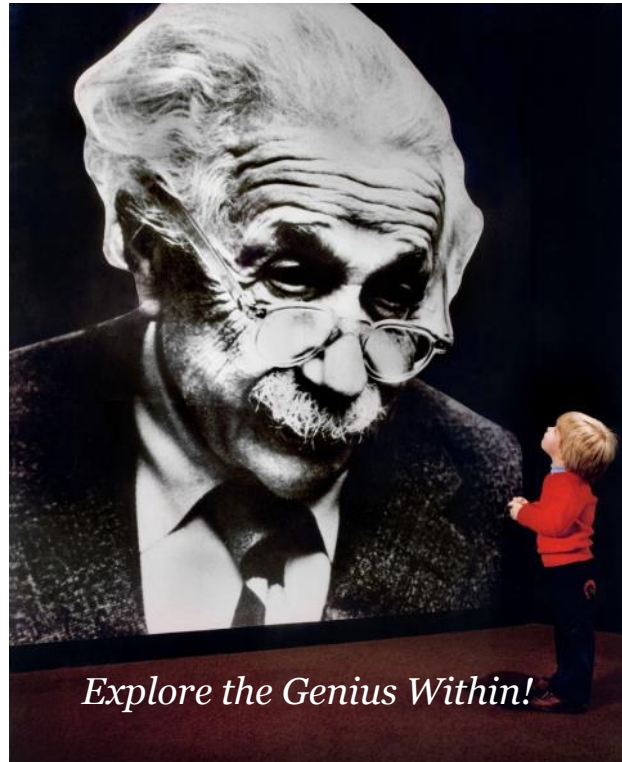


# use it or lose it

## ***Starter***

I can do anything  
I want to do,  
I can do anything  
at all,  
If I want it  
badly enough,  
If I work  
hard enough,  
If I have a little  
patience  
– But not too much.

*Gina Ginsberg-Riggs*



## ***Did you know?***

- ◆ Your **brain** has about 100 billion brain cells called neurons.
- ◆ Neurons can **communicate** with each other.
- ◆ A teenage brain can make up to 500 trillions of **connections** every second. (500.000.000.000.000)
- ◆ It's the number of connections your brain can make that shows how **clever** you are.
- ◆ Thousands of connections die every second.
- ◆ The more you use your brain the more connections it keeps making.
- ◆ Only the connections you use will **survive**.
- ◆ The brain **weighs** about 2% of your body **weight**, but it uses 25% of the **oxygen** you **breathe** in.
- ◆ We normally use less than one per cent of our brain's **potential**!
- ◆ You can do anything you believe you can, if you put your **mind** to it!



**Brain cells** – The brain is made of cells, just like all the rest of the human body. The number of brain cells in a newborn baby is about 100 billion. This number will **remain** about the same throughout life. The difference between brain cells and other cells is that they can communicate with each other, others cannot.

**Connecting** – The brain cells communicate with each other by making numerous connections from one to another. It's the connections of the brain cells that can change, become more and faster or less and slower, depending on whether we use them or not.

**Losing connections** – A small child learns **incredibly** many things in a few years' time. The brain of a five-year-old can make 1,000 trillion connections per second (1,000,000,000,000). After that the connections start dying. By the age of ten half of them are left and by the **teens** thousands of connections die every second. Only the ones we use will survive.

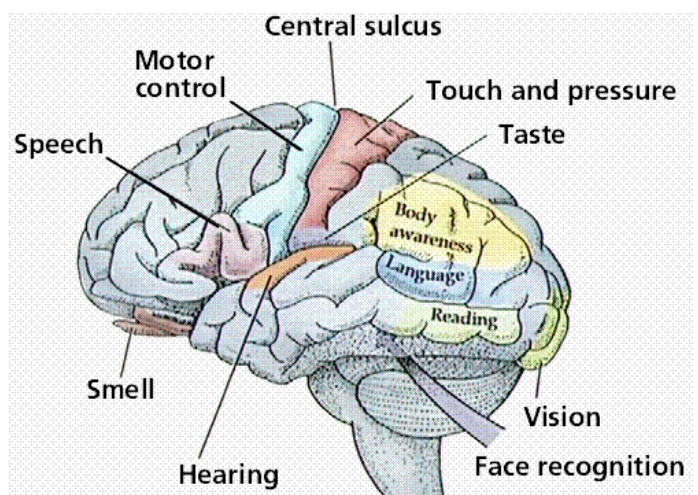
**Lighten up!** – The brain has different areas for different kinds of tasks. This can be seen with a magnetic camera, as these areas lighten up when a person is doing specific things. The activated area is busy with making thousands of connections between the cells. The brain is using energy and it's the energy that shows in the camera.

