



➤ A Neuroscientific Approach to Employee Wellness

Coping with mental demands of modern life requires more than just luck. This Safety Talk provides tips from the field of neuroscience to improve your focus, energy, and resilience to stress on and off-the-clock.



Leverage Circadian Rhythms

Our bodies and brains operate on a 24-hour cycle known as the circadian rhythm. This cycle dictates energy levels, alertness, and cognitive performance throughout the day. Being aware of these natural rhythms allows you to take advantage of peak productivity windows. Leverage your circadian rhythm each workday with the following routine:

- ✓ Expose yourself to natural light early in the day to improve mood and focus (preferably within an hour of waking).
- ✓ Plan challenging, high-focus tasks during mid-morning hours when most people experience a peak in cognitive performance (9am to noon).
- ✓ Schedule low cognitive demand activities in the afternoon when energy naturally dips.



Prioritize Sleep

Good sleep is the foundation of mental and physical health. Sleep deprivation, even slight, can affect your focus, creativity, and decision-making abilities.

- Aim for 7-9 hours of quality sleep per night. Consistent sleep and wake times are essential, even on weekends.
- If your sleep is disrupted or insufficient, consider power naps (10-20 minutes) during the day. Naps can significantly enhance cognitive function, but naps should be brief to avoid grogginess.

Segment Work In Intervals

Neuroscientific research shows that the brain works best in cycles of deep focus, typically lasting around 90 minutes. After this period, cognitive performance declines, making it essential to rest before diving back in.

Use time management practices like the *Pomodoro Technique*, where you focus in intervals of 30 to 60 minutes followed by a short break (2 to 5 minutes). After four cycles, take a longer break (15-30 minutes).

Manage Stress

Stress is inevitable, but how we manage it can drastically affect productivity. One of the simplest and most effective tools for managing stress is controlled breathing.

- **Try the physiological sigh**—a double inhale followed by a long exhale. This technique can lower stress levels by activating the parasympathetic nervous system, responsible for calming the body.
- **Incorporate daily breathing exercises** such as **box breathing** to reduce baseline stress levels. To practice box breathing:
 1. Sit upright and exhale any remaining breath.
 2. Inhale through your nose while counting to four.
 3. Hold your breath for a count of four.
 4. Exhale through your mouth while counting to four.
 5. Hold your breath for another count of four.
 6. Repeat several times.



Fuel Your Brain

Eating foods rich in omega-3 fatty acids, like salmon or walnuts, supports cognitive function and reduces inflammation. Avoid blood sugar spikes by opting for balanced meals with healthy fats, proteins, and complex carbohydrates.

- ✓ **Stay hydrated.** Dehydration, even mild, can impair focus and energy levels. Aim for 2-3 liters of water per day (more if exerting physical activity).
- ✓ **Consider caffeine timing.** While caffeine can boost alertness, it's most effective when consumed 90-120 minutes after waking, rather than first thing in the morning. Overconsumption of caffeine can lead to crashes and sleep disruptions, so aim for moderation.



Harness Dopamine

Dopamine is a critical neurotransmitter involved in motivation, focus, and the pleasure we experience from a job well done. To harness dopamine:

- Celebrate small wins. Recognizing progress, even with minor tasks, can increase dopamine levels keeping you motivated for longer periods.
- Get active. Physical activity, especially aerobic exercise, has been shown to boost dopamine.

Seek Help

Despite our best effort at times, we all need a helping hand. If you are struggling to cope, or stress symptoms will not go away, talk to a mental health professional. If your District offers an Employee Assistance Plan, you might receive complimentary access to a limited number of sessions with a licensed counselor. Talk to your human resources manager, if applicable.

Conclusion

Using these tips from the field of neuroscience, you can enhance productivity and wellness. Remember, small, consistent changes can lead to profound benefits over time.

