Increase Your Cognitive Power — A Simple User's Manual For Your Brain

What are you thinking about?

Me? Oh, I'm just thinking about what to write next (and how meta this sentence is). Meanwhile, you are wondering where this article could possibly be going.

Those thoughts happened spontaneously — painting the crowded canvas of our reality with meaning — only to be replaced by another thought in the next moment. But how does this happen and why is it happening?

During this article, we will co-pilot your brain together to explore your cognition and answer the intriguing question — what, how, and why do we think? With a deeper understanding of your cognition — a term we use to describe the range of mental processes relating to the acquisition, storage, manipulation, and retrieval of information — you will be able to make yourself healthier, happier, and wiser.



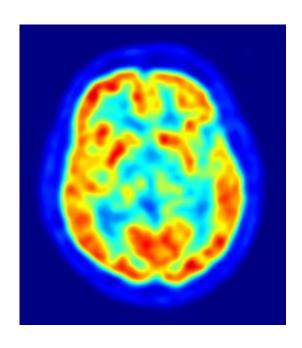
What Are We Thinking

What we think is easy enough to describe. If I tell you to think of candy, you use your cognitive abilities to retrieve the information related to the term "candy." You are overcome by thoughts, feelings, and memories that are related to your past experiences with candy (the taste, the feeling, your favorite kind of candy, etc.). This process was made possible by cognitive abilities you used in the past to acquire and store information, and you probably didn't notice that this process took place until something triggered the memory of that past experience.

Now, as you think about candy, your memories may seem completely accurate, but you are, in reality, manipulating the information in your mind based on many unconscious and conscious factors. You are probably thinking about what it tastes like and looks like, but you are likely to forget about how much it costs, what is written on the package, and the promise you made to yourself about eating "healthy." This is a perfect example of your cognitive ability to retrieve information and manipulate that information, and it happens every time you remember something.

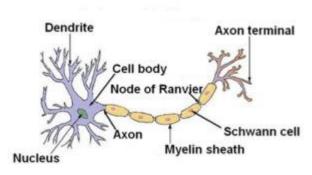
In the split second after you read the word "candy," you experienced every facet of cognition unconsciously, but as I took you through your cognitive processes you were able to experience it consciously. By making our cognitive processes conscious and understanding what affects cognition, we can harness its power to relieve suffering and better our lives in every way. But before we do, we must first develop a more intimate relationship with the most powerful tool we have — our brains.

How Are We Thinking



In your brain, you will find about 100 billion nerve cells called neurons. Each neuron consists of a cell body and branch-like projections (one axon and multiple dendrites) that send and receive messages from other neurons.

Structure of a Typical Neuron



Neurons send messages by transmitting electrical impulses across tiny gaps called synapses. These messages and the pathways that are formed between neurons are the physical components of your cognition.

In our first three years of life, our brain has up to twice as many synapses (think neural connections) as it will have in adulthood. These synapses help accelerate our learning by forming neural networks so that we can adapt to our environment as quickly as possible. Our genetics provide the basic blueprint for our synaptic connections, but our

environment and how we adapt to it ultimately determine the neural connections in the brain. For example, when I mentioned the word "candy," your neural connections that are related to the term "candy" fired together and created the experience of a past memory, thought, and feeling. But If you have never heard of candy before, your brain will try to find what it means by using contextual clues. For example, you read earlier that candy has a taste, so that must imply that candy is a certain type of food, right? There is no relevant experience of candy stored in your brain, so it tries to construct one from the context it is given. Once you have a candy bar, however, that experience is stored as neural pathway in the brain. That new neural pathway may be triggered to fire the next time someone mentions candy, which provides you with a little taste of the pleasure or pain you experienced the last time you had a piece.

This example explains the "what" behind the formation of our cognitive abilities. Neurons wire together and form intricate connections and fire together to convey a thought, feeling, and/or memory, but why does this happen?

Why Do We Think So Much?

Although the purpose of cognition is a complex topic that is hotly debated, let's keep it simple. Cognition is necessary for our survival. The ability to acquire, store, manipulate, and retrieve information allows us to adapt to the environment we live in.

