

Water.

It's everywhere.

Some of us can't live without carrying it around. Whilst others, would prefer not have to ingest any of this clear and liquid substance.

But, is there any actual merit to the necessity of this element?

With the Earth holding over 392 million trillion gallons of it, it's hard for us to even wrap our little heads around the sheer magnitude of just how much there actually is here.

So, let me put it into cubic kilometers, perhaps? The number comes out at around 1.3. Hmm still hard to wrap our heads around, but I guess that's a little more manageable for our brains to fathom given that the number is overall a lot smaller.

But even so, think about it, 392 million trillion gallons lives on this planet. If we convert it to liters, it can make anyone's eyes glaze over at the number.

1,260,000,000,000,000,000,000.

I mean, come on. That's still wayyyy too many zeroes to even come to terms with, right?

For starters, where do we even begin to read that number out loud?

Is it one point two-six kajillion or bazillion litres? That "illion" suffix alone is hard enough to comprehend.

When we look at it from the actual progression, once we go past million, billion, and trillion, we can keep adding three zeroes to it, reaching peculiar names like quadrillion, quintillion, sextillion, and eventually, decillion.

If we go far enough down the line, we reach the almighty *googol* that a website derived its name from.

Now, this googol involves a grand total of 100 zeroes accompanying the initial number. Which is a helluva lot of zeroes.

I mean, that's more zeroes than Jay-z has problems.

ie. A lot.

The suffix “illion” seems to get thrown around a lot. With the meaning being lost over time since we tend to tack it onto other consonants when we wish to simply create an understanding of an insanely huge number.

You know, like when we’re talking about how many grains of sand there are on the beach. Or how many stars there are in the sky. Or even how many times we’ve listened to that song, or watched our favourite movie.

It’s generally seen as a suffix to use when putting much needed emphasis on the amount of things or times something occurs.

But by any situations, when we see a large number, we know it’s a lot, yet our minds tend to uncomprehend just how much the number actually means.

Think back to the amount of water on earth that I mentioned earlier on (326,000,000,000,000,000,000. Or, 392 million trillion). It’s a huge number. But if I give you some perspective on just how big it is, our brains begin to manage to wrap our heads around it.

So when we realise that the Earth is made up of around 70% water, we start to piece together just what the 392 million trillion gallons actually is in the grand scheme of things.

Now, while the earth should actually be called Water judging by the amount that outweighs the contents of land, it hasn’t always been this way.

If we turn our clocks back far enough in time, we reach a point around 3.8-3.9 billion years ago that scientists say was around the time that all the water that we have on Earth arrived via tiny intergalactic spaceships, known as comets, meteorites and other random space debris.

It’s a weird thought to have that that exact water that you drank today is over 3.8 billion years old, right?

It kinda freaks me out.

But, water’s having one helluva a life if you ask me. I mean, its evaporated, converted forms, rained down, been flushed down toilets, been recycled, swam in, surfed on, and of course, consumed. Which is when its next adventure awaits.

It’s a popular thing too.

It’s a highly sought after destination in many holidays. And it’s one of our highly-preferred places to live near.

Yet, despite all of this, it's just some weird, clear-like, fluid that can change shape, form, mix, and even kill.

Yes, kill.

Water sure is a deadly substance. And as Bill Bryson notes in his epic novel *A Short History of Nearly Everything*, at the average depth of four kilometres, 'the pressure is equivalent to being squashed beneath a stack of fourteen loaded cement trucks.'

I dunno about you, but that seems awfully heavy.

So if four kilometres is the average depth, how deep is the deepest point on earth?

We already know that the Earth is around 70% water, and of that water, around 97% of it resides in our oceans.

For almost all of the water to reside in the ocean, our planet needs some rather deep trenches.

And the deepest trench that we know about currently, goes down a whole 11km. This is called the Mariana trench. And it resides between us and 'merica.

But, 11km. that doesn't seem too deep when you think about your typical drive to the grocery shops or the cinemas, right?

The first man-made device was a small bathyscaphe by the name of Trieste submarine way back in the 1960s.

