlight – the most distant source of energy

Sunlight causes the body to release serotonin – one of the reasons you feel in a good mood on sunny days. It also releases endorphins, which lower pain, and acetylcholine, which is essential for learning.

It stands to reason that your productivity as well as your personal energy will improve if you are bathed in natural sunlight rather than the unnatural florescent and incandescent lighting of most offices and working areas. We need the full spectrum light from the sun to really flourish. It improves vitamin D levels, strengthens our immune system and is even thought to decrease some cancer risks.

Studies have shown that sunlight also improve sleep, which has an impact on our daytime energy and productivity.

The energy-conserving artificial lighting is actually depleting our personal energy. Norman Doidge, in his 2015 book, *The brain's way of healing*, explains how cytochrome in all our cells converts light energy from the sun (originating 93 million miles away) into energy for our cells to use. Our eyes are not just used for sight. Every morning light-sensitive cells send electrical signals on a pathway separate from the one used for sight to cells in the brain that operate our biological clock.

It's difficult to imagine that sunlight not only warms the surfaces of our body, but is actually transported to our brain – where it sets in progress a sort of “human photosynthesis” that supplies us with energy.

2.2 Let it shine on your work and your work will shine

We should not deprive ourselves of this energy source from the sun. Yet in Toronto, where I live, it is possible to travel by subway from your condo to your office in a high-rise business tower and back again at night without exposing yourself to any fresh air or sunlight. The more we gravitate toward the cities and hole up in our offices, the more we withdraw from nature and its many benefits.

I don't expect you to locate your desk on the roof of your building or in the backyard; but at least position it so you're exposed to natural light. Go for morning walks, and take your breaks outdoors.

I moved my home office from a windowless room in the condo to the solarium where I am surrounded by two walls of glass and access to the balcony.

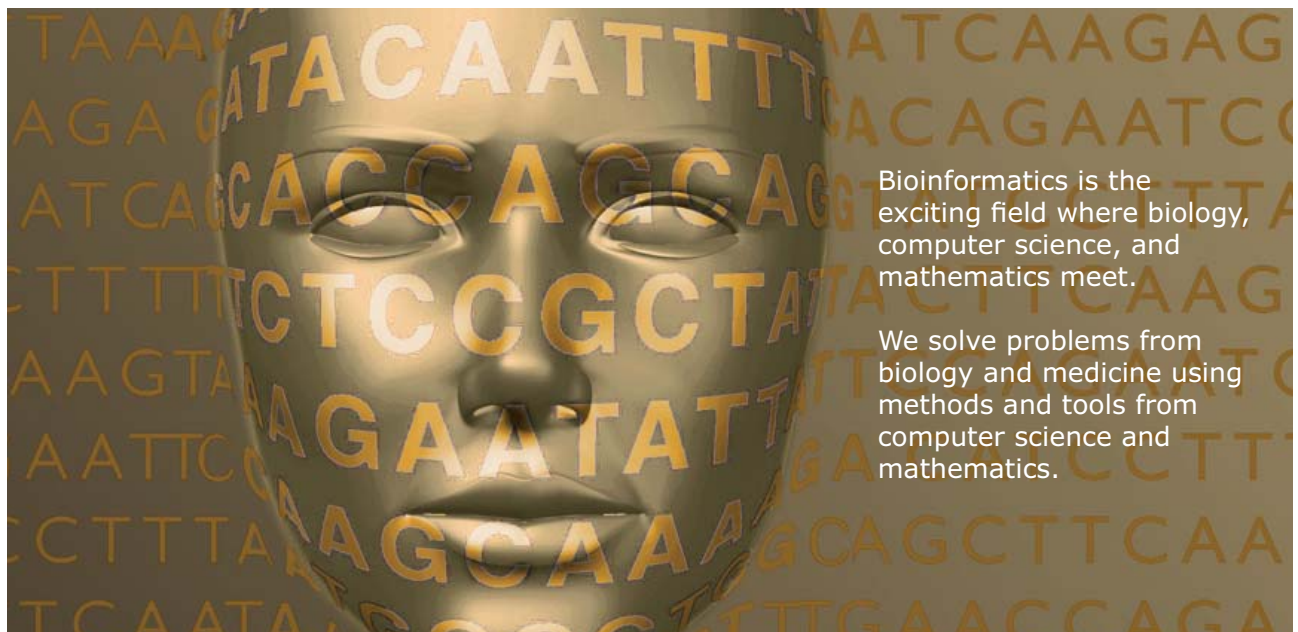
Light therapy studies, where blue-enriched white fluorescent tubes were installed, showed an improvement in mood, performance, alertness and so on. Not as good as working outdoors or near a window in the daytime, but it highlights the importance of light for our health and well-being -- which in turn affects our personal performance.

The impact of light on healing has been observed since ancient times. Although scientific research has only confirmed it relatively recently, science wasn't necessary to see that the sun was responsible for the growth of both plants and animals. Florence Nightingale, the founder of modern nursing in the nineteenth century demonstrated how sunlight reduced pain and promoted healing. In those days hospitals were designed so patients were exposed to sunlight as much as possible. Unfortunately, this ended with the invention and use of lightbulbs and our reliance on artificial light.

Not until about 2005 did researchers prove scientifically what Florence Nightingale had already shown – that natural sunlight can reduce pain, accelerate healing, and even cure some depressions. It's a “wonder drug,” when it comes to energy.



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2.3 Exercise your body and brain for greater energy

Although you would think exercise would consume more energy than it produces, it actually helps you to sleep better, and you feel more alert and energized as a result. A study from Northwestern University, in Chicago, showed that insomniacs who did about 40 minutes of moderate cardio between 1 p.m. and 7 p.m. four times a week got an average of 75 more minutes of sleep a night.

If you are concerned that exercising requires too much energy, try it with music. According to an article by Allison Bond in the May/June, 2014 issue of *Scientific American Mind*, exercising in rhythm with music uses less energy. Thomas Fritz, a postdoctoral fellow at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig says that music production makes exercise easier by activating so-called emotional motor control. Emotional motor control is responsible for spontaneous actions. You can activate this system by singing along more exercising in rhythm with a tune.

Research published in the Proceedings of the National Academy of Sciences, USA, confirms the power of combining exercise with music.

Also exercise helps us to expel negative thoughts, and those who free their mind during exercise have more energy.

Physical exercise stimulates the creation of new neurons not confined to the region of the hippocampus that stores new memories. Art Kramer of the *University of Illinois at Urbana-Champaign* found that a year of exercise can give a seventy-year-old the connectivity of a thirty-year old. Harvard researchers have linked aerobic exercise with improvements in food choices and the ability to resist temptation. They feel it may inspire healthier choices by altering structures in our brains that deal with regulation and impulse control while also making us happier and calmer. This could account for weight loss in addition to the calories you burn through exercise.

Exercise has many benefits besides facilitating sleep and weight control. For instance, studies conducted throughout the world indicate that your lifetime risk of dementia is cut in half when you participate in aerobic exercise on a regular basis. The risk of Alzheimer's Disease is reduced by more than 60 percent, according to the book, *Brain Rules* by John Medina.

And according to research from California State University at Long Beach, a 10-minute walk can increase your energy for up to two hours. Simply standing increases your energy, and walking increases energy levels by about 150%. Take the stairs and you could increase energy by more than 200%. Stand, stretch, move, walk – anything that will get you out of that killer chair.

