

Hi 🖐️

It's that time of year where *some* of us change our clocks – the back and forth [of springing forward and falling back](#).

But there's no great scientific reason why Daylight saving time, also known as summer time, exists.

If we're all [inconvenienced twice a year](#), you'd think there was a good reason for it. But... there's not.

[Polls show that 6 in 10 people](#) want to stop changing clocks altogether.

So earlier this year in the US, [the Sunshine Protection Act](#) was passed by the senate to stay on daylight time year-round. In the [UK some politicians have also proposed permanent summer time in the past](#), though it was never passed into law. So you might think that this is good, right? We all get an extra hour of sunlight?

BUT... it's not. The change would be detrimental to our health, and scientists and doctors passionately oppose it. So [what on earth is going on?](#) How does daylight saving time ruin our health, exactly? And how does this affect YOU?

[The origin of daylight saving is rife with myths](#). And the actual change of time isn't the real problem. Just overall, daylight time leads to a lot of lost sleep and - as some of you know - as well as being a YouTube creator I'm actually a sleep researcher. And I want to share with you the story of daylight, sleep and capitalism.

First of all, **Why do we even have daylight saving?**

It's a pretty common myth that Daylight Saving time was introduced for or by farmers - [around the world](#) they've [lobbied against it](#), because among other problems, it [upsets the cows](#). Daylight saving time was originally proposed by a [Kiwi entomologist](#) who wanted more light to collect insects after-hours, and a [British guy](#) who liked to golf.

Daylight Saving time was first [introduced in Europe and the US during WW1 to conserve light and heat in the evening](#) - to save on energy expenditure. [Since then, it's been abandoned and re-adopted](#) and has been pretty much a permanent thing since the 70s.

But there's [no good evidence](#) that later daylight saves energy - people just use more heat in the morning and drive more when it's lighter later in the day. So there's no true benefit other than: maybe it is fun to be able to do things after regular business hours if it's lighter, later.

And considering the kind of vague reasons, **Daylight saving time is an absolute confusing mess.**

It's a [complete patchwork](#) around the world, and the chaos of it all is best illustrated in Australia.

Australia is a country that moves from a somewhat normal time zone breakdown to utter chaos. Half of the country is like, "yeah, we like daylight savings", but the other half doesn't do it, and ultimately, there are [16 different time zones](#) during daylight saving.

Multiple time zones are split during daylight time. Which as people have pointed out is [completely unhinged](#) and Australia needs a [time zone intervention](#)

A lot of us think the main problem with Daylight Time is **this switching of clocks back and forth**

And yes that's a legit thing -

The transition to Daylight Time in the spring [increases fatal traffic accidents in the morning](#) and [workplace injuries](#) and [heart attacks](#).

BUT that's not the main problem. The main problem comes from living in a timezone that's mismatched with the sun and our natural circadian rhythms.

The problem with Daylight Time is that it screws up our body clocks.

Inside our brains we have an inner clock - it's in a brain structure I talk about a lot called the SCN. And *every cell of our bodies* has an inner circadian clock that's in sync with our SCN. These clocks regulate everything from your alertness to body temperature, blood pressure and hormone levels. They're trying to synchronise with the environment, and specifically with light... because, you know, we evolved on this fun planet with a 24 hour light-dark cycle.

If you have morning light, you synchronise best with the day and your body clock is ticking away in a way that helps you fall asleep in the evening. BUT if you add an artificial clock change - like daylight saving - and have no daylight in the morning, this shifts your clock later and makes you sleep later. You can see how this happens in [this awesome Guardian data visualisation of how much daylight shifts into the late evening](#).

So the obvious problem is the lost sleep during daylight saving time. BUT this lost sleep has flow-on effects that a lot of us don't realise or even know about. It affects the things I mentioned before - like your hormones.

