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A REPUTABLE STUDENT NEWS PUBLICATION FOR YOUR INFORMATION AND ENTERTAINMENT



COVER ART: DIL SHAAN DEEP SINGH

The human
CONNECTION



MEET OUR TEAM

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COMMUNITY



THE DEAN'S LIST

THE DEAN'S LIST RECOGNIZES EXCELLENCE IN ACADEMIC ACHIEVEMENT. THESE STUDENTS HAVE MAINTAINED AN AVERAGE OF 85% OR HIGHER IN THE FALL 2020 SEMESTER (WITH FIVE COURSES OR MORE).

SCIENCE

- ZOHREH MOHAMMADREZAEI
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- JONATHAN TAUSSKY
- NAOMI HIRSCH
- MEGAN PASQUALE
- MEIR BLANSHAY

SPRINGBOARD

- NONA NOURI
- AMINA CATRUC
- ALEXANDRE LARIVIÈRE
- ABIYA LILLY MONCY
- KEVIN WONG

SCIENCE



WOULDN'T YOU LIKE TO KNOW? GETTING TO KNOW TAV'S TEACHERS

BY: CHANA LEAH NATANBLUT

HAVE YOU EVER WONDERED WHERE YOUR TEACHER'S DESKTOP PICTURE WAS TAKEN, OR WHAT FOOD THEY ARE EATING DURING THE 15-MINUTE BREAK?

READ THIS ARTICLE TO LEARN MORE ABOUT OUR TEACHERS AND WHAT THEIR LIVES ARE LIKE OFF SCREEN.

Teacher: Samara Kornitzer

What is your favorite hobby? Reading, and hiking.

Where is your favorite spot in Montreal? My favorite spot in Montreal is the bird sanctuary in Westmount.

Where is the first place you traveled to? The first place I've visited was Italy.

Teacher: Daniel Glassman

What are your hobbies? Writing, Reading, Cooking

Do you have a favorite book? There are too many to list! That's like asking which of my best friends is my favorite friend!

Which restaurant is your most preferred? Deli 365

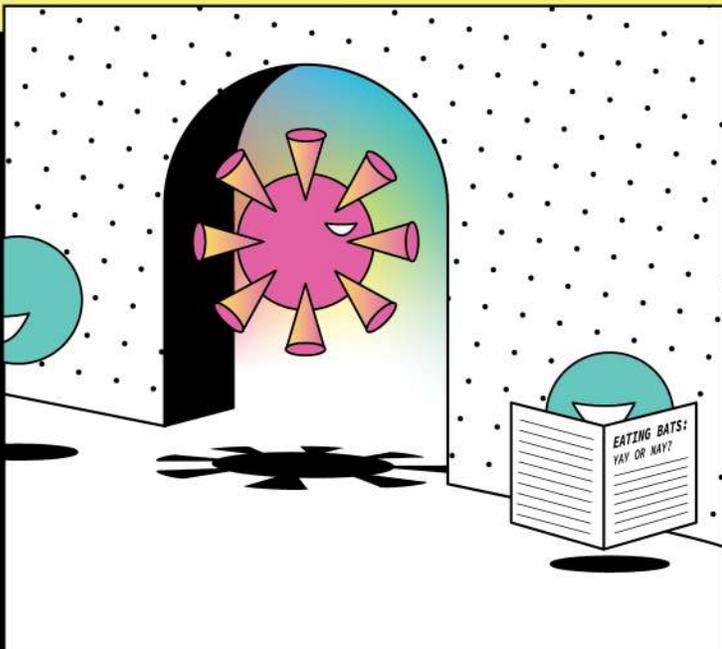
Where was your favorite travel? Spain

What is your favorite place in Montreal to visit? Mile End, Griffin Town

Do you have a favorite Food? Shawarma, Smoked Meat, Smoked Salmon

HOW mRNA VACCINES WORK

by Ita
Sonnenschein



If you haven't vaccinated, it's very easy to get infected with covid-19. For example, imagine that someone has just coughed on you, and now the SARS-CoV-2 virus has entered your body.



It takes your immune system a few days to recognize SARS-CoV-2 as a threat and retaliate. By that time, the virus has broken into your cells and created copies of itself, so you can become infected with covid-19.

TCSA HOODIE DESIGN CONTEST:

OPEN TO STAFF AND STUDENTS!

YOUR STUDENT ASSOCIATION IS HOLDING A HOODIE DESIGN CONTEST UNTIL THE END OF FEBRUARY. THE WINNING DESIGN WILL BE FEATURED ON SUPER COMFORTABLE, CUSTOM-MADE, UNISEX HOODIES OF VARIOUS COLORS AND WILL BE AVAILABLE FOR A LOW PRICE TO ALL TAV STUDENTS. STUDENTS WILL BE ABLE TO ORDER THEIR HOODIE ONLINE AND PICK IT UP AT THE COLLEGE.

WHAT WE'RE LOOKING FOR: THE DESIGN SHOULD PRESENT THE SPIRIT OF TAV COLLEGE. WHAT DOES TAV MEAN, NOT ONLY TO YOU, BUT TO THE CITY OF MONTREAL?

JUDGMENT:

THE TOP FOUR (4) CHOICES FOR THE SWEATER DESIGN CONTEST WILL BE SELECTED BY THE TCSA EXECUTIVE TEAM AND WILL THEN BE POSTED TO THE TCSA INSTAGRAM PAGE (SO MAKE SURE YOU'RE FOLLOWING THEM). THE WINNING DESIGN WILL BE SELECTED BY THE STUDENTS OF TAV COLLEGE VIA AN ONLINE VOTE. WHICHEVER DESIGN RECEIVES THE MOST VOTES, WINS!

PRIZE:

THE WINNING DESIGN WILL BE FEATURED ON CUSTOM-MADE HOODIES. IN ADDITION, THE WINNER WILL RECEIVE A \$100 AMAZON GIFT CARD.

SUBMISSION GUIDELINES:

SIZE: 800 X 800 PX

MUST BE SUBMITTED AS A .PNG FILE

YOU CAN SUBMIT YOUR DESIGN AS A SCAN OF A HAND DRAWING AND OUR TEAM WILL TRANSLATE THE DESIGN INTO A DIGITAL DRAWING

NOTE THAT THE WINNING DESIGN WILL BECOME PROPERTY OF TAV COLLEGE

THE DESIGN CAN ONLY CONTAIN ONE (1) COLOR

THE DESIGN MUST CONTAIN THE WORDS "TAV COLLEGE, MONTREAL"

SUBMISSIONS MUST BE SENT BY EMAIL TO: TCSA@TAV.CA BEFORE THE DEADLINE.

DEADLINE TO SUBMIT A DESIGN: FEBRUARY 26, 2021 AT 5 PM

GOOD LUCK!

