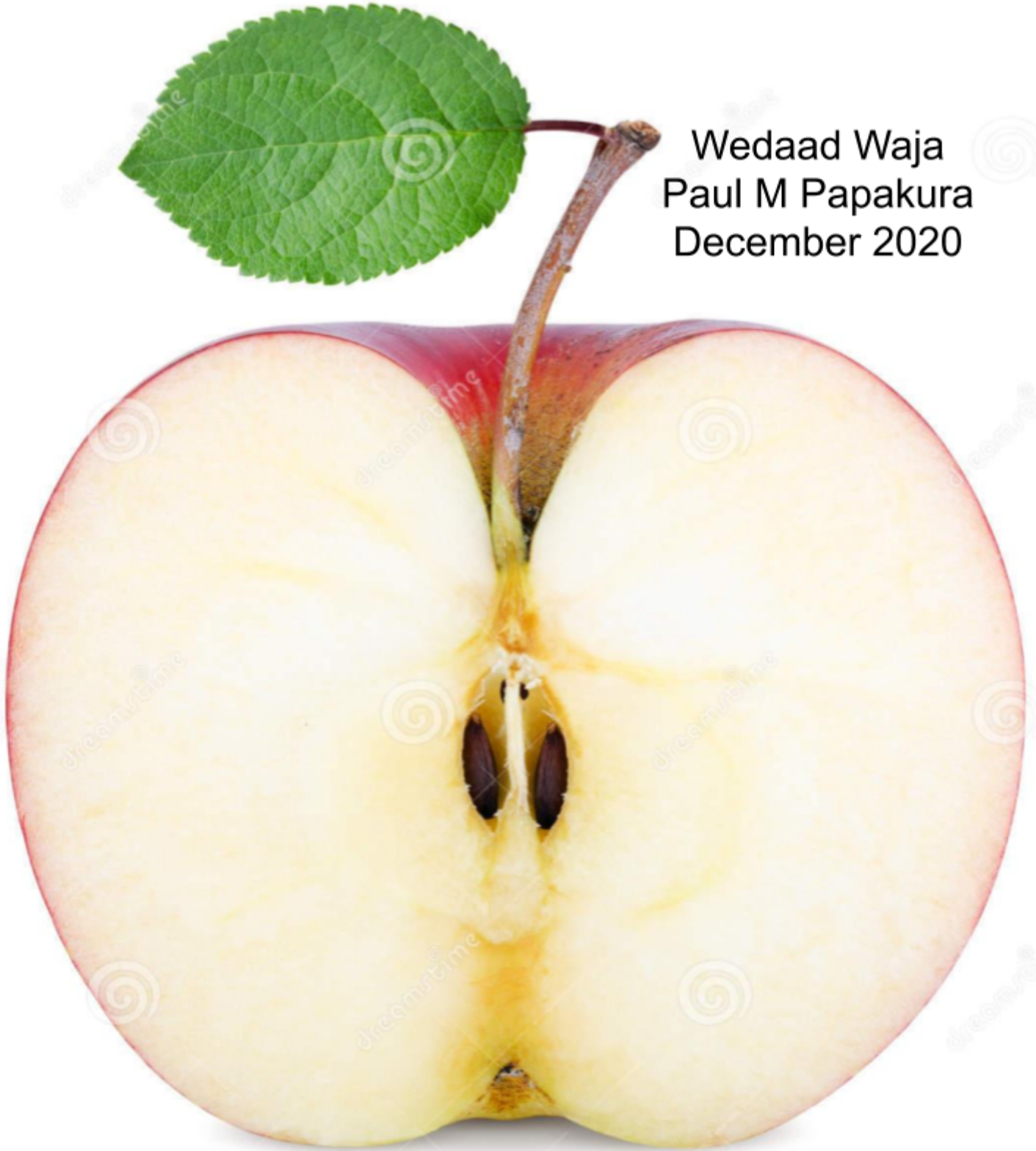


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My Lifesaver

27 years ago, my career as a personal trainer and aerobics instructor came to a sudden halt when I was attacked by a man in my house.

I was pushed to the ground, landed on my back with my legs in the air, giving my attacker the perfect position to kick my coccyx with a steel-capped shoe. I woke up in the hospital not being able to move at all. The kick sent a shock wave up my spine shutting down my neuromuscular system resulting in a state of paralysis from the neck down.