For example, [experimental studies](#) have shown us that losing sleep reduces levels of hormones that make us feel full (leptin), increases those that regulate hunger (ghrelin) and makes us more likely to eat high calorie foods. Which kind of explains why you [eat like a T.rex](#) when you're jetlagged.

So over time, lost sleep can impact our heart health as well as our mood and overall

well-being.

And the reality is that standard time best matches our body's internal clock. As the American Academy of Sleep Medicine says, **"The daily cycle of natural light and darkness is the most powerful timing cue to synchronize our body's internal clock. When we receive more light in the morning and darkness in the evening, our bodies and nature are better aligned, making it easier to wake up for our daily activities and easier to fall asleep at night."**

So why then, would a country have daylight time all year round?

The Sunshine "Protection" Act

Back in March, the U.S. began the process of passing the Sunshine Protection Act (which seems like the most American Culture Wars name for a law about Daylight Saving - we don't need to "protect sunlight", it's always there. One scientist said you might as well call it the [Darkness Protection Act](#) - what a burn). Anyway, the Sunshine Protection Act could make daylight saving time permanent across the country in late 2023 if it passes through the House of Representatives and is signed into law.

And it's easy to look at America from other countries and say "oh, this will never happen where I live", when it very well could.

The main continued reason for Daylight Saving and it's maybe-permanence is **an economic argument** – [people would spend 3.5% more](#) if there was daylight time year-round. We know that in months where it's lighter later in the day, people spend more money – so why not try to carry that effect over the winter months? The consumerism angle helps explain why [the US is currently the only country considering](#) this permanent change.

Over time, there have been some unexpected influences that have kept daylight saving time going, as well as continuing how long it is over the years.

One is the candy industry, who had a small impact lobbying to include October 31 within daylight time to increase profits of Halloween. [A bit spooky](#). There's also the golf industry, who in the 1980s pushed for an extra month of daylight time saying that the extra hour of evening light would [garner an extra \\$400 million in revenue](#). Which is an insane number, but keep in mind that [golf generates \\$84.1 billion a year in the U.S. alone](#)). And the daylight link has rung true before – In 1920, [The Washington Post reported that golf ball sales in 1918—the first year of daylight saving—increased by 20 percent](#). That's a lot of balls.

Not to mention that we all use more petrol or fuel when it's lighter later. One lobbying group estimated US gas stations have [added an estimated \\$1 billion in annual sales since a month was added to daylight saving in the 80s](#).

The reason why it's complicated is that many of us support daylight saving time, because [all of these things seem fun](#). Halloween is fun. Going out and doing things after work is fun! Including collecting insects. But changing the time and setting an artificial clock for us to have a bit of fun – at a huge public health expense – is a dangerous precedent. It also means that people are going to school and work in the dark and in some places, the sun is rising super late.

And I can't emphasise how much scientists oppose this. Imagine a bunch of passionate scientists who are angry about a proposed law. And keep that image in your mind (Because I don't really have a good image to illustrate that).

The lawmakers who are pushing this are from a state that reap a huge benefit in none other than... golf revenue. And golf shouldn't be more influential than all of the science and medical expertise we'd accumulated to date. Not to mention the public health expense of lost sleep, which is probably more than the golf revenue.

Luckily not every country is going down this path. For now, the [EU voted to scrap time zone changes](#), and stay on standard time, Mexico have done the same, and Japan, South Korea, China, Singapore and Dubai, have abolished 'daylight saving' too. But the UK and [Australia](#) are two countries that, historically, have flip flopped back and forth about maybe having permanent daylight time.

I mean, as we know, [Australia is positively chaotic](#).

I will also add that if BrainCraft was a country, according to my YouTube poll, you would prefer to stay on permanent Standard Time. This makes me kinda proud!

Overall, daylight saving makes very little sense. Life is hard enough, and having all the clocks in sync just makes the most sense - like your circadian clock, standard time, and the sunrise. Changing the clocks so people can spend more and do more is silly, when we all know that it's just better to do less.