



# The Health Nugget

## The Straight Truth

An antagonist is typically someone who is against us. Defined as an opposing, limiting, nullifying force, the antagonist does not carry a positive connotation. In the world of physiology though, a healthy balance of life could not be maintained without the antagonist and the agonist working together.

When you are ready to be totally honest with yourself, look into a full length mirror. With eyes closed, shake your arms and legs, roll your shoulders and then stand in a relaxed natural pose, feet shoulder-width apart. Now, open your eyes without moving your body, and take a good look. More than likely, what you will see, to some degree or other, is poor posture. Looking down from your stance, how many of your knuckles can be seen? From the side view, if an X was marked on your shoulder, and a plumb line hung from your ear, the line should fall right through the middle of the X, and then your knee. Have another assess where your plumb line falls. If your plumb line is off, or your knuckles can be seen, read on.

Perfect posture is so rare that typically when we see it we assume, “she must be a dancer,” or “he looks like he is in the military.” The rest of us pay for the hours spent in front of computers, books, sinks, at work, and lifting loads, with slight to dramatic deviations from what should be.

The muscles in our body are strategically wired so that for every action there is a corresponding opposition to that action, providing counteracting tension. Unfortunately, repeated actions, or strengthening of certain muscles to the neglect of others, places the body out of the position in which it functions best. Consider ‘Joe Hercules’ in the gym with bulging back muscles. He is noticeably strong. Yet, as a result

of the overdevelopment of obvious muscles to the neglect of the less obvious, his arms may have a gorilla like internal rotation, a sign of poor posture. Free range of motion and movement is hindered and there is a lack of support for neutrally positioned joints. In a typical elderly woman pose, where the plumb line from the ear falls two to three inches forward from the shoulder, similar effects are experienced. For every inch forward from where it should be, the head doubles in weight. Naturally, certain muscles will compensate for this while others are inactivated.

Agonist muscles are prime movers of a specific movement. Typically, synergists work along side of and aid the agonist in their job. Antagonists, on the other hand, are muscles that oppose or reverse a particular movement. They help to regulate the action of the prime mover by contracting slightly to provide some resistance. They give stability and smoothness to movement, and prevent overshooting the mark with excessive motion. Working together, these two oppositional muscle groups keep things, like our joint posture, balanced. When agonists or antagonists take over, there is imbalance. Symptoms of imbalance include back, shoulder and neck pain, tight muscles, disc and joint damage, fatigue, headache, affected breathing, slouching, misalignment. Additionally, the body typically compensates for bad posture with worsening posture. To achieve good posture, we need to think of agonist and antagonist muscles. Instead of limiting our mental focus in visualizing a straight spine, one should also focus on the chest being lifted up off the diaphragm, which will put the spine in a correct posture.

Chiropractor and professor Dr. Joan Young-Cheney educates her clients how to ensure and

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maintain good posture throughout life with a commitment of just four minutes a day. This is part of her program:

Begin with a few stretches:

While laying face up, interlace fingers behind the back of your head. Using arms only, lift head up off the floor or bed while exhaling slowly. Hold up until end of exhalation. Then slowly lower. Repeat 10 to 12 times.

While seated, keep the head slightly retracted. Slowly pull the top of your head over to one side with hand until you feel tolerable stretching in the muscles. Hold for one second and then release. Repeat 10 to 12 times.

While standing in a doorway, place your palms on the molding at waist level. Take a small step forward, and while keeping your chest lifted up, slowly stretch forward while exhaling. Hold for 10 seconds while continuing to breathe. Take a step back. Rest for 10 seconds and repeat 3 to 4 times.

After stretching follow with exercises:

Interlace your fingers behind your back, or use a towel to hold if your hands cannot clasp. Lift chest, not shoulders, roll shoulder straight back, keep wrists together if possible. Then squeeze the elbows towards each other and lift. Hold for 10 seconds. Relax for 10 seconds. Repeat 3 times.

Lay on your back on the floor with knees bent. Tighten abdominal muscles and push the back hard into the floor. Then squeeze the outer buttock muscles together, holding both groups of muscles tight. Slowly lift the pelvis (not the lower back) one inch off the floor. Hold for 10-20 seconds. Rest 5-10 seconds. Repeat 3 times.

Standing, lift your chest up from the breastbone to the ceiling and practice breathing from upper abdomen. This will help keep the shoulder and head

back over the center of gravity and remove weight from over the diaphragm to allow for proper oxygenation to tissue and joints.

Dr. Young-Cheney has seen amazing results with this program. Intentionally stretching and developing antagonist muscles will result in the unconscious work of these muscles of maintaining good posture throughout the day.

Nature displays this principle in myriad ways, of seeming opposites having a common goal and working together to achieve balance. In quantum size, we see energy, color, and work being released when opposite charges of electrons drop closer to the positively charged nucleus. "The coming together of opposite charges liberates energy that can be used to do work. For this reason, situations in which there are separated electrical charges of opposite sign have potential energy."<sup>1</sup>

If potential energy is found in a state of distance and diversity, then as a body of believers, we've got what it takes. But, as in nature, when we press together laying aside our minor differences, a power will be unleashed that this world has never seen before.

"Why, this unity with believers in and through Christ is the great strength of the church! The oneness, the love which through their faith and unity exists with God's people through faith in Christ, is a power."<sup>2</sup> One with Christ, diverse, and yet united with one another, lies the secret to unleashing the saving power of the Holy Spirit. And that is the straight truth.



<sup>1</sup> Marieb, Elaine, Hoehn, Katja. *Human Anatomy and Physiology*, 8th ed., Pearson Benjamin Cummings, 2010, p. 395.

<sup>2</sup> White, Ellen. *Sermons and Talks*, vol. 1, p. 194.