

Resource Pack for Balancing Energy



Resource Pack for Balancing Energy

Physical Energy Plan

- Recall a time in your life when you felt highly physically energized, fit and active. You wake in the morning, feeling rested, energized and calm about the day ahead and the challenges you faced, your body seemed to work for you and you had a reserve of energy to call on during the day.
- Or remember a time when all your physical resources were aligned. You were feeling fit and healthy, your body was rested and you knew you could count on your body to do what was needed. This is a time when you know that your immunity was high, and everything was working internally just as it should.
- Tell the story of this time. What were you doing that helped you feel so good? What were you enjoying that added to this state of physical strength and health? What types of people were you around? How did they add to your physical energy? What types of activities were you doing? What other things can you draw out of your memory which gives you insights about what increases and maintains physical energy for you?
- Given your experiences in the past, what small steps could you take that would help you tap back into that energy now? How could you interpret what worked for you in the past and integrate it into your lifestyle now?

Resource Pack for Balancing Energy

Physical Energy : Identify your Spark!

Identify the actions you are willing to commit to in the next 3 months:

Action

Date

- ✓ Take a little exercise every day. Choose an activity that fits your needs. Brisk walking, playing with children, cycling, gym or any other activity that gets you moving for at least 30 minutes will have both an immediate and long term benefit
- ✓ Take a few minutes each day to stretch. Stress and tension cause muscle spasm. Stretching will maintain soft, long and effective muscles.
- ✓ Do some strength training at least once a week, this may be in a gym or gardening session, include stomach exercises such as sit ups
- ✓ Pay attention to your breathing throughout the day. Exhale fully and use the diaphragm.
- ✓ Sit and stand upright. Stress causes us to slump and collapses forward. Poor posture exacerbates muscle and joint pain, cramps your breathing and makes your stress obvious to others.
- ✓ Establish a regular eating plan and stick to it. Smaller meals spread throughout the day; intermittent fasting; fresh produce and home cooked meals for nutrition ; cutting out junk food or processed food.
- ✓ Add regular fish or omega 3 supplements to your diet, the evidence for the fish oils is increasingly compelling.
- ✓ Stay hydrated - be sure to drink at least 6 glasses of filtered water today.
- ✓ Keep your coffee and tea to 3 drinks per day.
- ✓ Stop smoking
- ✓ Develop sensible sugar and alcohol intakes

Resource Pack for Balancing Energy

Mental Energy Plan

- Recall a time when you were in a demanding situation but you were able to think clearly and logically. Despite the challenge ahead and the complexity of the issues you seemed to be focused and sharp. This was combined with a strong 'gut feeling' about the right thing to do. You were mentally sharp, organized and had the ability to concentrate fully on the task at hand. Or, remember a time when all your mental resources were aligned. You were able to focus clearly on tasks and you found that learning new things came easily to you. You rarely felt distracted and even if things did distract you, you were able to refocus yourself with little effort. Your mind felt like it worked fast and efficiently. Remembering facts or situations from the past was easy and perhaps your concentration was able to be maintained over longer periods.
- Tell the story of this time. How did it feel? What were you doing that helped you feel so focused? What were you enjoying that added to this state of mental focus and fitness? What types of people were you around? How did they add to your mental energy? What types of activities were you doing? What thoughts were predominant, and what were the emotions you tapped into most frequently? What other things can you draw out of your memory which gives you insight about what increases and maintains mental energy for you?
- Given your experiences in the past, what small steps could you take that would help you tap back into that energy now? How could you interpret what worked for you in the past and integrate it into your lifestyle now?

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Mental Energy : Ignite your Genius !

- ✓ Develop an active mental body that allows you to develop your memory, thinking, problem-solving and learning: chess, crosswords, study and model building are good examples
- ✓ Set active goals – psychology shows that the leading determinate of success in life is a person’s mental discipline and persistence at achieving their goals.
- ✓ Start keeping lists instead of trying to keep mental checklists. Mental checklists add to the burden of active attention, which can contribute to stress.
- ✓ Turn the music off while driving to or from work, and take some quiet time to rest your mind
- ✓ Schedule time to pursue a hobby – e.g., a short course in language or re-connect with a lost pastime
- ✓ Learn something new for the sake of learning
- ✓ Challenge yourself by reading great works of literature
- ✓ Delegate!
- ✓ Allow yourself time to meditate / practice mindfulness each day
- ✓ Rid yourself of needless tasks and declutter your surrounds

Identify the actions you are willing to commit to in the next 3 months:

Action

Date

Resource Pack for Balancing Energy

Emotional Energy Plan

- Recall a time in your life when you felt a strong connection with the people you were working with, when you felt you were ‘all in it together’; that you were all striving for the same thing and were all supporting each other along the way. A time when things seemed to be challenging and yet you were positive and had a lot of fun along the way.
- Or remember a time when all your emotional resources were aligned. You were feeling overall very positive and stress seemed virtually non-existent. Even if things did go wrong, it never seemed to bother you for long – you always seemed to bounce back easily. Perhaps this was a time of carefree and frequent laughter, or a time of ease and relaxation.
- Tell the story of this time. How did it feel? What were you doing that helped you feel so good? What were you enjoying that added to this state of emotional ease and fitness? What types of people were you around? How did they add to your emotional energy? What types of activities were you doing? What thoughts were predominant, and what were the emotions you tapped into most frequently? What other things can you draw out of your memory which gives you insight about what increases and maintains emotional energy for you?
- Given your experiences in the past, what small steps could you take that would help you tap back into that energy now? How could you interpret what worked for you in the past and integrate it into your lifestyle now?

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Emotional Energy : Connect !

Identify the actions you are willing to commit to in the next 3 months:

Action

Date

- ✓ When an event overwhelms you with a sudden strong emotion, recognize that this is frequently an emotional hijack. If you recognize what provokes you, you can start to avoid it or deal with it.
- ✓ Spend some time just for you.
- ✓ Discuss emotional events, current news, TV or movies. Try to describe the emotions and compare your impressions with others. As you become more confident try to describe and share your emotions with others.
- ✓ Take time to understand the emotional working of others. When we get lost in stress we lose empathy and compassion for others. Reach out to others and make an effort at listening with compassion.
- ✓ Spend time with people who care about you
- ✓ Allow yourself time to read from a favorite book or write in a journal
- ✓ When your emotional mood is negative, visualize or recall times when you felt really great. Use the positive emotion associated with the image or memory to help you reframe your current emotional state. This is a powerful way to prepare for occasions when you need to be positive.
- ✓ Engage your own emotions and try to tune your emotional broadcasting to the moods of others. Emotion is the conscious and unconscious glue that maintains a robust social life.
- ✓ Remember that work is an emotional experience. Recognition and appropriate expression of emotion builds strong teams, inspires leadership, stimulates creativity and lends meaning to work.

Resource Pack for Balancing Energy

Spiritual Energy Plan

- Recall a time when you felt fully engaged, committed and passionate about something – perhaps something you believed in deeply, a cause or set of principles or values. This commitment seemed to energize and keep you going even when your body was tired. This belief seemed to be an engine that drove you forward.
- Or remember a time when all your spiritual resources were aligned. You were feeling as though you were living life close to your personal sense of meaning. Perhaps you were engaging in activities which felt like they were part of a greater purpose, or were aligned perfectly with your own personal values. You may have been spending time in personal reflection, or perhaps you found that your passion and commitment to a cause you believed in strongly was at the forefront.
- Tell the story of this time. How did it feel? What were you doing that helped you feel so passionate and committed? What were you enjoying that added to this state of spiritual alignment? What types of people were you around? How did they add to your spiritual energy? What types of activities were you doing? What thoughts were predominant, and what were the emotions you tapped into most frequently? What other things can you draw out of your memory which gives you insight about what increases and maintains spiritual energy for you?
- Given your experiences in the past, what small steps could you take that would help you tap back into that energy now? How could you interpret what worked for you in the past and integrate it into your lifestyle now?

