



Chiropractic Newsletter

Your Amazing Body

Reduce, Reuse, Recycle...It's Not Just for the Earth!

As the 53rd annual Earth Day approaches (first observed on April 22, 1970), you are probably familiar with these three most famous words from the recycling era: reduce, reuse, recycle. They refer to how these three simple actions can have a huge impact on the environment. However, the concept of recycling is as old as life itself.

Our bodies are constantly renewing themselves—that in and of itself is **AMAZING!**— however, what's truly incredible is that each one of our cells is constantly remodeling and recycling. Think small, very, very small. This cellular recycling is called autophagy (pronounced Ah-TOF-a-gee.) The process is like cleaning the house and taking out the garbage but being mindful to recycle the paper, plastics, and glass. And just as shoes can now be made from recycled plastic bottles, the process of autophagy uses the “garbage” in the cell to make new building blocks and energy. **AMAZING**, right!?!

Our cells can become damaged from stress, aging, poor diets, and many other factors throughout our lives. These damaged parts become “garbage” in our cells. But don't worry, our cells come equipped with the ability to break down the garbage and recycle it. One part, in particular, the lysosome, can breakdown worn out cell parts, destroy invading viruses and bacteria, and can even help the cell to self-destruct if it is beyond repair. How **AMAZING** is that!?!

The lysosome will identify damaged or old proteins or organelles, engulf them, and then work to break them down into smaller sections or even into their building blocks called amino acids. Once they are broken down, they can be recycled and used to rebuild other proteins. Your **AMAZING** body recycles!! Proteins are the building blocks for cells, so autophagy encourages the production (really re-production) of new healthy cells.

The process of autophagy also promotes a healthy, stable state in your body; increases your immunity; and is critical in the prevention of disease. Cleaning up the damaged parts is important because if junk builds up it can become impossible to repair. That may not be a big problem for the cells that only last a few days, but some of our cells (like heart cells and cells in our brains and parts of our nerve systems) can and should last for decades. Defects in the cleaning-up process have been linked to the development of cancer, heart disease, infectious disease, and aging.

Autophagy happens when you are fasting for more than just a few hours, so for most of us, that's when we are sleeping. That's why it's not such a great idea to eat any time too close to bedtime. If your body is busy digesting a meal at night, it will have less time to “take out the garbage” in your cells. When that happens, trash can accumulate which can lead to disease.

Sometimes we may think that little things don't matter, like taking out the trash or recycling. But

little things really do matter, and little things add up. Just as every little bit of recycling helps the planet, proper recycling within our body helps us not just avoid illness but to really express our best health.

This is true of anything we do for our health. The best possible choice is to take care of your body when you are well. That’s why you should visit your chiropractor regularly whether you are experiencing any symptoms or not. Small

misalignments in your spine, which can go completely unnoticed, might lead to problems down the road. But more importantly, little adjustments over time can enhance your whole-body function, maximize your life expression, and help you live your best life. Wishing you a Happy Earth Day!!!

—By Judy Nutz Campanale, DC, ACP



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