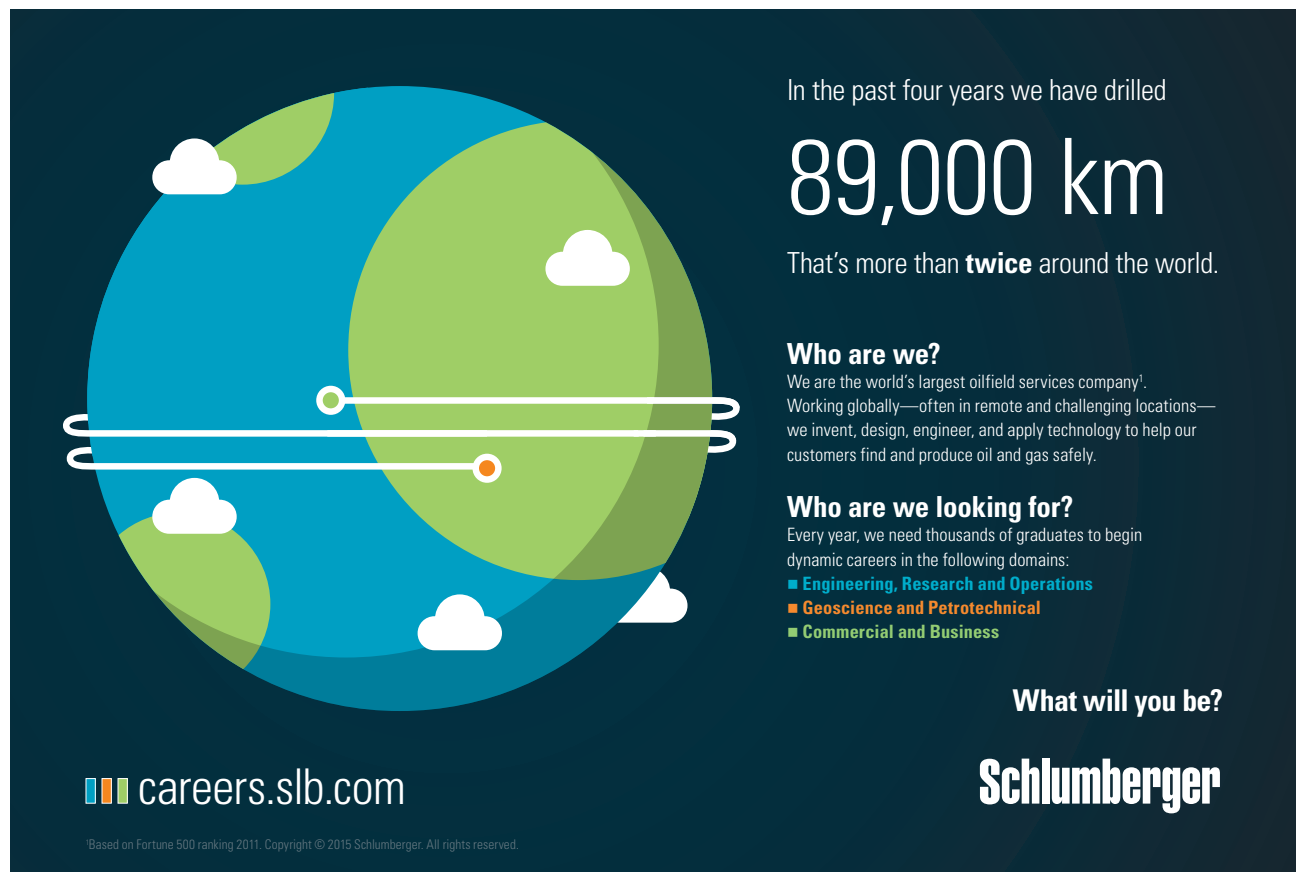
2.4 Your brain: use it or lose it

Exercising your brain – even without moving from your chair – could reap physical benefits. *Cleveland Clinic Foundation* research has indicated that just *thinking* about exercising a muscle will strengthen that muscle.

Neuroscience has proven that the more you use a circuit in the brain, the stronger it becomes and the less energy it takes to use it in the future. The reverse is also true, so don't relinquish all your tasks to a computer. Your memory, creative writing or any skill can be strengthened through practice. But variety seems to be the key. Improving one executive skill does not necessarily improve all the others. Doing crossword puzzles only increases your ability to do crossword puzzles. And this is true for most computer games as well.

You can exercise your brain and keep your brain active as well as strengthen neural connections by learning new skills. You might start by doing everyday tasks differently. Use your left hand to control the computer mouse (if you're right-handed), or to brush your teeth.

Learning a second language can sharpen many of the executive skills. Ellen Bialystok of *York University* in Canada found that the workout the brain gets in bilingualism carries over to improve such skills as problem solving and attention switching (multitasking).



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2.5 Nutrition

There is little doubt that the food you eat has a significant bearing on your level of energy. Many years ago eating enough protein was suggested as a key to optimal energy. But according to a lengthy article in Prevention.com magazine, August, 2015, it's the good bacteria that aid in digestion and are helping you to retrieve energy from the food you eat. The author of the article, *The way to a woman's energy is through her gut*, claims that the bacteria manufacture about 95% of the body's supply of serotonin, a key hormone for boosting energy – much of which is produced in your gut, not your brain.

The author of the article, Samantha Heller, a nutritionist at NYU Langone Medical Center, suggests that for a gut that's teeming with good bacteria and primed to fuel you, start with a diet rich in fiber, nutrients, and plant proteins. The foods she mentions are fruits, veggies, legumes, nuts and seeds, whole grains, organic yogurt, teas and unsaturated oils. She goes on to suggest that you skip such foods as meat, poultry, fish, eggs, coffee, artificial sweeteners, soft drinks and dairy – except yogurt, which is rich in probiotics. In the article she further suggests that if you feel hungry or unsatisfied, to add more beans, tofu, nuts, or nut butter to dishes since their protein is filling and important for keeping energy up. After two weeks, she suggests that your good gut bacteria will be replenished enough for you to add animal protein back into your diet, but the less you consume she insists, the better.

It's definitely worth checking out; but I suggest you gain the counsel of a healthcare professional as well. Ralph E Carson, in his book *The brain fix*, suggests such things as golden root, an arctic root that the Vikings used for strength and endurance, to overcome fatigue and boost your energy. He also suggests that ginseng is an herb that brings health improvements and is credited for boosting energy among other things, including brain power.

I do suggest you take your diet seriously and seek out help to ensure you are fueling your body with nutritional foods, and not wolfing down a handheld breakfast on the run and feeding on fast foods and chocolate bars.

One thing I do is start each day with a large bowl of cooked oatmeal to which I have added a banana, blueberries, raisins, flax seed, cinnamon and honey. Perhaps it's partially in my mind, but I seem to have plenty of energy for an octogenarian. But I think a diet has to be adapted to your particular needs.

2.6 Water your brain before using

To keep yourself energized, drink plenty of water. It will help improve your mood as well as your energy. According to research conducted at the University of East London in the UK, researchers believe that bringing water into an exam room can raise students' marks. Studies indicated that those who drank water while writing exams out-performed those who didn't. In one study, the scores averaged 4.8% better. One explanation is that students are in a mild state of dehydration when taking exams, and drinking water corrects this. Perhaps some of us should be drinking less coffee and more water.

