It’s Siesta Time!

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It is known by many names – Varna Khukshi in Sanskrit, Bhaadghum in Bengali, Siesta in Spanish. However, it is most popular as the “Power Nap”. This innocent afternoon sleep is slowly gaining ground as the new buzzword to increase productivity and work efficiency related to works that specially require mental occupation. While a short nap post-lunch is generally welcome throughout the world, especially in tropical regions as ours, research is on to calculate how much of this siesta is actually beneficial to us and to what extent it can be detrimental.

But before going into this, a bit controversial, to-sleep-or-not-to-sleep-in-the-afternoon topic, let us have a quick look at the sleep pattern in humans.

Sweet Slumber

In humans, a sleep cycle consists of four stages and a REM (Rapid Eye Movement) sleep that occupies a total time span of about 90-120 minutes.

Stage 1

REM Sleep

90 to 120 min

Stage 2

Stage 3

Stage 4

Sleep cycle showing stages of sleep

These four stages, and the REM Stage, that we pass through, constitute the sleep cycle. The invention of electroencephalograph, which accumulates and helps in deciphering the electrical activity from certain brain parts, and subsequent discoveries made in the 1950s revealed a lot about the events that remain functional while we are asleep.

The first stage that lasts for a brief period of about 10-15 minutes, acts as a bridge between wakefulness and being asleep. The second stage lasts for about 20-30 minutes in which rapid, rhythmic brain wave activity known as sleep spindles occur and both body temperature and heart rate show a decreasing trend. The third stage is a transition between light sleep and very deep sleep. The fourth stage is the deepest stage of sleep. At this stage, one is most likely to experience sleep-talking and sleep-walking. A sleeper, if awakened at this stage will feel groggy and disoriented.

Conditions such as poor health or sleep apnea can bring on sudden drowsiness during the afternoon.

Last but not the least, comes the most ‘active’ or ‘dynamic’ section of sleep which is accompanied by rapid eye movements (REM). This stage is most associated with vivid, real-like dream state (discovered by Dement and Kleitman in 1953). During this period, while the brain is active, the voluntary muscles are rendered inactive.

Seista – Tracing the History

“Sleeping in my orchard, like I always do in the afternoon”…these lines from Shakespeare’s ‘Hamlet’ show that sleeping in the afternoon was a part of culture since ancient as well as medieval periods. People all over the world, and especially in a tropical country like ours, still do enjoy afternoon naps, and one of the primary reasons for having a nap after meals is to keep away from the hot sun.

Recently, many countries seem to have adopted the idea of giving into the pleasure of a siesta because of the hot climatic conditions prevailing in their region. Even recruiters consider it more productive to allow the workers take a midday break from work and resume fresh in the afternoon, fully recharged. In farming countries, a midday break is customary because of their early and late work schedules. Some countries like France and Japan offer special areas in the workplace (even in schools) set up as napping rooms, popularly known as ‘napping salons’.

How Long is Good?

Naps can be classified according to the duration it is enjoyed. Here it follows:

- **Power Nap**: A nap of 20 ~ 40 minutes constitutes a power nap. This sleep is supposed to be most productive and efficient in elevating the mental dip that the brain suffers around 3 p.m. in the afternoon.
- **Macro-nap**: The nap enjoyed within a time range of 10 ~ 15 minutes.
- **Mini-nap**: This is of 5 ~ 10 minutes. It is often said that to cope up with his pressing responsibilities, John F. Kennedy had trained himself to take many mini-naps throughout the day.
- **Micro-nap**: 2 ~ 5 minutes. This is the type of nap that Salvador Dali is said to have taken.
- **Nano-nap**: 30 seconds ~ 2 minutes.
- **One-second nap**: It is said that Thomas Edison could switch from daydreaming about a problem to a 1-second nap in which he received a revelation or solution to a problem! But not all are so lucky to have the pleasure of this 1-second nap, of course!

The benefits of a sound sleep and the duration of sleep have often been subjects of research. Scientists of the University of California, San Diego have found that people who sleep six or
seven hours per night tend to live the longest. Some research indicates that a lack of sleep can increase the risk of cardiovascular disease, even resulting in death.

Now what do researchers have to say about the effectiveness of a power nap? A study by Masaya Takahashi et al. was designed to examine the effects of brief naps taken after lunch on alertness, performance, and autonomic balance. They found that a brief nap after lunch was effective for enhancing alertness and performance after normal sleep the previous night. It has been found that students who study hard before bed or take a nap after an afternoon study session are more likely to retain the studied information.

Conditions such as poor health or sleep apnea can bring on sudden drowsiness during the afternoon. When the night’s sleeping cycles are frequently interrupted and deep sleep or REM (rapid eye movement-dream) sleep is disturbed, an afternoon nap will be required to rejuvenate the system.

Most doctors and health professionals recommend a short break after the midday meal to digest. They also say the most important factor is maintaining a healthy lifestyle, coupled with a regular sleep cycles. If you follow these guidelines and maintain an awareness of your body’s needs, you can depend on and honor its natural requests for sleep. The time after a large noonday meal is a perfect time to honor that tendency because digestion creates drowsiness. However, research has discovered that even without a large meal, the tendency for napping occurs at around mid afternoon.

Afternoon naps are known to refresh the mind and improve overall alertness. It can also boost one’s mood and productivity. In a study conducted for six years in Greece the health benefits of napping for the heart were clearly noted.

Napping and Memory

Napping can also help memory. Sleep gives the brain a chance to process new information and can help stabilize memories. Yet another study suggests that dreaming during sleep may even be better — studies have shown that REM sleep following an activity, especially if that activity is part of the dream, can improve the cognitive process and memory retention.

As Dr. Sanjay Gupta puts it in an interview to CNN, “if sleeping is good for memory, dreaming is better”. He explains that an increased association between the Hippocampus and Frontal cortex of the brain during a dreaming phase of sleep can not only boost memory, but can also provide solutions to problems that have been bothering us while awake.

Millions of people, worldwide enjoy daytime nap. People can either nap out of habit, because they are sleep-deprived as a result of a sleep disorder, or after a long work shift. Individuals of all age groups, from infants to the elderly, indulge in an afternoon nap.

Perhaps, a nap of more-or-less 30 minutes during the day could promote wakefulness and enhance performance and learning ability. The benefits of napping could be best obtained by training the body and mind to awaken after a short nap as is already practiced in certain countries by consuming coffee before going for a nap. Whatever be the case, we can let the world argue while we say out loud, “Hola, it’s siesta time!”

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