Did you know that the ancient Roman Gladiators and Greek Olympic athletes were known to sleep ten to twelve hours a night to prepare themselves? How many hours do you sleep per night? Is it good quality or is it restless? And do you wake up feeling refreshed and energized?

Modern research suggests that sleep is a better predictor of health and longevity than diet, exercise, or heredity! Researchers have found that skimping on sleep can greatly impair the body's ability to repair and rebuild tissue, aging you prematurely both physically and mentally. Consider the following -

- Decreased sleep is associated with increased levels of the stress hormone Cortisol and decreased levels of Growth Hormone. Growth Hormone deficiency can lead to reduced muscle mass and strength, increased fat tissue, and weakened immune function. (JAMA; Aug 16, 2000)
- Long-term sleep deprivation is associated with accelerated aging and increased risk of type2 diabetes, high blood sugar, obesity, and memory loss. But just one week of sleep-deprivation alters hormone and blood sugar levels, creating a pre-diabetic state in healthy volunteers. (The Lancet; Oct 23, 1999)
- During sleep, our brain restructures and consolidates memories, enhancing our ability to solve problems and become more insightful. (Nature; Jan 22, 2004)
- Sleep deprivation alters the hormones levels of Leptin and Ghrelin, increasing appetite, promoting weight gain, and slowing the body's metabolism. This may explain why sleep-deprived subjects have higher BMIs. (PloS Med; Dec $7^{\text {th }} 2004$ )
- When compared to subjects who sleep 8 hrs a night, women who slept 5 hrs or less per night had $45 \%$ greater chance of heart disease. (Archives of Internal Medicine; Jan 27, 2003)
- Sleep disruptions decrease the body levels of Natural Killer Cells, lowering immune function and increasing susceptibility to infections. (Psychosomatic Medicine; 1998)

Despite these medical facts, we live in a chronically sleep deprived society. Many of my patients come to the clinic with complaints like chronic fatigue, frequent colds and flus, diabetes, hypertension, "brain fog", etc.. All too often, they are "too busy" or too stressed out to get a proper night's sleep. In many cases, increasing the quality and quantity of their sleep would yield better healing results than any medication! As athletes striving for optimal health and sports performance, we have all the more reason to maintain good sleep habits. If you have difficulty falling or staying asleep, below are my " $\mathbf{8}$ Tips for Quality Sleep"--

1) Get to bed no later than 10 or 10:30pm. Our bodies naturally do most of its recovery work from 11 pm and lam. When asleep, this is the time when the liver and gallbladder dump out toxins, adrenal glands restore themselves, and growth hormone levels rise to promote healing of muscles and connective tissues.
2) Listen to your body. While most adults do best with 8 hours' sleep per night, each individual is different. Furthermore, your needs will change with the seasons, your age, and training volume. So it is up to you to find your own personal optimum!
3) Sunlight during the day, complete darkness in the night. The sleep hormone Melatonin is influenced by cycles of light and darkness. The easiest way to regulate Melatonin levels is to maintain a bright daytime environment, dim the lights 1-2hrs before bed, and create complete darkness for sleep (e.g. Use an eyemask).
4) Avoid caffeine $\boldsymbol{\&}$ alcohol. If you happen to be a slower metabolizer of caffeine, even a morning cup of coffee could linger in the system at nighttime. So if you have difficulty sleeping, try avoiding caffeine altogether. Alcohol might make you drowsy, but it also keeps you from falling into the deeper stages of sleep, where most of the body's healing and restoration takes place.
5) Moderate exercise; beware of overtraining. Regular moderate exercise has been shown to help enhance sleep quality. However during peak training season, be aware that insomnia can be a sign of overtraining.
6) Avoid big meals or large amount of water right before bed. Eating dinner too close to bedtime can make it difficult to fall asleep. Also drinking too much water right before bed may disrupt your sleep with frequent trips to the bathroom. On the other hand, good hydration is generally helpful for sleep. So it is wise to stay hydrated throughout the day but not drink too much right before bed.
7) Create a relaxing bedtime ritual and environment. Some ideas to consider - take a hot bath before bed; try journaling or reading a relaxing book to settle the mind; practice a short relaxation breathing meditation. Avoid watching TV too close to bedtime, especially the news or suspenseful violent shows! Make the bedroom a TVfree and work-free zone, and maintain a comfortable temperature (not too hot or too cold).
8) Seek medical help. If you struggle with insomnia and these simple tips do not help, then you should seek help from a qualified medical professional. Insomnia can be a symptom of medical conditions such as hormonal disorders, anxiety and depression, side-effect from medications, etc... Also, note that for the treatment of insomnia, there are highly effective natural supplements and herbal medicines which do not cause dependence or side-effects commonly found in conventional drugs. Naturopathic Doctors, Acupuncturists/Herbalists, Osteopaths (D.O.), Chiropractors, and Nutritionists are some of the healthcare professionals most well-trained in these natural medicine techniques.

Let us follow the example of the ancient Olympians, and honor our bodies' needs for rest and recovery to achieve optimal health and peak performance. I wish you good nights and sweet dreams!