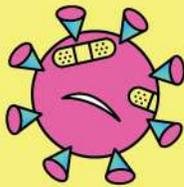


Most people who get infected with the virus will recover as their immune system learns to fight it off. For some people, symptoms like fatigue, shortness of breath, loss of smell and chest pain will last for weeks or months. In rarer cases, covid-19 is fatal. As of February 2021, the virus has taken the lives of 2.3 million people worldwide.

What if you could train your immune system to recognize threats in advance, so it could fight off intruders before they gain the upper hand? That's what vaccines do. While the concept of inoculation has been around since the 1100's, the first vaccine was developed in the late 1790's by Edward Jenner to combat smallpox. Here are some common ones.

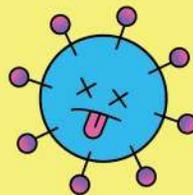
SOME EXAMPLES OF VACCINES

MEASLES



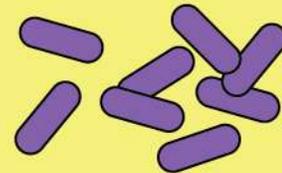
This is a **live-attenuated vaccine**. A live version of a virus or germ is injected. Other examples: mumps, rubella, chickenpox.

INFLUENZA (THE FLU)



This is an **inactivated vaccine**. It uses a strain of the virus or bacteria that has been killed by chemicals or heat. Other examples: polio, rabies, hepatitis A.

PERTUSSIS (WHOOPIING COUGH)



This is an **acellular vaccine**. This type uses a piece of the germ or virus, called a toxoid.

We'll be focusing on a newer type of vaccine called an mRNA vaccine, such as the ones made by Pfizer and Moderna.

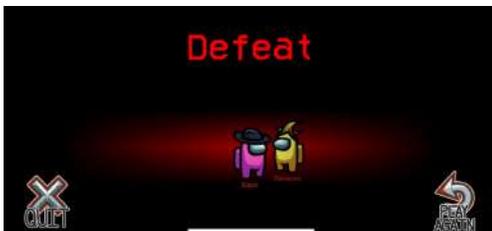
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TCSA HAPPENINGS

STUDENT CONCERNS

THIS MEETING WAS HELD IN RESPONSE TO STUDENTS' WORRIES REGARDING ON-CAMPUS EXAMS. A FEW REPRESENTATIVES FROM TAV WERE PRESENT LIKE NIMA AND THE DEAN.

AMONG US



NEW VICE PRESIDENT

LESLEY SOLANGE, VICE PRESIDENT OF COMMUNICATIONS.



LIPID NANOPARTICLE
fat bubble that protects
the mRNA

The radical thing about an mRNA vaccine is that it doesn't contain a piece of the virus. Rather, it contains instructions in the form of messenger RNA for making just the spike protein that surrounds the real covid virus.

MRNA VACCINE

MESSENGER RNA
a single-stranded molecule
that is complementary to one
of the DNA strands of a gene

SPIKE PROTEIN on a coronavirus fuses to a host cell and allows the virus to enter it

RIBOSOMES
the protein factory
of the cell

Okay, boys, it says we gotta build a spike protein!

On it. So the recipe calls for 1,400 amino acids...

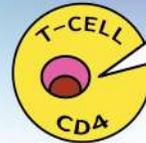
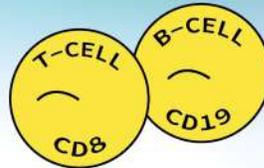
The vaccine is injected into the upper arm. The lipids dissolve, leaving the spike protein mRNA (the instructions) in the cell. Each cell's ribosomes read the instructions and make the spike protein.

TAV + COMMUNITY

ANTIGEN The S protein is known as an antigen, because its presence will trigger an immune response.



Hey, immune system!
Look what I got!

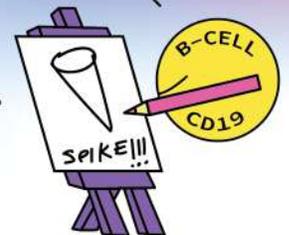


I don't like the look of that...

DENDRITIC CELL This cell is called a dendritic cell, because it presents antigens to the T cells of the immune system.

The mRNA is discarded and the cell now has a spike protein, which it displays on its surface. This attracts the attention of the immune system, which senses something foreign.

MEMORY CELLS take note of the spike protein and create antibodies, which will fight off the virus if it appears.



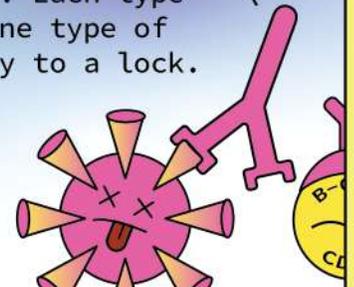
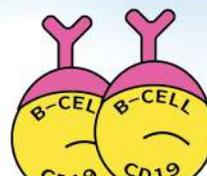
Kill it!!!

CYTOTOXIC T CELLS kill antigen-presenting cells.

Your immune system starts an attack to get rid of the invader. This is why people have symptoms like chills, fever, or muscle soreness after getting vaccinated.

You think we're gonna let you in? Think again!

ANTIBODIES neutralize threats by binding to them. Each type of antibody fits one type of antigen, like a key to a lock.



Now, your immune system has successfully created antibodies, which will recognize the spike proteins. Your body is properly equipped to fight off covid-19, thanks to the mRNA vaccine.

HUMAN REVOLUTION

BY DURGANSHI JAL

With the fleeting days of growing up,
with the souls all dolled-up, (in a human body).
We search for the survival,
Survival of the sensations that woe you half,
Part in the path, you search for love in your heart.
Then you find the one that invades your head.
carrying all the emotions
A shelter to stay and food to eat,
In between all the apathetic
You find humans who you actually believe in
It anchor your souls
and attacks your hearts
Asks your brain and takes you too far
All the questions get answers and you feel so cordial
When you encounter somebody similar, it amalgamates your paths
Day by day it gets stronger
Strongest pace by far
Then feelings come in between
And it all gets deflected
A good and a bad some individuals are confused
Some confessing the truth,
Some mocking in disputes
The human connection to them is wrecked,
and the connections between it are left is left shattered.
So the spectators walked blindly on their way,
Never stopping to ponder it may be them soon after.

Dreams:

What goes on in our brain when our body is at rest?

BY ELIZABETH VYKHODTSEV
PHOTO: GERD ALTMANN

Fascination in complexity

The human brain is known to be one of the most complex networks in the universe, if not as complex as the universe itself. Containing billions of signal-transmitting neurons, these cells practically carry out all internal and external functions in our bodies.

How complex is the brain you might ask? To answer that question, scientists till this day are still trying to uncover all the why's and how's that lie deep below the brain's surface, one of which, is probably one of the most fascinating phenomena— Dreams.

