



Chiropractic Newsletter

Your Amazing Body

Fireworks, Hotdogs, and YOU!

What did the dog say when he saw fireworks go off??? Nothing silly, dogs can't talk!! Here's another one: what do fireworks and hot dogs have in common with you?? The answer is actually quite a bit more than you would think!! Here's why. The same process that fuels those holiday explosions is going on inside a grill when you cook a hot dog and inside your body when you eat that hot dog!!

Packed inside fireworks is a mix of a few chemicals, one of which is powdered charcoal which is fuel for the firework. Charcoal, once used widely for outdoor grilling (though now often replaced with gas grilling), is still the primary fuel choice for those grilling away for home for example, at a campsite. Those lumps of charcoal are mostly carbon atoms all pressed together. When charcoal burns, the carbon reacts with oxygen to form carbon dioxide. In the case of your grill, carbon in the charcoal combines with oxygen in the air. That reaction releases energy in the form of heat and light which is used to cook your hot dog. Take away the oxygen and the reaction stops. Add more oxygen and it speeds up. That's why sometimes you blow on a fire to get it going better. In the event that there is a LOT of oxygen, something explosive can happen.

That's pretty much how fireworks work except they don't use oxygen from the air. Oxygen is available HUGE quantities inside the firework in the form of another chemical, potassium nitrate

or KNO_3 (the O stands for the oxygen.) While charcoal in your grill may take an hour or more to burn down, all that oxygen packed in the firework makes the carbon dioxide, heat and light explode out of the firework in a split second.

What's amazing is the explosives in a single ordinary firework only contain about the same chemical energy as a plain old hot dog. That is, when you eat a hot dog you are afforded the same amount of energy as in that firework. You and your AMAZING body just burn through the fuel in the hot dog in a slow and controlled way. Just like charcoal, a hot dog contains carbon and after you eat it, your body breaks it down slowly. Your body manages each step in the breakdown process to release only small bits of energy at a time so can do all the things you do in a given day.

Just like a firework, the process inside your body requires oxygen which is why you breathe it in. Without oxygen, your internal fire would go out. Just like a firework, the process inside your body produces carbon dioxide which you breathe out with every exhale. Just like the firework, the process inside your body creates heat but just enough to keep your body warm. And just like the firework, the process inside your body produces light although not very much. Very sensitive cameras have shown that our bodies actual glow. Your body is AMAZING!!

It turns out we have a LOT in common with fireworks than you might think. In fact, when our bodies work at their best, our lives can be one long, slow, well-controlled, beautiful display. Of course, it's important at every age, that your body has clear communication from your brain via the nerve system to run efficiently and effectively.

Misalignment of spinal bones can distort that communication and keep any or all of your parts from working the way it was meant to. Your family chiropractor can help you with that. He or she will ensure that your nerve/communication system works efficiently and allows you to be the most beautiful explosion of life possible.

AMAZING!!

—By Judy Nutz
Campanale,
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