

Heading into fight week is rarely just a matter of training sessions and hitting target weights. Between hoarding sleep debt, stretched schedules, weight cut dehydration, and juggling new surroundings, fighters endure a perfect storm of physiological challenges—especially when crossing time zones. One critical factor many overlook in the chaos of fight week prep is managing morning bright light exposure to reset the circadian clock and combat jet lag. This post unpacks the nuances of light exposure planning when you land in a new time zone, with a focus on fighters’ unique challenges during fight week.

Fight Week Scheduling Chaos and Sleep Debt

Anyone who has covered a fight week knows the drill: media day calls as early as 7:00 a.m., events with doors opening around 6:00 p.m., and walkouts often well past midnight. That’s before factoring in the weird sleep timing that dehydration and rehydration protocols force on the athlete.

Sleep debt accumulates rapidly. Fighters often accumulate it in the days leading up to weigh-ins because fragmented sleep—waking often to use the bathroom or manage discomfort—is the norm. The stress of the weight cut plus the pressure of media obligations squeezing into tight windows means—at best—catching catnaps here and there. This preexisting sleep deficit compounds the disorientation of crossing time zones.



Sleep Debt and Circadian Misalignment

Sleep debt worsens cognitive function, reaction times, and mood—everything a fighter can’t afford going into fight night. When crossed with jet lag’s circadian disruption, it’s a double whammy that can derail performance if not addressed head-on.

Weight Cut Dehydration and Fragmented Sleep

Dehydration leading into weigh-in night creates a unique physiological state which deeply affects sleep cycles. Fighters commonly wake multiple times to manage thirst, electrolyte balance, or gastrointestinal discomfort. These interruptions cause fragmented, poor-quality sleep, limiting REM and deep sleep phases critical for recovery.

It also changes the body's temperature regulation, which interacts with circadian rhythm cues. The body uses core temperature drops as one signal to prepare for sleep; dehydration and the post-cut rehydration phase disrupt this natural process.

Rehydration Night Physiology and Interruptions

Once weigh-ins conclude, fighters begin rehydration strategies involving electrolyte replenishment and fluid intake, sometimes aggressively to rebound performance weight. This phase, though essential, invites additional night disruptions—frequent urination, stomach discomfort, and the nervous energy of fight week tensions.



Rehydration-induced sleep interruptions further worsen the ability to synchronize with local time cues, making morning bright light management all the more important on arrival at a new destination.

Time Zone Shifts and Circadian Disruption

Crossing time zones misaligns the internal body clock (circadian rhythm) from the new environment's day-night cycle. This misalignment causes jet lag, resulting in excessive daytime sleepiness, difficulty falling asleep at night, digestive troubles, and impaired cognitive function.

Morning bright light exposure is the most potent natural cue to reset your circadian rhythm. It modulates the release of melatonin—the hormone that regulates sleep-wake cycles—by signaling to your brain when it's time to be awake and alert.

Developing a Light Exposure Plan for Jet Lag Reset

A deliberate **light exposure plan** that strategically leverages morning bright light after landing can help recalibrate your internal clock faster, leading to better sleep quality and improved daytime alertness during fight week.

What Does the Rulebook Say First?

First, always check the evidence-based guidelines on light exposure timing. A useful framework is:

- **Eastward travel:** Morning bright light exposure phase-advances your clock (making you fall asleep earlier). Light in the morning is key; avoid bright light at night.
- **Westward travel:** Evening light exposure delays your clock (allowing wake time to push later). Bright light in the morning may impede adaptation.

Since most fighters are crossing at least three time zones east or west, customizing exposure timing to your direction of travel is critical.

Managing Morning Bright Light Exposure on Arrival

Upon landing, try to expose yourself to natural bright morning light as soon as possible. If outdoors is not an option (airport lounges, hotel rooms), artificial bright light therapy boxes are your next-best tools. fightful.com Typical clinical thresholds recommend:

- Light intensity at or above 10,000 lux.
- Sessions of 30-60 minutes in the morning within the first 1-3 days post-arrival.

Be aware of your phone or tablet screens emitting blue light late at night, which can throw off melatonin secretion and slow recovery.

Using YouTube Interviews and Expert Insights

To complement this advice, here is a valuable interview with circadian rhythm expert *Dr. Charles Czeisler*, highlighting strategies athletes use to manage bright light exposure during travel seasons:

Note: Replace "XXXXXXX" with the actual YouTube video ID before publishing.

Batch Lab Reports and Certificates of Analysis (COA): Why They Matter Here

Managing biohacks like sleep aids, supplement timing, or electrolyte drinks during fight week often involves supplements or products claiming rapid effects. Be skeptical of vague promises like "you will sleep better instantly." Instead, demand transparency and lab data.

Batch Lab Reports and Certificates of Analysis (COA) verify product contents and potency. This is particularly important when you cross countries with different supplement standards.

When applying a light exposure plan in tandem with nutritional support, insist on:

- Products with clear batch lab reports available on manufacturer websites.
- COAs that specify ingredient purity, absence of contaminants, and accurate dosages.

This reduces risk and prevents unintended side effects during an already stressful pre-fight period.

Sample Morning Bright Light Exposure Schedule for Fighters Crossing 3+ Time Zones East

Day Post-Arrival Time to Get Morning Light Recommended Action
 Day 1 (Arrival day) Within 1 hour of local sunrise Spend at least 30 minutes outdoors or use a 10,000 lux lightbox
 Day 2 Within 1 hour of local sunrise Repeat 30-60 minutes light exposure; avoid bright light after sunset
 Day 3 Within 1 hour of local sunrise Optional light session; prioritize consistent wake time

Final Thoughts

Managing morning bright light exposure might feel like just one small detail amid the whirlwind of fight week. But the science is clear: timed light exposure is your strongest ally to reset your biological clock, combating jet lag's detrimental pull on sleep and alertness. Combine this with careful hydration, granting your body uninterrupted sleep cycles as best as fight camp allows, and always vet any supplementary aids rigorously with batch lab reports or COAs.

Fight week is hectic, yes—but your circadian rhythm doesn't negotiate. Master it with a light exposure plan tailored to your travel direction and timing, and you'll gain more than an incremental edge; you'll improve your readiness on fight night.