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IDENTITY

Our identity is what makes you, you and me, well me. It is what defines all of us and makes us different. Makes us special. This identity is one of the most important things to have growing up especially in your teen years and in these days it can be so, so hard to have one that makes you, you. How the media, friends and society all affect how we pick our identity. It is socially constructed, from our early childhood to now. This is important as the actions we do around young children can have an affect on them and influence them in both the good and bad ways. But what if we are in our teens and are lost, what if we have no identity. I find that most craft their identity from what others think of them or what the media says is "cool". But it isn't about what others think of you, it's what you think of yourself. Worrying about how people perceive you can lead to self doubt, negative emotions, anxiety and low self esteem. Be yourself. Be who you want to be.



"Be who you are and say what you feel because those who don't matter and those who matter don't mind" -Dr. Seuss

"Be yourself, everyone else is already taken"
-Oscar Wilde

"We know what we are, but know not what we may be" -William Shakespeare

"When I let go of what I am, I become what I might be: - Lao-Tzu

"Do not fear failure but rather fear not trying."- Roy T. Bennett

Rewiring the Brain

What is neuroplasticity?

Neuroplasticity is the ability of the brain to rewire its connections in response to a injury. Having the ability to rewire your brain and improve your mindfulness is a growth mindset while choosing not to improve yourself and create new connections within the brain is called a fixed mindset.

Arthur Boorman had served in the gulf war for 15 years and had suffered a devastating injury. He had chronic back and knee problems. The doctors told him that he would never walk again. Arthur then had stumbled upon a article about yoga and decided to give it a try with the hope that he would be back to his right self. After persisting through and having a lot of resilience, Arthur has lost a lot of weight, is a lot more flexible and can walk!



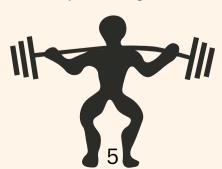
This is a growth

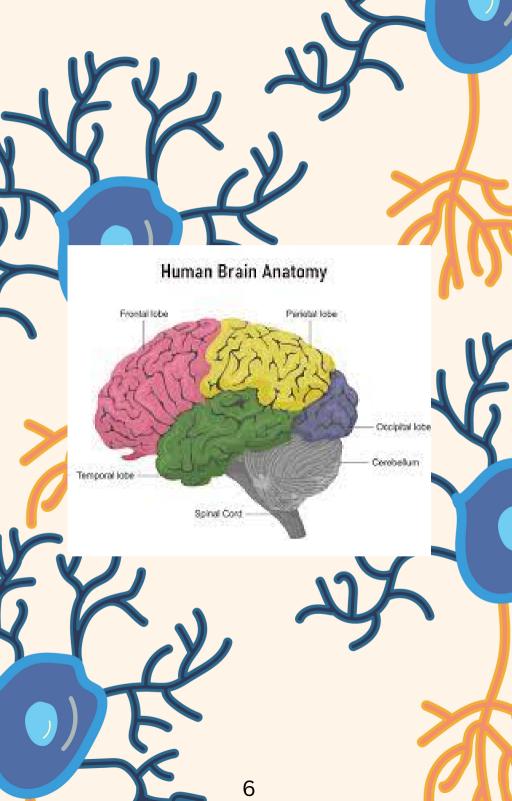


Ways to Rewiring the Brain

There are many ways to improve neuroplasticity and most of them are quite effective in boosting mood and energy as well. Creating music can improve mood, concentration and focus. Yoga can enhance brain neuroplasticity and improve their sense of memory function.

You can also rewire your brain to formulate better habits such as exercising, getting enough sleep and eating healthy. Create a strict routine and eliminate any distractions so you can repeat this over and over again. This will be hard at first but repeating this again and again and again it will eventually get easier and easier until it becomes a part of your daily life.





Our Gut Brain Connection





How the Gut and Brain Interact

The gut is commonly known as the "second brain" and for good reason. The same neurotransmitters in the brain are also found in the intestinal tract. Studies have shown that gut disorders often correlate with poor mood, anxiety and depression. The connection is both physical and mental. Ever heard of the term butterflies in the stomach? That is, the gut and brain working together.