Tracking 2500 people for nine years, *University of Miami* researchers discovered that those who drink diet soda every day had a 61% higher risk of stroke, heart attack and vascular related deaths than those who didn't drink diet soda.

Although sleep, exercise, sunlight, and nutrition are the major energy builders, there are also many ways of giving your energy a boost. These will be discussed in the next chapter.



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3 Ways to boost your energy

3.1 Working environment can impact both energy & productivity

Your surroundings not only impact your energy level and personal productivity, they can also affect your health, mental attitude and general well-being.

For example, studies have shown that the presence of potted plants improves productivity, creativity, performance and learning ability. And researchers have also found that plants act as vacuum cleaners, removing pollution from the air. Exposure to indoor and outdoor pollutants in both home and offices has been linked to anxiety, depression, irritability, fatigue and short and long-term cognitive decline among other afflictions.

One study involved new computers, which have been shown to give off chemicals into the air. When a batch of new computers were hidden behind a divider, cognitive testing showed it reduced performance and increased errors by those workers closest to the hidden computers. But those most distant from the computers were unaffected. Poor air quality can negatively impact both health and performance.

According to the February, 2010 issue of *Scientific American Mind*, background noise at home, work or school can not only disrupt a person's concentration, it could also increase stress levels and conditions such as high blood pressure, coronary disease, peptic ulcers and migraine headaches.

Another study of more than 11,000 office workers revealed that interruptions caused more than two hours of lost productivity per day – that's 25% of the workday wasted. This seems high, but an independent study by Basex in 2005 estimated that interruptions constituted 28% of the average knowledge worker's day. This study was mentioned in the article, *It's Time to fight back against infomania*, by Todd Bishop, P-I Reporter, January 23, 2009.

When we talk about noise as distractions and interruptions, I am referring to loud noises. According to a peer-reviewed study out of the University of Chicago, "A moderate level of ambient noise is conducive to creative cognition." So white noise can have the opposite effect. Research carried out at the University of Illinois on the effects of background noise on creativity found that the level of noise experienced in a bustling coffee shop enhanced performance and even helped people concentrate.

There's even a website called *Coffitivity* at <https://coffitivity.com/> that lets you bring the sound of a coffee shop to your computer while you work. Coffitivity recreates the ambient sounds of a cafe to boost your creativity and help you work better.

Background music, especially classical, has been shown to reduce stress, lower blood pressure and even help focus attention – so sound itself is not necessarily a distraction. I sometimes listen to AccuRadio on my laptop as I work. AccuRadio has over 50 genres including classical, blues, contemporary, Christian, country, and dance. You might check it out at Accuradio.com.

Dull, boring offices and meeting rooms encourage dull, boring ideas. A Milwaukee insurance company claims that productivity jumped 15% after moving to a creatively designed building. Keep this in mind when creating an office area or other work area.

Natural lighting from the sun, which was mentioned in the last chapter, is another environmental factor that can affect your health as well as your personal performance. It improves cognitive performance alertness and mood. A *University of Michigan* study showed that people with windows facing the outside world are more productive, healthier and maintain higher levels of concentration. People in windowless offices – such as the common cubicle layout – daydream more.

Research indicates that productivity rises 15% to 25% when work is done at home instead of at the office, and in general, self-employed people are more productive than others. These statistics are from a book called *Working from Home* by Paul & Sarah Edwards.

If you have a home office, working at a kitchen table may not be maximizing your personal productivity. Give more thought to where you locate your principal working area. Is there natural lighting? Ambient noise or music that encourages rather than blocks creativity? Adequate air circulation? Relatively free from interruptions? Pleasant, cheerful surroundings that include plants? How about a comfortable office chair and a stand-up desk as well so you to move around? Your environment is important if you are to maximize both your energy and your personal productivity.

3.2 Batching consumes less energy and increases efficiency

Batching refers to scheduling blocks of time in your planner for tasks that are similar in nature and require similar resources.

The length of time could vary, but I frequently tie it in with my practice of scheduling 90-minute chunks of time to work on projects in a relatively interruption-free environment. For instance, after a half hour or more of early morning start-up time, where I get rid of minor but essential tasks such as checking email, voicemail, requests for information etc., I might have a 90-minute block of time scheduled for writing articles for my newsletter and blog, material for my teleseminars, courses or website – all requiring writing, voice activated software, reference books, notes from my journal and so on.

A batching session could also involve communicating with various people by phone, text or email, whether that be business or personal related, at a particular time in the day.

Batching consumes less energy and causes less mental fatigue since you are using the same areas of the brain and not switching back and forth from one task to another or putting demands on your energy supply by having to make frequent and unrelated decisions. It also increases productivity since you are wasting less time locating materials, interrupting yourself or deciding what to do next.

It is easier to follow through on commitments first thing in the morning – before the distractions of the day arrive in full force. And 80% of all productivity gains normally occur within the first 20% of the day. So make sure that your first batch of work consists of priorities.

I prefer 90 minute blocks of time, which are reasonable lengths of time to be unavailable to others, and seem to follow the waves of high energy throughout the day. But smaller tasks require less time, and anything down to a half hour would be feasible. Anything less than that defeats the purpose of batching, and the benefits are few.

Other examples of the types of tasks that lend themselves to batching are back-to-back meetings, interviews and errands – where you visit the places farthest from your home base first and work your way back. It can also involve reading magazines, blogs, websites, books and other resources in search of information on a specific topic, posting and reviewing material on social media sites such as Facebook and Twitter or organizing a specific area of your home or office.

Forming the habit of batching reduces the practice of multitasking, and eliminates time wasted and things overlooked that occur when you constantly transition between tasks throughout the day.

Of course, the breaks between the 90-minute sessions spent working on projects or batches of similar tasks would consist of activities unrelated to the projects, and that would mainly involve the other brain hemisphere.

3.3 Coffee is a “good news – bad news” energy source

Although drinking too much coffee has been associated with anxiety and stress, in moderation it seems to give energy and memory a boost. A brief article in the spring, 2014 issue of *Health* magazine describes a link between caffeine and memory. Michael Yassa of *John Hopkins University* asked 60 people to view a series of images of different objects. Then, five minutes later, after receiving either a placebo or 200 milligrams of caffeine, were tested the next day on their ability to recognize images from the day before. More people from the caffeine group recognized that an image was similar to rather than identical with one they had viewed earlier.

Separate research published in the *Journal of Public Health Nutrition* also showed that one or two cups of tea a day can boost brain power and athletic performance. This held true for children as well.

There are many recent articles associating coffee with increased brain function, improved mood and a lower risk of disease. It contains antioxidants as well as several nutrients such as Riboflavin and Vitamin B5.

Among recent claims is that coffee lowers the risk of Alzheimer's disease, Parkinson's disease, diabetes, depression and liver cancer. A 2012 study, reported in the *New England Journal of Medicine* even suggests that regular coffee drinkers live longer.

But drinking too much caffeine or drinking it too late in the day can hurt some people's ability to sleep and or function. And the caffeine, like other stimulants, can heighten physical symptoms of anxiety.