When your neuromuscular system shuts down, you will have problems with the nerves that control your muscles; your muscles; and the communication between your nerves and muscles. In my case, this was not a disorder or disease merely my body shutting down from the attack. [1](#)

Specialists were alarmed by the severity of my cracked tailbone. After all the tests were done, they gave me two choices, to live with it or risk having an operation to try and fix it with the possibility of being paralyzed from the waist down. I chose to live with it.

Personal trainers listen to their clients' needs attentively. They then design a program specifically for that client. Put a plan in place with achievable goals. Make sure to support their client for the duration of that program and at the same time condition that client to maintain those goals. I became my own personal trainer.

As I lay in my hospital bed, not being able to move and contemplating what next to do, lunch arrived, it wasn't mine, and on the tray sat an apple. My eyes just stared at the apple. After a while, a nurse came in, looked at the tray, and apologized because someone made a mistake and put another patient's tray on my table. At that time, I was not on solids. I asked her if it was ok to leave the apple on the table. She looked at me blankly and did just that. I asked myself, what makes an apple strong? I don't remember how long I lay there just staring at the apple and then the penny dropped and I realized what I needed to do to get my life back.

The core of an apple is the most important part. The strength of the apple comes from its core. My Inner Core, yes my Inner Core was the answer. If the four major parts of the inner core were strengthened, did they have the potential to give me a fresh start at a normal life? I had nothing to lose by trying.

I was breathing so diaphragmatic breathing was the only tool I had. I first started with basic diaphragmatic breathing then moved onto breath counting. Within a week I managed to strengthen my diaphragm, engaging my inner core enough to at least feel someone touching my fingers; arms, and legs. The specialists were surprised by my achievements and within the second week, I was sitting up and walking, with support.

I managed to beat the odds. Strengthening myself enough to live a normal life.

When people say “I have a gut feeling” they are advising their listener to trust their instinct or “inner voice”. In many ways, there is a lot of wisdom in those words.

When something comes from your gut, namely the heart, it will have depth and resonate towards feelings of recharging the entire body. It will ground the body to relax and translate into confidence and dedication.

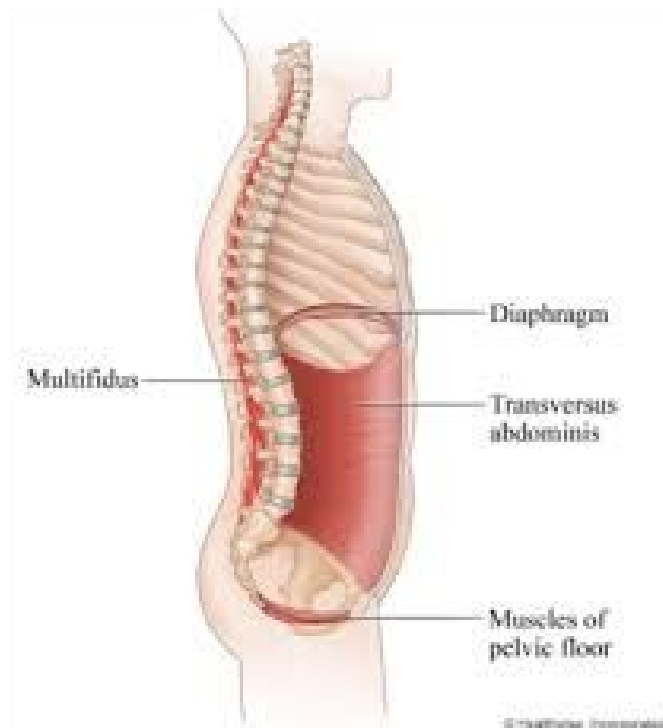
People that don’t take advantage of harnessing this often come across as if they are “holding back; unsure; undecided or even weak”

Breathing from your inner core helps you draw a deeper connection to your “gut instinct” helping you feel more calm and energized.

Did you know that your inner core contains 100 million neurons, and has been called a “second brain” by researchers. 2 It contains a complex network of neurons, neurotransmitters, and proteins that respond to stress and pleasure, much like the brain in your skull.2 Your gut literally has a mind of its own. It feels; it picks up good and bad vibes, it even picks up friendly or distasteful behaviors.

What you can’t see does not mean it doesn’t exist. When worked to its full potential it will help you achieve more power and stability. Your inner core is unlike no other. It is shaped like a cylinder, often forgotten, never seen, so therefore hardly trained.

The picture below clearly shows where the Inner Core muscles are.



