Dear Alice,

How should melatonin be used to alleviate jet lag?

Answer

Dear Reader,

While jetting cross-country may be considered a fun adventure, coping with jet lag is often an unwelcome effect. Jet lag is a temporary disorder that occurs when air travelers rapidly travel across multiple time zones. Traversing time zones appears to interfere with a person's production of melatonin, a hormone that helps regulate the body’s sleep-wake cycles (see Melatonin from the Go Ask Alice! archives for more information). This may explain why jet travel disrupts people's sleeping patterns and why it takes a while for someone to adjust to a new time zone. Travelers may consider taking melatonin to help counteract the effects that flying has on getting a good night’s sleep.

When mulling over the use of melatonin for jet lag though, you may be interested to know that the research on taking it for this purpose is a mixed (carry-on) bag. The research on taking melatonin to reduce jet lag is mixed. While it has been used to help regulate insomnia and establish a typical sleep cycle, it hasn’t been tested enough in terms of jet lag itself. Melatonin is also not regulated as a drug by the United States Food and Drug Administration (FDA) due to its classification as a supplement. This means that the ingredients of the supplement may not be reflected in the packaging, so what you’re getting may not be reflective of what was advertised.

That being said, if you’re considering taking melatonin to try to alleviate jet lag, there are some key points to know. When the goal is to be in bed and asleep during the typical nighttime hours of your destination, timing is key. If you take melatonin at the wrong time while still at home in New York, you may land safely in London, but your inner clock may be wandering around the Los Angeles airport wondering how it got on the wrong flight! So, what’s the trick? The secret to shifting your internal clock lies in the direction of your flight and duration of your journey. Travelers who cross three or more time zones generally require more time to adjust. Depending on your travel direction, it’s recommended to take melatonin as follows:
- Westward travel is associated with early evening sleepiness and predawn awakening. When traveling westward, melatonin may be taken in the morning of your local time.
- Traveling to the east is associated with struggling to fall asleep at the destination bedtime and difficulty arising in the morning. In this case, it's helpful to take melatonin in the evening at your local time.
- Melatonin may be taken 30 minutes before sleeping. You could also ask your health care provider about the right time to take it.
- Though side effects are uncommon, it's a good idea to avoid alcohol when using melatonin.

The severity of jet lag is also dependent on whether a person is able to sleep while traveling, their age, and the availability of local circadian time cues (indications that let your body know its time to sleep) at the destination (such as natural sunlight). Other than taking melatonin, your health care provider might recommend that you:

- Avoid alcohol, large meals, and caffeinated beverages during travel.
- Eat meals at the appropriate time of your destination.
- Drink plenty of water.
- Sleep, if possible, during long flights.
- Consider timed bright light exposure prior to and during travel.
- Take prescription sleep-inducing medications, such as zolpidem, eszopiclone, and zaleplon, during travel and to help you sleep during the first couple of days after your arrival. A health care provider can help determine if these are appropriate for you.

While adjusting to a new time zone may seem like a drag, your body will adjust in due time. Jet lag may last for several days, but it's considered a temporary condition that is generally manageable. Whether or not you choose to take melatonin depends on many factors, which may include the severity of your jet lag and your preference to induce sleep. In the meantime, don't forget to adjust your watch as well. If you have more questions about your own personal use, you may find it useful to speak with a health care provider prior to your travels. Happy (and restful) travels!

Alice!

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