

## Corvias

# LIGHT QUALITY

Light affects many functions of our body, including the sleep-wake cycle, alertness, mood, cognition and metabolism.

## Our bodies are naturally programmed to function on a cycle that matches the solar day.



This cycle, known as the circadian rhythm, governs many aspects of our physiology, metabolism and behavior, and is primarily synchronized by light.<sup>1</sup> Mounting evidence indicates that the quality, type and timing of light exposure can have a profound effect on our health, well-being and performance.<sup>2</sup>

Light affects many functions of our body, including the sleep-wake cycle, alertness, mood, cognition and metabolism.<sup>3,4,5</sup> Long-term disruption or desynchronization of the circadian rhythm and related hormones (e.g., through exposure to bright light at night) has been linked to obesity, diabetes, depression, metabolic disorders and breast cancer.<sup>6,7,8,9</sup>

Exposure to bright light in the morning can help dissipate sleep inertia, making it easier to wake up and stay more alert throughout the day. Exposure to bright, white-blue light in the bathroom minimizes disruption to the morning routine while allowing for adequate light exposure. Vanity light bulbs with energizing light are designed to promote alertness by suppressing melatonin to help regulate circadian rhythms.

While bright light during the day can help maximize mental acuity and productivity, our light patterns across the 24-hour day should mirror the sun – which means darkness at night. Exposure to light during sleep time – even in small quantities – can dramatically impact our circadian rhythms and lead to melatonin suppression.<sup>10,11</sup> Exposure to artificial light at night has been found to result in increased subjective alertness and decreased sleep efficiency and total sleep time.<sup>12</sup> Night lighting that is dim, contains minimal blue light, and is activated by low ambient light levels can help reduce disruptive bright light exposure at night. The light bulbs above the bathroom mirror produce a bright, white-blue light designed to promote alertness by suppressing melatonin to help regulate our circadian rhythms.

Bright light in the blue spectrum helps us wake up more easily in the morning.

### Light quality can help support healthy circadian rhythms, which in turn can help to:

- Increase energy levels and alertness<sup>3</sup>
- Boost cognitive function and productivity<sup>3</sup>
- Improve mood<sup>4</sup>
- Improve sleep<sup>5</sup>
- Boost metabolism<sup>5</sup>
- Lower the risk of obesity, diabetes, depression, metabolic disorders and breast cancer<sup>6,7,8,9</sup>

#### Light has a powerful effect on our bodies, from our moods, energy levels and alertness, to our sleep/wake cycle and cognitive functions.

- Exposure to light regulates your body's circadian rhythm—a biological process that works on a 24-hour cycle and determines your natural sleep-wake cycle.
- Lighting that is designed to support your body's circadian rhythm can help to positively affect your comfort, mood and alertness throughout the day and into the evening.
- Eliminating blue light exposure at night helps to ensure normal production of melatonin, a hormone that regulates sleep.
- Circadian disruption in the human body has been associated with poor sleep, increased mental and physical stress, type 2 diabetes, and other chronic illnesses.





The selected night lighting provides illumination for safer navigation while minimizing sleep disruption.

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