

Alertness Solutions Jet Lag Calculator

What is jet lag?

Jet lag occurs when the body's internal timer, the circadian clock, is moved to a new time zone. Therefore, the timing of the body's systems is disrupted. Physical functions such as digestion, hormone secretion, and most notably, sleep and wake, are desynchronized from the new environment, and from each other. Jet lag symptoms include disrupted sleep, difficulty staying awake, and digestive upset.

How much jet lag will you experience on your next trip?

While the experience of jet lag varies from person to person, as well as with the person's health, age, and other factors, you can get some idea from the number of hours your body clock will be displaced.

Home (_____)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|---|--------|---|---|---|---|---|-------|----|----|-----|----|----|--------|----|----|----|----|----|-------|-----|-----|--|
| 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12p | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | 11p | |
| | | | Sleepy | | | | | | Alert | | | | | | Sleepy | | | | | | Alert | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Destination (_____)

Example:

Home (San Francisco)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|----|--------|-----|----|----|----|----|-------|----|----|-----|----|-----|--------|----|----|----|----|----|-------|-----|-----|--|
| 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12p | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | 11p | |
| | | | Sleepy | | | | | | Alert | | | | | | Sleepy | | | | | | Alert | | | |
| 8 | 9 | 10 | 11 | 12p | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | 11p | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

Destination (London)

Using the chart

Use the following chart to determine where your clock will be in relation to your regular "Home time." Marked on each scale ("Home time" and "Destination time") are certain 3-hour periods. These represent normal periods of sleepiness and alertness that we experience each day as a result of the fluctuations of our circadian clocks. They are: two periods of increased **sleepiness** (3-5 am and 3-5 pm); and two periods of increased **alertness** (8-10 am and 8-10 pm). These times are in relation to home time.

Fill in your destination times to see when you'll be most sleepy and most alert once you get to your destination... and then use that knowledge to your advantage!