



Tibb, Physis and Sleep

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Summary

If we do not get a good night's sleep regularly, then not only does our quality of life begin to suffer, but we most likely will be affected by one or more chronic ailments. We now know that a good night's sleep (GNS) - that is, lasting the right amount of time, uninterrupted, balanced and regular - definitely leads to good health and increased life expectancy. Heart disease, hypertension, obesity and probably diabetes, pose a lower risk to those fortunate to be blessed with good sleep quality. Pregnant women, nursing mothers and convalescents benefit from a GNS as do those who are overweight, or affected by diabetes, or suffering from emotional disorders. Tibb regards good quality sleep as one of the cardinal Lifestyle Factors. It views developing sleep hygiene a proven way of supporting Physis in maintaining a person's inner harmony, and supporting it during the different stages of numerous diseases and convalescence from surgery, disease or trauma. It also recognises its benefit in lowering the risk of developing a number of chronic or recurring physical and mental disorders. The value of encouraging a GNS is enhanced when applied in synergy with other Lifestyle Factors, namely: a healthy food and drink consumption, better breathing, regular physical exercise, resolved emotional stress, and more efficient elimination processes. Several realistic and effective sleep hygiene factors, both generic and Tibb, are now available, and easily accessed. Good sleeping habits are most likely to persist if developed during the early years, adolescence or young adulthood. However, it also applies to those who adopt good sleep hygiene in their later years. The undoubted benefits a regular GNS can bring to the person, the family and the job are strong motivators to subscribe to suitable sleep hygiene.

Why do we sleep?

Sleep is one of life's enduring puzzles, with a bewildering number of theories to explain it. One theory relates to energy; that sleeping is a tactic to conserve and recharge the brain's energy stores. Another theory suggests that we need to go 'off-line' for some time to allow the brain to carry out activities which it cannot do when awake, such as processing information and experiences before storage, and deleting unwanted memories. According to this theory, the brain is allowed to process new memories, practice new skills, and solve problems. Yet a third theory is that sleep gives the brain time to exercise brain circuits which are important for survival, but not used much during the daytime. Finally, some researchers feel that sleeping is the route to dreaming. However, why we dream is itself a mystery.

In Tibb, sleep is viewed as a major expression of Physis in action. It allows the brain's mental activities to renew and maintain physical functions in digestion and metabolism, and prepare for the elimination of toxins. It allows the body to focus on tissue repair and the restoration of good health where necessary. It also ensures that normal psychological performance is restored.

We need sleep urgently after surgery, accident, or emotional upset, to give Physis time to restore harmony in the physical or mental domains.

What happens when we sleep?

From the scientist's viewpoint, sleep is a very complex phenomenon. As we know, the physical body becomes inactive, but the mind remains active in several ways. It is not a simple matter of dropping off and waking several hours later. *Sleep progresses in several phases:*

1. In the **first phase**, as we sink into deep sleep, the brain, together with breathing and the heart, slows down.
2. This is followed by the **second phase**, which is light and restful sleep. Body temperature drops and the body's muscles relax.
3. This is followed by the **third phase**, or slow-wave sleep. This is also dreamless.
4. Next there is the **fourth phase**, a short period of 'REM' (**Rapid Eye Movement**) sleep, when dreaming occurs, and the eyes twitch rapidly.

This cycle of four phases is repeated every 90 to 120 minutes, so there are five or so of these cycles in a GNS. Overall, deep sleep (non-REM) accounts for around 10% to 20% of sleep time. During this period old memories are discarded, and others selected for long-term storage.

From the Tibb perspective, sleep is the time set aside by nature for Physis to come into its own. We know that there is a strong link between sleep and the immune system, which is an important part of Physis' regulatory function. Physis is also in action with hormones and other mediator and secretory mechanisms, and in areas of the brain which regulate sleep patterns. These mechanisms are intimately involved with fine tuning the mechanisms which regulate blood pressure and blood sugar levels.

What is Physis?