Resource Pack for Balancing Energy

Spiritual Energy : Find Passion and Meaning ! Identify the actions you are willing to commit to in the next 3 months:

- | | Action | Date |
|---|---|------|
| ✓ | Revisit relaxation and/or contemplative practices | |
| ✓ | Read inspiring and spiritual books that engage you to contemplate | |
| ✓ | Find a space in nature where you feel comfortable and spend some time sitting and listening and observing without activity | |
| ✓ | Take your shoes off and feel the grass between your toes | |
| ✓ | Take a walk on the beach somewhere else in nature – notice | |
| ✓ | Undertake a values clarification, identify your core values and how they are impacting your life choices. Determine how you want to bring them more alive | |
| ✓ | Sing or listen to inspiring music, paint or create from the heart | |
| ✓ | Define and write your personal purpose and intention for your life – tied to the legacy you wish to leave | |
| ✓ | Write five things you are grateful for each day in your journal | |
| ✓ | Practice compassion and send compassion and blessings to others | |
| ✓ | Undertake a course of study with spiritual thinkers and leaders | |
| ✓ | Write your life story and what you have learned, write poetry, read and reflect on the poetry of others about life | |

Quick Body Boosters

Eye rolls

- Stand with relaxed posture and look straight ahead
- Without moving your head, roll your eyes up and look at the ceiling. Take a deep breath. Return your eyes to the forward position
- Notice that you feel calmer

Smile

- The act of smiling helps to release relaxing bio-chemicals – even a forced smile

Square breathing

- Breathe in for 4, hold for 4, breathe out for 4, hold for 4, breathe in for 4
- Relax the jaw and the tongue

BEE-ing

- Body – breathe out, focus on belly and spine
- Eyes – engage peripheral vision
- Ears – listen to the sound of your breath



Which of these would you like to try?

When and how will you practice this regularly?

Quick Mind, Heart and Spirit Boosters

Stimulate gratitude

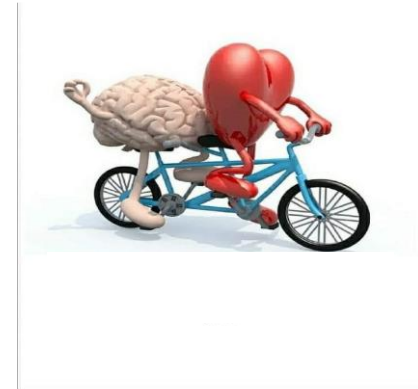
- Try now: bring to mind things for which you are grateful – see them, feel them
- Later: contact someone to express gratitude for something they've done

Make connection

- Try now: bring to mind someone or something you love
- Later: grant your full attention to really listening and finding what's interesting when others speak

Direct positive attention

- Try now: ask and focus on "What is the most important thing I want to achieve today?"
- Later: ask "What strengths do they have?" versus "What do they do badly?"



Which of these would you like to try?

When and how will you practice this regularly?

Physiological Vitality: Brain Nutrition

The starting point for a healthy brain is a healthy body

The ideal is a sound mind, in a sound body. The three key elements that boost brainpower and keep mental processes operating effectively are:

- High quality food
- Water
- Oxygen

The brain uses 20-25% of the total energy consumed by the body to power its 100 billion brain cells, and because a malfunctioning brain can take the rest of the body down with it, the brain gets the first choice of nutrients available. There are minimum quantities of calories, fatty acids, vitamins and minerals needed to perform, and some will increase your brain power, and thus your mental fitness.

When we look at the brain circuitry, we need to be 'feeding' the neurons (cells) myelin sheath (neuron protective coating) and the neurotransmitters (brain chemicals of communication). Nutrient deficiency creates misfiring in the circuits.

Brain Nutrients:

- Carbohydrates for energy
- Omega 3 fatty acids for forming and repairing cellular structure
- Proteins for amino acids from which neurotransmitters are made
- Folic acid, vitamins B6 and B12 facilitate the manufacturing and release of neurotransmitters

Lets take a closer look starting with Omega 3. Fats make up 60% of the brain and the nervous system overall. The wrong fats make it hard for the blood to transport oxygen to the brain. Thus a lack of Omega 3 can result in depression, poor memory, learning disabilities. Sources of Omega 3 are fish such as salmon, cod, fish oil, flax seeds, cauliflower, cabbage, brussels sprouts, walnuts, cooked soy beans, tofu, scallops and kiwifruit.

Antioxidants are produced by the body to protect against free radicals which attack and damage cellular structure. Sources of free radicals include radiation (electromagnetics included), smoke, food additives, hydrogenated vegetable fats and oils. Eliminating free radicals and fortifying the body against their damage means ingesting foods high in antioxidants such as prunes, blueberries, strawberries, colorful fruits and vegetables, dark chocolate and tea

Physiological Vitality : Brain Nutrition

Phytochemicals have a beneficial effect on blood vessels, vascular and artery efficiency, prevention of damage to DNA and lowering of cholesterol. Found in fruits and vegetables, those particularly rich are berries, grapes, broccoli, cabbage, tomatoes, garlic, green tea and turmeric.

Vitamins and minerals essential for growth and the functioning of the brain are the B complex (B1,B3,B6,B12). Sodium, potassium and calcium are important in the thinking process and they facilitate the transmission of messages while magnesium is needed for brain energy.

Choline is a chemical that is the building block of all cells. Without adequate amounts the brain cannot adequately store new information. Food rich in Choline include wheat germ, peanuts, liver, ham, lamb and whole wheat flour.

Fibre is not directly involved in brain function, it does however influence how other nutrients affect the brain. Putting in the right food is important and getting it out as well. Cleaning out the system improves mental performance. Foods high in fibre are beans, lentils, wheat bran, oats, grapefruit, apples and raisins. We are looking here at a diet that is high in fibre and low in saturated animal fats.

Timing

There is an impact on mental performance depending on whether protein is eaten before carbohydrates or vice versa. This is because of two competing amino acids that are the building blocks of protein synthesis. Tyrosine and tryptophan. The former a precursors to dopamine and norepinephrine, both of which are key to sharp thinking, recall and alertness. The body is able to produce its own tyrosine if needed, and this chemical is found in meat, poultry, seafood, beans, almonds, avocados, seaweed and bananas. On the other hand, tryptophan is an essential amino acid that must be obtained from the diet. It results in the release of serotonin and melatonin which induces sleep, slows down reaction time and lowers IQ. Both protein and carbohydrates contain tryptophan, but those coming from carbs reaches the brain more effectively. It is found in dairy products, bananas, spinach, spirulina and sunflower seeds.

So, how to use this information to remain at peak ? If you need mental acuity in the morning, start the day with a low-calorie, high protein meal and keep carbs limited. When you need to wind down at the end of the day – that is the time for complex carbohydrates, to facilitate sleeping later.

Warning Zone

Things to go easy on include caffeine, alcohol and sugar. Caffeine is the number one drug used to boost energy levels and fight tiredness. It is found not just in coffee, but also in chocolate, tea, cola, and most energy drinks. It has a short term hit and is addictive. It impacts the system in a similar way to amphetamines and cocaine.

Physiological Vitality : Brain Nutrition

200 – 400 mg (2-4 cups) per day is relatively harmless. The key is again when you drink it. Avoid using it as a replacement for sleep – a power nap or short meditation is a far healthier way to do a pick me up. Caffeine increases adrenalin and it is this stress hormone that gives the boost, it creates a 'false' awareness – however over time the dosage needs to increase to get the same effect – thus the addiction. Green tea or eating licorice is a better alternative. To decrease intake, phase it over 3-4 days as going cold turkey will result in headaches from withdrawal.

