

IN FULL SWING

TRAVEL ADVICE AND STRATEGIES TO ENHANCE ON-COURSE PERFORMANCE OF ELITE GOLFERS

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Golfers of all levels will always agree that golf is tough. At the elite end of the game, winning and losing often gets determined by a single shot over a four-day competition period. Your position at the mid-point of the event will determine if you even get the opportunity to earn money and a living from the game. With the margin between winning or not often being <0.3%, elite and professional golfers work tirelessly to make incremental gains in areas of the game such as swing speed and putting. However, frequent international travel is one of the toughest challenges all players face every year, regardless of how good their game is.

Unlike many other sports, the competitive golfing calendar runs the whole year round, with events taking place across every continent except Antarctica. Typically, the golfers themselves decide on their schedule. Their current World Ranking and tour status heavily influence the events they choose to play. The average tour professional competes in 20-30 events per year, depending on the qualifying criteria of the available events. Additionally, they need to travel for training and preparation.

The resulting annual travel demands are substantial and illustrated in Figure 1, which depicts the travel undertaken by a DP World Tour winner during a recent competitive season.

The annual travel demands a tour professional golfer experiences are unevenly distributed throughout the calendar¹. For example, European weather is less conducive to golf competitions during the first quarter of the year. During this time, players mostly play competitions in Africa, Australasia, Asia, the Southern USA and the Middle East, characterised by long-haul flights travelling both eastward and westward. The player shifts through multiple time zones on a week-to-week basis, resulting in additional stress for the individual to navigate (see Figure 2). As the year progresses, the travel demands and resulting time zone changes typically become less, although still requiring careful management to optimise health and performance.

The combined demands of travel and regular time zone changes, i.e. travel fatigue and jet lag, can place players under significant and consistent physical

and mental stresses. These stressors are associated more with the professional golfer's lifestyle than the competition demands. These demands correspond to sports like tennis and Formula 1 racing.

Athletes from other sports that require less travel across multiple time zones would work with their sports science and medical team to implement strategies to mitigate travel fatigue and jet lag. These strategies include pre-adaptation phase-advance or phase-delay, depending on their direction of travel². Such strategies include adjusting the time an athlete goes to bed or wakes up 3-4 days before travel, altering their light exposure throughout the day, as well as manipulating the timing of their meals³. Golfers can only employ some of these strategies due to the weekly competition schedule. A traditional golf tour event is a four-day competition that commences on Thursday and runs until the winner is announced on Sunday evening. Immediately after this event, most players tend to travel, eliminating their ability to utilise pre-adaptation strategies; they need to focus on the current event. Following this



Figure 1: Travel Demands of DP World Tour Winner during a competitive season.

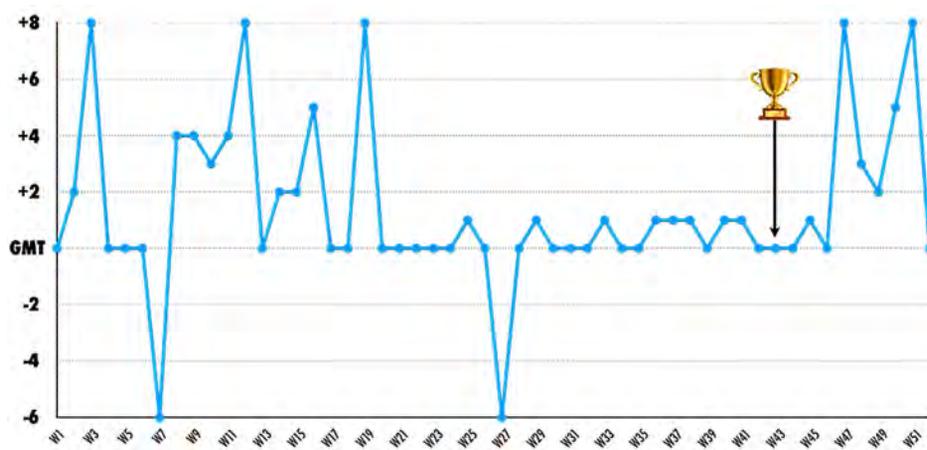


Figure 2: Time zone shifts of DP World Tour Winner during a competitive season. The trophy icon highlights the week the player won.