Caffeine is probably the world's most popular drug since 90% of the world's population consumes it. It does affect the brain. It is one of the few chemicals that crosses over the blood brain barrier – the barrier between your bloodstream and your brain. Here it stimulates the release of dopamine in your brain's reward center, similar to other addictive substances. It puts the brain on high alert increases your concentration and attention.

It is a good news – bad news substance, with most of the good news happening when taken in moderation – for example a maximum of one or two cups of coffee a day. It can improve mental functioning and mood with the additional benefits of alertness, better concentration, faster reaction times and better accuracy on memory tests.



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According to the book *Caffeinated* by Murray Carpenter, caffeine, the active ingredient in coffee, is a drug. To quote, “A 64th of a teaspoon, the amount used in many soft drinks, will give you a subtle boost. A 16th of a teaspoon, about the amount in 12 ounces of coffee, is a good solid dose for a habitual user. A quarter teaspoon will lead to bodily unpleasantness – racing heart, sweating, and acute anxiety. A teaspoon will kill you.”

The caffeine in coffee can make you stronger, sharper, energetic and efficient; but it can be addictive as well. I can personally attest to the withdrawal symptoms, including severe headaches, when I gave up wolfing down a dozen or so cups a day while speaking at conferences and facilitating workshops.

Coffee can certainly boost your energy; but the energy is not real; it's a chemical simulation akin to fear. But the cup or two a day limit is probably a safe bet.

3.4 Energy drinks are not recommended

Research suggests that energy drinks can improve performance, but lower amounts may actually be more helpful than higher amounts, and they can be dangerous in combination with alcohol because they eliminate the sedation associated with getting drunk, and you tend to drink even more alcohol. You become “wide-awake drunk” so to speak.

Energy drinks like Red Bull are basically soft drinks laced with about double the amount of caffeine that you get from an equivalent amount of coffee. They have been known to cause sleep disruptions, and personally, I'd stick to coffee.

3.5 Sweets may improve performance

Consuming glucose when you are given a problem to solve will likely improve your performance. At least that's what studies indicate. Glucose goes directly to the brain and feeds the neural circuits that are working on the mentally demanding tasks. Unfortunately doing this too often could lead to diabetes and sugar crash – not to mention your waistline. The brain burns glucose like a car burns gasoline, a little extra energy could be useful. But avoid a steady diet of sugary drinks and candy bars. Like most things, moderation is the key.

3.6 Building sound relationships keeps energy high

Strong friendships give both your physical and mental health a boost. The February, 2014 issue of *Scientific American Mind* reported on a quantitative review of numerous studies, concluding that having few friends is the mortality risk equivalent of smoking 15 cigarettes a day. People with a close friend at work are more productive and more innovative. Strong social connections are the biggest prediction of happiness in general – and happiness has been linked to do an increase in longevity.

A bad mood is contagious, according to Gary Lewandowski, Jr., associate professor of psychology at Monmouth University. You unknowingly pick up other people's nonverbal behaviors and tend to mimic them – similar to yawning. (It is more common when the person yawning is someone close to you.) Similarly you can pick up their high energy or low energy, positivity or negativity, enthusiasm or lethargy.

So choose carefully those whom you associate with – because you can pick up their bad moods as easily as you can pick up good moods. Avoid toxic people whenever possible. Research suggests that there is a class of brain cells called mirror neurons that appear to reflect the actions and feelings of others. No wonder our mothers warned us to stay away from obnoxious people and to surround ourselves with positive friends.

And when mother said, “This hurts me as much as it hurts you,” she wasn't fibbing. Studies show that the pain we feel when others get hurt activates the same regions of the brain that are activated when we actually get hurt ourselves.

Not only does this make sense of the fact that we sometimes get “bad vibes” from people we meet, it also emphasizes the importance of being able to manage stress effectively – since stress is another thing you can “catch” from others. And stress can affect our productivity as well as our energy, mood and state of health.

Relationships can be either an energy booster or an energy drainer.

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4 Activities that drain your energy

4.1 Excessive use of technology can drain your energy

We seem to be obsessed with the need to stay connected, check email every few minutes, respond immediately to every email and text message we receive, interrupt ourselves from important tasks to answer our smartphones, and continually disrupt family plans and scheduled events.

Getting more things done faster is no longer limited by technology, but by our brain. Our brain has a limited capacity for processing information, and this limit is being approached and frequently passed by the ever-increasing rate at which it is being assaulted by new information.

In the past decade, Internet use has expanded by 566%. It is estimated that 40% of all people of the world are now online. According to the book *The End of Absence* by Michael Harris, by 2012 we were already searching for information via Google more than 1 trillion times each year. We “liked” 4.5 billion items on Facebook and uploaded hundreds of hours of video on YouTube for every minute of real time.

With over 6 billion cell phones in use, and the average teenager, according to Nielsen research, sending about 4000 text messages each month, it is not difficult to imagine the impact on our brain. Torkel Klingberg, in his book *The overflowing brain*, claims “boundaries are no longer defined by technology, but by own biology.” Torkel mentions a survey of workplaces in the U.S. that showed workers were being interrupted every three minutes, and people have an average of eight windows open at the same time.

Absorbing new information burns energy. And it takes more energy to multitask, make decisions and work on demanding tasks. To maximize brain efficiency, we must protect our brain from energy- draining activities encouraged, if not caused, by technology.

We must continue to use technology and all that it has to offer in order to improve both our performance and lifestyle. But we must do so in a manner that protects our health – including the health of our brain. This involves judicious use of the Internet, control of technology, and the practice of moderation as opposed to excess.

This pressure to be forever connected and on top of things drains our energy and takes its toll on our health and well-being. We become fatigued, mentally drained and under constant stress, which in turn taxes our energy supply even more.

4.2 Balance your technology and your humanity

It is essential that we control our use of technological gadgets such as iPads, iPhones and other PDAs. They were originally supposed to give us more leisure time, but instead they make it easier for us to work longer and faster – regardless of where we are. Control them by turning them off at a set time each day, such as 6 p.m. It will help keep your life in balance, reduce the temptation to multitask, and slow down the pace of life. It will also reduce stress and help us to sleep easier if we're not checking email just before we go to bed. We try to get more done by cutting back on sleep when studies show that after a good night's sleep you get *more* done, with fewer mistakes, because of your increased ability to concentrate.

Technology was meant to speed up the completion of tasks, not the behavior of people. We are not machines. It's bad enough trying to keep up with our neighbors, without trying to keep up with our *smart phones*. Don't allow technology to rob you of your creativity, individuality, humanity and peace of mind. Make time for yourself and rid your life of strife.

The busier you are, the faster time seems to pass, and many people seem to be in a constant state of overload. By using technology indiscriminately, they are putting their lives in high gear, multitasking, responding to crises, and filling their lives with incessant interruptions and trivia. No generation has had such a long lifespan as this current generation, yet a third of Americans claim they do not have enough time. In some respects, all we have done by introducing technology and increasing speed is reduce the time we spend on trivial and low-priority activities so we can spend time on even more trivial and low-priority activities.

To manage our energy we must first manage our technology. For a full discussion of this topic, referred to my book, *Managing the use of technology*, Bookboon, 2015.

4.3 Multitasking can deplete your energy supply

The impact of multitasking on society is now so obvious that it cannot be ignored. The Human Factors and Ergonomics Society estimates that 2600 deaths and 330,000 injuries are caused each year in the U.S. by motorists speaking on their cell phones while driving. Daniel J Levinson, in his book *The organized mind*, claims that multitasking also disrupts the kind of sustained thought usually required for problem-solving and creativity. He also indicated the impact of interruptions when he said the awareness of an email waiting to be answered can reduce our IQ by 10 points.