Alcohol is a depressant. It is all about moderation so a glass of wine with dinner relaxes the blood vessels and lowers the risk of heart disease, and red wine is rich in antioxidants. In small amounts it increases dopamine and serotonin but the effects don't last long.

The normal range of glucose in the blood is helpful for memory, concentration and learning. Too little will impair performance and memory. When engaged in mental activity more glucose is needed. The types of carbs eaten impacts how quickly sugars are released into the blood stream. The best are low glycemic index starches and fruit sugars. They take longer to break down and provide a time-release source of steady energy rather than a flood. A sudden burst of sugar from processed flour products and sugary foods and drinks results in the release of insulin and this hormone tells the body to store fat and also not to release any. This results in a surge, followed by a sudden drop followed by the body storing the excess as fat. Sugar surge results in wild fluctuations in performance and mood due to neurotransmitter imbalance.

Danger Zone

Things to be avoided at all costs, include nicotine, aspartame, and MSG. The body can tolerate levels of caffeine and alcohol, but nicotine starves the brain of oxygen and blocks the arteries that enable oxygen rich blood to circulate.

Aspartame (additive code – 950, 951) is found in many sugar free foods and drinks. It has been linked to headaches, migraines, dizziness, seizures, nausea, weight gain, depression, fatigue, insomnia, and heart palpitations.

MSG (additive code – E621) enhances the flavour of food. It is used to replace the loss of taste in many low fat, no-fat foods. However it is made up of 78% free glutamic acid which is considered a neurotoxin. In other words it kills neurons in the brain. MSG is always present in the following : hydrolysed vegetable protein, plant protein extract, yeast extract and corn oil. Malt extract, stock, pre-mixed flavourings and spices often also contain MSG. It pays to read labels.

Overall – when looking for brain food think **C O L O U R**. And Balance.

Physiological Vitality : Brain Nutrition

Brain Nutrition Audit

Keep track of what you eat. And ID against each of the nutritious, not so good and bad stuff. You can do this for just one or over an number of days.

Good Stuff	Breakfast	Lunch	Dinner	Breaks & Snacks
Omega 3				
Antioxidants				
Phytochemicals				
Vitamins & Minerals				
Choline				
Fibre				
Not so Good Stuff				
Caffeine				
Alcohol				
Sugar				
Bad Stuff				
Nicotine				
Aspartame				
MSG				

1. After taking a look at your average day's consumption, what do you think would be useful to add to your diet?
2. What foods/drink would you like to eliminate or reduce your intake of?

Physiological Vitality : Water

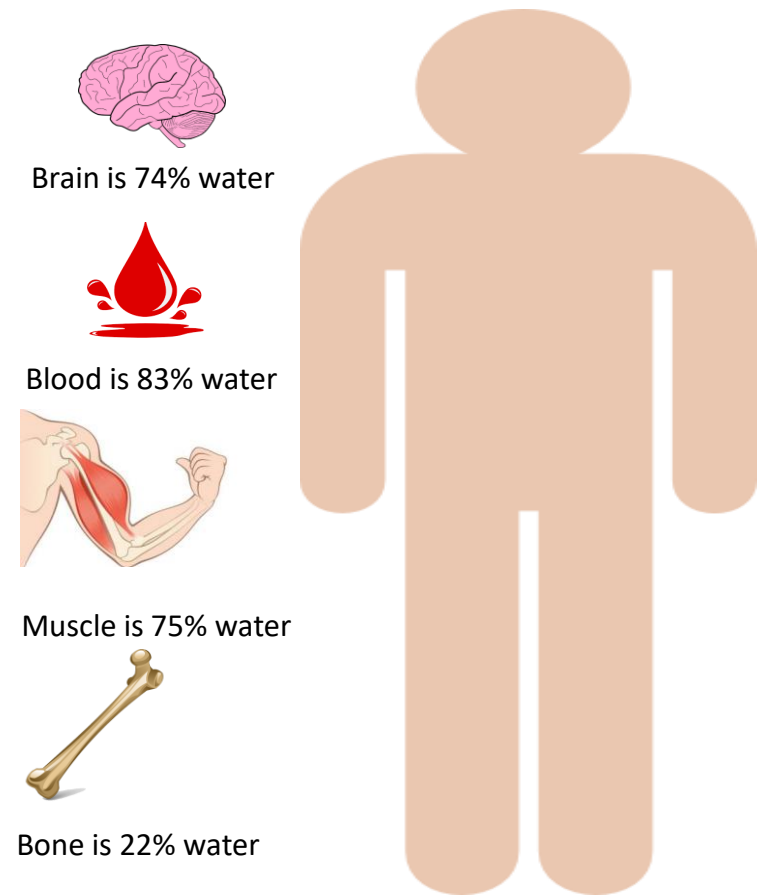
The source of all life is water. It is ranked second only to oxygen as being essential for life. Thus without water there is no life. We can live only a few days without it. It makes up 6—70% of body weight and is important in numerous bodily functions and processes.

Yet we often treat it as an afterthought, and always present resource, an element to be used, wasted and forgotten. That is until there is drought, or the municipal cuts the water when pipes blow up or maintenance needs to be done. Multi nationals such as Coke and Nestle make millions out of selling what once came freely. So lets compare this with how many indigenous peoples view and consider water. As a sacred element connected with intuition, emotions, trust and nurturance. Water is the giver of life and it fills the shape of whatever it contains. It can be calm like a pond or wild like the sea or destructive like a tsunami. It cleanses our bodies, allows plants to thrive and covers the majority of the surface area of our planet.

Our bodily systems are electrical so every physiological function depends on water. Having even 4-5% less than the recommended daily amount of water can impact mental and physical performance by up to 20-30%. It is water that provides the hydration needed to conduct electrical impulses through out the body between the brain, muscles, organs and tissues.

We loose water through urination, respiration, and sweat. If you become dehydrated every part of the body suffers, blood is literally thicker and your body has to work harder for it to circulate. Poor hydration is often the root cause of fatigue issues. Thirst is an obvious sign of dehydration – however you need water long before you feel thirsty, due to the fact that when you are very dehydrated the body looses the ability to detect it.

Symptoms of mild dehydration are painful joints and muscles, lower back pain, headache, dry skin, nausea and constipation. Yellow or amber coloured urine. Long term dehydration has been linked to asthma, allergies, heartburn, hypertension and headaches, poor muscle tone, digestive issues, low metabolism and reduced organ function. As water is lost and is not replaced through drinking, the body will squeeze water from tissues including the brain and the skin. Also, sensations of thirst and hunger get generated simultaneously – and if you aren't getting enough water, you are likely to eat more to satisfy the body's need for water.



Physiological Vitality : Water

Become aware of all things water – and how it affects your senses:

- cultivate gratitude for the quality of water you drink
- become aware of how water cleanses – you, others, objects, the air after rainfall
- become conscious of the different sensation of water on your skin when you shower or bathe
- arrange to have a spa, soak in a hot tub or swim mindfully in a pool and notice how the water moves and molds itself around you
- give thanks to the rain – knowing it is upon this that growth of the plants and other animals depend
- notice water in what you are eating and drinking e.g. watermelon is mostly water

At the end of this day of reflection – list how your life is impacted by water, and what role it plays in your life:

Hitting the Bottle :

Get yourself a water bottle. YOUR water bottle. Keep it with you, replenish regularly. Don't wait until thirsty – because if you notice that then you are probably already dehydrated. Keeping hydrated has numerous benefits which include creating skin health, improving energy and supporting weight loss. Expect more trips to the bathroom as your body gets use to being fully hydrated. If you drink anything with either caffeine or alcohol it will cancel our the water consumed. So for each glass you will need another glass of water.

