

many companies today encourage their executives to log 100-hour workweeks, applaud the road warrior who lives out of a suitcase in multiple time zones, and promote the negotiator who takes a red-eye flight to make an 8 am meeting. This kind of behaviour is not only impedes performance, it also endangers employees and puts other peoples' lives at risk.

Indeed, sleep is a very basic human need. On average, we spend one-third of our lives with our eyes shut? The mechanism and reason why we sleep is extensively researched and yet still not fully understood. But one thing's certain – each of us has different sleep requirements and different sleep patterns. Some of us spend up to 10 hours a day sleeping, while others can do with just four hours.

Are you actively asleep?

Most of us assume that sleep is a passive event, where we close our eyes and all our bodily functions simply 'switch off'. Well, contrary to popular belief, sleep is an active process involving complex interactions with increased metabolic functions and activities within the brain.

Sleep is divided into two main phases: dream sleep and non-dream sleep.

On average, an adult spends 25 to 30 per cent of the entire sleeping duration in dream sleep. In a child, however, dream sleep may comprise of as much as 50 per cent of the entire night's rest. During dream sleep, brain waves slow down and coordinated pattern and metabolic activity in most parts of the brain increase.

Most sleep experts believe that dream sleep is crucial for the human mind and body. It is well accepted that dream sleep is important for well-being, memory re-building, rejuvenation and mental alertness. This explains why drugs that are selective non-dream sleep promoters may cause patients to feel very tired and lethargic the following day – the

Got a sleep debt?

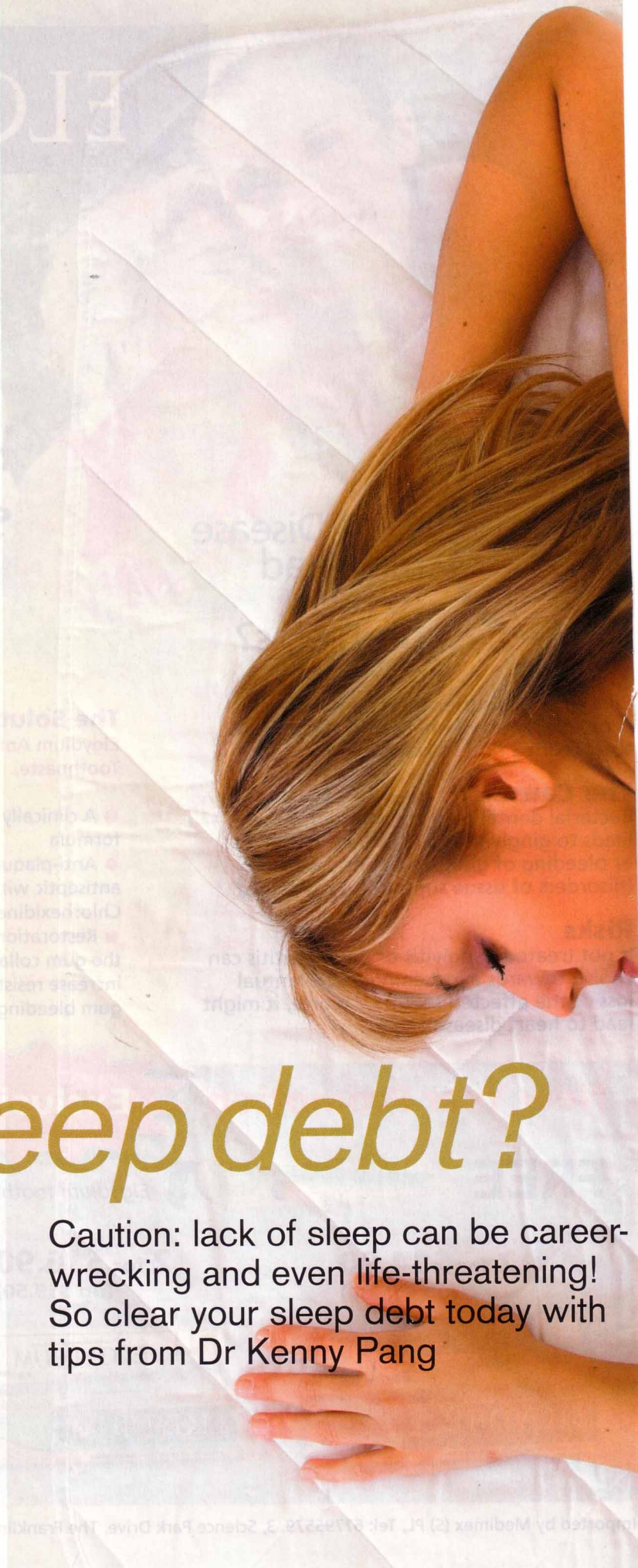
Lack of dream sleep causes patients to feel tired.