Physis is the organising principle which maintains harmony (also known as *homeostasis*) within the body. Amongst other functions, it enables the body to heal itself from within. This concept originated with Hippocrates,

Most self-help complementary medical systems work by sustaining Physis, so encouraging "the doctor within".

who considered that health is the state where the person's body, the environment and his or her behaviour and lifestyle are in equilibrium or harmony. Physis acts on all activities in the body, from the lowest level of molecular movements within the cell, through the operation of every tissue and organ, to the highest level of integration of the body's many organ systems. It is also the driving force behind all protective mechanisms, from the immune system to the various detoxification mechanisms. Physis is in operation from the instant of conception to the moment of death. Tibb acknowledges the importance of Physis in both maintaining good health, and in its role of restoring it when the person is suffering from a disease. In this situation, all remedies provided by Tibb are aimed at supporting and encouraging Physis, not repressing or damaging it, as some present-day medications and procedures do. Disease arises when Physis is unable to deal with influences outside its control – whether genetic changes, malign influences or pathological organisms invading from outside, or changes within the body such as biochemical processes which lead to cancer or diabetes, for example. Sleep, as one of the Tibb Lifestyle Factors, is one of the routes by which Physis is supported in maintaining harmony in the body.

Different people, different sleep needs

Although everyone needs sleep, the length of time asleep needed varies from person to person. Generally, children need more than adults, the elderly usually need less, and women need more than men. The amount of sleep needed by individuals in different age groups is shown in the table:

Time needed for a GNS	Time (hours)
Newborn babies	12 to 18
Infants (up to one year)	14 to 15
Toddlers (one to three years)	12 to 14
Pre-school children	11 to 13
Children (5 to 18 years)	8.5 to 11
Adults (over 18 years)	7.5 to 9

People, who are sick, or convalescing from illness or surgery, also need more sleep. The need for sleep increases if the person is carrying out more mental or physical activity.

In Tibb, the amount of sleep needed by different persons is, to a great extent, determined by their *temperament*. The dominant sanguinous temperament requires between six and seven hours' GNS to function at its best. The dominant phlegmatic temperament, by contrast, needs more (eight hours upwards), whilst melancholic and bilious temperaments need less (around five to six hours).

Time needed for a GNS	Time (hours)
Adults (over 18 years)	7.5 to 9
Sanguinous temperament	6 to 7
Bilious “	5 to 6 hours
Phlegmatic “	8 hours
Melancholic “	5 to 6 hours

Problems resulting from poor sleep

We now know that over the longer term someone plagued by poor quality sleep is vulnerable to a host of disorders. Lack of a GNS prevents Physis from functioning properly, so that the normal harmonious balance in the brain is distorted. This can encourage the development of increased daytime high blood pressure, heart rate and glucose intolerance (the precursor of type 2 diabetes). We also know that too little sleep is likely to increase the risk of heart attack, stroke, and coronary heart disease. There is also an emotional price to pay: chronic sleep deprivation is associated with depression, changes in appetite and attention deficit disorder in children.

If a person habitually sleeps badly, mood and brain performance will be affected. Important functions like day-to-day learning, problem solving and planning are impaired, as are concentration, alertness and attention span.

Chronic sleep deprivations can double the risk of metabolic syndrome – high blood pressure, raised 'bad' cholesterol, weight gain and glucose intolerance. These conspire to increase the risk of diabetes.

Chronic sleep deprivation is widespread, and has an adverse effect on industrial performance, productivity and motivation.

Poor quality sleep, because of diminished Physis activity, can disturb a person's hormone balance. For example, cortisol secretion from the

Chronic deprived sleep is the royal road to obesity and diabetes. Obesity and sleep deprivation are interlocking epidemics.

adrenal gland normally surges before awakening, which contributes to the 'get-up-and-go' feeling. Poor sleep, however, suppresses this surge, so the affected person is loathe to rise, and feels fatigued throughout the day.

The way severely troubled sleep leads to major health problems is now known. Blood sugar falls markedly during sleep, and this triggers adrenaline release from the adrenal gland, which in turn mobilises glucose from the liver, so restoring normal blood sugar. However, the excess adrenaline leads to increased alertness and wakefulness, so perpetuating the poor sleep pattern. It also leads to the person becoming anxious.