For humans, without the help of breathing apparatuses and too much equipment, the deepest anyone has ever gone is 253 metres. That title is given to an Austrian by the name of Herbert Nitsch. He managed to get to that depth in the year of 2012. Which in fact, is when he broke his previous world record of 214 metres.

Pretty insane, right?

But to put that into perspective, that's only around 2.3% of the depth of the Mariana Trench off the coast of Hawaii that holds the 11km depth.

It kinda makes it seem like not very big of an accomplishment now.

And whilst those numbers are easy to gauge in our heads, as we can relate them to simple things like football field lengths, and track events in the Olympics, it's still hard to understand the severity of what Mr Nitsch risked his life achieving.

Now, you might think that the biggest danger and risk of going to those kinds of depths is the mere fact that we have not yet evolved into breathing underwater – or flying, for that matter. Though, what is actually the most life-threatening thing about going below sea level, is the pressure that can kill us.

But, it's not the crushing type of pressure that water is capable of doing.

As the human body is made up of between 55-65% water, with a higher percentage being given to us when we start out as infants, the amount of water doesn't actually leave our bodies to resemble pancakes the deeper we dive.

The gases, on the other hand, are the true culprits to a devastating underwater death. Most notably, nitrogen, which makes up about 80% of the air that we breathe.

Put us under pressure, and the nitrogen changes to possible blood vessel clogging, oxygen depriving meanings when the change is too rapid and extreme for us to handle.

These kinds of situation can cause enough pain to knock someone down for the count (ie. the bends). With horrific stories of people even going to bed feeling completely fine, but never waking up.

With the percentage and amount of water we humans are made up of, comes a great responsibility with keeping our stocks filled and keeping us hydrated.

In fact, if we don't stay hydrated enough, the most extreme account details that if we deprive our body of enough water, our lips fade, our gums blacken, our nose shrinks, and the skin around our eyes contracts to prevent us from blinking.

Some pretty serious shit right there, if you ask me. Not the stage I'd ever want to get to.

But on the less extreme spectrum, not consuming enough of it is known to create bad situations like losing brain efficiency, a spike in amount and severity of headaches, drier skin, tiredness, less-than-optimal digestion, less-happy bodily fluids including urine, sweat, blood plasma, and seminal and vaginal fluids. And even stiffer joints.

Speaking of stiffer joints, when we get down to the nitty gritty of it, no one, and I do mean NO ONE wants stiffer joints.

When dealing with our daily shrinking and growing spine thanks to the magical forces of gravity, we want to make sure that this certain section of our body gets enough water to keep it happy.

Daily shrinking and growing spine, you ask? It's weird to think, but when we sleep in a horizontal and relaxed position, the forces of gravity now have a different effect on us.

When we stand the next day, the forces change again, and throughout the hours we are in a vertical position, the spine gets compressed, making us shorter as the day goes by.

This proves even more that we should want to keep each section between the vertebrae hydrated and filled with enough fluid, right?

So, to recap.

If we want to keep our brains functioning optimally, keep our body's fluid flowing freely, keep our joints mobile and pain-free and our nose, just by drinking some of the leftover 3% fresh water on Earth, we can ensure a longer living, and happy life.

But how much is an optimal amount?, you may be thinking.

It's a good question.

But a universal recommendation for an average humans lifestyle seems to point towards around 30-40mls per kilogram of bodyweight.

If we exercise or exert ourselves enough to see some sweat beads covering our faces, for every hour that this happens, we also want to think about getting an extra 500+mls.

Get too much of it, however, and you will know about it.

In one of the most extreme and devastating examples of too much water, a lady by the name of Jennifer Strange consumed seven litres of it to win a Nintendo Wii.

She died from what is known as acute water intoxication in 2007.

Pretty messed up.

But this amount was consumed at one sitting.

Spreading your dose over an entire day won't lead to extreme situations like this.

Choose to drink regularly and keep yourself hydrated throughout the day.

Especially when the weather is warm.

Water, with it being an all-encompassing, majority-covering, desirable substance to consume, live near, and visit, it really does make you wonder why our planet isn't called it.