In studying how the brain uses energy, scientists have learned that it's virtually impossible to do two things at once with equal amounts of attention. And attempting to do so consumes energy.

Dr. Amir Allen Towfigh, a neurologist with *Weill Cornell Medical Center* claims that multitasking can jam up your brain processing. He says our frontal lobes are the main engines directing our attention, and they have a limited amount of processing power. Multitasking puts a strain on working memory since it requires you to bring back important pieces of information for each task as you switch back and forth between them.

By using functional MRI, researchers discovered that when people juggle two assignments, their prefrontal cortex appeared to deal with the tasks one at a time, creating a mental bottleneck.

Brain research does indicate that you can have several motor programs running simultaneously, whether it's steering your car, talking on your cell phone, texting a message or whatever; but you can only focus your conscious attention on one thing at a time. Your body may react through habit; but your brain thinks sequentially. So relying on muscle memory when thinking is required can be a dangerous practice. If one task is automatic such as walking, it doesn't place such an energy demand on the same area of the brain. But two tasks requiring activity in the same area of the brain might be produce an energy drain.

The ability to focus is one of the most critical functions of the brain, and it depends on the strength of our executive skills, which reside mainly in the prefrontal cortex. They are not fully developed until we are about 25 years old, and our brains shrink at about 2% per decade as we age – so it is even more imperative that we do not multitask when we are either young or aging. It is during these stages of our lives that we are most easily distracted. Although focus consumes energy, multitasking consumes a lot more.

Multitasking can also be stressful, and during stress our weakest executive skills become more pronounced. Too much exertion without a break taxes the executive skills as well. The cards are stacked against you when you multitask.

4.4 Decision-making, problem solving & willpower all consume energy

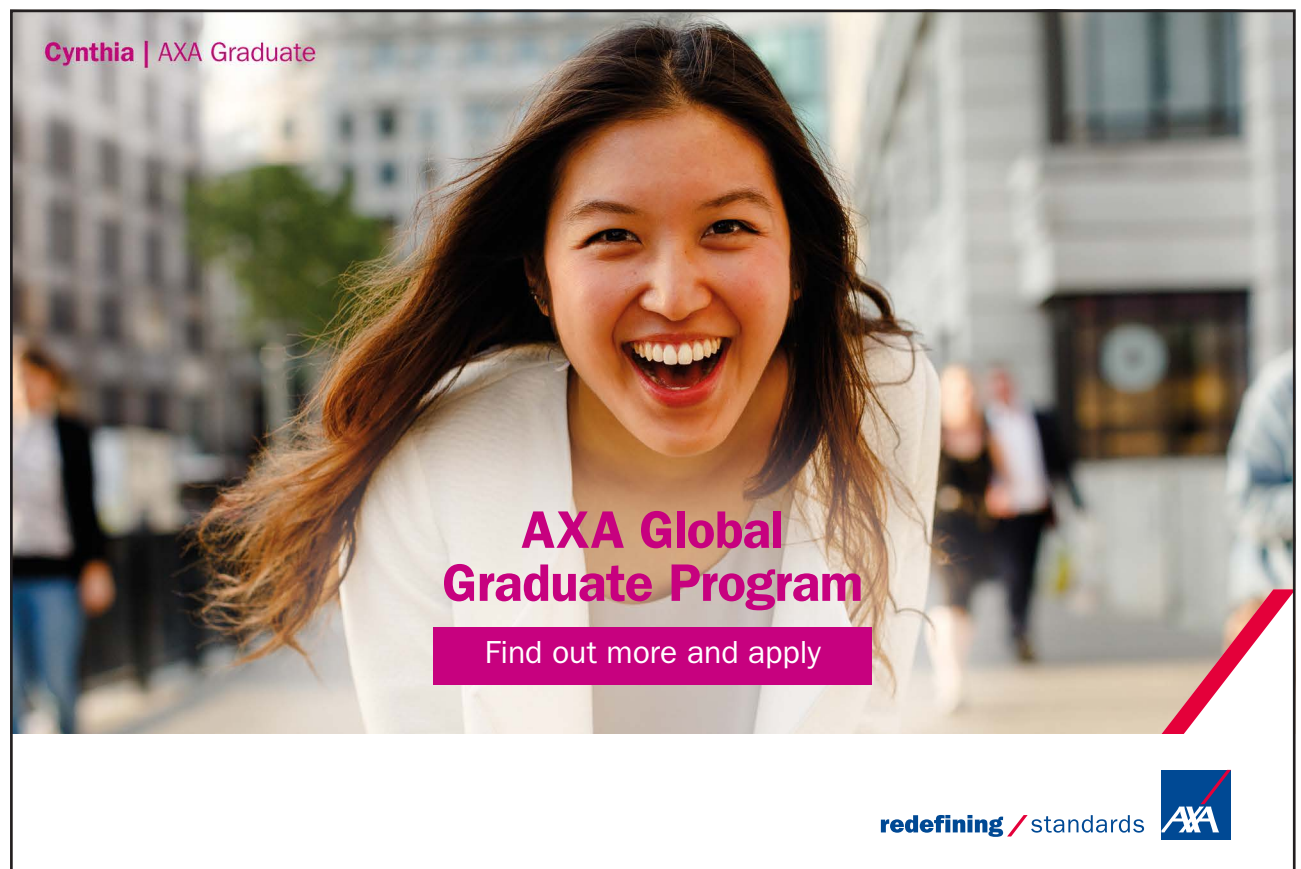
As far as your brain is concerned, less information frequently results in better decisions. Too many choices and too much information taxes the brain and depletes your mental energy. Researchers have found that coming to a decision often involves listening to two parts of the brain – one that relies on taking advice and the other on experience. The brain considers both views, sometimes conflicting, and makes a decision.

Experiments show that there is a finite amount of mental energy available for exerting self-control, willpower, problem solving and decision-making. As mentioned in the introduction, making decision after decision eventually leads to poor decisions. Similarly it has been shown that exerting willpower reduces your energy.

Too much mental exertion without breaks taxes the executive skills. In fact studies described in *Scientific American Mind* (May/June, 2011) have shown that people who exert themselves mentally, such as resisting the temptation to eat chocolate or whatever, gave up on problems sooner when presented with them immediately afterwards.

Willpower can be improved through practice. For example turn down desert once in a while, or second cup of coffee. Give up your favorite TV program or sporting event and so on. You could have a glass of water instead of a milkshake and resist that chocolate bar after golf. It takes energy to do so, but it is an investment of energy since once you develop willpower, you are able to resist temptations and urges with less effort.

In decision-making, when too much information is available, the prefrontal cortex, home of your executive skills, goes into overload and you either don't make a decision or you make a poor one. In one study, grocery shoppers who were offered free sample of 24 jam flavors were less likely to buy anything at all compared to those shoppers who sampled only six flavors. And when people are given information on fifty rather than ten options in an online store, they choose lower-quality options. The main reason for this is the limited capacity of the brain's working memory. It can hold about seven items; anything more must be processed into long-term memory.



