

## ***Section 6—Deep Rejuvenating Sleep for Holistic Health***

Deep uninterrupted Sleep is as vital to health as food and water. Sleep is that precious time when the body repairs and rejuvenates itself. The growth hormone gets secreted during deep Sleep; it restores, and rejuvenates body cells, promotes growth in young, and slows down the aging process in adults. Inadequate Sleep weakens the Immunity, causes mental stress, and premature aging. Sleep deprivation is the greatest epidemic of modern times. There are several health problems associated with lack of adequate deep Sleep:

- ***Overweight and Obesity***—Sleeping less than 6 hours, staying up past midnight, and poor quality Sleep leads to weight gain. Late sleepers have a high level of the appetite hormone ghrelin and low level of the satiating hormone leptin. Late sleepers, therefore, get into a vicious cycle of overeating. Since healthy food is unavailable at late hours, they end up eating junk and fast foods. A long term sleep deficit of as little as 1-2 hours a day can lead to 10-15 kg weight gain.
- ***Weak Immune system***—It is a common observation that poor sleep leads to frequent colds, other respiratory infections, and worsening of asthma and Rheumatoid arthritis. Poor sleep also slows down the recovery from an illness. Melatonin, the hormone of deep sleep produced in the brain in response to Sunlight or bright daylight, is known to have an anti-cancer effect.
- ***Memory, mood, and mental health***—Sleep plays a vital role in memory, creativity, learning, flow and concentration, and mood. Lack of Sleep causes anger, hostility, irritability, headaches, migraine, and depression.
- ***Type 2 diabetes, Heart disease, high blood pressure***- Lack of deep rejuvenating Sleep raises the level of the stress hormones cortisol, and adrenaline. These hormones interfere with glucose utilization increasing blood sugar, increase heart rate, and blood pressure.

### **A Healthy Sleep-Wake Cycle**

Melatonin is the hormone of the deep sleep, and its secretion is under the control of the circadian brain clock. The light signal from morning sunlight or bright morning light sends a message to the Pineal gland in the brain to produce sleep hormone melatonin and also mood-elevating hormone serotonin. Sleep and mood hormones are intimately related to each other. That is why Insomnia leads to depression, and depression leads to Insomnia. The light and dark cycles of the Sunlight control the healthy Sleep-Wake cycle.



### Sensible Rules of Rejuvenating Sleep-Wake cycle:

- a) ***Wake up that follows a healthy deep sleep is spontaneous and does not require an alarm clock or human intervention.***
- b) ***Getting out of bed is swift and speedy after deep rejuvenating Sleep*** — The vitality of a well-rested body and mind does not allow for lingering in the bed.
- c) ***The ideal time for sleeping is between 10 to 11 PM to 6–7 AM*** - Deep rejuvenating Sleep occurs between the hours of midnight and 3 AM. To get there, one must sleep by 10 to 11 PM. Wake-up time in the morning controls the sleep time at night. If one wakes up by 6–7 AM, the sleep time naturally gets set at 10–11 PM.
- d) ***Do not take afternoon naps of longer than 30 minutes*** –Longer afternoon naps cause difficulty with initiating natural sleep at night.
- e) ***Physical activity during the day is vital to sleep at night***—More tired the body faster the onset of sleep at night. The physically inactive individual has difficulty falling asleep and staying asleep.
- f) ***Stay loyal to the wake-up time irrespective of the time you went to bed***-It is the wake-up time that controls the healthy sleep cycle.
- g) ***Switch off all the blue light devices 1-2 hours before sleep time***—Television, computers, and smartphone screens emit blue light, which interferes with the release of the sleep hormone melatonin in the brain. Melatonin is vital for deep rejuvenating sleep.
- h) ***Go to bed with a calm mind***—Reading a calming book and soft music is ideal.

- i) **Limit caffeine intake**--Avoid drinking tea, coffee, and caffeinated drinks after 5 PM.
- j) **Keep in mind that alcohol gets you to sleep faster but robs you off the deep rejuvenating Sleep** - Lack of rejuvenating sleep is the reason for hangover and headaches.
- k) **Do not indulge in Strenuous exercise after 7 PM**- The strenuous activity after 7 PM causes the release of excitatory hormones such as adrenaline, which interferes with sleep onset.
- l) **Keep dinner time before 8 PM**—Eating late causes indigestion and acid reflux. It also increases the body's core temperature, which interferes with deep sleep.
- m) **Ensure exposure to morning sunlight or bright natural light**—The morning natural light signal prompts the production of deep sleep hormone Melatonin, and mood-elevating happy hormone Serotonin in the brain.