How much water should you drink? There is the 8 glasses a day rule – but this doesn't account for different body mass, activity and there is no scientific evidence to back this up. The little research that has been done, says that as long as you have no medical conditions, you should aim for 250ml for each 10 kgs of body weight. So if you are 70 kg, then 7 250 ml glasses. If you drink caffeine, alcohol or sodas – you will need to add and extra glass for each cup of coffee and two for each alcoholic drink.

Naturally we are thirsty in the morning – starting the day with water assists the flushing of toxins that have been generating overnight. Drink most of your quota before 6pm, and spread drinking over the day in order to avoid midnight bathroom trips.

Physiological Vitality : Breath

The breath is the bridge that connects life to consciousness, and unites body and thoughts.

Oxygen (O₂) is a vital element for the body, and an essential for brain integrity. As humans we can go without food for quite some time, but without oxygen we die within a few minutes. The breath not only enables oxygen to enter the body but also eliminates carbon dioxide. It is the levels of carbon dioxide (CO₂) in the blood that regulate the blood supply to the brain and other tissues. Oxygen inhaled purifies the blood of toxins that are circulating and proper breathing helps the body eliminate toxins 15 times faster than poor, shallow breathing.

When the sympathetic nervous system is activated by the firing of the amygdala – generating the Fight, Flight response, the breathing automatically becomes more rapid in order to lower CO₂ levels in the blood, shifting the body chemistry and allowing the muscles to contract more strongly in order to fight or run. As humans we aren't designed to remain in this state for long periods, due to the lowering of the CO₂ levels impacting through lowering the blood supply to the brain and the heart.

Controlling the breath rejuvenates the mind and counters the impact of stress. When stressed our breathing is often the first thing impacted and as it becomes irregular it adds to the stressed state. A purified blood stream is the one of the major secrets of physiological vitality and is achieved through taking in extra supplies of oxygen.

When we are relaxed our breathing is quite naturally slow and regular with the length of time for the in an out breath being about equal. And although our breath is automatic we can bring it under conscious control. Our respiratory rhythms reflect the state of our unconscious mind. About 1/3 of the oxygen we inhale goes to the brain. The more oxygen received the better the brain will function.

Experiment

Try to perform a difficult mental exercise whilst you are out of breath. (such as a math problem). Notice that you won't be able to concentrate until your breathing has settled. Short breath – short attention span. Deep full breaths enables more complex and deeper thinking to emerge.

Increasing the oxygen flow to the brain achieves two things:

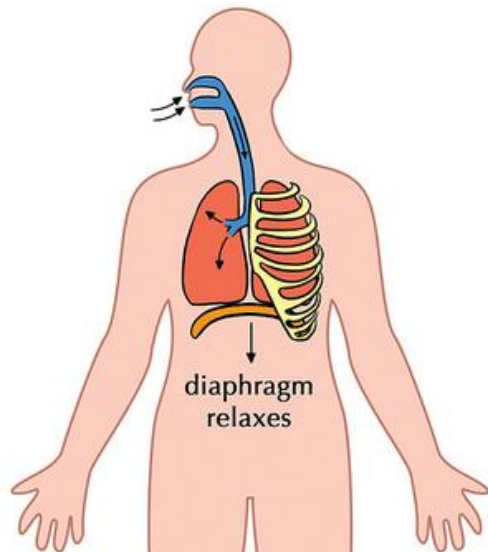
- Activates areas of the brain that are inefficient through lack of blood
- Slows down the degeneration of brain cells.

For those with sedentary lifestyles who sit in an office all day, the brain can easily become starved of oxygen due to the body not performing the physical activities it was designed for.

Physiological Vitality : Breath

O2 starvation leads to tiredness, irritability, and nervous tension, along with poor sleeping patterns which repeats the cycle. This weakens the immune system making us more susceptible to disease.

Inhalation



Diaphragmatic Breathing

The value of proper breathing is underestimated. It is however critical to maintaining good health as it triggers a whole chain of physiological reactions that span the billions of cells that make up the body. The act of breathing is more than just inhaling and exhaling. We enter the world as a baby knowing how to breath properly – if you watch a newborn breathe you will notice that it is the stomach not the chest that is rising and falling. Or to be precise it is the diaphragm – that band of muscles that sits between the lungs in the chest and the abdominal cavity and muscles.

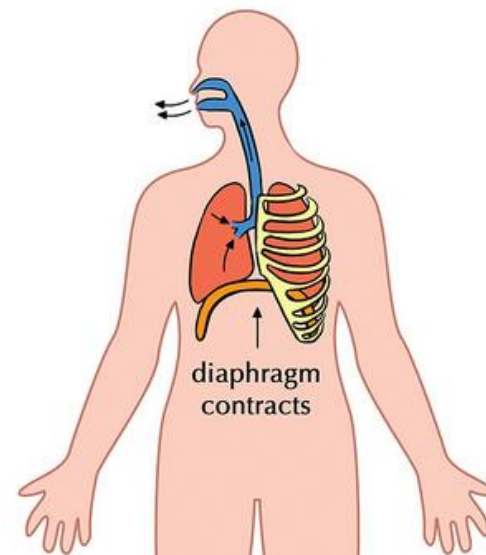
When the diaphragm contracts it is forced downward causing the abdomen to expand. This negative pressure within the chest forces air into the lungs bringing the oxygen needed to nourish the cells in the body. This is called diaphragmatic or abdominal breathing. And is an excellent way to trigger the relaxation response.

Unfortunately over time, stress causes the chest and stomach muscles to tighten up and the breathing rate to quicken. The breath becomes shallow and the breath is in the chest not the stomach. Most people are what we call 'thoracic breathers' using only the middle and upper parts of the lungs. The upper chest only expands and contracts. And we are told to hold our stomach in – particularly when on the beach ☺.

Most people's breathing is too shallow. Not taking in enough oxygen and eliminating too much carbon dioxide. In fact many people who think they have heart issues are actually suffering from improper breathing. Our modern lifestyle creates this fast and shallow pace of breathing – due to being in a hurry most of the time. Shallow breath becomes a habit of a office bound lifestyle, not just being a result of getting older.

The first step is self awareness. To observe how you breathe and then take action.

Exhalation



Physiological Vitality : Breath

Other impacts upon quality of our breathing

Posture plays an important role in not only breathing but overall well-being. Good posture with a normal curve in the lower back so the head isn't poking forward and the shoulders aren't rounded. Good posture supports and protects major organs, allowing maximum use of the five senses and positively impacts mental health. Having a normal curve in your lower back facilitates breathing into the abdomen.

As said holding the stomach in as part of the trend for a flat tummy creates tension and this prevents effective breathing patterns, restricting lung capacity to the chest only.

Breath through the nose – not the mouth. The first rule of correct breathing is THROUGH THE NOSE. Many people breathe principally through their mouth, but there are reasons why the nose has it:

- The breathing slows down because you are breathing through two small holes instead of one large one
- Breathing through the nose increases oxygen concentration by 10%
- The nose has internal cilia to hygienically filter the air ensuring that pure, warm air enters the lungs from the nasal passage.
- The exception is during exercise when the mouth acts as an overflow when volumes are too great for the nose alone.

