

Performance Point

Travel Strategies to Enhance Performance!

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Competition at the highest level requires international travel across multiple time zones. Not only are athletes traveling at altitude in a dry re-conditioned air environment and confined to a small seat, but also as they travel across multiple time-zones they may become sleep deprived and undoubtedly their biological clock will become desynchronized. Thankfully, there are a number of strategies that can be used to minimize the negative effects commonly referred to as “jet-lag” and ensure optimal performance at the destination competition. Usually it takes approximately one day of adjustment for every time-zone crossed but with experience and using some of the strategies below this re-adjustment period can be significantly reduced.

Pre-travel

Ensure that your flight will be as comfortable and safe as possible by organizing the following items in advance:

- sleep mask
- ear plugs
- saline spray (for keeping the mucous membranes of nose and ears moist)
- travel pillow
- anti-bacterial hand sanitizer (wash hands once per hour)
- travel snack kit (healthy snacks)
- travel tips
- wash bag
- zipper seal bags
- compression socks (to prevent blood pooling in lower limbs)

Note: These items are available in a FliteKit™ that can be purchased directly from PacificSport for a nominal fee. For more information or to place an order, email reckardt@pacificsport.com.



These things will make your air-travel as comfortable as possible and hopefully allow you to sleep more easily. Bringing a change of clothes (at least a shirt, underwear and socks) for any layovers, or for mid-flight, can also enhance comfort. Depending upon travel regulations purchasing fluids in advance to bring on the plane (water and/or sports drink) are essential for the dry environment. Bringing some money to purchase fluids once athletes have passed through security is another strategy to ensure adequate fluids are available on the flight.

Be Organized and Rested: Many people arrive at the airport already tired because they have been running around organizing themselves at the last minute before travel. A little planning and organization will reduce the pressure and ensure you are well rested prior to travel.

Reset your body clock: If the shift in time-zones is going to be large then it may be beneficial to begin to re-adjust the internal biological clock a few days prior to travel. Start re-adjusting your body's clock in advance of travel up to three days before you travel. Go to bed one to two hours earlier (traveling east) or later (traveling west) and adjust wake-up accordingly. Pre-adjusting by more than two hours is not recommended.

Nutrition: Eat cultured yogurt or other probiotic food regularly in the week before travel, as this can provide some sustained protection against gastrointestinal problems. Additionally, extra care should be taken to ensure you are well-hydrated and fuelled before traveling.

Powering Sport Performance

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During travel

Live by the clock: Set your watch to the destination time as soon as you get on the plane and try to adjust your sleep/wake cycle to align with the destination time. This can be difficult to do on a plane so if you are having trouble with this nap frequently using the sleep mask and ear plugs if necessary.

Move: Try to get an aisle seat or better yet an exit row seat that will allow you to get up, move and stretch often (every hour or two). Performing some simple exercises intermittently will keep your blood circulating, you will feel less stiff when you de-plane and your muscles will thank-you. At layovers walk briskly, stretch, wash (shower if possible) and change your clothes. PacificSport has developed a cue card of "AIRobics" that can be used by those athletes and support staff traveling; this card is included in the *FliteKit™*.

Hydrate: Drink plenty of fluids such as water, sports drinks, herbal tea. Avoid caffeine, alcohol and sleeping pills! You should drink at minimum 250ml (1 cup) of fluid per hour of travel.

Eat light and healthy: Focus on fruit, vegetables and healthy snacks enroute. Salty foods will decrease urination and help retain fluids.

Wash your hands: With an antibacterial hand-wash cleanse your hands every one to two hours to minimize the chance of picking up a cold or flu.



Upon Arrival

Move: Do light exercise as soon as possible (walk, jog, swim)

Catch-Up on Sleep: If arrival is morning or early afternoon take a short nap (less than one hour)

Live by the clock: Have your evening meal at the appropriate local time and go to sleep at your normal time in the local time zone.

Optimize Sleep: Create a positive sleeping environment (quiet, dark, relaxing). If you wake in the night and have difficulty sleeping just relax and go with it!

See the Light:

Adjust light-dark exposure according to the table below. Light-dark exposure is one of the key factors in adapting to a time shift. Good times to seek light are listed below. At other times of day avoid bright light by staying indoors or wearing sunglasses.

Time Zones West		Time Zones East	
4 hrs	17:00 - 23:00	4 hrs	09:00 - 15:00
8 hrs	13:00 - 19:00	8 hrs	13:00 - 19:00
12 hrs	09:00 - 15:00	12 hrs	09:00 - 15:00
16 hrs	05:00 - 11:00	14 hrs	07:00 - 13:00

Training: Gradually increase the training intensity, duration and complexity over the first few days. Do not try to make up for lost training time during travel.

Nutrition:

- Include protein in your breakfast to stimulate the wake cycle
- Focus on carbohydrates in your evening meal and/or snack to stimulate sleep. Avoid caffeine in the 6 hours prior to going to sleep. Pumpkin seeds and soybeans are natural foods that may stimulate melatonin release and promote sleep.
- More travel nutrition tips are available at the following link:
http://www.pacificsport.com/Groups/SportScienceReference/06_06_28_PerformancePoint_Nutrition_FINAL.pdf

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