Dream sleep is characterised by a highly active brain in a 'paralysed' body. This is biology perfected by our divine maker, because this state of 'paralysis' prevents us from acting out our dreams to disastrous effect. Imagine dreaming of playing soccer – how dangerous would it be for your partner if you tried to make a brilliant pass in bed and kicked your partner?

Do you have a sleep deficit?

When work or daily demands pushes us beyond the limit, and we go sleepless for more than 24 hours,

Caution: lack of sleep can be career-wrecking and even life-threatening!
So clear your sleep debt today with tips from Dr Kenny Pang





we have a sleep deficit. This sleep deficit may build up throughout the week, and cause us to become less productive at work, irritable, depressed and sleepy.

Here's how sleep-related factors affect performance:

DOZING OFF The homeostatic drive for sleep at night is determined mainly by the number of consecutive hours that we've been awake. Consequently, throughout the day, we build up a stronger and stronger need for rest. Most of us think we're in control of this need, and that we choose when to sleep and when to wake up. The fact is that when we get so tired and exhausted, the brain seizes control involuntarily, and we fall asleep, just like that, in the middle of a meeting or, worse still, in the driver's seat!

SLOWING DOWN The second factor is the total amount of sleep that we had over the past few nights. If we get at least eight hours of rest per night, then the level of alertness should remain stable throughout the day. But if we have a sleep disorder or haven't been sleeping for several days, we will develop a sleep deficit that will make it more difficult for the brain to function.

LOSING A SENSE OF TIME The third factor has to do with sleep circadian rhythm, that is, our internal clock that tells us when it's midnight or when it's dawn. A neurological timing device called the 'circadian pacemaker' is responsible for this. Hence, shift workers who may sleep during the day for a few days and shift back to sleeping during the night the next few days, may disrupt their sleep circadian rhythm and constantly feel tired.

FEELING GROGGY The last factor that can affect performance is sleep inertia. This is the grogginess most people experience when they first wake up. Just like a car engine, the brain needs time to 'warm up' when we wake. The part of the brain that is responsible for memory consolidation doesn't function well for five to 20 minutes after we wake up and doesn't reach its peak efficiency for a couple of hours.

But wait, if that's not enough to convince you of the importance of proper rest, there's more – long-term health consequences of sleep deprivation may even include high blood pressure, heart disease, strokes and sudden death during sleep!

Are you practising sleep hygiene?

Sleep disruption is common, especially

during times of stress and anxiety. Heightened emotions and work stress may significantly interfere with sleep. However, don't worry, some simple sleep hygiene will help bring sleep patterns under control and minimise sleep disruptions.

DO:

1. Go to bed and get up at the same time each day.
2. Exercise every morning. Simple stretching and aerobic exercise make great workouts. There is good evidence that regular exercise improves restful sleep.
3. Get regular exposure to natural light or bright lights, especially in the late afternoon.
4. Make your bedroom warm and cosy. That means no bright lights and loud noises in the bedroom.
5. Use your bed only for sleep and sex.
6. Establish a relaxation routine just before going to sleep. Muscle relaxation, imagery, massage and a warm bath are great ways to lull yourself to sleep.
7. Keep your feet and hands warm. If your room is air-conditioned, wear warm socks and gloves to bed.
8. Take medications as directed. It's is often helpful to take prescribed sleeping pills one hour before bedtime so that they take effect when you lie down. As a rule of thumb, sleeping pills should be taken 10 hours before getting up to avoid daytime drowsiness.

DON'T:

1. Exercise just before going to bed.
2. Engage in stimulating activity just before bed. Competitive game, exciting television programmes or movies, and serious discussions are no-nos.
3. Have caffeine in the evening. This includes coffee, many teas, chocolate and sodas.
4. Use alcohol to help you sleep.
5. Go to bed too hungry or too full.
6. Take another person's sleeping pills or over-the-counter sleeping pills without your doctor's knowledge. You may quickly develop a tolerance towards these medications.
7. Take daytime naps.
8. Command yourself to go to sleep. This only makes your mind and body more alert ♥

This article is contributed by Dr Kenny Peter Pang, Director, Pacific Sleep Centre, Paragon.