late Sunday night or early Monday morning travel to the next event venue, golfers may choose to do some light training, practice or recovery during the remainder of Monday before building into a full day of practice on Tuesday. This is followed by a Pro-Am (professional and amateur) event on Wednesday and straight back into the competition proper on Thursday. As a result of these tight turnarounds, we recommend that players invest in a “toolbox” of travel strategies that can be employed immediately post-competition on a Sunday evening to help them prepare for the next event.

Given the time constraints and potential fatigue of golfers, the recommended travel strategies should be simple and easy to adhere to. As a result, the authors have devised a series of practical strategies broken down into graded tasks spread across the stages of travel the golfer will experience.

STAGE 1: PLAN FOR TRAVEL FATIGUE AND JET LAG

Travel fatigue is temporary exhaustion and follows any long journey, including car, bus and train trips. It follows a period of prolonged inactivity, irregular sleep, restricted food choices, dehydration, and other factors associated with long-distance travel⁴.

Jet lag is also temporary but follows rapid long-distance travel, crossing 3 or more time zones. It is caused by rapid transmeridian travel and your body clock becoming discordant with the time zone at your new destination⁴.

STAGE 2: IMMEDIATELY POST COMPETITION

At this moment, the focus is on acute recovery. The energy cost of the final round of the competition will be approximately 600-800 kcals, although this is individual and can vary⁶. In addition to this exercise

energy expenditure, there may be some glycogen depletion, muscle damage and dehydration. To address these needs, golfers are advised to repair damaged muscle with quality protein, replenish fuel stores with appropriate amounts of carbohydrates and rehydrate with fluids and electrolytes⁶. A post-round snack, such as a smoothie made with greek yoghurt, fresh fruits and milk, can quickly and conveniently aid this recovery process. Should the player have more time, they can complement this with a treatment such as compression boots or hands-on massage, followed by an additional recovery meal⁶. Plan as much as possible in advance to reduce stress and anxiety:

- Make sure your documents are in order, e.g. passport and visa if required
- Enquire if you need any vaccinations before entering the destination country
- Take the shortest route with the least amount of stopovers
- Get enough sleep and rest before your journey
- Try and prevent illness

STAGE 3: AT THE AIRPORT

Attention should now shift towards preparing for travel, including purchasing some airport essentials. Before checking in bags, we recommend that golfers who may be using electrolytes transfer these to their hand luggage for inflight use. Following this quick check and proceeding through security, players should purchase antibacterial hand gel, if they do not have one already, for regular use throughout the trip. Additional airport essentials include chewing gum and having enough water for the duration of the flight but also the transit at the other end. Depending on the travel duration, golfers should also consider purchasing some travel meals and snacks as the food provided by airlines can often be unreliable, and their arrival can disturb sleep.

STAGE 4: DURING TRAVEL

It is now time to prepare the body for the new destination. Golfers may wish to change the time zones on one of their devices, e.g. phone or watch, to that of the new destination. To support quality sleep, they are advised to align their sleep with the place of departure as their psychological drive for this rest is higher, and sleep will be easier to initiate. Should the golfer

struggle to sleep consistently, then a sleep-when-possible approach is advised during travel. Added considerations include good quality ear plugs, an eye mask and recovery legging or flight socks to aid venous return, improve recovery and decrease the risk of deep vein thrombosis. If the golfer has purchased food in the airport to consume during travel, then an in-flight meal and snack timings may be adjusted according to the destination time zone⁷. Food choices should remain familiar with new foods being avoided. However, in the absence of pre-purchased or prepared meals, it is best to align eating with in-flight mealtimes for convenience. In addition to planning their meal timing, golfers are advised to follow a pattern of eating regular, small meals to meet their energy requirements and avoid deficiencies. Consuming regular but smaller meals containing sufficient protein, micronutrients and fibre (e.g. fresh or dried fruit, trail-mix, pre-prepared (by the athlete or their team) meals will aid recovery, support immune function and induce satiety. During this travel period, the golfer should limit “mindless grazing”, particularly on high-calorie processed foods (e.g. potato crisps, salted peanuts, fried foods, etc.), as these can lead to excess energy intake.