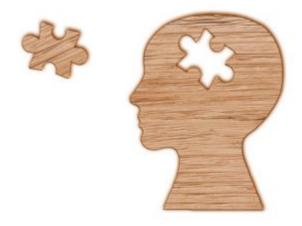
Most animals have these cognitive abilities, but consciously manipulating cognition may be an ability unique to humans. This statement, however, may not be true. Some neuroscientists, like Sam Harris, argue that the freewill we think we have over our cognition is just an illusion. Much of what we think, feel, and do is dictated unconsciously by our genetics, our past experiences, and our environment in such a

way that it makes us the victim of our brain rather than the victor.

https://www.youtube.com/watch?v=hm05uwzFg0M

On the other hand, a group of researchers conducted four experiments that may provide evidence against Sam Harris's contention. These researchers found that we can consciously control the way unconscious stimuli affects our behavior. This means that you can completely change your reaction to unconscious stimuli like what happens in your brain when you read the word "candy."

We can easily rewire our neural connections to create the feeling of disgust rather than excitement when we think of candy. We can also use the power of intention, along with nutrition and environmental changes, to enhance our cognition.



How to Enhance Your Cognition

Even if we don't have freewill, we can still use our internal environment, external environment, and self-awareness to enhance our cognition and better our lives.

1. Change Your External Environment

Your environment has much more power over your brain than you think. Your brain is using your senses to pick up information

from your environment every 13 milliseconds. This constant flow of information triggers specific thoughts, feelings, and reactions that you don't notice until you experience the thought, feeling, or reaction. This suggests that one of the most powerful ways to better your cognition is by changing your environment.

When it comes to hacking your environment here's a simple principle you can follow — make the things that you should do easier than the things you shouldn't do.

Here's an example from my life. To make sure that I don't eat highly refined food, I never buy it. If my family buys refined foods that are tempting to eat, I will make it more difficult for me to eat them and easier to eat healthy food. To do this, I make the food I want to eat easily accessible and put it in places where I will not see any unhealthy options. This removes candy eating triggers from my environment, which reduces the chance that I will eat candy again.

Other ways to hack your environment are to use essential oils like rosemary, listen to music, and experience nature. The smell of rosemary essential oil has been found to increase alertness and quality of memory, so diffusing it in your workplace may help boost your cognitive performance. Music has potent effects on our brain as well. The effect of music is so potent that it is being used in the treatment of cognitive disorders like dementia and Alzheimer's disease. Researchers suggest that the positive effects of music include a calming effect due to the activation of the parasympathetic nervous system. Binaural auditory beats and apps like brain.fm may also help you improve focus and creativity.

Related: Understanding Essential Oils: A Complete Guide For Beginners

Another potent cognitive enhancer is nature. Studies have shown that simply looking at a picture of nature stimulates the vagus nerve, which improves mood and self-esteem and reduces blood pressure.

But what happens when we can't change our environment? You're not at home, you've run out of rosemary oil, the only sound you hear is a jackhammer from the construction workers on the street, and the closest tree is miles away. What can you do?

2. Develop Self-awareness

You can use self-awareness to thrive in any environment. Self-awareness is your conscious knowledge of your own character, feelings, motives, and desires. By developing self-awareness, you can become conscious of the feelings, motives, and desires that are stealing your cognition away from things that are more important.

To develop self-awareness, direct your focus with specific questions. Dr. Relly Nadler suggests asking yourself five simple questions:

- What am I thinking?
- What am I feeling?
- What do I want now?
- How am I getting in my way?
- What do I need to do differently now?

These questions will help you shift your focus and find a better way to act now and in the future. You can also use these questions to assess past experiences so that you can plan a new action for the future. Using the questions in this way can help you use your present cognition to enhance your future cognition.

The most popular way of developing self-awareness is through meditation. By simply sitting and focusing on your breath and nothing else for 10-30 minutes every day, you will train your brain to be less reactive, which reduces stress and enhances cognitive function.