**New science** – It was not until in the 1990s that scientists found a way to look into a living person's brain and see what happened in it while the person was thinking, feeling and learning. Although this science is still very young, we have already learned more about the brain in these 10+ years than in the 100+ years before that.

**Learning** – When you start to learn a new thing, like playing a new game, your brain needs a lot of energy and a big area is activated. The better you learn to play the game the smaller area your brain needs to do the task. Now the rest of the brain is free to do other things.

**Practice** – Think of your brain as a big jungle. You want to go from one place to another through the jungle and there is no **path**. You have to cut out the path, which takes a lot of energy. Next time you go the same path it is easier. The more you go there and back, the easier it gets, because the path stays open. But if you stop using the path for a while, it will soon grow new grass, bushes and trees.

**Memory** – The brain works by making connections. When it hears a new thing it tries to connect it with something that it already knows. That's how you can keep things in mind and remember them, by connecting the new with old.

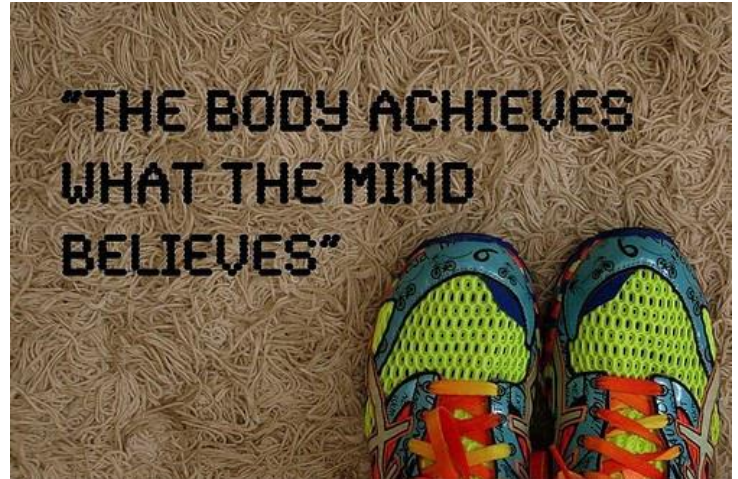


## ***A healthy mind in a healthy***

Your brain can't work alone without the **support** of a **fit** and strong body. When you exercise to keep fit, you start breathing deeper.

This **causes** your lungs to work more **efficiently** and your body gets more oxygen. Your brain needs a lot of oxygen to **function** well.

Also, your brain works better and faster if you keep feeding it with many different tasks: **physical** exercise, creative activity and **relaxation** as well as study.



## ***Brain Food***

**Fish** – The original "brain food" **contains** lots of omega-3 and fish oils.

**Vegetables** – This is a great source of antioxidants, which may **reduce** the loss of **cognitive ability**.

**Fruits** – Red and dark berries, **plums**, avocados, oranges, cherries and kiwis are rich in antioxidants.

**Water** – Not food, but very important. Let your body never get thirsty!

**Chocolate** – The darker the better; cocoa beans contain flavonoids and antioxidants. The sweetest way to improve your memory!



## ***Brainy Activities***

**Sleep** – Most of us don't get enough shut-eye, which hurts cognitive **performance** and health. When tired, we think slower, have more difficulty concentrating, and are worse at remembering things. Sleep actually **repairs** **damaged** neurons.

**Relax** – Stress **weakens** the immune system and **hinders** learning and memory. Stress hormones can actually **destroy** neurons. So learn some relaxation techniques to use when you are in the middle of a stressful period in your life or study.

**Party!** – Socializing and staying close with friends and family is good for your health and brain function. People with close relationships have a stronger support network that helps them deal with problems in life and so the brain stays healthier.

**Play Games** – **Challenging** tasks can help keep your brain sharp. Some games are better than others, and a few, such as Lumosity, were developed specifically for building cognitive performance.

**Learn New Things** – Every new thing; thought or idea creates new connections between the neurons.

**Love!** – Positive feelings like love and affection increase some **vital** chemicals in the brain, which brighten up your life and make you live longer. Love is as **addictive** as drugs, because without love the humankind would die out.



## Two halves make one!

The upper part of your brain is divided into two halves. In most people they have different tasks:

Left	Right
words	<b>imagination</b>
lists	colour
numbers	<b>intuition</b>
logic	<b>creativity</b>
analysis	place
details	whole picture
right hand	left hand



The more you use both sides of your brain, the more **effective** the brain is at everything.