Throughout the flight, golfers should get as much rest and sleep as possible, and drink the water they purchased. Golfers are advised to drink regularly and follow a hydration plan that was configured pre-travel; regular sips of non-alcoholic and non-carbonated drinks are best, with priority given to water with electrolytes, although smoothies and/or fruit juice may be considered also. The recycled air of the aircraft makes it easier to lose moisture breath by breath. Players become dehydrated and increase their risk of contracting an illness. Needing to visit the bathroom relatively regularly throughout the flight is a useful, practical indicator that the player is drinking enough. However, alcohol and caffeine should be avoided. In addition to staying hydrated, chewing gum can also aid the production of salivary IgA and reduce the risk of infection⁸. When awake, stretch and, if possible, do some movement exercises, such as heel-raises, walking up and down the aisle.

Some further recommendations include:

- Choose your seat to be as comfortable as possible

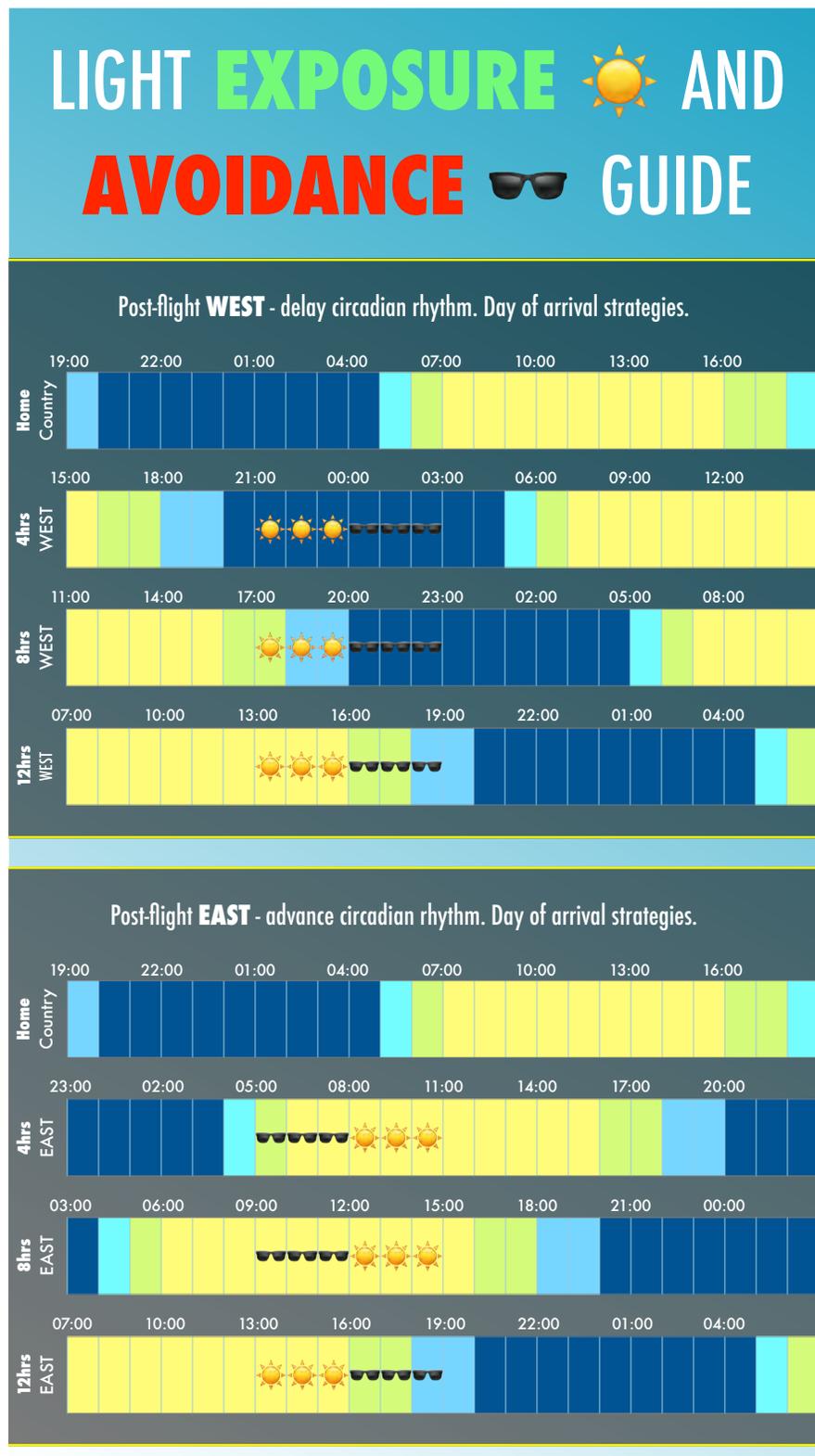


Figure 3: Light exposure and avoidance guide³.

- Wear loose-fitting clothing
- Prevent motion sickness
- Sleep as much as possible

STAGE 5: ARRIVAL AT DESTINATION

The full focus is now on recovering from the flight and preparing for the

competition starting on Thursday. Given the need for golfers to be mobile to get into the desired swing positions, mobility work such as traditional or yin yoga is advised within the first 24 hours of landing to help restore range of motion and reduce joint stiffness. Heavy or intense resistance

training should be avoided or adapted, if fatigued.