TOP 10 Reasons to Breathe into the Stomach

1. Improves blood quality due to increased oxygenation in the lungs helping to remove toxins.
2. Increases the efficiency of digestion, assimilation and oxygenation of food.
3. Improves nervous system, including the brain, spinal cord, nerve centres, and nerves themselves.
4. Rejuvenates the pituitary and pineal glands
5. Rejuvenates the skin – which becomes smoother, reducing facial strain and wrinkles
6. Massages the abdominal muscles and the heart, stimulates upper body circulation
7. Builds healthy powerful lungs, and is a good insurance policy against respiratory problems
8. Make an efficient, stronger heart, and reduces its workload, blood pressure and heart disease
9. Burns excess fat more efficiently and feeds starving tissues and glands when underweight
10. Improves the body's lymphatic drainage

Breathing practices have been a part of Eastern cultures for thousands of years, and now we have scientific research from the great universities of the western world (Harvard, Stanford, Oxford and many others) that prove the effectiveness and importance of these techniques for calming the mind and healing the body.

Physiological Vitality : Breath

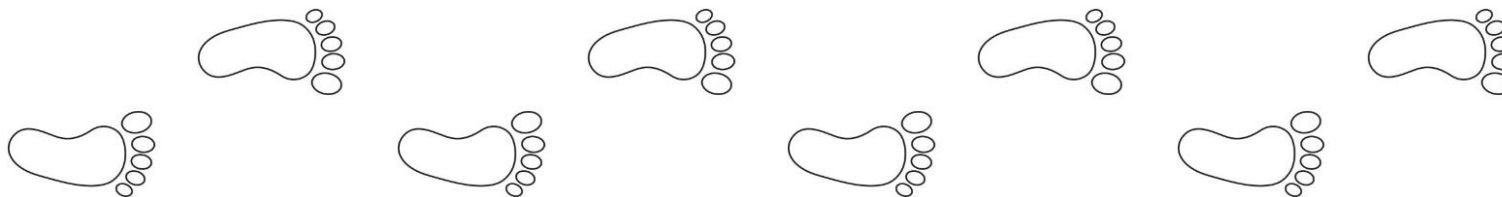
Three Breathing Practices

Activity Breath - Pick an everyday activity such as washing the dishes, driving to work, walking the dog or brushing your teeth. While doing this bring your attention to your breath. As you are breathing make sure you are :

- Practicing abdominal breathing with your abdomen rising as you breathe in and falling as you breathe out.
- Maintain good posture with the spine naturally straight and the head not poking forward and shoulders not rounded
- Breathing through the nose not the mouth.

NOTE: If you find yourself struggling with abdominal breathing, then go to the third practice on this page.

Walking Breath - This is an excellent technique for integrating the mind and body through the breath. It can be done at anytime



In Breath

Out Breath

Experiment to find a walking pace that aligns to the breathing rate. You may find the optimum speed is 2&2; 3&3; 4&4; 5&5 etc. Once you have mastered even paced breathing, change to 1 to 2 breathing. EG. Inhale for 3 steps and exhale for 6.

Focus the Breath - This practice brings a state of relaxed alertness that can be used at home or work.

Step 1 : Comfort – Make yourself comfortable by lying down or sitting, ensuring you are fully supported and not feeling any strain

Step 2 : Close the Eyes – Close the eyes and notice how you are breathing for about 30 seconds

Step 3 : Breathe In – Place your hands on your stomach and breathe in through your nose in a long, slow breath for a count of 8. Feel the stomach expand out to the front, sides and back as you breathe in.

Step 4 : Exhale – For a count of 10, exhale and feel your stomach fall, continue to exhale until you feel your lungs are empty (when this happens you will automatically trigger the next inhale). With every exhale feel any tension leaving the body

Step 5 : Continue – Breathe this way for a minimum of 5 or 6 minutes.

Physiological Vitality : Sleep

Sleep and Exercise are two sides of the same coin.

There are three theories as to why we sleep. One is that sleep is the time for the body to rest, heal and return to balance. The second is that sleep is the result of an internal timing mechanism that humans are programmed to sleep at night due to evolution and the safety night provides and the third is that it's a time we encode memories from the day. Probably all three are correct.

The brain doesn't shut down when we sleep. It processes information from the day – the most active part of the brain during sleep is the limbic system (emotional part of the brain) which explains why many dreams are emotionally charged. Other mammals also dream.

Getting quality sleep is essential for a healthy immune system. Growth hormones are released during sleep. The two factors key to quality sleep are melatonin and the circadian rhythm (24 hour body clock). Melatonin is determined by how much sunlight you get. Most people's body clock runs just over 24 hours – and it is temperature compensated, meaning when body temperature drops, it's a signal for sleep and when it rises it signals time for activity. As sunlight raises the body temperature – the more of it you get results in greater activity during daytime and deeper sleep at night. On average the highest point of sleepiness is in the middle of the night, lowest point is on awakening and it increases slightly again mid afternoon.

The circadian rhythm is genetically determined and you will either be an early bird or a night owl. The body clock can be reset to a limited extent. Early birds can keep their rooms dark in the morning and expose themselves to more light in the afternoon. Night owls who get more light of a morning, will find that after a few days they'll be better able to cope with early morning starts. That said the basic rhythm of the day is universal – it is just that it begins a bit quicker for early birds than night owls.

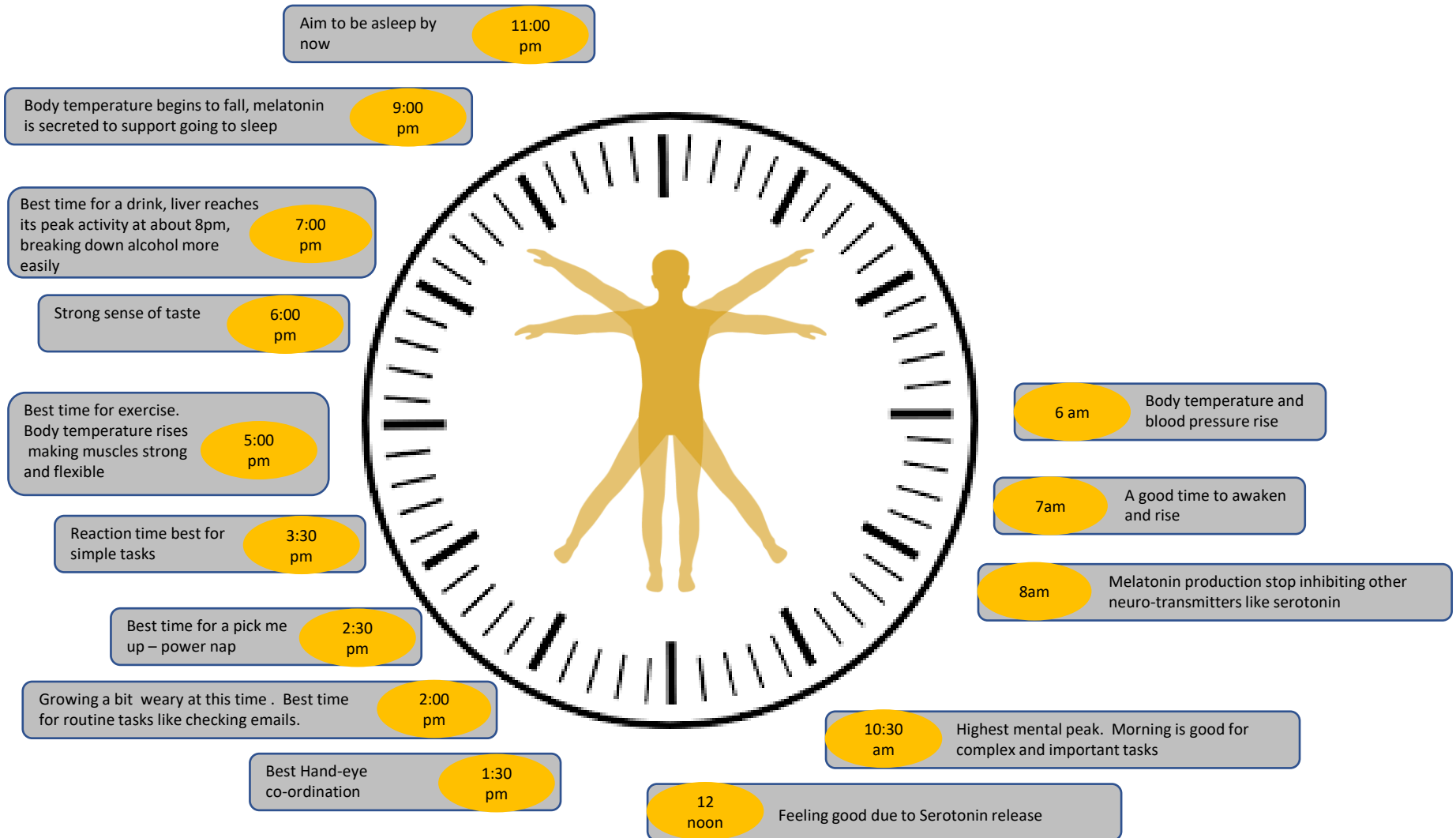
Yes, we do need a regular time to go to bed and that includes weekends. Parents know this and set a routine for their children but strangely when we become adult we seem to forget this principle.