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Whether hiring new employees or deciding to go with a new product, executives sometimes go with their gut feeling rather than plow through all the accumulated information and comparing the pros and cons. In business there seems to be a preference for the quick over the right; because there are so many decisions to be made.

4.5 Interruptions consume energy as well as time.

Interruptions, which are a form of multitasking, also help to use up your daily supply of energy. The average smartphone user checks his or her device about 150 times a day according to the 2014 book, *Thrive*, by Arianne at Huffington. And according to a study conducted in 2005, it takes an average of 25 minutes to return to a task once interrupted, and people spend only 11 minutes on a project before being pulled away. In addition to self-interruptions are the hundreds of daily distractions resulting from your working environment, including décor, clutter, and other people.

Many of us like to surround ourselves with photos of our family, trophies of our accomplishments, and certificates of achievements and paraphernalia that remind us of the past. But they also distract us from the present, and consume energy in the process. Personally, I think it is better to focus on business in the office so you can complete your daily workload sooner and enjoy your personal time later. Not that your work should not be enjoyable; but enjoying your two roles separately is more efficient and consumes less energy.

Distractions waste our energy; concentration focuses it. If we have reduced external distractions to a bare minimum by turning off smart phones, engaging voicemail, and working alone in the home office devoid of other people, the bulk of the distractions will still remain. The tendency of our minds to wander or daydream is a function of our reactive brain, which is always on the alert for unusual or sudden motion, sound or sightings.

We don't like to be distracted when we are working on a project, but the brain's alertness to distractions is a built in safety factor for our own good. A sudden appearance of a threatening object in our peripheral vision, for example, is something you shouldn't ignore. Focus is great in a safe environment such as the confines of your office, and you should do what you can to avoid distractions. But realize that you will always have a certain number of distractions that cannot be avoided. Don't resent them; allow for them when scheduling time for projects and tasks.

4.6 Disorganization is an energy waster as well as a time waster

One U.S study mentioned in an article by Leah Etchler in *The Globe & Mail* (April 6, 2013) found that employees lose 76 hours per year as a result of disorganization so you have more than just energy drain to be concerned about if you are disorganized.

Disorganization definitely consumes energy, whether by searching for misplaced materials in your office or scanning dozens of folders left unfiled on your computer desktop. Mehmet Oz and Mike Roizen, authors of *YOU: On a Diet*, claim that visual clutter slows down the brain. They say that's why clusters of road signs double the chances of missing the one you're looking for. It also explains why website designers aim for simplicity. So clearing clutter from your desk, office and home and leaving more wide open spaces also helps to clear your mind so it will be more productive and consume less energy.

If you have a problem organizing your working area or setting up a workable time management system, get help. There are professional organizer associations in many countries who can point you to professional organizers in your area who will assess your needs and make recommendations. You can locate them by doing a quick search with Google or other search engine.

Organizing your office and home not only helps you to find things, it helps you to find purpose in life as well. According to recent research reported in the July/August, 2015 issue of *Scientific American Mind*, an ordered life lays the groundwork for the pursuit of larger goals, purpose, and significance.

4.7 Stress is the catalyst for energy loss

Fatigue and information overload tend to weaken executive skills, lower your energy level and make you more susceptible to distractions.

Excess cortisol impairs function in the prefrontal cortex – an emotional learning center that helps regulate the “executive skills,” including working memory. The overproduction of cortisol was found in seniors who were experiencing memory loss. And it is believed by many neurologists that memory loss experienced by seniors is largely a factor of stress, not age. Prolonged exposure to cortisol has been shown to shrink the hippocampus by up to 14%.

In stressful situations, your weakest executive skills fail first and become more pronounced. Fatigue and information overload tend to weaken them further. Avoiding, releasing or being able to manage stress is important.

An article in the September, 2014 issue of the *Reader's Digest* (*A new way of thinking* by Philip Preille) reported that a few years ago a major U.S. study confirmed previous findings that high levels of cortisol, when produced for too long, impair mental retention. The alleviating factor is face-to-face contact with others. All evidence reports to social activities – anything from bridge clubs to evening classes, particularly volunteerism – to relieving stress and improving memory. Seniors who double up on their volunteering activities live up to 44% longer than non-volunteers.

Avoiding, releasing or being able to manage stress is important. You should re-examine your workload. Simplify if possible. Delegate and outsource. Pace yourself.

Activities such as meditation, yoga and relaxation can change brain structure so that brain processes are more efficient. Meditation has been shown to have a positive effect on the immune system and cardiovascular function as well as the brain. In one study, those who meditated showed less activity in the brain area associated with negative emotions such as anger and anxiety and more activity those areas associated with optimism and confidence – and these emotions have an impact on energy.

A popular stress-reducing activity that is gaining momentum is coloring books for adults. Psychologists claim it can be as effective as meditation in lowering stress levels. Discover what works best for you, and develop a daily or weekly routine that incorporates stress-reducing activities. After all, routines consume less energy.



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5 Ways to conserve your energy

5.1 Make your health and well-being a priority

More than a quarter of Americans depend on fast food, and over 30% of people consume some fast food on any given day. Americans spend over \$134 billion on fast food each year, according to the October, 2010 issue of *Psychology Today*.

In 1995, no state in the U.S. had an obesity rate above 20%. By 2011, all but one state had an obesity rate above 20%. (Source: *Globe & Mail*, July 8, 2011). A CTV news program aired around the same time as the *Globe & Mail* article mentioned that Canadians consume an average of 700 calories per day more than we did back in 1970.

Skipping breakfast is no way to lose weight. Australian research reported in the June, 2011 issue of *Chatelaine* magazine indicated that kids who skip breakfast have a higher risk of heart disease as well as obesity.

Obesity is not good news. A study published in the journal *Neurology* showed that people who are obese in middle age have almost 4 times the risk of developing dementia later in life than those of normal weight. According to *Archives of Internal Medicine* you have an 89% lower risk of developing diabetes if you are not overweight or obese.

Adequate sleep is important when it comes to avoiding obesity. A study of 68,000 women by *Harvard Medical School* found that women who sleep only 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.)

Another study described in the October, 2015 issue of *Scientific American* found that in sleep deprived volunteers, an appetite stimulating hormone had increased by 28%.

More exercise would help stamp out obesity. But only 5% of Canadian children and youth and 15% of adults are meeting physical activity guidelines according to Christa Costas-Bradstreet, a physical activity specialist with ParticipAction.

According to Statistics Canada, only 13% of Canadian adults aged 49 to 59 and 11% of those aged 60 and above meet the guidelines for moderate physical activity (defined as 150 minutes of moderate to vigorous activity per week in bouts of 10 minutes or more, in addition to muscle and bone strengthening activities using major muscle groups at least two days a week).

To increase the amount of time in your life by avoiding obesity, it appears we should avoid fast food and junk food, watch our diet, eat a healthy breakfast, get adequate sleep, and exercise as much as possible.

5.2 Maintain an active lifestyle

An article in the November, 2014 *Scientific American* provides some statistics based on 18 studies reported during the past 16 years, covering 800,000 people. The author of the article, James Levine, co-directs *Obesity Solutions*, a program of the *Mayo Clinic* in Scottsdale Arizona. The title of his article is “Killer chairs,” and he indicates that sitting for more than half the day doubles the risk of diabetes and cardiovascular problems. Among the findings reported after following 8800 adults for seven years was that those sitting over four hours a day watching TV had a 46% increase in deaths from any cause when compared with those who sat in front of the TV set for less than two hours a day.

