

# Jet Lag Reduction Strategies

2011 IAAF Athletics Championships

Daegu, South Korea



## In Flight from USA to South Korea

There are 16 time zones separating the west coast of the United States and South Korea. A nonstop flight from San Francisco to Seoul is approximately 12.0 hours. Therefore, on the flight from the United States to South Korea it is important for you to establish as much of a personal “comfort zone” as possible. The general strategy is to reduce physical and psychological stress, and therefore fatigue and jet lag. We encourage you to take advantage of several of the “ergogenic aids” for international air travel shown on the back of this sheet.

In developing a more-detailed strategy for reducing jet lag, the most important question to ask is, “Should I sleep or stay awake on the flight?” To answer that question, you must know whether it is day or night in South Korea during the flight over from the United States. Remember, your goal is to shift your body’s internal clock closer to South Korea time, thereby reducing jet lag and allowing you to begin high-quality training within a few days after arriving in Daegu. Shown below is a table that compares the local time for San Francisco and Seoul/Daegu during the 12.0-hour flight (3-hour intervals). When you depart San Francisco on Sunday at 11:00 AM (red text), in Seoul/Daegu it is Monday 3:00 AM. When you land approximately 12.0 hours later, it is 2:55 PM Monday in Seoul/Daegu (red text) and 10:55 PM Sunday in San Francisco.

	<b>San Francisco</b>	<b>Sunday</b> <b>11:00 AM</b>	Sunday 2:00 PM	Sunday 5:00 PM	Sunday 8:00 PM	Sunday 10:55 PM
	<b>Seoul / Daegu</b>	Monday 3:00 AM	Monday 6:00 AM	Monday 9:00 AM	Monday 12:00 Noon	<b>Monday</b> <b>2:55 PM</b>

The best in-flight strategy for the San Francisco-Seoul flight is to stay awake, because once you get settled in and eat the first meal, it is already close to wakeup time and the start of day in South Korea. Staying awake on the flight will not be as difficult as you might think. If you look at the table, you will see that during the flight, it is the middle of the day and early evening back home in the United States, during which time you are normally wide awake. So you should be able to stay awake during the flight with little difficulty, provided you keep yourself entertained with music, movies, walking around, talking to teammates, etc. It is possible that you may feel sleepy in the last hour or so of the flight, but that’s usually when the flight crew comes around to open the shades, serve the final meal, collect trash and generally make a lot of noise which should help you stay awake. If you feel yourself getting sleepy at any other point during the flight, do your best to “fight it” by getting up out of your seat and walking around, or perhaps ingesting some caffeine (coffee, tea, Excedrin). If you sleep on the flight from San Francisco to Seoul, it’s almost guaranteed that you will not sleep your first night in Daegu, which in turn will keep you jet-lagged and out of synch for several days, and prevent you from training effectively. In contrast, if you stay awake on the flight from San Francisco to Seoul (arrival 2:55 PM), by the time you clear Customs and catch your next short flight to Daegu, pick up your baggage, transport to your hotel, and have some dinner, it will be about 9:00 PM to 9:30 PM and you will be ready to sleep soundly in tight synchrony with Daegu sleep time. Bottom line: if you “push through” and stay awake on the flights from San Francisco to Seoul and from Seoul to Daegu, you will have minimal trouble with jet lag and therefore be able to adjust to Daegu time rapidly and resume quality training within a few days of arrival.

## First Days of Training in Daegu

Because you stayed awake on the flights from San Francisco to Seoul and Seoul to Daegu, you will definitely be tired and ready for bed by approximately 9:30 to 10:00 PM. By falling asleep at this time, you will be in tight synchrony with South Korea sleep time, and therefore you will have minimal problems with jet lag over the next few days. Taking a warm shower prior to bed will also help you relax and sleep soundly. You may want to use a moderate over-the-counter sleep aid (e.g., Tylenol PM) to help you sleep and to take away some of the “aches and pains” picked up on the long journey. It is also recommended that you sleep with the window blinds slightly open so that you will wake upon “first light” more easily.

The next morning, get up no more than 1 hour later than your normal wakeup time back in the United States. At this point, the best strategy to reduce jet lag and help expedite your body’s adjustment to Daegu time is to combine natural sunlight with exercise. The combination of sunlight plus exercise has been shown to be the most effective way to readjust your body’s internal clock to local time. In Daegu, the optimal time for sun exposure is between 1:00 PM and 7:00 PM. Plan on doing two light to moderate training sessions on your first full day in Daegu. Also, plan on as much social activity as possible when you’re not training. Stay busy and avoid taking naps! Go to bed on your first full day in Daegu as close as possible to your normal bedtime. The next morning, get up at your normal wakeup time and try to expand on the previous day’s sun exposure, training and social activity schedule. Go to bed at your normal bedtime. The following day will be your third full day in Daegu. Get up at your normal wakeup time. Feel free to begin harder training on this day if you feel like you can handle it. However, be aware that you are trying to adjust to two environmental stressors at once: a difference of 16 time zones and heat/humidity. Regardless, you should be 90% to 95% adjusted to Daegu time and ready to begin training and tapering effectively in preparation for competition.