The myth of 'catching up on sleep' over the weekend is just that. The reason we have 'Monday morning blues' is because of the endeavor to 'catch up' on sleep over the weekend throwing the body clock out. It is also a known fact that shift workers, and particularly night shift workers suffer more health issues and have more accidents than those not working shifts. These issues include insomnia, fatigue, high blood pressure, heart disease and ulcers. And those who are unfortunate enough to be on rotating shifts have it even worse, due to the continual shifting of the body clock

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Daily Rhythm

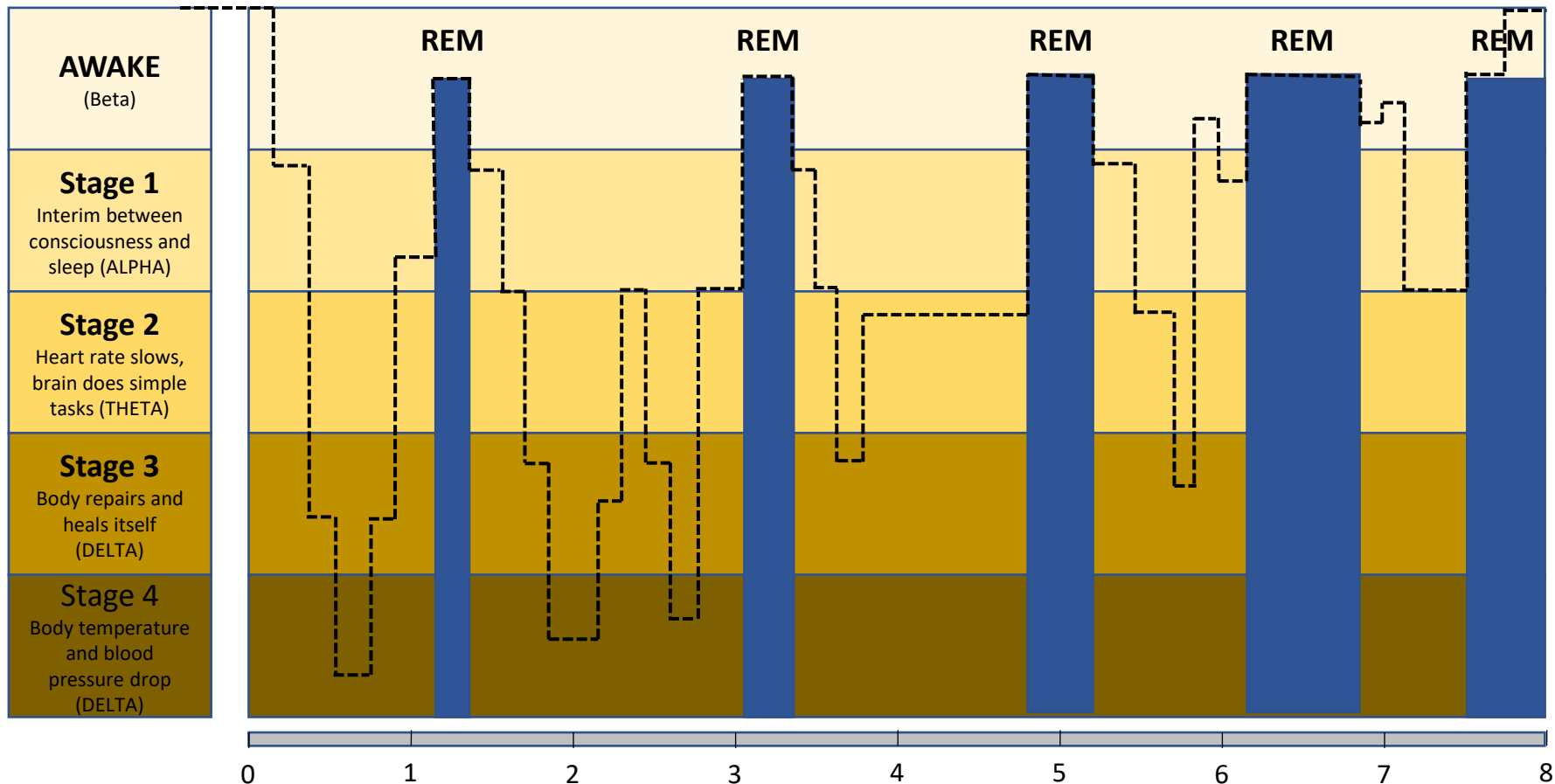
The diagram below is a guideline. Experimentation with daily routine will hone the specifics of personal rhythms



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The Sleep Cycle

Sleep has its own cycles that go from higher brain wave frequencies to lower frequencies and back again. This continues through the night until we wake up. Each cycle is from 60 – 90 minutes in duration. As brainwaves become slower, sleep becomes deeper. Have you ever received a call in the middle of the night and as you pick up you feel like a Zombie – this is because you've probably been woken in the middle of theta or delta brainwave pattern. Conversely – have you ever awoken and feel fresh as a daisy? And you can't get back to sleep? This is probably due to your having just finished a sleep cycle.



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As you can see from the chart of the previous page, Delta (deep) sleep is the longest at the beginning of the sleep cycle and gets shorter throughout the night. Where-as REM starts off short and gets longer over the course of a nights sleep.

NOTE : If you want an experience of the side effects of getting no sleep. Take the time to watch Al Pacino in the film Insomnia. He plays a guilt ridden detective stuck in an Alaskan summer where its daytime 24/7.

REM Sleep (rapid eye movement)

REM sleep still hasn't been fully explained by science, however it is thought that it is critical to ensure the maintenance of mental health, maintain levels of motivation and process the day's experiences and memories. The physiological response and cerebral activity in REM sleep is very similar to being awake. That is why 80% of people who wake up during REM can recall their dreams (and why they seem so real), while only 7% can recall dreams from non-REM sleep. The last few hours of the sleep cycle is REM sleep for most people, thus it isn't physically restorative – however it is essential for dealing with stress release through the dreaming state.

Power Naps

When tired and want a sleep but have things on your plate that need doing. A 10-20 minute 'power nap' will rejuvenate, and is a better alternative than trying to 'catch up' sleep over a weekend and throwing the body clock out. As humans we are chemically designed to have a nap around mid afternoon, due to the drop in body temperature – a practice well known in Mediterranean countries where the siesta is part of the lifestyle. Research shows us that power naps have recuperative powers out of proportion to their brevity. One NASA study showed that a 20 minute nap improved pilot performance by 34%.