## Eight kinds of smart

Each of us has eight kinds of intelligence, some of them stronger, some weaker:

A **linguistic** person is good at languages; with sounds and words.

A **logical** person is good at mathematics; with numbers and **patterns**.

A **spatial** person sees the world clearly, understanding **shapes** and **images** of the mind.

A **musical** person hears music in his or her head and can create sounds in the mind's ear.

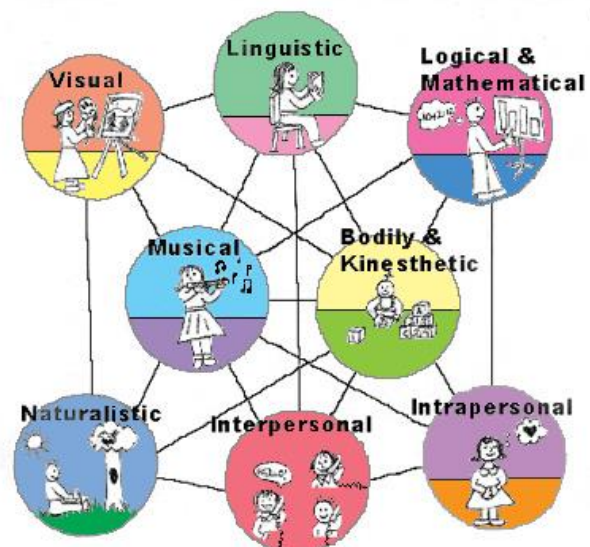
A **bodily(-kinesthetic)** person is good at controlling body movements and handling objects.

A **naturalistic** person is good at noticing patterns in and making connections to elements in nature.

An **interpersonal** person is socially smart and **empathetic** with other people.

An **intrapersonal** person has a high level of self-understanding and can follow his or her own personal **growth** very closely.

Don't just **settle** with one.  
As you **develop** them all,  
they will support each other.



## How to lose it?

**Sleep less** – Teenagers need about nine hours' sleep **on** average. If you don't wake up without an alarm clock or get **drowsy** and start **yawning** during the day you haven't given your body enough sleep. This will cause memory loss, slower understanding, foolish decisions, difficulties in learning and a poor **immune** system.

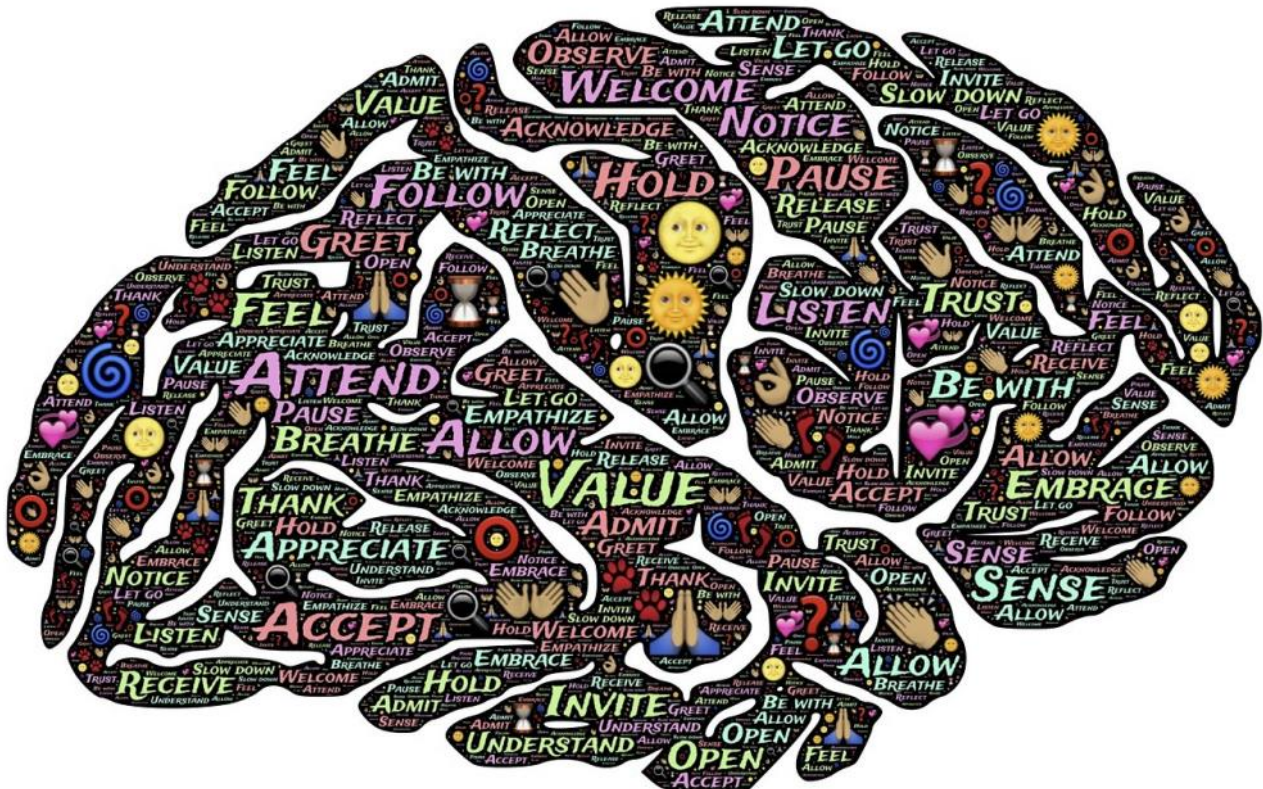
**Smoke** – Smoking **affects** your memory. It makes your memory **dependent on** the cigarettes. Smoking also **prevents** your body from getting enough oxygen and generally causes your **fitness** to **deteriorate**.

