

Nutritional Strategies to Mitigate Fatigue in Healthcare Professionals

Some of the negative effects of sleep deprivation due to shiftwork or long work hours can be mitigated by deliberate modifications in hydration and nutrition. Try incorporating some of the following strategies into your daily life:

- **Keep hydrated** to reduce fatigue and sleepiness, improve mood, concentration, memory, reflexes, and visual focus and acuity. Hydration can also improve sleep quality among those with existing respiratory disorders. While there is no scientific consensus on best method to assess hydration status, in healthy people urine color can be used to assess hydration status (lemonade color: hydrated, apple juice color: need to drink more fluids).
- **Use caffeine strategically** to improve reaction times, alertness and mood, and to reduce risk of errors and grogginess after waking up. Caffeine can take up to 90 minutes to reach its peak effects, so if you have limited time to rest, try drinking coffee/tea right before a short “caff-nap” to benefit from the combined alerting effects. The optimal alerting effects of caffeine can last about 3 hours. Ideal time to consume tea or coffee is at the beginning and in the middle of a 12 hour shift. Avoid caffeine for at least 5 hours prior to your bedtime or daytime recovery sleep.
- **Pay attention to timing of your meals.** When you are sleep deprived, eating a protein rich meal shortly after waking can improve alertness during work. On night shifts, eat your meal before starting your shift (ideally before 10 pm) and try to avoid eating between 12-6 am. If you are physically active and feel hungry in the middle of the night, have a healthy snack or small meal (e.g soup) of about 150 calories. Avoid caffeine, chocolate, alcohol, and heavy meals 4 hours before bedtime.
- **Pay attention to composition of your meals.** When you are sleep deprived, eating a meal higher in lean protein sources and non-starchy vegetables, and lower in processed carbohydrates and saturated fat can reduce postprandial sleepiness. Eating a carbohydrate rich meal 4 hours before bedtime can result in better sleep quality. Eat at least 3 servings of fruit and/or vegetables to reduce sleep-related impairment.
- **Other strategies to improve alertness:** Chewing gum can improve alertness and mental focus and reduce stress. During high stress periods or at times when you cannot follow a healthy diet, consider taking a broad-spectrum (multi) vitamin and mineral supplement every other day. Inadequate intakes of B vitamins, vitamin C, vitamin D, zinc, selenium, magnesium, potassium and iron can lead to feeling mentally and physically fatigued and disrupted sleep patterns. To ensure safety and quality of supplements, only choose those that have a USP or GMP certification.