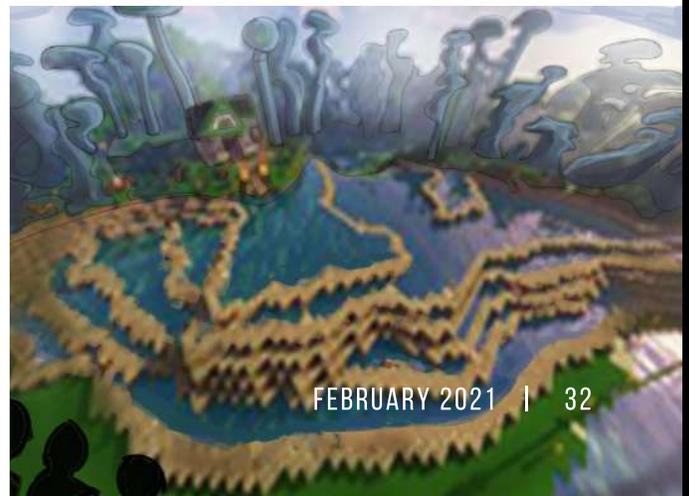
In order to understand some of these why's and how's that revolve around dreams, we must first understand the basics of sleep, when and where do dreams occur, and what exactly are they? Most importantly, what do dreams convey about the brain itself when our bodies are at rest?



This imposing figure belongs to the one called Eiya. Eiya was Nobu's sibling and was tasked by their father to assume the role of Commander-in-chief of the kingdom's Earth expedition. This gentle giant stood at 16 feet tall, had the head of a bull, a heart of gold, and an indestructible body. Just as wise as he was mighty, Eiya was slow to anger and praised stability above all else. This tendency caused him to be somewhat stubborn and resistant to change. Eiya was Toku's favorite child because he was dependable and steadfast, unlike his sister whose every whim had her changing course at any moment. He had a track record of hoarding all manner of beautiful and luxurious things, however, that many disapproved of. Though he ruled justly as Commander of the Earth expedition, he was rigid and unimaginative later when situations arose that demanded adjustment and when his people needed to improvise.

This is the restored capital of the kingdom on the Twelfth Heaven. You may be wondering what all of this has to do with our troubles, both the isolation felt during this pandemic and the larger environmental crisis. I mentioned earlier how this is about restoring perspective to our bewildered spirits. You see the Light beings are intimately intertwined with humanity and are linked to some of the most important and spectacular events that have occurred on this planet. From the very genesis of mankind to the Great flood that was to have erased our kind off the face of the Earth! All prophets and all saviors have known this truth.

These benevolent otherworldly beings fashioned us from clay and breathed life into our nostrils. The reason for this act of divine creation, however, was not altruistic. They intended to use us as laborers to mine gold because their numbers had dwindled after the near destruction of their planet. Toku could not send any more of his subjects for the important work being carried out on Earth. When they first arrived on this planet about 13000 years ago, only the natural things like the primordial elements existed along with the animal, plant, and mineral kingdoms. Judging the already existing creatures to be lacking reasoning faculties and unsuited for the kind of tasks they needed doing. The beings sought the permission of their supreme king to allow Nobu to devise a new life form more capable of aiding them in their efforts.



Understanding sleep

It has been calculated that humans spend an average of one third of their lives sleeping. Who would have thought that sleeping would take up so much time of our life? Although it might seem so time consuming, the importance of sleep goes beyond its basic necessity for survival.

Researchers from the National Institute of Neurological Disorders and Stroke have proven that within the 7-9 hour period that the body is asleep, the brain uses this time to restore itself by clearing out all toxins that build up during the day, a process that cannot be done when the body is in its conscious state.

The exact process of the brain's restoration however, is still unknown. The brain's ability to restore and clear toxins for the improvement of its overall function proves to show how active the brain is during that period of time when our body is not.

Stages of Sleep

In the unconscious state during which our body is asleep, our brain produces different brain waves and neuronal activity, causing our body to go through two phases of sleep: non-REM sleep and REM sleep.

The abbreviation REM is short for rapid eye movement, however, this eye movement behind our closed lids does not occur until the last stage of sleep.

Non-REM sleep occurs in the first three stages in which our body enters its unconscious state. In the first stage, the brain transitions from its conscious state to sleep. This light sleep stage slows brain activity, breathing, and heartbeat as the body eases itself into slumber.

In the second stage, the body's functions continue to lower, as well as its temperature. Although the brain's activity remains to slow down, small sparks of electrical activity are detected.

The third stage is the stage your body enters its deep sleep. At this stage, your brain and body's functions drop to their lowest points.

Soon after, the body enters its last stage — REM sleep. It is at this stage that rapid eye movement begins, and the brain becomes strikingly active, as if it were in the body's conscious state. This is when our brains start creating all sorts of visual imagery, with familiar characters in distorted situations. Dreams unravel and become the most vivid in this final stage.

This cycle eventually repeats itself, and the brain enters the REM stage 4 to 5 more times, which might explain why we experience a series of fragments of different dreams that have no correlation between them whatsoever!





It all started long ago when these strange Light beings faced extinction in their world due to excessive consumption of natural resources. All the warnings to cease their actions had gone unheeded. Until finally, the entire planet's ecosystems crumbled resulting in massive catastrophic disasters. A massive loss of life ensued as the devastation triggered more and more seemingly unrelated calamities. A dark cloud had descended over the near-perfect, god-like beings.

In the desperate scramble to save their world, it was discovered that the chemical element of gold had the ideal makeup to patch up massive caverns that had formed over the millennia of unchecked depletion of the minerals, gases, and other resources deep in the interior of the planetary mass. These gigantic empty

spaces threatened the structural stability of that entire globe. As it turned out, gold was rare on that planet, and so after a quick scout around our solar system, the gods discovered a humble blue planet and descended upon it to mine for the gold.

First came the one called Nobu. This being was a feline-faced, slender figure, who stood at a towering height of 12 feet tall. Nobu was Toku's first born child and the brains of the Earth task-force expedition. She was deep into the STEM subjects and was an avid inventor of all manner of wacky yet useful gadgetry. She had a reputation for being a troublemaker in the alien society but always got away with it because her eccentricity was the source of her genius, which was highly valued and praised by all.



What about dreams?!

Dreams are scientifically described as hallucinations that we experience when the brain is at its most active state during sleep.

Dreams carry a mysterious quality to them, as they leave people and scientists with questions that have no definite answers as to why exactly we experience dreams and if they hold some sort of importance on the brain's or body's overall function.

In REM sleep, significantly more brain activity is observed in the hippocampus, a section of the brain responsible for memory and learning. This observation allows scientists to conclude that there is a strong connection between dreams and memory.

