



JET LAG – CLINICIAN GUIDELINES

<p>HerbatoninPRO™</p>	<p>Traveling eastward is more problematic as it requires the circadian rhythm to advance, which is more difficult than delaying it. The circadian system can shift, at most, an hour per day.</p> <p>For ≤ 3 time zones eastward or westward:</p> <ul style="list-style-type: none"> Take HerbatoninPRO™ 0.3 mg at bedtime on the travel day and until client is sleeping well. <p>For > 3 time zones eastward:</p> <ul style="list-style-type: none"> In advance of travel, begin to shift to the destination time zone by taking 0.3 mg HerbatoninPRO™ 6 hours before bedtime for 3-4 days and shift the bedtime earlier by 30 minutes each day. Upon arrival, take 3 mg of HerbatoninPRO™ 30-60 minutes before bedtime of the destination, until the client is sleeping well.
<p>Nutrition</p>	<ul style="list-style-type: none"> Standardize mealtimes during travel, with distinct breaks between meals. Avoid alcohol 3-4 hours before bed. If consuming caffeine, avoid it eight hours before bed. Minimize rich or heavy meals before bed, instead plan them for mid-day. <p>Eastward travel: In preparation and upon arrival at the destination</p> <ul style="list-style-type: none"> Eat breakfast to shift the body clock earlier. Finish eating 3-4 hours before bedtime. <p>Westward travel: Upon arrival at the destination</p> <ul style="list-style-type: none"> Eat meals on a later schedule to shift the body clock later.
<p>Lifestyle</p>	<ul style="list-style-type: none"> Schedule adequate time in the itinerary for sleep. Dim lights ideally to <10 lux, and / or wear blue-blocking glasses for two hours before bed. Plan to wind down for one or more hours before bedtime (e.g., take a warm, relaxing bath). <p>Eastward travel:</p> <ul style="list-style-type: none"> Exercise before 4 pm as it will aid in shifting the body clock earlier. Avoid exercise after 7 pm. Consider sleeping on a later schedule when traveling eastward, as this reduces the circadian shift required. <p>Westward travel:</p> <ul style="list-style-type: none"> Exercise later in the day to aid in shifting the body clock later. Consider sleeping on an earlier schedule to reduce the circadian shift required.
<p>Additional Supplements</p> <p>*Supplements should always be personalized to the client's needs</p>	<ul style="list-style-type: none"> Digestive enzymes with meals to reduce digestive upset that typically results from meal times being out of sync with the inherent body clock. Immune-supportive nutrients such as vitamin C, zinc, and quercetin, to help reduce the risk of infections and immune dysfunction with travel. Supplements specific to your client's jet lag symptoms which could include headache, irritability, anxiety, depression, and/or difficulty concentrating.

References:

- Eastman CI, Burgess HJ. How to Travel the World Without Jet Lag. Vol. 4, Sleep Medicine Clinics. 2009.
- Takahashi T, Sasaki M, Itoh H, Ozone M, Yamadera W, Hayshida KI, et al. Effect of 3 mg melatonin on jet lag syndrome in an 8-h eastward flight. In: Psychiatry and Clinical Neurosciences. 2000.
- Paul MA, Miller JC, Gray GW, Love RJ, Lieberman HR, Arendt J. Melatonin treatment for eastward and westward travel preparation. Psychopharmacology (Berl). 2010;208(3).
- Garbellotto L, Petit E, Brunet E, Guirronnet S, Clouus Y, Gillet V, et al. Gradual Advance of Sleep-Wake Schedules Before an Eastward Flight and Phase Adjustment After Flight in Elite Cross-Country Mountain Bikers: Effects on Sleep and Performance. J Strength Cond Res. 2022 Sep 22;
- Choy M, Salbu RL. Jet lag: current and potential therapies. P T. 2011 Apr;36(4):221–31.
- Zerbini G, Kantermann T, Meroo M. Strategies to decrease social jetlag: Reducing evening blue light advances sleep and melatonin. European Journal of Neuroscience. 2020;51(12).
- Youngstedt SD, Elliott JA, Kripke DF. Human circadian phase–response curves for exercise. Journal of Physiology. 2019;597(8).
- Takahashi M, Tahara Y. Timing of Food/Nutrient Intake and Its Health Benefits. J Nutr Sci Vitaminol (Tokyo). 2022 Nov 30;68(Supplement):S2–4.