

Overseas Travel



Factors at Play

- Jet Lag
 - mismatch between body clock and actual time
- Jet Stress
 - response to being in a confined, pressurised cabin for extended periods

The Equation

Crossing Time Zones = JET LAG

Sitting in a Plane = JET STRESS

North - South Travel = Jet Stress

East - West Travel = Jet Stress + Jet Lag



Body Clock Regulators

External

- **light/dark**
- **activity**
- **meals**
- **social interaction**

Internal

- **hormonal**
- **neural**
- **body temperature**
- **circulatory**
- **fluid balance**



Causes of Jet Lag



- Number of time zones crossed
- Direction of flight (W-E > E-W)
- Duration of flight
- Time of departure and arrival

Causes of Jet Stress



- Confined Space
- Poor Posture
- Lack of Movement (DVT)
- Dry Cabin Air

Other Factors



- Quality/Amount of Food
- Timing of Meals
- Taper / Low Activity - ↓ energy requirements
- Change of Season

Minimisation Strategies



Before Travel

- Pre-book aisle & exit seats
- Pack light, healthy snacks
- Order special meals (low fat, extra fruit/rolls)
- ??? Phase Adjustment - only if time change < 2 hrs (otherwise conflict with env. cues)
- Consider alternative routes or stop-overs



Minimisation Strategies

During Travel

- Adjust watch immediately to destination time
- Sleep and Eat according to destination time
- Don't over-eat
- Regular fluid (water) intake
- Avoid caffeine & alcohol (diuretics)
- Move and Stretch regularly
- Comfortable clothing
- Pillows for lower back
- Passive Mental Set



Minimisation Strategies

After Travel

- **STAY AWAKE** during the day
- plenty of **NATURAL** light
- plan social activities (esp. in afternoon)
- train AM rather than PM (avoid strenuous activity late in the day - ↑ catecholamines) (expect ↓ skill)
- **PROTEIN** for breakfast - ↑ adrenaline secretion promotes alertness
- **CARBOHYDRATES** for dinner - ↑ serotonin synthesis causes drowsiness



Melatonin

- Hormone released by the brain to regulate sleep cycles
- levels follow the cycle of light & dark
- peaks after midnight
- ↑ melatonin causes drowsiness & ↓ body temp
- *Natural* sleeping pill, effective sleep, feel alert on waking



Travel Kit

- Water Bottle
- Snacks (muesli bars, dried fruit, crackers)
- Neck Pillow
- Ear Plugs
- Eye Shades
- Humidifyer