Dreams are different from one individual to another, the reason being that dreams reflect on the individual's reality. These dreams are a distorted mirror of the environment we live in, the people in the past and present we associate ourselves with, our inner thoughts and emotions, and everything we have ever experienced or observed in our life.

All of this information is stored in our hippocampus as memories, which later on at night, our brain uses small fragments of to create a bizarre, happy, or even a frightful conscious-like experience while our body is in deep sleep.

A forgetful mystery...

The mechanism and function behind dreams continues to show how complex our human brain is, and how much more there is to discover.

Although we might not have all the answers to why our brain functions the way it does, or what the exact purpose of dreams are, or even why we remember only some parts of our dream and forget the rest, this mystery behind these unanswered questions is what keeps people fascinated simply by not knowing the unknown. Maybe dreams uncover emotions, thoughts, or desires that our conscious mind is not aware of itself? Maybe the purpose of dreams is to shine light on the true person we are deep down? Or maybe it is preparing the brain itself for the unknown, whatever that might be. However, of all these questions, perhaps the one we should be more focused on is: Maybe some mysteries are meant to be left unsolved?



Ever look up at the night sky in the countryside and wonder if there was life beyond our solar system?



Once upon a time, there lived a great omnipotent king named Toku. This all-powerful and benevolent king was immortal and had ruled his kingdom since the beginning of creation. His divine kingdom was called Twelfth Heaven. Located just outside our solar system, it was populated by a race of strange and enigmatic beings made of Light.

My name is Sam Urai, the last king of Gandawaland. I was born about 3520 years before Christ and lived for over 700 years. Are you surprised? Ha! In those days, mankind's life span topped 900 years on average. You cannot conceive of the world of my time as it has been lost to history. Furthermore, in antiquity, gods from the heavens lived among men on this Earth.

These gods taught mankind to utilize our free will to reason and they bestowed technology upon us. All benefits and luxuries you enjoy today, without exception, are derived from their knowledge. Everything from agricultural techniques to architecture and civil engineering, from art and music to math and sciences. All of which were holistically contained in a single philosophy or worldview. Practitioners of this religion were committed to developing character and dignity. In turn, they acquired a permanent divine grace and longevity.



BREAKING THE SILENCE

DESTIGMATIZING MEDICAL CONDITIONS

A SERIES BY ESTY ROSENFELD



TALE OF ANTIQUITY

THE STORY SO FAR

BY HERVE MUGISHA
ARTWORK BY HERVE MUGISHA

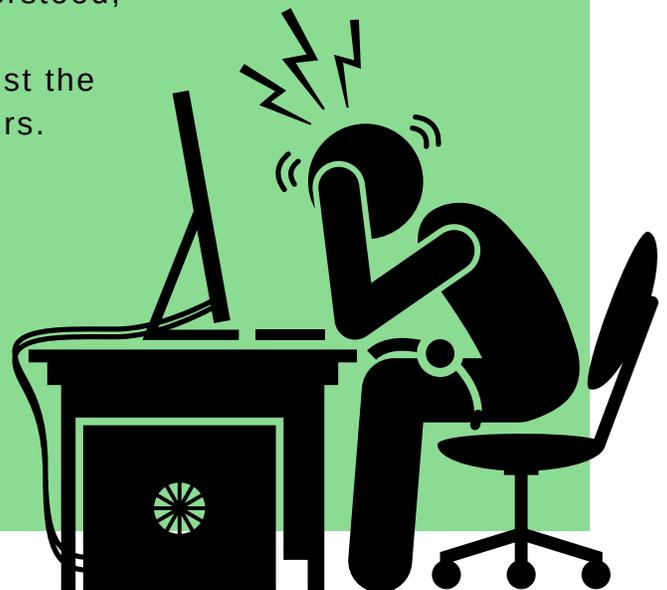
ABOUT THIS SERIES:

Living with a chronic or life threatening illness brings a whole host of challenges. Oftentimes, these challenges can be invisible. This makes it harder for others to be compassionate and helpful. People who experience medical issues can feel like their life is out of their control, which can make it really difficult for them to reach out for help.

The goal of this series is to raise awareness about medical conditions through storytelling and through information. Knowledge is power. Hearing and understanding people's experiences can help you be better equipped to respond the next time you encounter someone with a medical condition.

It will hopefully make you more aware and sensitive towards others struggling. This can even be in the simplest form of avoiding the generalization and misuse of medical conditions. Doing so diminishes, undermines and devalues what individuals with those conditions experience. For example, using expressions like you're retarded, I'm depressed, I'm so OCD can be hurtful to those who have medical retardation, depression or OCD.

According to the World Health Organization, headache disorders are often misunderstood, underestimated and misdiagnosed throughout the world. They are amongst the most common nervous system disorders. These recurring headaches can be debilitating and can seriously damage one's quality of life. Because they are usually not life-threatening, there is a lack of knowledge, understanding, sympathy and awareness for people who suffer from headache disorders.



CREATIVE

See It Through My Eyes

As a child, I had headaches but I didn't think much of it. When I was in grade five, it was a known thing that I'd get a headache by 3:30 every day.

When I was a little older, I went to the eye doctor. He was checking my eyes and asked me if I was getting headaches to which I responded the affirmative. He told me that those are migraines based on my sensitivity to the light. He suggested that I stay away from certain foods like nuts, seeds, cheese and wines.

Although I became more cautious and tried to avoid those food items, I was too young to understand the magnitude of what the doctor had told me.

Navigating in the Dark

When I was in tenth or eleventh grade, my migraines increased dramatically. I couldn't go a week without missing days of school. They started to come more frequently and increasing in length and intensity.

My pediatrician referred me to see a neurologist who conducted various exams to make sure that there was nothing else serious going on.

My mother wanted me to hold off on starting a prescription medicine. My uncle is a doctor and my aunt gets migraines too. We sent them the prescriptions to look at. They suggested trying to find another solution as this one can make you become more forgetful.

Laying Low

By my first year of CEGEP, I was experiencing waves of extended periods of time where I'd be fine and then missing more than three weeks at a time because of migraines. They became so debilitating that I was bed-bound. My migraines lasted more between 8-12 hours.



Migraines also include experiencing nausea, vertigo and distortion of sight. Usually I'll experience tell-tale signs that a migraine is setting in.

It was at this point where I started taking medications. They help decrease the frequency and intensity of my migraines. It also causes side effects like brain fog which can be from the medication or the migraines.