Research has shown that our second brain has more than 100 million neurons that are located within the walls of the intestines. Neurons are like little messengers so the gut sends a message to the bran telling it what it needs to consume.





Our gut also affects how our brain feels. With poor gut health this can lead to our brain not absorbing the right nutrients

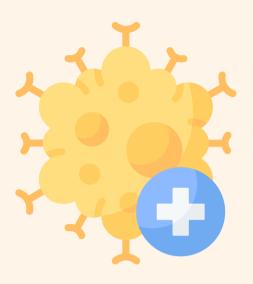
Foods to Improve Gut health

Foods that Improve gut health Foods that DO NOT Improve gut health

- -Almonds
 - -Oats
- -Miso Soup
 - -Yoghurt
 - -Bananas
 - -Ginger
 - -Kimchi

-Processed
foods(Chips,
cereal, Candie)
-Refined sugar
-Gluten
-Dairy products
-Fried foods.





Where is Serotonin Created?

Many people think that Serotonin is created in the brain but surprisingly, 95% of serotonin is created in the gut. Serotonin is the hormone responsible for regulating your mood and controls your happiness

Stress and the Gut

Ever had stomach or intestinal problems such as heart burn, abdominal cramps or loose stools? These are all related to stress levels! There are many ways to decrease stress levels such as eating whole foods and having a nutritious diet, get good sleep, exercise, taking deep breaths and writing in a journal.

Did you know?

The gut contains more than 70% of our immune cells.

Immune cells



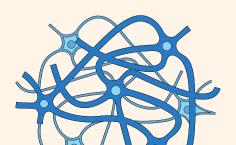
White blood cells have an extremely important role in our immune system. They are made from our bone marrow and travel through the blood tissue to find and kill any intruders such as viruses and bacteria. Getting more sleep, eating healthier and exercise can increase these cells.

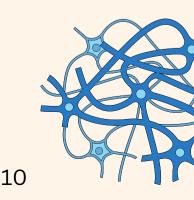
<u>Our Happy</u> <u>Hormones</u>

What is Dopamine?
Dopamine is that good
feeling you get when you
fell satisfied with
something or you
achieve that certain goal
you made.

What is Serotonin?
Serotonin helps control
how you feel. Its like a
mood manager and
when you have enough
of it you feel happy and
content

What is Oxytocin?
Oxytocin is released by
the brain when you feel
"loved". When you have
a crush on someone or
when you are hugging a
family member, that
feeling is oxytocin.





What are the best ways to achieve these hormones?

What are the best ways to get more <u>Dopamine?</u>

Getting more Dopamine can be achieve by doing activities that you enjoy. It could be listening to music, reading a book, exercising, even just smiling and laughing can increase dopamine





What are the best ways to get more Serotonin?

Higher serotin levels can be achieved by spending time in the sun, getting enough sleep and even practicing acts of kindness.

What are the best ways to get more Oxytocin?

Oxytocin is like your "love hormone". This is the feeling you get when you have a crush on someone or you are playing with someone. The best ways to get this is simply hugging your loved ones, help others and say "I love you".

Words can go a long way.



The Enteric Nervous System

What is the enteric nervous system, and how does it contribute to the process of digestion in our bodies?

The enteric nervous system or ENS is lined throughout the wall of our gastrointestinal gut. The ENS is often referred to as our second brain with good reason. The ENS is responsible for many functions such as regulating blood flow through certain parts of the Gi tract, Secretion which is when the neurons in the ENS release certain enzymes and hormones that aid in breaking down the food we are digesting, motility which is what propels the food we eat through our digestive tract to our stomachs. In short, the ENS is a vital part of the body and works with the Central nervous system so that our gut remains healthy.

Can certain foods or lifestyle choices influence the health of the enteric nervous system, and if so, how?

The enteric nervous system is and is in charge of releasing a variety of neurotransmitters to different parts of the body to facilitate the parts such as the motor, sensory absorptive and secretory functions of the gastrointestinal tract. These neurotransmitters come from the 600 million neurons that are housed in the enteric nervous system. It also plays an extremely important role in how we digest foods such as digestion, absorption, and gut motility. The foods we eat can affect the enteric nervous system. Eating fruits and vegetables which contain a large amount of dietary fibres can promote a healthy ENS and Antioxidants which are found in berries and green tea have been known to improve gut health.

