

Beat the Jet Lag Blues

Sydney FC fitness and conditioning guru, Dr Craig Duncan, tells us how to overcome the negative effects of travel on performance.



Dr Craig S. Duncan is the Head of Human Performance at Sydney FC. Read more of his work at drcraigduncan.com

It is suggested that playing at home gives a significant advantage to a team. Home crowd, familiarity with conditions and minimal changes to normal life appear to be the major reasons for this advantage.

Alternatively, these positives for the home team are the negatives for the away team. But what can we do to manage these issues? In a country as large as Australia, travel is a major issue that must be overcome for a team to be successful.

MODE OF TRAVEL MATTERS

A three-hour bus trip can have as many issues as a six-hour plane trip. Depending on the mode and length of travel the effects may include sleep deprivation, dehydration, muscle stiffness and loss of appetite. International travel

and travel that requires changes in time zones appears to have the most negative effect. It is believed that these issues are related to a person's circadian rhythms being out of synch.

Chronobiology is a field of biology that examines the circadian rhythms in living organisms and needs to be understood when looking at the effect of travel. For instance, a human may be at their best in respect to strength and cardiovascular endurance at 3-5pm and this may be the time of kick-off at the travel destination. However, 3pm at the destination might be 3am at the player's home base, which coincides with when the player would normally be asleep. Thus, it is easy to see how performance can be affected.

In our national competition (A-League) the greatest

time difference is five hours (Wellington-Perth/Eastern Daylight Time) and if these issues are not attended to there will be a detriment to performance. Teams such as Wellington and Perth are most affected in our league and interestingly both teams do not have outstanding away records.

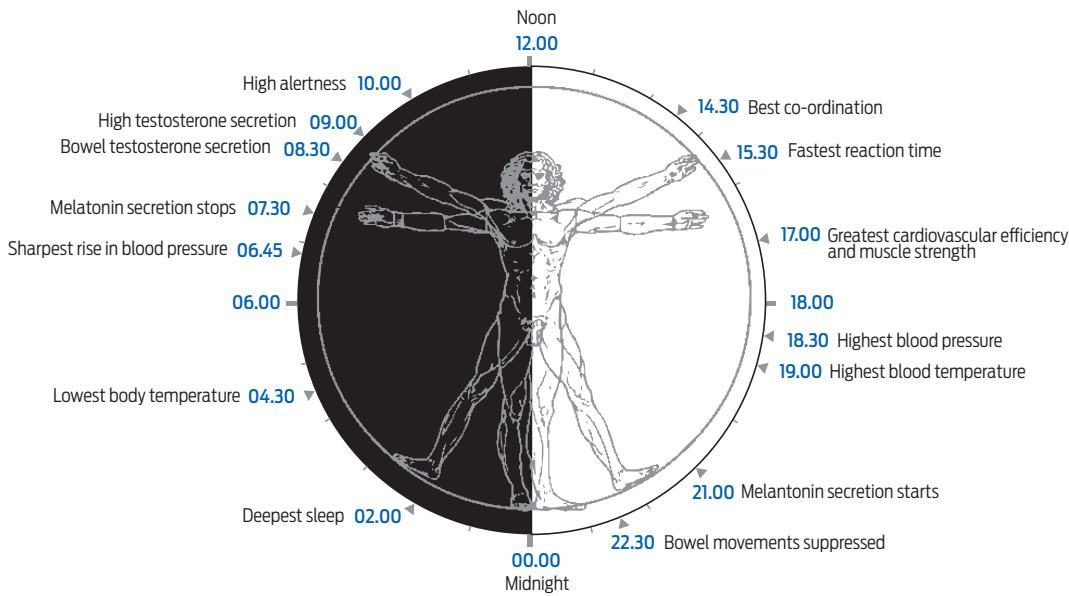
However, travelling west, where the body clock is delayed, is easier than eastbound flights where the body clock is sped up, so it is easier to recover from a Sydney-Perth flight than Perth-Sydney.

WAYS TO NEGATE THE EFFECT OF TRAVEL

Firstly, every club must have a travel plan for each destination. This plan should be formulated with input from the players, coaching staff and human performance team and implemented by the club human

Bus rides can present as many problems as plane trips.





Wayne Rooney gets ready for a long flight.

performance staff. It is vital there is a person completely focused on this plan during the season. Once the plan is formulated it must be monitored and adjusted if required. The plan must also allow for individual differences as players can be affected in different ways and must focus on pre travel, during travel and post travel.

One major issue is hydration, so I believe it is important to ensure your players are hydrated before travel. I will test hydration levels prior to flying and then ensure players know exactly how much they should be drinking pre/during and post flight. I will also test hydration levels when we arrive at our destination. Caffeine and caffeinated drinks should not be consumed before and during flight as they will have a negative affect on hydration and may also disrupt sleeping patterns.

Players should also be encouraged not to over-eat during the flight. It is best to organise with the airline specific meals if required and to have healthy snacks available. It is also important to have in-flight flexibility programs so players can avoid muscle tightness. On longer flights stopovers are a great time for players to complete some light exercise. Also, on arrival, it is better for players to interact with

other rather than be isolated in their hotel rooms, so I encourage a team walk or group stretching soon after arrival.

The first training session post-arrival should be light and focus on flexibility and mobility. Massage and pool work can also enhance flight recovery and should be implemented. There are also a number of products that can be beneficial, including compression garments (reduction in muscle soreness), Gastrolyte® (electrolyte replacement), Synthetic Melatonin (help in regulating internal clock – not presently available in Australia) and humidifier masks, which help to decrease risk of airborne disease and dehydration (see humidifyer.com).

In respect to non-plane travel, it is very important players stretch during the trip and that the nutritional intake is monitored. I do not like players sitting in one spot for more than an hour, so a simple flexibility program will help to decrease muscle tightness associated with long bus trips. I also think it is important to have stops during the trip so players can get off the bus and go through some basic flexibility and mobility work.

CONCLUSION

Whatever the mode or length of travel, you MUST have a travel

plan for every destination. The plan must be very detailed and the implementation has to be precise.

In professional sport, travel is a major part of preparation and more attention should be given to getting this part of the preparation right. Having a travel plan can decrease the disadvantages of playing away from home so players can perform to their maximum potential. 