Migraines ≠ headaches

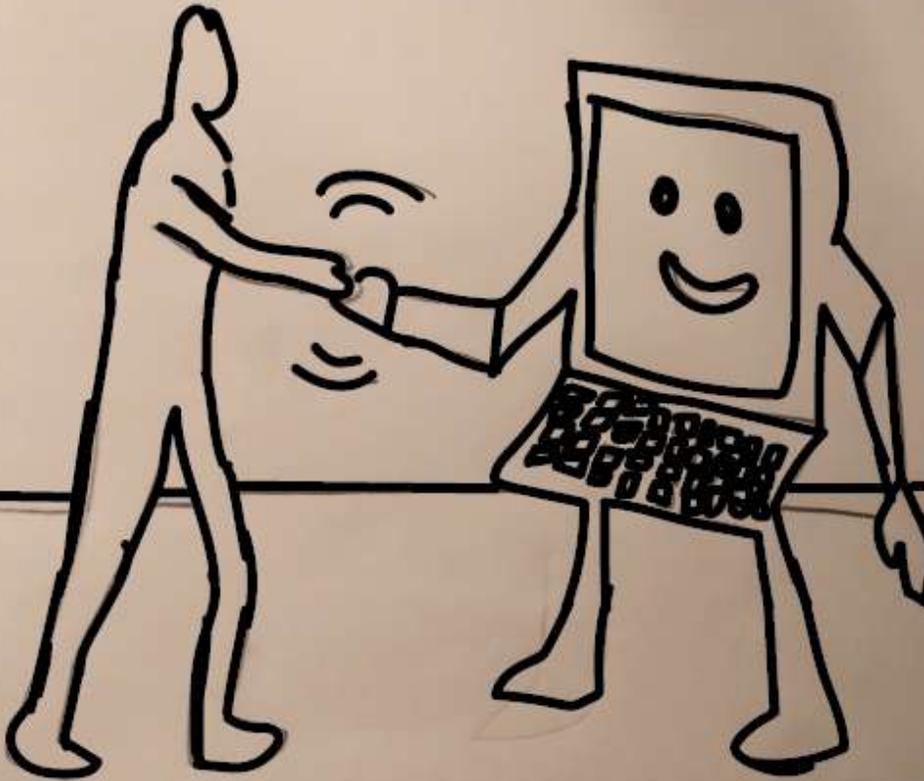
People don't understand the magnitude and implications of having chronic migraines. I will often be told to take Tylenol and move on with my life. This is a pretty universal response that those who experience migraines will receive.

If there was one thing I wish people would know, it would be that migraines and headaches are not the same thing. Migraines can be debilitating. When I get migraines, my eyes and head start hurting. Lights and noise become unbearable. I need to just lay down until it passes.

The name and all identifying details have been withheld for privacy.

If you'd like to share your story, email tjdc@tav.ca with 'breaking the silence' as the subject line.

The following information is from the World Health Organization



THE HUMAN CONNECTION IN A DIGITAL WORLD

BY LUCAS YIFRU
ARTWORK: LUCAS YIFRU

Human Connection in a Digital Environment

Technology has been in our lives for a long time now. It has made a lot of progress since its inception. It has become an integral part of our everyday lives. It has changed the way we communicate. Every step of the way, technology was being developed in its dynamic ways.

The human connection evolved because of technological advancements. We connect with people in many ways that are fairly simple and straightforward to operate or use. We see people through our screens to conversate and enjoy with each other, and we have these great moments that truly define how we connect with each other.

Cultivation of Human Connection in a digital space

The pandemic has made us connect to our others through our devices more than ever. We now attend our classes on our computer devices. Broadened examples would be, attending our meetings, our club gatherings and activities, and, finally, daily work meetings.

The creation of technology

The creation of digital media has changed the face of the world. We have all sorts of platforms available to use for our businesses, for building a fundraising page, for important causes, and way more in the technology aspect in which you can do so much.

HEADACHE DISORDERS

MOST COMMONLY TREATED WITH MEDICATIONS AND LIFESTYLE CHANGES



1/2 OF PEOPLE
WORLDWIDE HAVE A
HEADACHE DISORDER

UP TO %4

EXPERIENCE IT FOR 15
OR MORE DAYS OUT OF
EVERY MONTH

MORE THAN %30

OF 3/4 OF THE POPULATION
REPORTED MIGRAINES. THE OTHERS
MAINLY EXPERIENCED HEADACHES



HEADACHE DISORDERS ARE THE THIRD
TO HIGHEST CAUSE OF YEARS LOST TO
DISABILITY

MIGRAINES



FREQUENCY OF ONCE A YEAR TO ONCE A WEEK



ROUTINE PHYSICAL ACTIVITY CAN AGGRAVATE THE SYMPTOMS



LASTS A FEW HOURS TO A FEW DAYS



ONE SIDED HEADACHE



NAUSEA



MODERATE TO SEVERE IN INTENSITY



MORE COMMON IN WOMEN BY A 2:1 RATIO

MEDICATION-OVERUSE HEADACHES



CAUSED BY CHRONIC OR EXCESSIVE USE OF MEDICATIONS TO
TREAT HEADACHES



HEADACHES OCCUR ON MOST DAYS AND IS
WORST WHEN ONE WAKES UP



AFFECTS %5 OF THE POPULATION BUT MORE COMMON IN
WOMEN

TENSION-TYPE HEADACHES



EPISODIC TTH LASTS FEWER THAN 15 DAYS WHILE
CHRONIC TTH LASTS MORE THAN 15 DAYS PER MONTH



CHRONIC TTH IS OFTEN WORSE THAN EPISODIC TTH



PRESSURE HEADACHE WHICH SPREADS DOWN TO
THE NECK



MORE COMMON IN WOMEN BY A 3:2 RATIO

CLUSTER HEADACHES



SEVERAL TIMES A DAY



PAIN FOCUSED ON ONE EYE WITH TEARING AND
REDNESS



EXTREMELY SEVERE BUT BRIEF HEADACHES



MORE COMMON IN MEN BY A 6:1 RATIO



AFFECTS 1 IN 1000 ADULTS



Who is Andrew Matthews?

Andrew Matthews is an Australian author and speaker. According to his site, he has published his books in 47 languages and addressed over 1000 international corporations in happiness, well-being, and prosperity. He also appeared on over 5000 radio and TV programs.

He gives you a better understanding of your life and your relationships. He also shows you some new ideas of thinking, those you can use to be happier and healthier.

“Follow Your Heart” has ten chapters, and it talks about over three original concepts of well-being in each chapter. One of the biggest strengths of this book is that it is easy to digest.

Dedicate Time to Your Soul

Give fifteen minutes per day to Andrew Matthews and start an incredible journey with him. Listen to his practical advice with all of your heart. I assure you he will inspire you, and you will change at least some of your beliefs or thoughts after finishing this book.

What does the book talk about?

“Follow Your Heart” will show you a new horizon and engage you in lots of thinking. There are dozens of ingenious messages and useful advice waiting for you to consider and use.

It also talks about that you are enough, even with all of your flaws. The only thing you need to do is to embrace the changes and be happy with the existence of your challenges. Working on your weaknesses can strengthen you.