The Parasympathetic and Sympathetic Nervous Systems

The **sympathetic** nervous system is responsible for our fight or flight reaction. It is triggered when your brain believes it is in danger. When in this state the sympathetic system causes a lot of issues to the body such as constricting blood vessels. releasing glucose into the body and worst of all, decreases activity of digestive system.



Autonomic Nervous System

The Autonomic nervous system plays an important role in our body as it controls all of the automatic features of our body. These include our heart rate, respiration which is inhaling and exhaling, salivation and the release of urine. The ANS also consists of two branches:

- The sympathetic nervous system (SNS)
- The Parasympathetic nervous system (PNS),

When we go into fight or flight mode, we get a high heart rate and many other problems from being activating the SNS.

How do we recalibrate ourselves back to rest and digest? Being in our (PNS)

Taking deep breaths and meditation.

Even singing, gargling or chanting can revert us back to rest and digest as the vagus nerve is connected to the vocal cords!

Resilience

Resilience is the ability to recover quickly from whatever obstacles you may face, and whatever issues life throws at you. Resilience is a skill and you can improve on it. When improving on your resilience skills, it is important to know that different things work for different people and that it can take time.

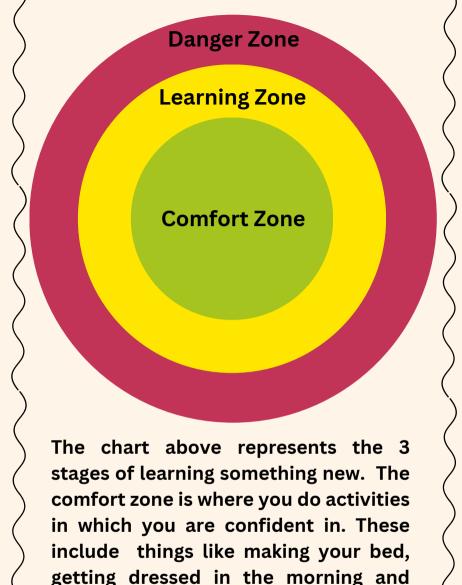
A challenge I faced were I had was doing a pushup challenge with my AFL team which consists of 30 athletic kids. Most of them were a lot fitter then me. We did around 50 down and up although I came 4th out of the 30 kids, I went to my absolute limit and I am proud of

Ways to Build Resilience



- Dont critisize yourself
- Manage stress and anxiety levels
- Be kind to yourself
- Look after your physical health

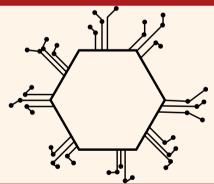
Always remember that different options work for different people



stages of learning something new. The comfort zone is where you do activities in which you are confident in. These include things like making your bed, getting dressed in the morning and even going to sleep. The learning zone is where you should be when learning something new. It gives you challenges you can overcome. The danger zone is beyond learning and is where you are completely uncomfortable and are in completely unfamiliar ground.

Navigating the Ai world

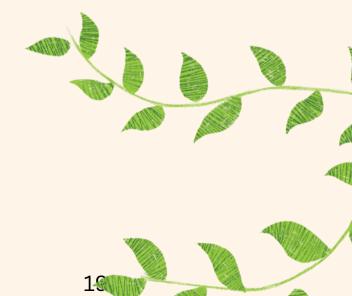
Ai, you probably have heard of it before and no I don't mean Terminator although they are quite similar. The use of Ai in this world has increased by a lot. This isn't necessarily a bad thing as robotics are produced to work the more dangerous and extreme jobs without any pay but we have to remember what makes us human in the first place.



What separates us from Ai is the fact that we humans have the ability to show true emotion. Empathy, anger, love are all feelings that only us humans can experience and no robot ever will.



Never Give Up



About the Author

Dimitry Hall is 13 year old writer from a homeschool group and has written this book to help teenagers with their health, both mentally and physically.