Position statement BioClock Consortium

Stop changing the clock: choose a fixed and healthy time

On the night of Saturday, March 29 to Sunday, March 30, 2025, the clocks will once again move forward by one hour. The European Union is currently debating whether to abolish the practice of changing the clocks and adopt a permanent time system. **The BioClock Consortium supports other scientific organizations in advocating for the implementation of natural time.** For the Netherlands, this corresponds to the time zone known as Western European Time.

Natural time: what do we mean by that?

By "natural time," we refer to the time zone that best aligns with the geographical location and the natural timing of sunrise and sunset in a given area. This means that the time shown on the clock closely matches the local solar time, ensuring that the sun is at its highest point around noon. Officially, the world is divided into 24 time zones, based on the 24 hours in a day. Geographically, the Netherlands falls within the Western European time zone, along with the United Kingdom. However, the Netherlands currently follows Central European Time. As a result, the clock in winter runs 40 minutes ahead of solar time. During daylight saving time, this discrepancy increases to 1 hour and 40 minutes. In other words, the current system forces the entire population to wake up more than 1.5 hour earlier than the natural time that best suits our country's geographical position.

Natural time is the best choice for our health

Following natural time aligns best with our biological clock: the internal timekeeper that regulates our body's day and night rhythms. Light exposure helps keep our biological clock in sync with the environment. Morning light accelerates your biological clock and helps you wake up on time. Evening light, on the other hand, delays your biological clock, making it harder to fall asleep and wake up on time in the morning. The natural time zone therefore best matches our biological clock and promotes healthy sleep.

Why should we abandon the current system?

In the current system, sunrise and sunset times in our country do not align with the biological clock. This problem is most pronounced during daylight saving time when people are exposed to light later in the evening, causing them to fall asleep later while still needing to wake up early. This is not just a temporary adjustment after the clock change; it is a persistent problem. A later sunrise and sunset (relative to natural time) is associated with a higher risk of various health issues, including obesity, type 2 diabetes, cardiovascular diseases, and certain forms of cancer¹⁻².

Permanent daylight saving time: an additional problem in winter

Some advocate for the introduction of permanent daylight saving time. However, this would result in a four-month period during winter when the sun would not rise until after 8:30 AM. Under the current wintertime system, this is less than two months. If we switched to our natural time zone, the sun would rise before 8:00 AM year-round. Since morning light is essential for our biological clock, permanent daylight saving time would make it harder for many people to get enough sleep and wake up on time in the morning. This would particularly affect students and young people, the most mentally vulnerable age group³. As they naturally have a slower biological clock, morning light is especially crucial for their well-being.

Time for policy, not temporary solutions

The BioClock Consortium's position to abolish the biannual clock changes and adopt permanent natural time aligns with the advice of the Dutch National Institute for Public Health and the Environment (RIVM)⁴ and other (inter)national scientific organizations that focus on sleep and the biological clock⁵⁻⁹. The European Commission already decided in 2019 that the biannual clock changes should stop¹⁰, but political decisions have yet to be made. When will this change finally happen?

Referenties

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