We are continuously being presented with small challenges which we must learn to overcome. “Unless we learn the lessons, we get to take them again... again... and

again.” (Matthews, 1997. p16). Accepting the full responsibility for our obstacles will make this growth process smoother and more pleasant. Our problems are our treasures, which can bring us spiritual growth.

Matthews covers some significant concepts like the subconscious, the miracle of gratitude and peace of mind, passion, the secret of power, luck, family and forgiveness, and love and fear are other concepts that Andrew brought you with his interesting methods of writing.

Individual's stories

The author suggests that even though we all have a story, we are not defined by them. We do not belong to a particular category. We can change the narrative of our lives if we are feeling unhappy with the direction we are going in.

He believes we can deal with our problems reasonably. If we are not happy with what we do, there are always jobs out there that belong to us. We can earn money and love what we do at the same time. Matthews teaches us to be comfortable with money, and to enjoy what we have in life. Thus, there is a chapter that helps us understand more about the benefit of the detachment of money, lovers, etc.

The school of life

Hard work is necessary to our growth. There is almost no way out of it. It is important to learn how to navigate the ups and downs of our lives. Life can be compared to school, which means that as long as you are breathing, the class is in session.



IS TIME NOTHING BUT A HUMAN-MADE ILLUSION?

OUR PERCEPTION OF TIME MAY BE COMPLETELY FLAWED.

BY ZOHREH MOHAMMADREZAEI
PHOTOGRAPH: "CLOCK" BY ZOHREH



YOUR SECOND LIFE MIGHT START IF YOU “FOLLOW YOUR HEART”! A REVIEW OF ANDREW MATTHEWS’S BOOK

BY MAHLA SEFATI

PHOTOGRAPH: “MY FAVORITE MOMENT OF THE DAY” BY MAHLA SEFATI

Looking back at 2020, we can all say that we went through lots of worries and difficulties. We were afraid of what the future might bring us. Fortunately, I read this book in those months. While reading, I realized that even in the most stressful days of my life, I must try to advance my thoughts and feelings.

If you feel the same, maybe you want to give it a chance and read it. This article is here to introduce a book that is perfect to enlighten your life.



Have you ever sensed that time felt weird in 2020 or that it speeds up as we get older?

We, human beings, are actually considered to have a naive perception of the flow of time. The way we think about time and its one-way direction flow, in fact, doesn't correspond to physical reality. We believe that time is irreversible and the past can never be experienced again. We can feel its flow when the season changes, when the sun sets, and thereafter rises again, when we get older and when we are reminded of our memories. The past is a part of history. The present is the moment we live in. The future is the present that is yet to come, and will soon become a part of the past. However, the question that should be asked is whether these assumptions are actual realities of the physical world or created by the human mind. In fact, several studies show that our perception of time is unstable and prone to illusions.

Time Perception

Sometimes, we feel like years pass in a blink of an eye, or some memories from ten years ago seem very real to us that it makes it hard to believe that such a long period of time has actually passed. Other times, a minute can last forever while we are waiting for a light to turn green. In fact, Humans are likely to rely on their memory rather than their knowledge to recall the events occurring within their lifetime. However, one must consider that the memory distorts the perception of time, and affects the sense of when an event has actually taken place.

There is a theory, known as the “proportional theory”, which suggests that our perception of time is proportional to the length of our lifespan.

This hypothesis states that as we age, our sense of present starts to feel relatively short in comparison to our entire lifespan. It is also determined that how long a duration feels depends on how many events in it can be recalled. Therefore, when only a few special events happen in our personal life during a year, that year will relatively seem shorter to us compared to a year full of important events.

The Idea of Timeless Reality

According to the operational meaning, time is simply what a clock displays. Nevertheless, the scientific definition of time completely differs from what we have in mind. Physicist Victor J. Stenger, in the book “Timeless reality”, declares that, based on established principles of simplicity and symmetry, reality is literally timeless at its deepest level. Furthermore, he explains that time is actually reversible. In opposition to our basic sense of time, the fundamental reality of the phenomena occurring around us might be with no beginning, no end and no arrow of time.



BE PART OF ZERO WASTE REVOLUTION

Here are some recommendations that you can implement to be part of the change:

1. Rethink and redesign:

- Open your mind and apply changes in the way that you consume. Choose eco-friendly products and options that reduce waste. Vrac & Bocaux, Loco, and Megavrac, are just a few of the zero-waste grocery stores in Montreal.

2. Refuse:

- Refuse to use items that are not necessary such as single-use plastic.

3. Reduce:

- Whenever you go to consume something, think if it is really necessary. Think about the resources that had to be used in its manufacture and the destination that it will have after being used.

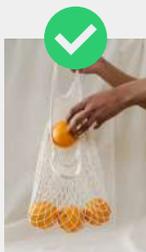
4. Recycling:

- Check your city's waste program to find out what can be recycled.
- Download the APP: Ça va où? This will help you clarify the bin in which each item should go.
- Identify the Ecocenter closest to your home, to bring there electrical objects, clothes in good condition, construction materials and Hazard materials.

5. Composting:

- If the collection of organic waste is not available in your neighborhood, you can take the material to the community composters or dare to use it in your own garden.

The garbage crisis is a reality that is causing irreversible damage to the environment. A big part of the solution is to have a responsible consumption, incorporate environmentally friendly habits, and be aware that every decision you make in your daily routine counts!



ALWAYS CARRY A REUSABLE SHOPPING BAG WITH YOU



MANY CAFES AND RESTAURANTS AWARE OF THE SITUATION, ARE WILLING TO SERVE YOU DRINKS IN YOUR OWN CONTAINER.



AVOID PRODUCTS THAT COME WITH PLASTIC PACKAGING AND MAKE YOUR PURCHASES IN ECO-FRIENDLY MARKETS.



USE COMPOSTABLE CUTLERY OR CARRY HARD PLASTIC CUTLERY IN YOUR BAG

In fact, the one-direction flow of time is not found in any of the laws of physics . All the basic physical phenomena are entirely or mostly time-symmetric and can occur in either direction of time. Therefore, if you watch a video of a physical process, you would not be able to tell if it is being played forwards or backwards, as both would be equally feasible. Specifically, when it comes to quantum phenomena and events on an atomic and subatomic level, no trace of time direction can be found.

Neuroscientist Abhijit Naskar, in his book “Love, God & Neurons”, argues that time is basically an illusion created by the mind to aid in our sense of temporal presence in the space. Furthermore, he mentions that there is no actual existence of the past and the future and all that there is, is the present. All we sense is the virtual perception of the past and the future which is created by our neurons, based on all our experiences.

Einstein’s Theory of relativity

Albert Einstein also showed that time is an illusion. According to his theory of relativity, not only there is no significance to the present moment but also all the other moments of life are equally real. Moreover, he suggests that simultaneity is relative. This argues that spatially separated events occurring at the same time is not an absolute fact. Distant simultaneity, in fact, depends on the observer’s reference frame.