Pelvic floor muscles act as the foundation and work with all the deep abdominal muscles allowing the deep back muscles and diaphragm to stabilize and support your spine. They help to control the pressure inside your abdomen dealing with the pushing downforce, as you do when you are exercising. 3 & 4

Having the ability to contract the pelvic floor muscles correctly can be difficult. A proper pelvic floor contraction incorporates both compressing and lifting movements without the contraction of other muscles such as the adductors and glutes. As well as marking an important transition point between the thoracoabdominal region and the lower limbs that are important for walking. There is loose connective tissue between the posterior border of the muscle and the coccyx. 3 & 4

While **Transverse abdominis muscles** run on each side of your torso towards the front. More importantly, they activate the core and stabilize the pelvis and low back during most movements. They play a key role in keeping your pelvis stable. When you cough these are the muscles that contract. 3 & 4

Generally, there are two ways to activate the Transverse abdominis muscles to improve core stability, bracing and hollowing.

Bracing refers to an isometric contraction (when tension increases while the length remains constant) of the transverse abdominis muscles by contracting the muscles of the abdomen and holding them tight without movement. When bracing, imagine that you are getting ready for a punch to your stomach. Aim to tighten the muscles without sucking in or expanding your abdomen. To activate the transverse abdominis muscles you will need to maintain an isometric hold in this position for 6 to 10 seconds. Release and repeat 5 to 10 times. 6

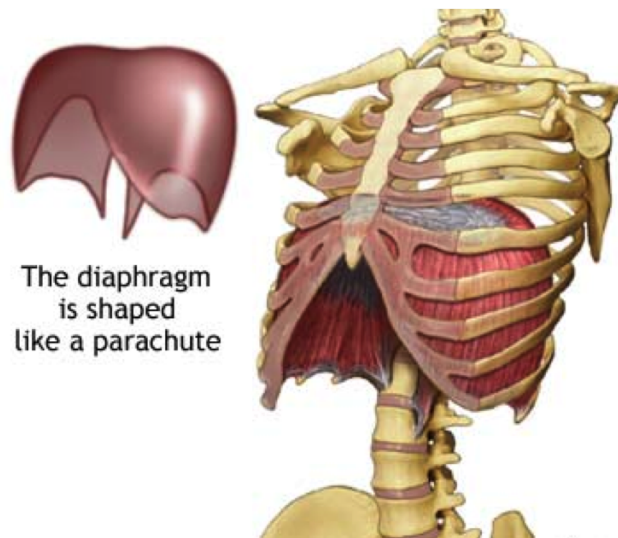
Hollowing refers to a technique to activate the transverse abdominis muscles as you suck in and compress the abdomen. To perform this technique, contract your abdomen and pull your belly button back toward your spine to make your abdomen as small as possible. Once you've completed this movement, maintain an isometric hold of this compressed position for 6 to 10 seconds. Release and repeat 5 to 10 times. 6

Bracing has been found to be more effective in stabilizing the lumbar spine than hollowing. Bracing results in the contraction of the entire core muscle group, and particularly the transverse abdominis muscles. You can practice bracing while sitting; walking or lying down. The bracing technique can also be used during abdominal and core workouts. Once you can activate the transverse abdominis muscles, you can progress to the plank; side plank; bicycle crunches; vertical leg crunch, and basic abdominal crunch to work all the abdominal muscles and the core. 6

The **Multifidus muscles** are a series of small, triangular muscle bundles located on either side of the spinal column that makes up the second layer of the deep back muscles. When they are strengthened, they help support the lower part of your spine and keep the vertebra strong. The main job of the multifidus muscles is to stabilize the vertebrae as the spine moves. The unique design provides the spine with extra strength. 3 & 4

Another reason as to why the multifidus muscles provide more strength is that it tends to "co-contract" with the deepest abdominal muscles in front which is the transverse abdominal. Core muscles are noted for their contribution to spinal stability. The Multifidus muscles together with the Transverse Abdominis muscles and the Pelvic floor muscles all act as stabilizers for the lower back therefore allowing your limbs to move freely. 3 & 4

Your Diaphragm is your primary muscle used for breathing. The picture below describes its shape to perfection.



I have found that the most efficient effective way to train your Inner Core is to use Diaphragmatic Breathing.

With diaphragmatic breathing, the amount of air entering your lungs increases significantly. Allowing more oxygen to enter your bloodstream. Shallow chest breathing allows approximately 350ml of air to enter the lungs, compared to 4500ml that enters the lungs when you breathe diaphragmatically. 5

There are various forms of diaphragmatic breathing.