An increase in a person's body mass often reflects a chronic sleep disorder. People who sleep less are more likely to be fat. This comes about because growth hormone secretion from the brain's pituitary gland is inhibited.

Workers who smoke, get migraines, are depressed, have hypertension or take little exercise are more prone to bad sleep.

This in turn changes the body's muscle/fat balance, so leading to irregular fat distribution – the beer-belly in males, and the pear-bottom in females. Sleep disorders also distort the appetite; this results in a yearning for sugary and salty snacks. Overweight, obesity and chronic sleep disorders are closely linked: and interfere with sleep and weight. Women who sleep less than five hours nightly are 2.5kg heavier on the whole than women who sleep seven hours.

Another major sleep behaviour is *excessive sleep*. In Tibb, this is associated with an increase in qualities of cold and moistness. This can harm the person's vital, metabolic and psychic faculties, leading to an overall

Up to 35% of adults have a sleeping problem. Often they are too tired to work properly. Computer, work stress, and taking work home are blamed.

reduction in vitality and an increase in fatigue. This explains the groggy, dull and lethargic features of excessive sleep. It also leads to disturbed digestion of food and general metabolism.

Poor sleep quality is often associated with *snoring*. Recent studies have revealed a substantial increase in the risk of cancer developing in affected people. This is linked to low oxygen levels in the blood, which seem to encourage the formation of blood vessels supplying early cancer growths.

Sleep and the elderly

Until recently it was thought that an elderly person needed less sleep (up to two hours less) than younger people. However, it seems that seven to eight hours' restful sleep are needed nightly. In Tibb, a good night's sleep is particularly valuable in the elderly person as it restores moisture needed to overcome the dryness associated with ageing, and allows Physis the opportunity to restore energy, repair tissue damage and expel toxins. Any shortfall in sleep duration, often due to the tendency to wake up more often, can be made up with short naps. This apparently does not disrupt night-time sleep.

Bringing sleep on

Many people use *alcoholic drink* as a sleep inducer. However, more than two substantial alcoholic drinks can do more harm than good. It may lead to sleep, but this will probably be fitful and unsatisfactory. The reason is that the alcohol in the drinks is metabolised to acetaldehyde, a toxic chemical which disrupts sleep. Also, alcohol is known to suppress REM sleep, which means that people who drink have poorer memory performance. Whilst studying, students should definitely not drink before sleeping.

Sleeping tablets are used by many people with real or perceived sleep disorders arising from illness, emotional upset or troubling events. The actual increase achieved for sleep duration is reputedly around 25 minutes per night. There is, however, a price to pay, in the form of impaired thinking, daytime fatigue and physical clumsiness. Tolerance to the hypnotic drugs over time usually leads to the need to increase dosage progressively. In addition, attempts to withdraw from the drug leads to insomnia – the very disorder the drug was meant to alleviate. This predictably leads to a return to the drug.

Sleep hygiene – the way to get better sleep

There are several tried and trusted tactics which can be adopted to achieve regular good nights' sleep. 'Sleep hygiene' is the collective term for these measures.

Bedroom details:

- **The bedroom.** Ensure it is suitable for sleep – well ventilated, warm, pleasant-smelling and suitably dark. Some people prefer some low-level light, especially in unfamiliar surroundings.
- **The bed itself.** This should suit the person – firm, level, silent, and firmly fixed.
- **Background noise.** Ideally, the room should be quiet. However, any disturbing or irritating outside noise can be mitigated by ear-plugs, low-level music, white noise or a small water feature.
- **Alarm clock.** Avoid loud alarm clocks, as they are very stressful. They sub-consciously tense the body.