If you have travelled westward through 4 time zones, aim to get up to 3 hours of exposure to natural light, ideally outdoors, in the late evening and avoid light in the early morning hours to support phase-delay. If you have travelled westward through 8 time zones, aim to get this light exposure in the early evening, avoiding it for up to 3 hours in the late evening. If you've travelled through 12 time zones, consider light exposure in the early to mid-afternoon and follow this with a period of up to 3 hours of light avoidance in the early evening. Coinciding exercise with the time of light exposure is also recommended in all cases³.

If you have travelled eastward, crossing 4 time zones, aim to get up to 3 hours of exposure to natural light, ideally outdoors, in the mid-morning and avoid light in the earlier waking hours of the morning to support phase-advance. If you have travelled eastward through 8 time zones, aim to get light exposure in the early afternoon and avoid it for up to 3 hours mid to late morning. If you've travelled through 12 time zones, follow the same pattern as when travelling westward, crossing more than 12 time zones. Again, coinciding exercise with the time of light exposure is recommended³.

Also:

- Shower on arrival
- Take a nap when you feel tired, but not longer than 30 minutes and not too close to bedtime
- Take caffeine in the morning to improve daytime alertness
- Relax as often as possible
- Rehydrate at regular intervals with water and sports drinks that you are accustomed to
- Sleep enough, i.e. at least 6-8 hours

Figure 3, created and adopted from Janse van Rensburg et al³, shows practical recommendations on light exposure and avoidance for the practitioner and the golfer to use when travelling. Figure 4 displays general tips pre-, during and post-travel. Elements of these strategies are also shared with tennis, Formula 1, and other sports that require extensive travel, with athletes and their support personnel often comparing and sharing strategies.

Where the player and support team do not have a competition the week before travel, and a significant time zone shift exists between their base location and

GOLF TRAVEL TIPS

HOW TO STAY ON TOP OF YOUR GAME WHEN TRAVELLING

WHAT HAPPENS TO YOUR BODY?