Basic diaphragmatic breathing is the simplest form. To perform basic diaphragmatic breathing, lie down on a flat surface, using a pillow to comfort your head and another beneath the knees. Pillows will help the body remain comfortable and relaxed. Place one hand in the middle of the upper chest. Then place the other hand on the stomach, just beneath the rib cage but above the diaphragm. Inhale slowly breathing in through the nose, drawing the breath down toward the stomach. The stomach should push upward against the hand, while the chest remains unexpanded. To exhale, tighten the abdominal muscles and let the stomach drop down while exhaling through the mouth. Once again the chest should remain motionless. Repeat this breathing exercise 5 to 10 times around three to four times each day. This will allow your body to adjust and feel energized. 7

Once you become comfortable with basic diaphragmatic breathing, you may now practice this exercise not only seated but standing in an upright position. When practicing diaphragmatic breathing in these positions, it is important to keep the shoulders; head; and neck relaxed.⁷

Training yourself to consistently breathe deeply while using your diaphragm will ensure that more air enters your lungs with the following additional benefits to your body. It improves the stability in the core muscles while strengthening the diaphragm at the same time slowing the breathing rate thus lowering heart rate and blood pressure, which in turn reduces oxygen demand as well as promotes relaxation. ⁷

Once you have mastered basic diaphragmatic breathing it would be time to move onto something more challenging.

Breath Counting is an advanced version of diaphragmatic breathing. To perform breath counting take one deep breath in and then exhale all of it to the count of four. The first count exhaled contracts your diaphragm, therefore, deflating the “parachute” pushing the air down. The second count contracts the transverse abdominis muscles, tightening the muscles in your abdomen. The third count awakens the multifidus muscles giving you an overall cylindered contraction. Lastly, the fourth count tilts your hip forward, engaging your pelvic floor muscles, grounding you, and giving you stability.⁵

Countless times you would have heard your instructors tell you while you perform your patterns, relax; faster hands; complete every movement before moving onto the next; don’t allow your shoulders to tense through the movements as well as finish every movement with power. ⁸

Mastering the art of diaphragmatic breathing will help you enhance everything you do as well as effectively engaging you in your activity.

The strength of my inner core and the concept of diaphragmatic breathing that I continue to practice daily, has helped me through my Taekwon-Do journey. Every moment in Taekwon-Do, to me, has four parts, my stances; what my body and arms need to do; my sine wave, and how I control my breathing. When I breathe in, inflating my diaphragm and allowing my body to relax, my “parachute” gives me the top part of my sine wave. When that breath is exhaled it flows down and contracts my transverse abdominal muscles which guide my upper body and arms into different positions. As that breath continues down contracting my multifidus muscles it helps me use my hips and once it reaches my pelvic floor muscles, it grounds me giving me extra stability. All those contracted muscles now push that breath back up and when released through my mouth it gives me speed and power.

Tools we use in breaking are merely messengers.⁸ For example, there are so many muscles involved in a turning kick break. We know that the ball of our right foot is the correct tool to use when executing a right leg turning kick break. The power from the glutes and quadricpep is transferred in a straight line down the leg to the ball of your foot because of the angle the leg is positioned in from the hip joint.⁹ The outer abdominal muscles, the lower back muscles, and the hip flexors are also used. ⁹ To compliment all these muscles I use my inner core muscles to give me extra stability; impactful power and increased speed for that cutting edge break.

Splitting an apple in half by twisting it with your bare hands with the core intact is nearly impossible. After using the right tools to remove the core of the apple making it weak and unsturdy, you can split the apple in half with ease.

Imagine your inner core as the core of an apple, strong; stable; powerful, and impactful, all unique tools to have to help us throughout our Taekwon-Do journeys. I draw strength from my inner core to help me with not only the physical challenges or aspects of Taekwon-Do but also the mental and emotional ones I face graduating from grade to grade. It gives me the inner strength to overcome life's challenges with resilience, perseverance, and tenacity. You don't have to be a giant to embody your inner strength. Listening to my "inner voice" connects my body; mind; heart and soul as one, in unison. My inner core has truly been my lifesaver.

To conclude I am sure you too, would want to cultivate your inner strength so that you can deal with anything life throws at you. Don't procrastinate or waste time thinking about it, start by strengthening your inner core.

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