



Counteracting Jet Lag

There are two causes for jet lag symptoms:

1. Body rhythms that are out of synchrony with the local time.
2. Sleep deprivation from the disruptions of travel.

On average, it takes about a day per time zone for your body rhythms to catch up to local time. Appropriately timed **bright light** (e.g., sunlight) exposure can speed up the adjustment process. Try to get at least 30 minutes of bright light exposure first thing in the morning after traveling eastward, and late in the evening after traveling westward.

However, there is an exception: If you have traveled over six or more time zones, your body clock may misinterpret the light-dark cycle, reacting to dawn as if it were dusk and dusk as if it were dawn. This misinterpretation could retard adjustment or start your internal clock adjusting in the wrong direction. Therefore, after traveling eastward more than six time zones, avoid bright light in the evening for the first few days.

Taking **melatonin** (a hormone that signals darkness) at the right time can also speed up the process of resetting your body clock. For some people, it is a mild sedative as well. Melatonin can be taken together with sleeping medication, but keep in mind that the sedative effects will be additive. Melatonin is currently available in 0.5 mg and 3 mg tablets or capsules from health food stores and pharmacies.

Hypnotic agents (**sleeping pills**) can help you counteract the buildup of a sleep debt by allowing you to sleep on the airplane and for the first several nights of your trip when your body clock is out of synchrony with the local time. Take a short-acting sleeping medication on the airplane, if you are flying overnight, and for 3-5 nights after you arrive. When using sleeping pills, alcohol intake should be limited to no more than one drink per night.

Recommendations for an Eastward Flight of Over 8 Time Zones

Because you have traveled more than 6 time zones (see above), avoid early morning light if possible for the first few days. After that, get as much morning light as possible.

Take melatonin at 3 pm on the day of departure. On arrival, calculate the time for taking melatonin by adding the number of time zones crossed to 3 pm; i.e., after crossing 8 time zones, take melatonin at 11 pm (local time) on the first night. Then shift the time an hour or two earlier each day until you feel you have adjusted. You may also use sleeping medications as described previously.

Recommendations for a Westward Flight of Over 8 Time Zones

Because you have traveled more than 6 time zones (see above), avoid evening light if possible for the first few days. After that, get as much evening light as possible.

Take melatonin at 6 am on the day of departure. On arrival, calculate the time for taking melatonin by subtracting the number of time zones crossed from 6 am; i.e., take at 10 pm (local time) the first night. Then shift the time an hour or two later each day until you feel you have adjusted. You may use sleeping medications as described previously.