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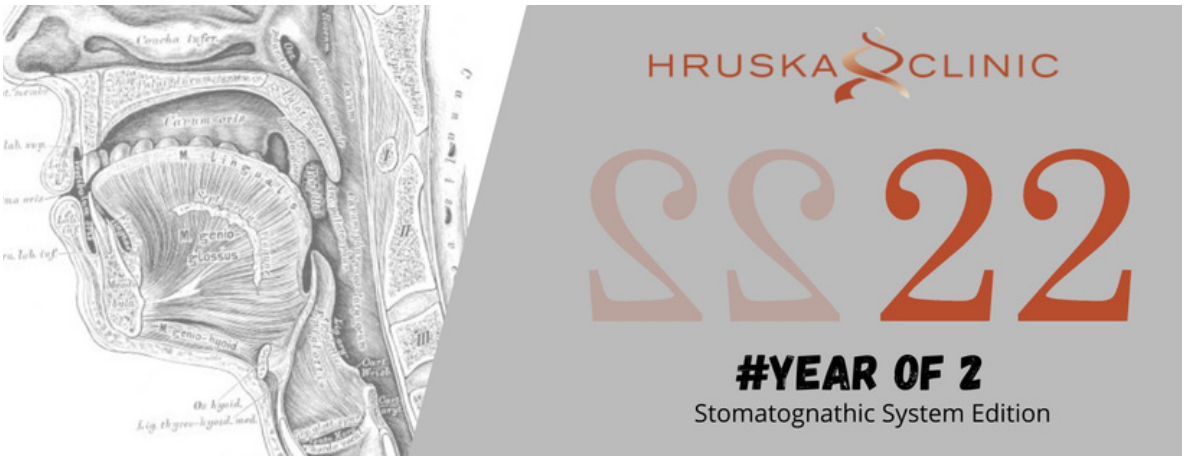
THE INTEGRATOR



The Stomato- "what"? System

We've had a busy summer at the Hruska Clinic with treating patients and the recent hire of our newest therapist Ann Simsar to the mix. Things are going well, and we hope you all have had a great summer as well. It's been awhile since we have done a newsletter but as a quick reminder in the year 2022 we are highlighting the fact that we have 2 sides of our body that need to work together to provide effective, efficient movement and function AND the fact that we believe our body has normal predictable patterns of asymmetry that predispose our 2 sides to work and behave differently. With the understanding we have of these patterns through Postural Restoration science and application, it allows us to better manage the dysfunction that occurs when your 2 sides stop working well together.

This spring the Postural Restoration Institute hosted their annual symposium on the management of The *Stomatognathic* System with Ron Hruska, our own Jason Masek, and Dr James Carlson, DDS (a dentist) as the speakers. For you non-Greek speakers *stomatognathic* refers to the mouth ("stoma") and jaw ("gnathos"). The stomatognathic system is comprised of the teeth, the bones of the jaw (mandible and maxilla), the tempro-mandibular joints, and the muscular, nerve and vascular systems associated with the mouth. The stomatognathic system functions for chewing and swallowing, speech, respiration, and in maintenance and posture of the head, neck and mandible. All of these things are the reason why we are interested in this system, because it can help set and regulate the processes of respiration and head and neck positioning which is so necessary for efficient whole-body function.

If you or someone you know has ever had jaw pain, so called "TMJ", you won't soon forget it. Often the focus on jaw or TMJ pain is the singular bone called the mandible or jawbone. But here in 2022 we aren't focused on singular bones we are focused on "2". It is the same for us when we see jaw pain.We don't focus on the one mandible, but instead focus on the more important temporal bones that make up your jaw sockets. There is one on the right and one on the left and they very much need to be balanced in order for the one jawbone (the mandible) that is hooked to them to be able to work well.
How do these bones influence jaw function? Well, most importantly the temporal bones (and all your cranial bones) move. Not like your arm bones move but they do rotate and wiggle, they move to adjust to atmospheric pressure, sinus pressure, and they do tolerate some degree of stress and strain. The problems start when the movement of one or both is lost or restricted. This positions one jaw joint in a different alignment from the other and that can affect how and what direction the jaw moves. Imagine a door with 2 hinges. If those hinges are lined up the door will open nice and smoothly. If one hinge is not in alignment with the other hinge that door will creak and may even have a difficult time opening at all. Anything that affects those temporal bones like neck or head imbalance or bite/tooth imbalances can influence your jaw as well as the jaw influencing the neck and rest of your body.