Must Read: How To Be Happy

3. Change Your Internal Environment

You cannot out think poor nutrition. No matter how peaceful your brain and environment are, you will always have poor cognitive function if you aren't healthy.

For example, if you eat candy and other refined foods every day, your body will be in a chronic state of inflammation as it tries to save your cells from oxidative damage due to free radicals and other oxidants found in the refined foods.

Eating more fruits and vegetables can increase cognitive function, especially cruciferous vegetables like broccoli and kale. When we chew cruciferous vegetables, a compound called sulforaphane is created. This compound is designed to protect the plant from small predators. In humans, it sets off a cascade of processes in the body that detoxify and protect the cells from oxidative damage. After the damage is healed, you can use Lion's Mane mushroom extract to prevent the loss of cognitive function, while inducing nerve growth factor — a neuropeptide that maintains a healthy brain and grows nerve cells.

Related: Sulforaphane - Why Your Cells Need Cruciferous Vegetables

Supplementing with vitamin B1 and coconut oil also help boost cognitive function by ensuring that your neurons have sufficient energy. Coconut oil contains medium chain triglycerides, which provide an alternative fuel source for brain cells and may prevent neural cell death. Vitamin B1 helps your neurons use energy sources, like sugar, more efficiently. To prevent cognitive loss — especially if you have Alzheimer's disease — it may be best to supplement with vitamin B3 and curcumin from turmeric. All of the other B vitamins also play an essential role in preventing the loss of cognitive function while improving general health as well, and

for we recommend taking a B vitamin complex that has all of the Bs as opposed to just one or two B vitamins, which can throw your body out of balance.

But before you start adding these supplements to your shopping cart, it is important to note that the most effective methods of improving cognition are free.

Increasing your physical activity can improve brain volume and reduce the risk of Alzheimer's disease by up to 50% and learning a new skill forms new synaptic connections and prevents the loss of synaptic connections and brain volume as we age.

Related: How to Improve Brain Health and Reduce the Risk of Alzheimer's

To take advantage of both of these benefits at once, go to a movement class, practice a sport, play a new sport, take up yoga. Your brain will thank you by being sharper and more efficient than it ever was before.

If you experience a rapid change in your behavior and/or notice no effect from making the changes suggested in this article, you may have something else going on. So it is important to consult your doctor and get the proper referral.

Putting It All Together

By changing your environment, developing self-awareness, and nourishing your inner environment with brain-boosting foods, you can enhance your cognition and live a life that consistently makes you happier, healthier, and wiser.

Related Reading:

- How to Increase your IQ with the Right Foods, Herbs, Vitamins
- How to breathe
- Mental Health, Physical Health & B Vitamins Nature's

Valium

■ The Fascinating Bacteria in our Gut, and How it Affects
Our Whole Lives

Brain Supplements:

- Shillington's Brain Tonic
- B Complex Thorne Research
- Shillington's Cayenne Tincture
- Krill Oil
- Omega-3 w/CoQ10 Thorne Research

Sources:

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How Do We Think — Wonderpolis

 Conscious control over the content of unconscious cognition — Science Direct

Music Therapy Enhancing Cognition — Alzheimer's Association

Man In Nursing Home Reacts To Hearing Music From His Era — Music & Memory

- The effects of views of nature on autonomic control. NCBI
- What Was I Thinking? Dr. Relly Nadler
- COCONUT OIL: NON-ALTERNATIVE DRUG TREATMENT AGAINST ALZHEIMER'S DISEASE Europe PMC
- B Vitamins and the Brain: Mechanisms, Dose and Efficacy—A Review NCBI
- PILLAR 3: EXERCISE & BRAIN AEROBICS ARPF
- Alterations in Brain and Immune Function Produced by Mindfulness Meditation — Psychosomatic Medicine
- Binaural Auditory Beats Affect Vigilance Performance and Mood — Science Direct
- Music for the Brain Brain.fm
- Compounds for dementia from Hericium erinaceum —

Journals on the Web

■ In the blink of an eye — MIT News