As your body tries to resynchronise its internal clock (circadian rhythm) with the external environment (light, meal timings, etc) it may experience some symptoms of jet lag.

To help your body get back on time & ready to performance focus on these **3 key areas...**

LIGHT EXPOSURE & SLEEP

Light exposure is the biggest regulator of your circadian rhythm. Manipulating when you do or do not get access can have a dramatic impact on your sleep hormones & how you sleep!

BODY MAINTENANCE

Staying on top of your physical maintenance pre, during, & post travel will ensure you body is in the best place possible to compete again without sacrificing mobility, strength & power!

NUTRITION & HYDRATION

Long haul travel can often lead to unusual meal times, a higher risk of dehydration & occasional GI upset. By altering you meal timings & staying hydrated you'll help your body get on time quicker & back to peak performance!

PRE TRAVEL

Minimise time between last "proper" sleep at the place of departure and first "proper" sleep at the destination

Reduce your training volume & intensity a few days before travel

Plan & prepare (or buy if short of time) your meals & snacks for the plane

Also ensure you have packed your electrolytes in your hand luggage & not your check in bag!

DURING TRAVEL

Try get as much sleep & rest as possible during the flight!

Wear your compression garments & move/stretch often when not sleeping to avoid stiffness when you land

Set one of your devices to your destinations time zone & if possible manage your meal times

Drink plenty of water (not alcohol/coffee) & flavour one of your bottles with 1-2 electrolytes

Chew gum when awake to help reduce your risk of infection

POST TRAVEL

Follow a light exposure and avoidance schedule according to your direction of travel and time zones travelled

Consider brief strategic naps early in the day to limit travel fatigue & not interfere with sleep

Avoid heavy training for 1-2 days. Instead perform lower intensity such as mobility or yoga to reduce joint stiffness

Coincide exercise with your identified time of light exposure

Strategically use coffee in the morning to support practice but avoid in the late afternoon/ evening

Consuming 30mls tart cherry concentrate 60 mins before bed may improve sleep quality & quantity

Figure 4: Golf travel tips.

the next competition event location, the player will often try to arrive several days earlier to facilitate adaptation³⁴. Examples of this would include travelling to practice in the Middle East for a week before a series of events, with most players living in Europe (+3-4 hours' time zone shift) or

North America (+8 hours or more time zone shift). Players will often opt to play a tournament in the same geographical area the week before a 'Major'. For example, in 2022, fourteen of the world's top 15 players elected to play The Genesis Scottish Open the week prior to The Open Championship,



Figure 5: How to prepare your bedroom to help you sleep⁹.

which was also based in Scotland, while the field was similarly strong for the Trust Golf Women's Scottish Open, the week prior to the AIG Women's Open (hosted in Scotland).

Other important aspects for the travelling athlete include selecting suitable hotel accommodation. The golfer will often prioritise 24 hour check-in in case of demanding flight schedules or delays. Although the player will travel with ear plugs and an eye mask, blackout blinds in the hotel and a quiet room away from a busy street or next to the lift are important. Some simple steps on sleep hygiene – summarised in Figure 5, can aid in consistent sleep and give the player confidence that they are doing all they can to maximise their performance.

With the amount of travel, varied environments, and shared indoor space golfers are subject to during travelling to work, illness prevention strategies are imperative. Some key information provided to golfers is summarised in Figure 6.

As athletes are often the gatekeepers of tacit sporting knowledge, this article will conclude with a quote directly from the golfer whose data is visible above. The importance of these travel strategies and the supporting role practitioners play

in providing guidance by following the correct practices is shared from a player's perspective.

"It may not be a coincidence that my win came on the back of an easier period of travel with less disruption. That said, The European Tour Performance Institute has worked with me to develop individual strategies which cannot be underestimated".

