## Sleep – why we need good sleep –

Your body needs sleep, just as it needs air and food to function at its best. During sleep, your body heals itself and restores its chemical balance. Your brain forges new connections and helps memory retention.

Your central nervous system is the information highway of your body. Sleep is necessary to keep it functioning properly, but <u>chronic insomnia</u> can disrupt how your body usually sends information.

During sleep, pathways form between nerve cells (neurons) in your brain that help you remember new information you've learned. Sleep deprivation leaves your brain exhausted, so it can't perform its duties as well.

Stimulants, like caffeine, aren't enough to override your body's profound need for sleep. In fact, these can make sleep deprivation worse by making it harder to fall asleep at night. This, in turn, may lead to a cycle of night time insomnia followed by daytime caffeine consumption to make up for the lost hours of shut-eye.

While you sleep, your immune system produces protective, infection-fighting substances like cytokines. It uses these substances to combat foreign invaders such as bacteria and viruses.

Along with eating too much and not exercising, sleep deprivation is another risk factor for becoming overweight and obese. Sleep affects the levels of two hormones, leptin and ghrelin, which control feelings of hunger and fullness.

<u>Leptin</u> tells your brain that you've had enough to eat. Without enough sleep, your brain reduces leptin and raises <u>ghrelin</u>, which is an appetite stimulant. The flux of these hormones could explain night time snacking or why someone may overeat later in the night.

Sleep affects processes that keep your heart and blood vessels healthy, including your blood sugar, blood pressure, and inflammation levels. It also

plays a vital role in your body's ability to heal and repair the blood vessels and heart.

## Help

- limiting daytime naps (or avoiding them altogether)
- refraining from caffeine past noon
- going to bed at the same time each night
- · waking up at the same time every morning
- sticking to your bedtime schedule during weekends and holidays
- spending an hour before bed doing relaxing activities, such as reading, meditating, or taking a bath
- · avoiding heavy meals two hours before bedtime
- refraining from using electronic devices right before bed
- exercising regularly, but nothing in the evening hours close to bedtime