**Stress** – Stress causes your neurons to die. It also prevents your brain from getting oxygen. Long-term stress also damages your immune system, so you get all kinds of infections very easily. The weakest part of your body gives up first.

**Drink alcohol** – Alcohol prevents you from making good decisions, often **increases** aggressiveness and drives you into doing things you will **regret** later. In time it will affect your memory and understanding even when **sober**. Teenagers' brains are damaged by alcohol quicker than adults' because the brain is still growing and changing until the age of 24.

**Use Drugs** – Cocaine and amphetamines very quickly make your brain look and function like an old person's brain. A cocaine user's brain actually **shrinks** at high speed. Ecstasy makes holes in the brain that cause the brain to lose many of its normal functions.

## How not to lose it?



activate	<i>aktivera</i>
addictive	<i>beroendeframkallande</i>
affect	<i>påverka</i>
affection	<i>kärlek</i>
brain	<i>hjärna</i>
breathe	<i>andas</i>
cause	<i>orsaka, framkalla</i>
challenge	<i>utmana</i>
clever	<i>klok</i>
cognitive ability	<i>uppfattnings förmåga</i>
communicate	<i>kommunicera</i>
connection	<i>förbindelse</i>
contain	<i>innehålla</i>
creativity	<i>skapande förmåga</i>
damage	<i>förstöra</i>
dependent on	<i>beroende på</i>
destroy	<i>förstöra</i>
deteriorate	<i>försämra</i>
develop	<i>utveckla</i>
drowsy	<i>sömnig</i>
effective	<i>effektiv</i>
efficient	<i>effektiv</i>
empathetic	<i>empatisk, har inlevelseförmåga</i>
eventually	<i>i längden</i>
fit	<i>spänstig, kry, frisk</i>
fitness	<i>kondition</i>
function	<i>fungera, verksamhet</i>
genius	<i>geni</i>
growth	<i>växande, här: utveckling</i>
hinder	<i>hindra</i>
image	<i>(mental) bild</i>
imagination	<i>fantasi</i>
immune	<i>immun, motståndskraft</i>

increase	<i>utöka</i>
incredibly	<i>otroligt</i>
intuition	<i>omedelbar uppfattning</i>
magnetic	<i>magnetisk</i>
mind	<i>tankar</i>
on average	<i>i genomsnitt</i>
oxygen	<i>syre</i>
path	<i>stig</i>
patience	<i>tålamod</i>
pattern	<i>mönster, modell</i>
performance	<i>prestation</i>
physical	<i>fysisk</i>
plum	<i>plommon</i>
potential	<i>möjligheter, resurser</i>
prevent	<i>hindra, förhindra</i>
reduce	<i>minska</i>
regret	<i>ångra</i>
relaxation	<i>vila</i>
remain	<i>kvarstå</i>
repairs	<i>reparera</i>
settle	<i>nöja sig</i>
shape	<i>form</i>
shrink*, shrank, skrunk	<i>krympa</i>
sober	<i>nykter</i>
specific	<i>vissa</i>
support	<i>stöd</i>
survive	<i>överleva</i>
teens	<i>tonåren</i>
weaken	<i>försämra</i>
weigh	<i>väga</i>
weight	<i>vikt</i>
vital	<i>livsviktig</i>
yawn	<i>gäspa</i>

