

Morning Sunlight

Circadian rhythms, which are probably the foundation of our health, are about the light and dark cycles regulating almost all our bodies cellular automatic processes. This month, I'm going to talk about the importance of morning sunlight.

Did You Know ... There are receptors in our eyes that the sun activates depending on the colour of the light. The light then effectively talks to our brain, mainly the SCN (Supra Chiasmatic Nucleus, known as the master clock) which sends signals to every cell in our body synchronising each cell's clock according to the time of day. Imagine the brain as an airport control tower, if the control staff went on strike but the pilots didn't, consider the ensuing chaos. So, if we don't get enough instructions from the sun, cells will lose synchronicity, carrying out tasks later and later; this chaos manifests as inflammation, which is associated with causing disease.

Phases of the morning sun

- **Just before sunrise**
 - Dominant light is Infra-Red (IR), this is soothing and anti-inflammatory.
 - IR structures the water in and around our cells (99% of our cells are water). That's a future article 😊.
- **See the sunrise for 2+ minutes, you don't need to see the actual sun**
 - Dominant light is red, but Infra-Red (42% of all light) stays all day.
 - Kicks off our cells engines (mitochondria) to produce energy (known as ATP), CO², hormones, infra-red heat, biophotons and cellular water.
 - Blue light will become more intense and trigger the hormone pregnenolone to be converted into the sex hormones **oestrogen**, progesterone, testosterone. However, if stress is high, you are inflamed or using artificial light before seeing the sunrise an excess of cortisol will be produced instead.
- **When the sun is 10° above horizon, this is the most important period to be exposed to the sunlight**
 - All the visible colours and Ultra Violet A is now available.
 - Your eyes will now create hormones to do the following:
 - Go from sleepy to happy and focused.
 - Increase motivation and curiosity.
 - Improve concentration and give runners high.
 - Produce melanin – sun protection.
 - Create melatonin – for sleep when it's dark.
 - Create thyroid hormone.
 - A protein called POMC will regulate these functions depending on the body's needs at that time:
 - Appetite, inflammation, libido, pain levels, fat burning.

How do you add morning light into your daily routine?

- Go outside or look out of an open window during sunrise, but not too early in the summer.
- Open a window while you are cleaning your teeth or doing make up.
- Drive while not wearing sunglasses and an open window (just a crack is enough).
- Work near open windows, take calls outside where possible.
- Go for a morning walk or take a tea break outside.
- If it's dark first thing, wear blue light blocking glasses and or use dim orangey or red lights until sunrise.

How not to do it

- Wake up and look at your phone or device or turn on bright LED lights.
 - The dominant colour in our tech and most lights is pure blue, so this will fool your brain into thinking it's noon and the relevant hormones won't be produced very much. This will confuse your body clock and can cause inflammation, affect your sleep, healing and fat burning at night.

Food

- A higher fat and moderate protein breakfast is also known to trigger your circadian rhythms correctly and keep you fuller for longer.
- Eating within 60 minutes of sunrise is optimal but do the best you can depending on the season.
- Eating earlier and less at night allows your digestive system to be rebuilding at night rather than processing your last meal.

Types of diseases can be related to circadian disorders:

Cancer, poor metabolism, hypothyroidism, neurodegenerative disorders, migraines, insulin resistance, macular degeneration, autoimmune, skin aging...

If you decide to experiment with the above natural processes, then ease yourself into it, choose one thing to change and increase it as you get used to it.

I hope you enjoyed this article, and if you'd like to find out more or would like some supporting research, then please get in touch. Or come to my talk at the Harvey Centre on October 19th.

Until next month, or I'll see you at the Harvey Centre!

Cheers, Nigel

nigel@humanblueprint.co.uk

07590 537392

NB, this article is for information only and should not be taken as health advice.