Unless living in Spain or Italy a siesta in the modern working environment is pretty much a no no. However if feeling lethargic, then even 5-10 minutes of shuteye (even if it is just shutting your eyes at your desk) will pep you up – much better than coffee. However, any more than 20 minutes will have the brainwaves slowing down to theta and delta and you will feel worse than before. Power naps also impact our night time sleep and our general health. A study in Okinawa, Japan showed after four weeks of taking short afternoon naps and an evening pre-dinner walk (also a practice in Spain and Italy), the participants mental and physical health and sleeping improved. And in other towns that implemented these same practices with elderly people, they found that medical costs dropped by 70%.

How much Sleep do we need ?

Numerous large scale studies in the US and Japan have shattered the myth that adults need 8 hours sleep per night. A 10 year study of over 100,000 people showed the healthiest and fewest deaths occurred amongst people who slept between 5 and 7 hours.

Physiological Vitality : Sleep

The key however, is to tune into your circadian rhythm. I hear you saying **“Nooooooo, I need my eight hours otherwise I CAN’T FUNCTION!!”** This is not true. What make us feel terrible is the combination of inconsistent time of going to bed and waking up, sleeping in the REM stage where the brain is active for long periods of time, or being woken up at the deep sleep stage of sleep cycle. All of us can thrive on around six hours of sleep with practice. It can take as little as three weeks to master this shortened sleep cycle. And reducing two hours per day, means you will have 14 more hours a week to spend on doing things that are important to you.

By doing this, you are not missing out on quality of restorative sleep, but are increasing sleep efficiency. And over a year you end up giving yourself almost an extra month of usable awake time. How to do this. Experiment. Design and trial your own sleep reduction program – and continue until you find your own circadian rhythm. What will assist is going to bed at the same time, and waking up at the same time each day. Using a 20 minute power nap, getting sunlight and taking a pre-dinner walk will all assist.

Getting to Sleep – using Progressive Muscle Relaxation

PMR can be used at anytime of the day to help you relax. However it is also helpful to get you off to sleep. In order to do this make sure you are :

- Wearing loose clothing and wait at least 30 minutes after eating.
- If you fall asleep whilst doing it, then that great. If you aren’t using it to fall asleep – you are better to do it sitting up rather than lying
- Tense each muscle group for 8 seconds (count slowly “one thousand, two thousand, three thousand etc.) Then allow that relaxation for another 8 seconds before moving onto the next group of muscles
- As you relax, focus on the difference between the tense state and relaxed state of your muscles
- Inhale as you tense your muscles – exhale as you relax them
- Relax all the other muscles apart from those you are tensing. It may take some practice but you will achieve finer muscle control over time.
- Start at the top of the body and work down or being at the bottom and work up.
- Count to 8 again before standing up, so you don’t faint

1. **Face Contract** : squeeze eyes shut, tense teeth, frown and make face as small as possible
2. **Face Extend** : open eyes, mouth as wide as possible, stick out the tongue as far as it can go – make the face as big as possible
3. **Neck** : tense the jaw line and all around the neck
4. **Shoulders** : hunch up the shoulders to try and touch the ears
5. **Upper arms** : tense biceps and triceps
6. **Forearms** : tense the muscles between your elbow and wrist
7. **Hands contract** : make a tight tight fist
8. **Hands extend** : extend the fingers as wide and long as possible
9. **Upper back** : tense the upper part of the back
10. **Lower back** : tense the lower part of the back
11. **Chest** : tense the whole chest area – scrunch it up
12. **Stomach crunch** : make your six pack visible (even if just in your imagination) by pulling in tight
13. **Stomach extend** : push the stomach out as far as it will go
14. **Butt** : tighten the butt muscles as much as possible
15. **Thighs** : tense the front of the thighs from hip to the knee
16. **Hamstrings** : tense the back of the legs from hip to the knee
17. **Calves** : tighten up the back of the legs from knee to ankle
18. **Skins** : tighten the front of legs from knee to ankle
19. **Toes contract** : Bring your toes to contract under as far as possible
20. **Toes extend** : extend the toes as far away as possible

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Finding your Rhythm

What follows is an exercise in two parts.

Part 1 : Throughout the Day

Keep a record for the day, noting each time you feel sleepy. Is it in the afternoon after lunch? Is it when you are driving home from work? Use this record to gain insight into your circadian rhythm. Record the TIME and write a brief description of what you did for the last hour before you began to feel tired.

1.

2.

3.

4.

5.

Refer to the Daily Rhythm chat on page 68 to see how your rhythm compares to the average. If yours is off, see what you are or are not doing that may be affecting it (like drinking six cups of coffee to get through the day). Perhaps you'd benefit from eating a lighter lunch, getting up and walking around, getting some sun etc.

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Part 2 : Sleep Notebook

Keep a notebook next to the bed and for a week – make a note of when you go to sleep and when you wake up. Is it consistent?

DAY	Awaken	Any night wake-ups (Time and Why?)	Asleep
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

The Good Sleep : Experiment with the following and see which ones are helpful for you and your quality of sleep.

- Get more sunlight during the day e.g. eat lunch outside rather than at your desk
- Avoid wearing sunglasses just after sunrise or before sunset. Protect the eyes from UV at its peak around noon.
- Exercise – kill two birds with one stone and go for a walk at lunchtime – getting your daily dose of Vitamin D as well
- Listen to music that has 60 beats per minute – slow classical or electronic recordings like Philip Glass, Enya or Stephen Halpern – they will slow down the brainwaves and make it easier for sleep to come
- Go to bed at the same time and wake up at the same time every morning, including the weekends – even if it is tricky
- If you are lacking sleep or have had less than usual, add sleep to the beginning of the sleep cycle instead of the end by going to bed earlier. Add sleep in ½ hour increments
- Ensure the bedroom is dark so it is more conducive to sleep. Get black out curtains if necessary
- Try a ‘brain dump’ to slow down the racing thoughts before you go to bed. Either write your thoughts down in a journal kept beside your bed or record your ideas into your phone or other voice recorder. Keep note paper and pen beside the bed for if you wake up.
- Sleep in a quiet place. earplugs of white noise can cancel out external noises
- Sleep in a cool room, and keep your temperature the same throughout the night
- Bedroom is for sleeping or sex. Take the TV and any other electromagnetics out. Turn phone to flight mode. Read in another room
- The best position for sleep is the side allowing shoulders to sag forward with a pillow under the head. Make sure the pillow supports the neck but isn't too high, too soft or too hard.

Physiological Vitality : Exercise

Why is moving important for vitality?

It is a no brainer that physical exercise improves both mental and physical health. Some of the benefits are:

- prevention of diseases such as arthritis, depression, diabetes, obesity
- strengthens the heart
- lowers blood sugar
- alleviates stress
- helps us sleep better
- increases the ability to deal with pressure and changes in mood
- enhances digestion
- reduces bad cholesterol
- improves sex life
- helps relaxation and the ability to focus
- increases energy and improves both strength and fitness

As humans we are designed to move, and in years gone by we had enough activity in our daily lives that there was no need to schedule time to exercise our bodies. With today's more sedentary lifestyle – it is important that we do some physical exercise daily. The two main types of physical exercise are aerobic and anaerobic.

Aerobic respiration requires oxygen, and it involves the exchange of gases between the organism and the outside environment. It takes place within the cytoplasm and mitochondria of the cells, and involves the breaking down of glucose (source of stored energy in the body) into carbon dioxide releasing energy for use in activity. All higher organisms such as mammals perform aerobic respiration. In humans, this kind of respiration:

- Improves cardiovascular (heart and lung) endurance
- Increases the number of red blood cells which in turn aids the movement of oxygen around the body
- Uses glucose and can also use fat for fuel
- Elevates the metabolism for at least 2 hours after exercise

Aerobic exercise tends to be lower in intensity. it includes jobbing, dancing, cycling, skipping, swimming and walking.

