

## **Sleeping Beauty Is Not Just A Fairytale**

This past year I have attended several conferences on Neuroendocrinology and the effects of stress on human health. In one lecture given by one of my favorite colleague and speakers Brazos Minchew, MSc, ND, entitled "High Anxiety and Psychophysiology of Disease", he talks about common triggers and nutritional protocols for sleep disorders, premature aging, ADD/ADHD, mind-body immune suppression, and more. In his lecture he refers to what he calls "The Seven Healers". These seven healers include: 1) air, 2) water, 3) nutrients, 4) sleep, 5) play, 6) significant others, and 7) purpose. In the coming months I hope to address each of these topics, but in this article I wish to talk about sleep.

Why do we need to sleep?

- Sleep gives the body a chance to repair muscles and other tissues, replace aging or dead cells etc.
- Sleep gives the brain a chance to organize and archive memories. Dreams are thought by some to be part of this process.
- Sleep lowers our energy consumption, so we need three meals a day rather than four or five. Since we can't do anything in the dark anyway, we might as well "turn off" and save the energy.

According to an article in Science Magazine, (Porkka-Heiskanen, T., et al. 1997. Adenosine: A mediator of the sleep-inducing effects of prolonged wakefulness. Science 276(May 23):1265) :

- Sleep may be a way of recharging the brain, using adenosine as a signal that the brain needs to rest: "Since adenosine secretion reflects brain cell activity, rising concentrations of this chemical may be how the organ gauges that it has been burning up its energy reserves and needs to shut down for a while." Adenosine levels in the brain rise during wakefulness and decline during sleep.

Sleep defies definition. It is not an "altered state" and not really "resting", because many body processes are highly active during sleep. For example it is a prime time for growth hormone gH release among adults. The word "growth" hormone is misleading, I would call it more of a repair and restore hormone. It effects almost every cell in the body, rejuvenating the skin and bones, regenerating the heart, liver, lungs, and kidneys, bringing organ and tissue function back to youthful levels.

Growth hormone is an anti-disease hormone that revitalizes the immune system, lowers the risk factors for heart attack and stroke, improves oxygen uptake in emphysema patients, and prevents osteoporosis. It is a very effective anti-obesity hormone, stimulating the metabolism to youthful levels, re-sculpting the

body by selectively reducing the fat in the waist, abdomen, hips, and thighs, and at the same time increasing muscle mass. It may even be a powerful aphrodisiac, reviving flagging sexual potency in older men. It plays a part in restoring the elasticity, thickness, and contours of youthful skin; reversing the loss of extracellular water that makes old people look like dried-up prunes.

Sleep is defined as 5 – 7 cycles a night, which includes 70 – 90 minutes per cycle. It is important to know if you are getting enough sleep. Here are some of the signs of sleep disturbances, and adrenal stress:

If you go to bed and you fall asleep within 5 – 15 minutes this is good, 15 – 30 minutes points to adrenal stress, 30 – 60 minutes, indicates mild insomnia and 60 minutes or longer indicates serious insomnia. If you wake once and return to sleep this is ok, falling asleep easily, but waking frequently through the night may be a sign of hypoglycemia. It is the first detectable sign of insulin resistance and may be associated with obesity. Waking early and unable to resume sleeping, e.g. 3:00 a.m. could indicate biochemical depression. Morning hunger is a good sign of gH release. Snoring may be associated with allergies or polyps. And finally, sleep apnea is a condition that kills 38,000 men in America annually. It is often a fatal trigger in congestive heart failure. It may be indicated by high a.m. blood pressure or waking with a panic attack.

If you suspect that you have any of these sleep disorders contact your health care practitioner. If you don't know for sure that you may have these problems there are a number of recommended sleep clinics that might be helpful. Check your local listings on the Internet or the phone book. There are many natural therapies that are available that you may also want to consider. For further information contact The Center for Natural Health. I also recommend the book "Tired of Being Tired: Rescue, Repair, Rejuvenate" by Jesse Lynn Hanley.

Sleep is nature's way of healing and restoring the body and the mind. Perhaps Sleeping Beauty was so beautiful because she got so much sleep.