This is what makes us different. Even with jaw pain we need to make sure that the whole system is balanced always looking for the CAUSE of your dysfunction rather than just trying to treat your symptoms.

One of the major players of the *stomatognathic* system is the tongue. It's been said the tongue is mightier than the sword! Did you know there are 2 sides of your tongue that the tongue can become imbalanced when the body is out of alignment below it? The tongue is actually comprised of several paired muscles (one on the right and one on the left) that assist with airway management, chewing, swallowing, and speech.

The common human pattern of favoring the right side of our body for postural support, can cause the spine to orient to the right and create muscle and joint imbalances throughout the body. We have talked about this in relation to your hips, feet and pelvic floor. Remember this right dominant pattern is only a "bad" thing if you stay stuck here. If you remain in this position of right stance and right arm activity and your body is not able to alternate left and right, it will create imbalances throughout the body including your tongue!

When your tongue becomes imbalanced or overactive on one side it can affect your ability to breathe, speak, and swallow. At the Hruska Clinic, we counter this right-dominant pattern at all levels through having our patients get comfortable supporting themselves appropriately on their left leg, and work to re-balance spine and breathing mechanisms with left arm reaching and right arm reaching, as well as rebalancing the tongue and jaw positions (to the right) in this new pattern. We have exercise techniques to assist all these things if needed. If any of those areas, leg, spine, ribs, neck, jaw or tongue does not understand how to counter the dominant pattern it may be difficult for the whole system to stay balanced. Therefore, the long-term goal is to get our patients not only to alternate left and right with their body weight and to reach with both the right and left arm, but also for our patients to be able to chew food on both sides of their jaw and use their tongues in a restored more balanced way! This thought really can give us a whole new perspective on the power of the tongue.

Can you walk the talk?

Have you ever wondered how your brain knows what to do to keep you from falling over? There are receptors within our body that allow our body to sense its own position, balance, and movement. These receptors are in our feet, teeth, and joints to inform our brain about our physical environment and how we are interacting with it. These receptors work based on your nervous system being able to instantaneously accept and interpret information and fire a signal back to your muscles with how to respond. One of the biggest pieces of information you need is where the floor or surface you're standing on is. When you walk you are pushing into the ground/floor to sense what is going on underneath your foot. If the floor is soft or slanted or not there at all you will have to compensate so you don't fall.

The floor under your foot isn't the only floor we are interested in though. We often tell our patients that there are 2 floors (...remember its 2022) that your brain needs to sense. The sense of your top teeth (and especially back molars) in contact with your bottom teeth provides your brain a consistent, hopefully appropriate, sense of where your head and neck should be positioned at rest. This tooth contact in general is utilized by your brain as a "floor" to rest your head upon. If that "floor" is not in the appropriate position your head and neck position will be imbalanced. Sensing contact of the back molars is the equivalent of sensing your heels on the ground. The head uses the neurological input from the back teeth like a "floor" to sense stability and proper position. If the back molars do not touch on one or both sides, the head and neck will have to compensate for that instability of the bite. The brain relies on this sense from 2 floors to be accurate and appropriate for normal muscular stability with upright posture and balance. Poor occlusion or bite references as well as improper foot contact with the ground can lead to compensatory patterns of movement and posture that can eventually contribute to jaw pain, headaches, lower back pain, anxiety related issues or dizziness. So to literally walk the talk we need to ensure your 2 floors on your 2 sides are appropriately managed.