Also, comparing lean and obese people in the US with similar environments and diets, the obese people sat 2.25 hours longer than their lean counterparts every day, and expended 350 fewer calories.

Tom Rath, in his book *Eat Move Sleep*, (Missionday, 2013) called sitting “the most underrated health threat of modern times.” He claims that *sitting* more than six hours a day greatly increases your risk of an early death.

Neither Tom Rath nor James Levine seem to be suggesting jogging or marathon walks to remedy the problem, but rather to just get out of your chair. Get up and move around, as we were created to do, rather than lead a sedentary life. Walk around while you talk on the phone, work at a stand-up desk, have stand-up meetings, take the stairs instead of the elevator, walk to the local mall instead of taking the car – are the type of recommendations these authors seem to be supporting.

Tom Rath claims that as soon as you sit down, electrical activity in your leg muscles shuts off, the number of calories you burn drops to one per minute, and enzyme production, which helps to break down fat, drops by 90%. And after sitting for two hours your good cholesterol drops by 20%.

On the other hand, staying physically active, socially connected and mentally stimulated has been shown in studies to help keep brains sharp.

5.3 Don't rush needlessly

Just as gulping your food and rushing through meals takes the enjoyment out of eating while doing nothing for your health, so rushing through life has its consequences. If you can't remember what you had for dinner last night, you were probably mentally absent at the time. And the same thing applies to life itself. If you rush through life, multitasking and always thinking ahead about the next item on your bottomless “To Do” list, later in life you will wonder where the time went.

Speed is the enemy of time management, not its ally. Life is meant to be savored, not dispensed with as quickly as possible. Slowing down will result in fewer errors, fewer accidents, a healthier lifestyle, improved relationships, and more energy for an enjoyable and memorable life.

Many people are too rushed in the morning to pause for breakfast. Skipping breakfast deprives your brain of the energy it needs to function at its best, according to Dr. Brian Morgan of *Columbia University College of Physicians and Surgeons*. And Valorie Burton mentions a survey in her book, *How Did I Get So Busy*, that reveals that 58 percent of Americans admit that they skip lunch altogether if they're too busy.

Several studies have shown that people who eat breakfast have more energy throughout the day. You can get by just fine on a helping of low-fat yogurt, a slice of whole-grain toast and a banana or handful of nuts. But any energy gained by a coffee or doughnut will quickly dissipate.

Skipping breakfast is not a good idea; it is like trying to start your car with an empty gas tank. Australian research reported in the June, 2011 issue of *Chatelaine* magazine found that kids who skip breakfast have a higher risk of heart disease and obesity.

An advertisement for SKF. It features a woman with long dark hair smiling in the foreground. In the background, a white wind turbine is visible against a blue sky. The text 'Brain power' is written in large white letters on the left. On the right, there is a block of text about wind energy and SKF's role. At the bottom left, there is a call to action to visit the SKF website. The SKF logo is in the bottom right corner.

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SKF

Because we don't make time to eat properly, exercise properly or sleep sufficiently, we are becoming obese. It is considered an epidemic. In the U.S. up to a third of Americans are clinically obese. It's interesting to note that children in schools within walking distance of fast food restaurants tend to be obese. 4.5 million Canadians are obese. That's about 20 percent. This becomes one more roadblock to living a longer, healthier and happier life.

According to Matthew Edlund in his book *The Body Clock Advantage*, those who don't rush through the day in a panic, but pace themselves & work efficiently, actually survive longer. That's a greater time management strategy than working more efficiently.

Speed consumes energy. A frantic level of activity can generate busyness without the concomitant results. And there is a difference between working fast because you want to and working fast because you have to. If you want to, it's more relaxing and consumes less energy. So it is important to have a job that you enjoy.

5.4 Pace yourself during the day

The more you use your brain the more energy you consume. The brain draws fuel, oxygen and glucose, from blood delivered via 400 miles of blood vessels. When certain brain areas work hard at something, more blood flows to those regions to help them refuel. They do this by dilating near spots that need a supply boost. This widening causes blood to reroute.

The more active your brain, the more energy is consumed. If more blood is not delivered when neurons needed, those cells might starve and cognition could suffer.

Managing your energy is like increasing gas mileage in your car. If you run the air conditioner with your windows open, exceed the recommended speed limit, drive all night, and periodically drive with your emergency brake engaged, you are going to consume a lot more gas. Similarly, you will burn more energy if you push yourself when you are tired. This was illustrated in the example of the parole board in the introduction.

According to the September/October, 2015 issue of *Scientific American Mind*, even the mental effort required to count calories could lead to burnout, fatigue and resentment in dieters. The article by Charlotte and Markey, psychology professor at Rutgers University, claims that focusing too much energy on what you eat reduces your ability to do other, potentially more important things. Studies have shown that dieters have more difficulty solving problems and exerting self-control.

This applies to everything you do; because you have a limited supply of energy at any one time. Whether solving complex problems, continually multitasking or focusing for hours on the same task, you're depleting your energy resources.

You must pace yourself when you work. European experiments have shown that short, three-minute breaks every hour helps rejuvenate people more than two fifteen-minute breaks.

Stop making or accepting phone calls, checking email or initiating new work 15 or 20 minutes before you normally leave work. Use that time to organize the unfinished work, your working area and yourself, prepare for the next day, and make the transition from work to home. Kenneth Ziegler, author of *Getting organized at work*, claims that taking work home in your head doesn't help your job performance as much as it hurts your personal life.

I saw a cartoon that outlines the three stages of life. As a teenager you have time and energy but no money. When you approach working age you have money and energy but no time. And during old age you have time and money but no energy. But in reality, if you manage your energy by taking advantage of the energy boosters and avoiding the energy drainers, you will have adequate energy for your entire lifetime.

5.5 Keep on top of your workload

The more things in your life that you think should be done but that you leave undone, the more anxiety and stress you experience. Seldom would a person think of a project they had completed or a meeting they had attended or a phone call they had made and feel stressed as a result. The opposite is true. They would feel good about themselves for having completed those things. Unfortunately that feeling doesn't last if they think of the dozens or hundreds of things that they have yet to do.

If you don't think something should be done and therefore don't do it, you're usually not under stress as a result. If you simply don't care whether something gets done or not, you're not under stress either. I've never seen a child have an anxiety attack because they hadn't cleaned their room yet.

Being a responsible adult does have its disadvantages. We *do* care about the multitude of things that should be done. And if we have more to do than we have time for, how do we get out of this Catch 22?

The first thing you might do is to write down everything that you think you have to do. When items are reduced to writing we don't think of them so often. They no longer pop into our minds unexpectedly, causing incessant anxiety. The next step is to decide which ones can be eliminated without having a significant effect on our business results or our career or personal or family well-being. Most people have a multitude of things drifting in and out of their minds that they feel should be done. Capture them and delete them before they delete you. Once you have decided not to do them, they can no longer be a vehicle for stress.

Of the remaining items, quickly do those that will take less than five minutes to complete. This does not follow the recommended time management principle of doing the most important things first, but it will sure make you feel good to see all those crossed-off items. And with most of the items off the list, you are able to concentrate on the ones that are important.

