



Chiropractic Newsletter

Your Amazing Body

And the Groundhog Says...

Whether it's six more weeks of winter or an early Spring doesn't really matter because Punxsutawney Phil only gets it right about 40% of the time. It's true, groundhogs don't make great meteorologists. In their defense, it isn't easy to predict the weather, and honestly, it's a lot harder if you're a groundhog.

Of course there are lots of other differences between groundhogs and humans. Groundhogs hibernate all winter. You may think you hibernate in the winter too, but you are nothing like the groundhog. While hibernating, a groundhog's body temperature can drop from around 99 degrees to as low as 37 degrees. Their heart rates can slow from about 80 beats per minute to about 5. Their breaths per minute can go from about 16 to as few as 2. And while a groundhog will go about 150 days without eating while hibernating, it will only lose less than a fourth of its body weight. This is thanks to all the above-noted, energy-conserving measures its body can take. You really can't do any of that.

You though, are AMAZING and the fact that you maintain a steady state in all of these measurements and on an ongoing basis throughout your entire life, what's called homeostasis, is truly AMAZING!!! Homeostasis refers to your body's ability to maintain a stable internal environment despite changes in external conditions.

If your body temperature dropped even just a few degrees you would suffer hypothermia. A drop of 10 degrees would likely be severe enough to require treatment in a hospital. But don't worry!! When you go outside, whether it is in the bitter cold or in the blazing heat, your body temperature stays about the same. Your AMAZING body has an internal thermostat that maintains you around an average that's just right for YOU!!!

If your heart rate dropped even into the 30s, you might not get enough oxygen to your brain!!! That could cause memory problems, fainting, or even worse problems. But nothing to worry about here either!! Your AMAZING body has an internal regulator that keeps your heart rate at just that right pace for YOU. When you sleep, your heart rate may slow a little, but your body parts still require oxygen even at rest so your body ensures a steady heart rate to ensure your organs function at their best at all times.

Your internal mechanisms that maintain homeostasis for YOU are controlled by your nerve system. Your brain sends messages to your body parts via your spinal cord and nerves, and then your body parts communicate back via nerves. Your nerve system is so critical to you being your most AMAZING self, that most of it is protected by bone. The brain is protected by the skull and the spinal cord by the bones of the spine.

This is why it is so important that your spine be in good alignment. Misalignment of bones of the spine can distort the communication within the nerve system (called vertebral subluxation) and keep your body from maintaining homeostasis for YOU as it should. Your family chiropractor checks your spine for vertebral subluxation and adjusts you when necessary. This ensures that your nerve/communication system works more efficiently and allows you to maintain YOUR AMAZING steady state. So whether the groundhog sees his shadow

or not, see your chiropractor regularly and stay AMAZING!!!

—By Judy Nutz Campanale, DC, ACP