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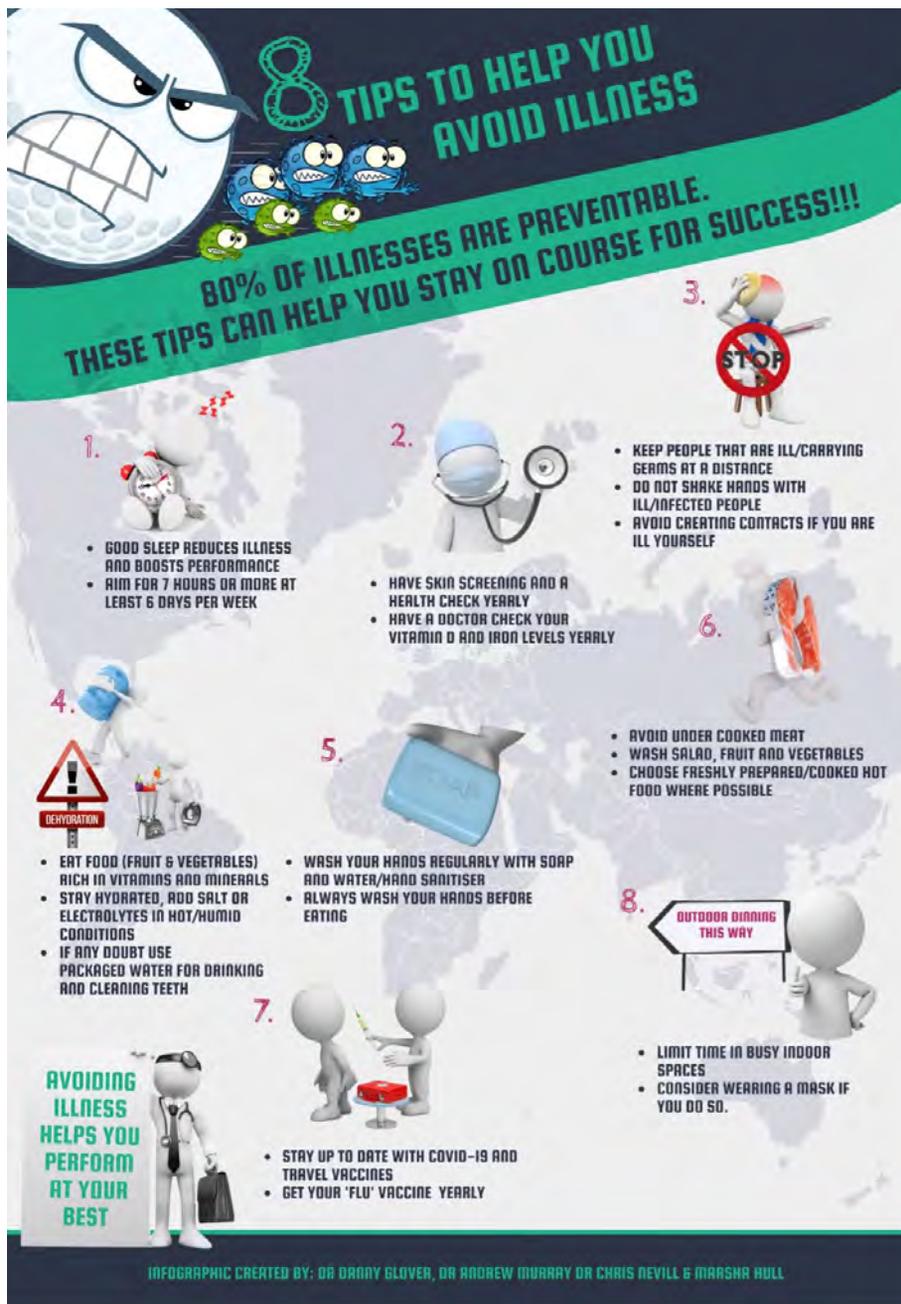


Figure 6: Eight tips to help you avoid illness¹⁰.

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