Your list may still not be down to a manageable size. If not, see which items can be delegated or outsourced. Don't be afraid to ask for help. Then prioritize the remaining items. Schedule time to work on the high priority tasks – those that will have significant impact on your personal and organizational goals. The more urgent ones should be scheduled earlier in the week. If they are huge, time-consuming tasks, break them down into chunks. Scheduling two or three hours each week to write a lengthy and complicated procedure for instance, will complete it within a few months

Finally, put the remaining items on weekly *To Do* lists, either in a week-at-one-glance paper planner or your handheld device. Be realistic. Don't cram them all onto a “*Things To Do Today*” list. Spread them over the ensuing weeks. If they don't all get done, it's no big deal. You have already blocked out the time to work on the ones that are really important.

If, after all this, some things still don't get done, rest assured it's not your fault. Your job is to do what's possible, not what's impossible. Don't sweat the small stuff. Worry or anxiety weakens your immune system as well as your executive skills, and leaves you open to energy loss.

Making choices do consume energy. The frontal lobes of our brain are constantly weighing the pros and cons of every bit of information, trying to determine the best choice. But once the choices have been made, the stress disappears, and it is no longer an energy drain.

Trust and responsibility

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Inés Aréizaga Esteva (Spain), 25 years old
Education: Chemical Engineer

– You have to be proactive and open-minded as a newcomer and make it clear to your colleagues what you are able to cope. The pharmaceutical field is new to me. But busy as they are, most of my colleagues find the time to teach me, and they also trust me. Even though it was a bit hard at first, I can feel over time that I am beginning to be taken seriously and that my contribution is appreciated.



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5.6 Develop routines to conserve energy

Getting organized, maintaining a tidy office, keeping a daily schedule, having weekly dinners with friends and other routines all add meaning to your life, according to Samantha Heintzelman, a University of Missouri psychologist. Although most people may think routines bring boredom, they bring richness to the mundane, while saving time and mental energy to invest in higher pursuits.

Few people balk at the morning routine of taking a shower, getting dressed, brushing their teeth and so on before starting their day. It's necessary groundwork upon which to launch their significant activities. Neither should they question the validity of developing routines for planning their day, dispensing with email, making calls, and working on their significant projects in chunks of time throughout the day.

For maximum ongoing productivity and achievement you should first invest the time in organizing your office or work area. Set up your electronic and hard copy file systems, your follow-up system, the location of your inventory and office supplies, the layout of your desk and bookshelves, and so on. Also you should re-examine your workload. Keep organized, plan, and allocate your time to things of importance. Simplify if possible. Delegate and outsource. And of course, pace yourself.

Then choose a good planner that displays all seven days at a glance, segmented into 15-minute or half hour increments from early morning until late evening so you can schedule both work and personal activities.

Develop the habit of scheduling time for the priorities of the day well before the day's activities begin. Relegate the less important tasks to your To Do list, preferably on the same week-at-a glance planner page.

You must manage your energy in order to gain control of your time. Routines require less energy, leaving plenty for creativity, decision-making, and the mental demands of your significant projects and tasks. And the tendency to procrastinate is reduced to a minimum.

5.7 Maintain a healthy attitude

A happier, healthier lifestyle is more important than ever, and along with it, an attitude that tends to stress-proof your life. It's important to get sufficient sleep, daily exercise and social support. But it's equally important to be aware of the good things that happen to you – those positives amid negative events.

Be more conscious of the things that go right in your life, and remember that when things look bleak, humor helps. Don't take yourself too seriously. Laughter reduces stress hormones such as cortisol and adrenaline, aids immunity, changes mood for the better, helps you think – and improves memory. Sandra Kornblatt, in her book, *A better brain at any age*, also gave an account of how humor during instruction led to increased test scores.

Exposure to non-stop negativity can disrupt learning, memory, attention and judgment according to Robert Sapolski, professor of neurology and neurological sciences at Stanford University. Researchers have linked negative emotions to increased risk for illness, and positive emotions to health and longevity.

Volunteer on a regular basis. By helping others you are also helping yourself because helping others will generate a sense of fulfillment and help you to be grateful for what you have. One study, referred to by doctors Roizen and Oz in a syndicated column in the Toronto Star, January 15, 2010, showed that volunteering increases activity in the part of the brain that normally declines with age.

Be quick to forgive. It will release you from the self-inflicted pain caused by resentment. And do something nice for someone, with no expectations of anything in return. Acts from the heart can work magic on your outlook on life.

5.8 Keep your friendships alive and active

Just as crowds generate energy, so do relationships. Make a list of the people you really enjoy spending time with. How much time did you spend with those people during the past week? Last month? Last year? Chances are there are people – perhaps family members – who are being crowded out of your life because of your busyness. Some people are so busy networking; they have little time for anyone who is not a business associate.

Be careful that you don't allow the people who count to be crowded out by things that don't. Our choices in life have multiplied exponentially during the past decade. We can cruise the Internet, take photos with cell phones, play games on our laptops, scan hundreds channels on our flat screen plasma HD TV set, send email and text messages with our smartphones, listen to our favorite music on our iPad, ad infinitum. We could spend a lifetime reading instruction manuals for electronic toys and household gadgets.

It's a life of choices. And the problem is there are too many of them. If we are not careful, what we do may not reflect our true values. We must make sure that we don't lose sight of what's really important.

Take that list of people, for instance. To ensure that you will spend adequate time with them, make commitments now. Schedule time in your planner next week or next month for a coffee, luncheon or night on the town. Never end a conversation with a good friend by saying, "Let's get together sometime." Instead, say, "Let's schedule a time when we can get together." Then do it.

6 Conclusion

Success is more about health than wealth. In this age of stress where 96% of leaders interviewed say they feel burned out, and sleep, exercise and proper diet take a backseat to 24/7 connectivity and busyness, a new concept of success is emerging.

The new success still includes the acquisition of wealth and power, but not at the expense of health and well-being. In fact scientists have proven that both efficiency and effectiveness decreases as we attempt to achieve more through ill-conceived strategies such as multitasking and expanded work hours.

The new strategy for success in all areas of life include mindfulness and meditation, empathy and compassion, rest and recreation, purpose and balance, health and well-being, and the constant care and feeding of body mind and spirit.

Everyone does not subscribe to all of these strategies, but as more and more successful individuals attest to their experiences in climbing the ladder of success, the more people are moved or motivated to make life-enhancing changes to their own careers and lifestyles. I'm referring to such books as *Thrive: the third metric to be defining success in creating a life of well-being, wisdom and wonder*, by Arianne Huffington, cofounder and President of the Huffington Post Media Group, and *My stroke of insight*, by Jill Bolte Taylor, a brain scientist. Both authors went through life-changing experiences.

As we age, we seem to be more open to concepts such as living our eulogy rather than our resume, the power of our mind to heal as well as to innovate, and the productivity and health advantages of working with nature and not against it.

Unfortunately many of us die before the reality of holistic living hits home. We die with our boots on – or more accurately, with our iPhones activated.

But we can learn from others and our own experiences if we can pause long enough to let their lessons sink in. This requires awareness on our part – mindfulness, if you will – and the management of your energy as well as your time.

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8 About the author

Harold Taylor, CSP, CEO of *Harold Taylor Time Consultants Ltd.*, and partner, *Taylor in Time*, has 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 the "Harold Taylor Award" in his honor.

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.



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