

Chiropractic Newsletter Your Amazing Body

"Time to Make the Donuts!"

You may be too young to remember the Dunkin' (then known as Dunkin' Donuts) commercial that made the title line famous. It's 3:30 in the morning and an alarm clock begins to ring. You see an older gentlemen (Fred the Baker) fumble to shut the clock off with his wife in her hair rollers sleeping soundly beside him. He slowly opens his eyes and quietly mumbles, "Time to make the donuts." It spoke to the fact that Dunkin' went out of their way to make fresh donuts daily. The commercials were so popular that they aired multiple variations on the same theme for 15 years (from 1982 to 1997.)

March is the time of year when animals begin to awaken from hibernation. Of course, they don't have an alarm clock like Fred the Baker, they have to rely on internal clocks. Some animals get signals from the environment, for example the days getting longer or warmer, that trigger them to stir. However, many animals in caves or dark burrows don't get any environmental clues. What they do have is a part of their brain, called the hypothalamus, which triggers a series of chemical reactions. First, the hibernator may shiver, which uses energy and generates heat. Then gently they begin to stir and awaken.

You may not sleep for months on end, but you too have a similar mechanism that helps you naturally fall asleep and then awaken each day. Your internal clock is called the suprachiasmatic nucleus or SCN. It consists of two, small, paired clusters of about 10,000 nerve cells each located inside YOUR hypothalamus. Your SCN collects information from your eyes and reports to your brain accordingly. When there is less light, the

SCN sends signals to the brain to produce melatonin to help make you sleepy. AMAZING, right!?!

Important note: this is why your parents don't want you to use your phone or other electronics before you go to bed. The light confuses your brain into thinking that it's time to get up, then you don't sleep well, and that makes for a yucky tomorrow!!!

Additionally, your SCN controls your circadian rhythms, which are natural, physical, mental and behavioral changes that follow 24-hr cycles that regulate many of your body's functions and form the foundation of good health. Your SCN is a master clock that controls smaller, individual clocks that are found in nearly every organ of the body. They are vital to a properly functioning body. Synchronizing the clocks in the lungs, heart, kidney, and brain allows each of the systems of your body to work at their best. Your body is constantly responding to increases or decreases in different chemicals within your cells to ensure the proper function of your digestive system, your cardiovascular system, your immune and system, much more. AMAZING!!!

This is why it is so critical to maintain a regular circadian rhythm. Rhythm in the brain is synchronized to the outside world by light and darkness, but rhythms in the rest of the body are synchronized by eating time, daylight exposure, exercise and stress management. Communication is also a huge factor in your body's ability to function optimally. The most

significant part of good communication in your body is a healthy spine and nerve system. Sometimes, bones of the spine can misalign and disrupt the normal function of your nerve system (called a vertebral subluxation.)

Because your nerve system controls every other function of your body, these misalignments may lessen your ability to communicate as well as you should. Your family chiropractor can help you with this. Ensuring your spine is well aligned will also promote a good night's sleep and that will help you be your best when it's time to make the donuts!!!!

-By Judy Nutz Campanale, DC, ACP



