



# Mental Wellbeing

We continue our series of articles by Dr Libby Artingstall and Dr Sile McDaid, Co-Founders and Directors of Team Mental Health.

## Sleep: A non-negotiable necessity

Sleep is part of the natural rhythm of life and is an essential part of survival. It is a vital component to supporting good mental and physical health. We know that an average adult should have between 7– 9 hours' sleep every night.<sup>1</sup>

There are two major types of sleep:

Rapid Eye Movement (REM)  
Non-Rapid Eye Movement (NREM)  
(composed of 3 stages)

A normal pattern of sleep usually involves entering NREM, which is the deepest and most restorative sleep, followed by REM, in which the brain remains active and dreaming occurs. Typically, a night's sleep consists of four to five REM/NREM cycles with occasional brief episodes of wakefulness.<sup>2,3,4,5</sup>

Without good sleep our immune systems can be negatively compromised, and poor sleep is associated with many physical health problems including heart disease, stroke, diabetes and cancer. Sleep disturbance has also been linked to all major mental health problems including depression, anxiety disorders, post-traumatic stress disorder and suicidality. In order to increase our ability to stay physically and mentally well, recover from illness, cope and navigate the current circumstances, doing what we can to optimise our sleep could not be more important. Sleep is not a luxury; it is a non-negotiable necessity.<sup>2,3,6,7</sup>

There are certain steps we can all take to optimise our sleep patterns, and these are influenced by three key factors:

### 1. Circadian rhythm

This is our internal clock and regulates our pattern of sleeping and waking over the course of a 24- hour period. It also plays a role in regulating other essential bodily functions including fluctuations in body temperature, blood pressure, levels of digestive enzymes and various hormones.<sup>8</sup>

### 2. Melatonin

Is a naturally occurring hormone which is produced by the pineal gland in the brain and synchronises with our circadian rhythm. When the sun goes down, the pineal gland is stimulated and melatonin production begins, signalling to our bodies that it's night-time. Consequently, we start to feel less alert and more ready for bed.<sup>8,9</sup>

### 3. Adenosine

Is a chemical that is released as we expend energy. As cells produce power to move us through the day, adenosine is released into the bloodstream and is taken up by receptors in a region of the brain governing wakefulness. As adenosine levels increase, our attention, memory and reactions are affected, and we feel drowsier. When we sleep, our adenosine levels reduce. After a good sleep, adenosine levels are at their lowest and we are at our most alert.<sup>8,9</sup>

Not only can sleep deprivation have a significant negative impact on our physical and mental health, it can also affect our performance at work. As sleep deprivation has the potential to put others at risk, it's important to recognise the signs. These may include:

Fluctuations in mood  
Anger and frustration  
Impulsivity  
Sleepiness  
Increased use of stimulants eg. caffeine or energy drinks  
Poor concentration / focus  
Impaired decision making  
Memory impairment  
Reduced performance  
Reduced communication  
Difficulty multi-tasking<sup>10</sup>

At this present time, for workforces across our communities, particularly the NHS and other key workers, good sleep is essential. Legislation sets out that "employers have a legal duty to manage risks from fatigue and sleep deprivation, irrespective of any of their workers' willingness to work extra hours or preference for certain shift patterns."<sup>11</sup> However, it's important for us to recognise that each one of us has a responsibility in this regard. Employers and employees must work together.<sup>11</sup>

Check out our next sleep blog for some top tips to find out what we can all do, as individuals and at an organisational level, to promote good sleep.

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