

DEAD TIRED, (PART 2)

By Dr. Derek Conte

Last month, we explored the little-known, yet profound effects of sleeplessness presented on the NATGEO channel show, *Naked Science*, called *Dead Tired*.

We discussed the importance of the phases of sleep: deep sleep, promoting the growth and healing of the body and shallow sleep (dreaming), promoting the healing and integration of the mind. We saw that if we do not give the brain a chance to rest, it will shut down like a computer low on batteries to protect and restore itself. To this end, the brain will force brief states of unconsciousness on us while we are awake called, "micro sleeps". Driving under these conditions is extremely hazardous and leads to thousands of accidents.

This month we will consider the pathologies caused by sleep-debt. Dreaming is essential in integrating learned information and solving problems - functions so critical to our survival that dreams will be forced upon us during waking hours, creating an hallucinatory state. These perceptual distortions resemble those seen in schizophrenia. Continued sleeplessness can even bring on a state of psychosis. (In psychological warfare, sleep-deprivation is used to destroy and control the personality.)

Long after bad sleep patterns are established, symptoms of depression can appear as early as childhood. People who cannot achieve deep sleep are 5 times more likely to develop depression. In children, sleep-debt manifests itself as "hyper-arousal", an over-active state often misdiagnosed as ADHD. The child is then given the cocaine-like drug, Ritalin, the last thing the he needs.

The steady lack of sleep acts insidiously and destructively on one internal



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organ system after another, causing a chain reaction. Sleep-debt leads to hormonal imbalances, increasing hunger messages in the hypothalamus, even though we may have recently eaten. Since we can't recog-

nize that food is already onboard we eat ravenously, causing obesity. As we gain weight our necks thicken, disrupting airflow in the pharynx, and we become prone to sleep apnea. Sleep apnea puts a great stress on the heart due to poor oxygen delivery to the body when breathing is interrupted - up to 600 times a night! The heart must try, therefore, to compensate

by beating harder and faster, damaging the heart muscle in the process and increasing stroke risk by 400 percent. This global decrease in oxygen levels is a definite precursor to illness and disease.

The inability to achieve a deep sleep shocks our immune system and causes the body to act like it is under viral attack. Insulin production and insulin sensitivity are decreased, increasing the risk of diabetes by 50 percent. Diabetes is a disease that destroys vessels and nerves, doing massive tissue damage, causing blindness and tearing the kidneys apart.

Can it be that risk for all of these awful problems can be reduced merely by getting enough rest? Yes, it seems so. For it is during sleep that we heal and grow. But we may need to make hard choices in these modern times to get enough sleep. I, for one, have made a decision to do just that. Sleep well!

Dr. Derek Conte is co-founder of Chiropractic Specialists on Concord Rd. in Smyrna and is available to speak to your group, free of charge. Questions/Comments? Call: 404-784-6008.