Gravity and speed are two key factors of the observer’s reference frame in the concept of Relativity of simultaneity. As claimed by Einstein, the faster one moves through space, the slower they move through time. Also, the closer one is to a gravitational field of an object, such as the earth, the slower the time goes for them. For instance, time goes faster at

the top of mount Everest due to lower gravity and higher rotational velocity compared to the sea level. If you were standing on the top of Mount Everest, it may feel as though the new year begins a few minutes earlier for you compared to people standing at the sea level.

Conclusion

All in all, although many things may seem real to us, they may be only the constructs of the human imagination and don’t correspond to the actual truth. Reality might completely differ from how we see and feel it. We might have been given wrong information all along our lives. So it’s good to doubt our knowledge once a while and ask yourselves questions. Why do we believe certain things? How do we feel a certain way about something? What is the science and logic behind the phenomena we are surrounded by? Even though definite answers might not be found for some questions, at least we will be one step closer to reality.



Many people tend to think that recycling is the main solution to this environmental problem. However, recycling is not the answer to solve the waste crisis considering the efforts required for this process, such as the use of new resources, the consumption of water and energy, transportation, packaging and so on. Although recycling is part of the solution, it cannot be an excuse to ignore the underlying problem: OVERCONSUMPTION.

On the other hand, not all packaging or items that are  considered recyclable or have this symbol are able to be recycled because each local government has its own recycling system. Waste management in each city varies according to the technology available in the sorting plants and the needs of the companies to which the material is sold.

For this reason, every citizen should take the time to educate themselves on the particularities of the waste management program of their city.



BE PART OF THE SOLUTION!

According to information reported by the World Bank, North America is the region with the highest generation of garbage per capita. In 2016, the total garbage generated was 289 million tons, with an average of 2.21 kilograms per capita per day. The good news is that public and private actions are being generated to solve the environmental crisis generated by waste. For example, Montreal is implementing a plan with the objective of being a zero-waste city by 2030.

IT SOUNDS IMPOSSIBLE BUT IT IS POSSIBLE!

Kamikatsu is a small city located in Japan that is listed as the world's first zero-waste municipality. Sweden is another successful example in the field of waste management through an innovative waste-to-energy (WTE) program. This system has been so successful that the country has begun to import waste from other regions.

In both cases, one of the greatest factors that has allowed this environmental revolution is the commitment of each citizen.

STRESS MANAGEMENT

HOW DOES STRESS AFFECT OUR BODY?

BY SIMRANJIT KAUR



However, new consumer habits and rapid population growth have caused one of the most sensitive problems we face today: the excessive generation of waste. According to the World Bank, around 2.010 million tons of urban solid waste were generated during 2016. This is an exorbitant figure, which generates more concern when considering the participation of the methods of its disposal worldwide. Around 37% of waste is deposited in sanitary landfills, 33% in open landfills, 19% is recovered through compost and recycling and the remaining 11% is treated by plants heat treatment or incinerators

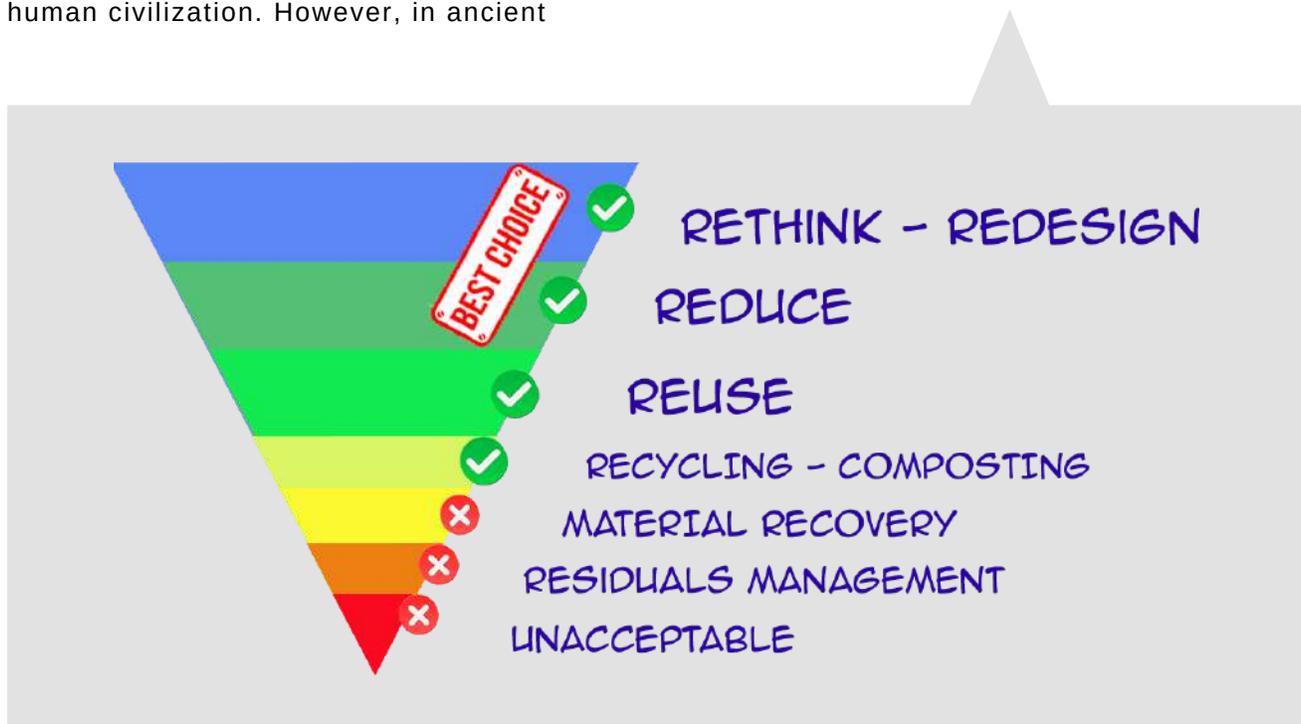
Waste discarded in open dumps and landfills that do not have an adequate gas collection system, cause the emission of greenhouse gases and consequently climate change. For its part, waste deposited in the sea is causing the extinction of species and negative effects on human health due to the consumption of microplastics.

It is true that waste has been present since the beginning of the development of human civilization. However, in ancient

times, the largest proportion of the waste generated was organic which means that it was deposited on the ground and decomposed easily. In contrast, most of the waste produced in modern society takes long periods of time to biodegrade. For example, a plastic bottle can take between 450 and 1,000 years to decompose, plastic cutlery 400 years, and disposable masks 450 years. While other materials such as Styrofoam © (The white material that is usually used in boxes to protect delicate products such as computers and televisions and is also used to pack food and beverages) and Tinfoil cannot decompose due to their chemical characteristics and will remain in the landfills forever.