Preparations:

- **Eating.** Before retiring, a light, low GI (Glycaemic Index) snack (fruit, nuts, whole-wheat bread) or hot milky drink helps avoid waking up during the night due to low blood sugar.
- **Drinking.** Avoid heavy alcoholic intake at night, and caffeine-rich beverages or soft drinks (the extent of negative effect varies from person to person).
- **Bathing.** A warm (not hot) bath before retiring helps. Adding a few drops of lavender oil adds to the benefit.
- **Relaxation.** Breathing exercises, praying, meditating, reading a non-fiction or non-violent book helps. A gentle massage, especially after a warm bath, and light isometric exercises also help.
- **Clothing.** Wear appropriate bedclothes, preferably comfortable and loose fitting. If necessary, wear light gloves and bed-socks in winter to avoid waking up due to the cold.

Person behaviour:

- **The routine.** Early to bed, early to rise is probably the best regimen, ideally at the same times daily, even at weekends or when on holiday.
- **Position in the bed.** Sleeping on the body's right-hand side is best, as this helps to complete any digestion of food which is still in progress from supper. It also lowers strain on the heart.
- **Sleep time.** The best time-period is from before 10.00 p.m. to sunrise. An hour before midnight is considered to be worth two hours after.
- **Quiet time.** Reviewing the past day, and preparing mentally for the next, often benefits by settling the mind.

Sleeping support:

- **Medication.** Check that any medication you are taking is not the cause of poor sleeping. Consult the package insert – especially for anti-asthma drugs and colds/flu remedies.
- **Herbal remedies.** Lemon balm and valerian will often help in troubled sleep. Try chamomile tea before bedtime instead of caffeine-rich beverages.

- **Separate bedrooms.** Sharing a bed can affect sleep badly, especially when people are older, or if the bedfellow is restless or snores. Give a separate bedroom (or bed) a trial run.
- **Other.** Don't lie in bed if unable to sleep; read for a while or drink tea, then return. Do not turn the bedroom into an office – no eating, phoning, watching TV or working on the computer, etc.

Benefit of a good night's sleep

Normal, good quality sleep, un-influenced by hypnotic drugs, allows a person's Physis to organise physical and mental rest, and to repair and rejuvenate in the physical, mental and spiritual domains. It is no surprise, therefore, that there are significant benefits from regular, quality good nights' sleep. Summarised below are a number of benefits which have been confirmed for regular GNS:

At the physical level:

- The risk of diseases of the heart and blood circulation is reduced.
- The onset of type 2 diabetes is delayed, or even prevented.
- There may be protection against the development and progress of some forms of cancer.
- The formation of facial wrinkles is delayed.
- Vulnerability to infection is markedly reduced.

At the mental level:

- Depression is less likely to develop.
- Job performance is enhanced.
- Physical skills are picked up more effectively.
- Psychological performance is enhanced.

Concluding remarks

The functions of sleep remain a mystery. Why do we sleep? There is no single acceptable theory. It may be to conserve energy; to allow body maintenance to be carried out; to exercise unused brain circuits; or to organise various brain activities. But we do know the effects of poor quality sleep on the body and the mind. Poor quality sleep is known to magnify stress-related disorders, including heart disease, digestive system disorders such as ulcers and constipation, and depression. We also know that severe sleep deprivation can weaken the person's immune system, possibly making him or her more susceptible to the onset of cancer. It can also adversely affect blood sugar regulatory mechanisms, leading in many cases to type 2 diabetes, overweight or even obesity. Even a poor night's sleep is known to dull the memory and impair physical and mental performance.

Tibb has long regarded quality sleep as a major Lifestyle Factor, and one of the cornerstones of good health. Its primary function is to provide protected time for Physis to carry out its myriad functions. A GNS is one of the simplest, most cost-effective and easily attainable facet of daily life that provides rich rewards in maintaining good health, helping recovery from surgery or trauma, and dealing with most chronic ailments.

Further reading

Bhikha RAH & Haq MA. *Tibb: Traditional Roots of Medicine in modern Routes to Health*. Mountain of Light (2000)

Online at: <http://www.world-of-lucid-dreaming.com/why-do-we-sleep.html>

Online at: <http://articles.mercola.com/sites/articles/archive/2010/10/02/secrets-to-a-good-nights-sleep.aspx>

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