Physiological Vitality : Exercise

Anaerobic respiration doesn't require oxygen, there is an exchange of gases but oxygen doesn't take part in the process. It takes place only in the cytoplasm and in this instance glucose breaks down into ethyl alcohol, carbon dioxide and energy. Lower organisms such as bacteria and yeasts follow this kind of respiration. As the terminology actually means 'without oxygen' it can't last long and it uses muscles at high intensity for a short period of time, for example weight lifting, sprinting or any rapid burst of hard exercise. This kind of exercise:

- Increases muscle strength and power
- Uses only carbohydrate for fuel
- Prepares the muscles for quick bursts of speed
- Evens out blood sugar levels
- Increases the metabolism by adding more muscle tissue
- Increases the BMR (Basal Metabolic Rate) i.e.. the amount of energy you use while at rest
- Improves bone strength and density

Improving bone strength and density is especially important for women due to the risk of osteoporosis when they age. Weight training helps bones absorb calcium better and strengthens connective tissue, which increases joint stability. As women have between 6-25% of the testosterone that men have, weight training will not bulk up a woman. Muscle is however heavier than fat so the scales are best ignored.

Flexibility

Flexibility is improved by stretching muscles and tendons, which in turn increases the joint's range of motion. The benefits of stretching include:

- Increased muscle and tendon strength
- Improved range of movement in joints
- Increased blood circulation
- Reduced muscle tension
- Help preventing injuries
- Alleviate stress
- Increased energy levels
- Better balance

Physiological Vitality : Exercise

There are a range of stretching techniques – and ideally finding an instructor to design one specifically for you will be most beneficial. That said, a gradual stretch of each major muscle group for 30 seconds each is a good way to begin. If you are doing high-intensity anaerobic exercise such as weight training then stretching beforehand is not recommended, it is better to do warm ups of light to moderate load before heavy lifting.

If you want to get fit, a stroll wont do it as you need to increase your heart rate and use muscles you wouldn't normally use. It seems obvious but do choose and exercise you enjoy, as it will increase the chances that you will be motivated enough to do it consistently. That said some variety is also a good thing.

Popular culture does impact what form of exercise is 'in'. In the 80's it was buffed men like Sylvester Stallone, then came Jane Fonda and aerobics, prior to the rise of psychophysical activities such as Yoga, Qi Gong, Tai Chi, Martial Arts and body work like Pilates, Alexander Technique and Feldenkrais. The benefits of such cross training is recognized now as being very beneficial for both mind and body, in terms of strength, flexibility, and the whole body spirit connection.

When to Exercise :

Exercise just like sunlight increases body temperature – therefore exercising in the morning delays the energy drop in the afternoon and gives greater energy levels when you need it. Ensure you exercise no later than four hours before you go to sleep, because the increase in body temperature will make it hard to go to sleep.

Exercising on an empty stomach early morning theoretically results in greater fat burning due to low blood sugar – however, eating prior will enable longer and higher intensity workout, because the cells wont be starved of glucose, meaning the total calorific output will be higher. When doing aerobic eat carbs (fruit vegetables, grains) 2 hours prior and if early in the morning at least have a banana 30 minutes before exercising. When doing anaerobic have some protein (eggs, meat, soy, dairy) 2 hours prior, or a protein shake if working out first thing. Eating protein after exercising will help rebuild muscle.

30 minutes per day is a good guide for duration. Everyday doesn't need to be high intensity – take the opportunity to take a 30 minute walk, do some gardening, walk up stairs rather than take the lift – or other forms of exercising whilst living – all of which are beneficial. the biochemical impact of exercise is well known. It produces melatonin which assist sleep, serotonin which is the happy hormone, releases endorphins the body's natural pain killer, breaks down the stress hormone cortisol and assists in forming new neurons.

Exercise assists in the lifting of depression. Winston Churchill famously suffered from what he called his 'black dog' – and had an infamous diet of champagne, whisky and cigars ... and no exercise.

Physiological Vitality : Exercise

WAWS

30 minutes of moderate exercise is recommended daily. WAWS is a simple rule of thumb that is helpful in planning your exercise.

1. **Warm-up (3 - 5 minutes)** ; a warm up gradually increases the heart rate and blood flow to the heart and muscles to prepare them for exercise. This means just doing the chosen activity at a slower rate for about 5 minutes. Before stepping up the speed – do a few joint rotations of the arms, shoulders, hips, knees and ankles to finish.
2. **Aerobic activity (5 – 10 minutes beginners / 30 - 60 minutes for advanced)** ; gradually increase duration.
3. **Warm-down (3 - 5 minutes)** ; warming down allows the heart rate, breathing and blood pressure to return to normal. It also prevents blood from pooling in your working muscles and returns the heart and blood to normal and prepare for stretching. Decrease the activity.
4. **Stretching (5 – 10 minutes)** ; Stretching improves flexibility, decreases muscle soreness and helps relax the muscles. Stretch all the major muscle groups you were using in the exercise. Stretch in a relaxed yet controlled manner. Hold each stretch for 20 – 30 seconds. Do not bounce. Never stretch to the point of feeling pain.

Make your own exercise structure for each kind of activity you choose to do.

Warm-up

Aerobic Activity

Warm-down

Stretches

Physiological Vitality : Exercise

Office Stretch

Whenever you wish to stretch but don't have a lot of room to move around, even at the office desk when you've been working in front of the computer.

1. Neck Rotation (Ensure you keep your shoulders still as you do this exercise)

- Stay straight, relax your shoulders and let your head roll forward, chin to chest
- Slowly rotate the head in a circle without straining the neck. Repeat 5x
- Relax
- Now rotate in the opposite direction Repeat 5x

2. Shoulder Shrug

- Sit erect in your chair
- Raise the arms so the elbows are flared in an outward position (as if you are doing a chicken impersonation) with your hands at shoulder level in front of the body
- Keep hands at shoulder level and raise your elbows as high as you can, isolating the pressure on your shoulders
- Hold for at least 10 seconds and then relax. Repeat 5 x.

3. Shoulder Rotation

- Sit or stand tall
- Lift the shoulders as high as you can
- Bring them forward, then push down and then pull them back
- Return to the starting position. Repeat 5x
- Reverse direction. Repeat 5x.

4. Chest

- Sit straight in the chair, raise the arms directly in front at shoulder height. Palms together
- Rotate the palms up so they are facing the ceiling
- Move the arms horizontally as far away from each other as you can – as if you are trying to put them behind you
- Hold for 10 seconds and bring the arms back together in front of you. Repeat 5x.

Physiological Vitality : Exercise

5. Back Twist

- Sit straight in the chair, both feet flat on the floor. Look straight ahead.
- Place your left hand on the right side of your right knee for support
- Slowly turn your torso to the right as you reach around behind yourself with your right hand to grasp the top or left side of the chair.
- Stretch as far as you can and hold for 10 seconds. Repeat 5x.
- twisting left and then right, aim to turn the body a little further each time

6. Arms

- Stretch the left arm up as high as you can, as if trying to pick an apple from a tree
- Alternate arms. Repeat 5x.

7. Hands

- With the left hand touch the tip of your thumb to the tip of each finger in turn, making the circle as round as you can.
- Straighten the fingers in between touching each finger. Repeat 10x for each hand

8. Legs

- Sit back and place your hands under your right thigh at your knee.
- Pull the knee toward the chest
- While holding there extend the leg straight in front of you as far as you can. Hold for 5 seconds. Repeat 5x with each leg