ZERO WASTE

Faced with this situation, different movements have appeared, such as the "Zero Waste" ideology that is based on the conservation of all resources through responsible consumption and environmentally friendly production processes. The principles established in this approach can be visualized in the Zero Waste hierarchy:





What is stress?

According to the Mental Health foundation, stress is our body's response to pressure related situations which can lead to physical, mental and emotional changes. When we feel like we are in danger, our bodies go into a "fight" or "flight" response. Stress can cause short term as well as long term health issues or problems. Catecholamines (including adrenaline and noradrenaline hormones) are triggered by the adrenal gland during the short term stress. Similarly, during long term stress cortisol is released and a high increase of cortisol leads to Cushing's syndrome, which makes you feel tired and weak. Even though stress is unpredictable, there are many ways to control it. These include following a proper healthy diet, exercise and getting enough sleep.

TERMS EXPLAINED:

CATECHOLAMINES ARE RELEASED BY THE ADRENAL GLANDS.

ADRENAL GLANDS: LOCATED ON TOP OF BOTH KIDNEYS AND PRODUCE HORMONES THAT HELP REGULATION OF METABOLISM, IMMUNE SYSTEM, ETC.

CORTISOL: SECRETED BY THE ADRENAL GLANDS, AND REGULATES BLOOD PRESSURE REGULATION, GLUCOSE METABOLISM, ETC.

CUSHING SYNDROME: A DISORDER CAUSED BY AN EXCESS RELEASE OF HORMONE CALLED CORTISOL.

AMINO ACIDS: ORGANIC COMPOUNDS WHICH COME TOGETHER TO FORM PROTEINS.





CONSUMED BY WASTE?

BY LUISA RAMÍREZ

PHOTOGRAPH: "STOP" BY VOLODYMYR HRYSHCHENKO

WALLE, a Disney movie released in 2008, is perhaps one of the films that best reflects how the earth will be in the future if human beings continue upholding the same lifestyle.

It is undeniable that since the industrial revolution, there have been significant advancements which have ensured better conditions in nutrition, hygiene, and medicine, and therefore a greater life expectancy. In addition, other inventions have facilitated some of the tasks that were challenging for our ancestors, such as machinery for operation in the field, vehicles as a means of transport, and mobile devices that make possible communication.

Why follow a healthy diet?

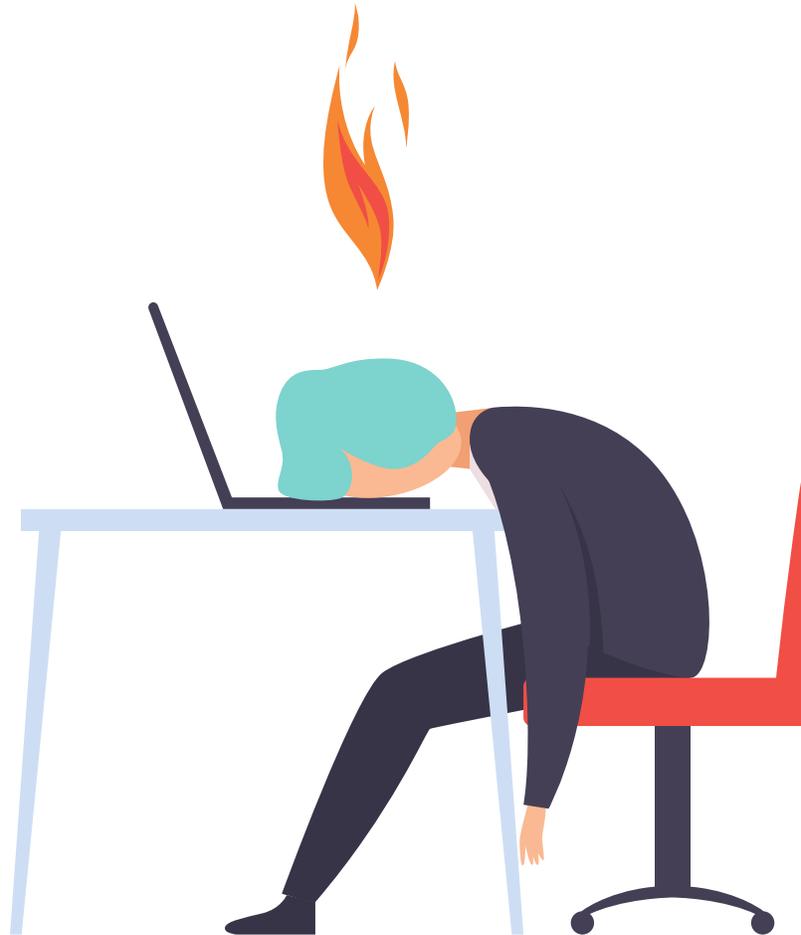
Following a proper diet is very important for our body. According to Matthew J. Kuchan, Ph.D., a senior research scientist at Abbott, "Eating a healthy diet can reduce the negative effects of stress on your body," These include cardiovascular disease, heart attacks and high blood pressure. According to the VeryMindwell article, coffee does boost your body immediately but it also increases the cortisol levels in your body. Fish and nuts contain omega 3-fats, which play a role in the regulation of mood. In an article published by the journal Nutrients, researchers Jiwon Kim and Jihye Kim have found that green tea which contains an amino acid, called theanine, which acts as an anti-stress benefit for people fighting with depression. At the end of the day, it is very important to take a proper healthy diet.

Feel Fresh, Feel Good

The most important factors in reducing stress is exercise. We already know that exercise is good for weight loss and improving muscle strength but did you know it also helps in the production of endorphins? According to an Exercise and Depression article, their role is to reduce pain and increase positive feelings. The famous philosopher, "Saint Thomad Aquanias", mentioned that, "All men need leisure". Exercise is a way to distract ourselves from the daily grind of our lives. When we are involved in some type of physical activity, our minds are relaxed and we are able to think freely.

Connection between Stress and Sleep levels

Getting an adequate amount of sleep is mandatory. As per the National Sleep foundation guidelines, an adult needs 7 to 9 hours of sleep per night. Usually if our cortisol level increases during the night,



it will disrupt the release of melatonin. This hormone controls the sleep-wake cycle. In an article written by Sleepscore, research shows that lack of sleep can make you more impulsive, and more sensitive to negative stimuli. Sleep deprivation can give rise to stress in a number of ways. It is our job to give our brain some rest so that we can be active and improve our concentration, thinking skills.

Small efforts lead to good results

In order to be able to reduce or overcome stress, we should begin to follow a healthy diet meal, perform some sort of physical activity and most importantly get the right amount of sleep. These small efforts will allow your brain to think freely. You will feel confident and full of energy.

LIFESTYLE
