A Short Story (Part 4): The Evolutionary History Behind EXERCISES FOR TONGUE AND MINDFUL EATING

The Evolution of the Female Pelvis

“A Short Story Part 3” explained that we have a severe lack of information about female evolution, which underlies a severe lack of medical research on female needs, as well as little modern improvement in understanding fetal development and embryogenesis. As a consequence, the most vulnerable members of our culture (our children) do not get the type of attention that we need for positive social advancement. Our Western culture is strongly focused upon “making men wealthy and powerful” rather than generating healthy institutions which assist in human growth (of all types: educational, health-wise, culturally inclusive, etc.)

A bio-energetic focus with female perspective is at the heart of IN SYNC psychotherapy. Males are not excluded from IN SYNC; on the contrary, the same techniques and interventions which create psychological health in the female also impacts the health of the male and their children. After you have “resolved” the trauma aspects of your condition, we will begin the cultural psychotherapy component of IN SYNC. Then, all the prior background information will come together in your increased intuition and wisdom.

So, where do we start in this shift to the female perspective? It is a little bit like the “chicken and egg” question: Which came first? It is my intuition that the female pelvis holds the answer. Recall that the evolutionary focus has been upon “how man began walking”? And that this theory contradicts the female’s evolutionary development because this theory conflicts with the birthing process? The female evolutionary perspective presents that the tripedal walk (3 limbs walking and holding baby with one limb) was an intermediate stage to bipedalism (walking upright on 2 legs).

This tripedal stage also lead to fur reduction (baby did not have to hold onto mother hominoid’s fur, like the ape’s baby does) and thermoregulation (able to regulate body temperature) of the naked skin (no fur on human mother), with evolving of subcutaneous insulating fat layer (different body form of the human mother from ape mother). The female evolutionary perspective then considers that the mother and baby had to “huddle together” (to keep warm without fur) and that “hormonally defined rites of passage” were the social functions which “kicked out the adolescent male” from the “huddle.” (I mention this “rite of passage” as a “prelude” to the later IN SYNC education on the “human energy field” concepts and how “social evolution” may have created an increased sensitivity in females and children for “intuitive energy” knowledge of each other, a sensitivity not shared by many males who remained focused on “war and challenging for power” mentality.)

So, back to the idea that the female pelvis holds many mysteries about human evolution. It has been found that all women DO NOT have the same pelvis shape! A brief summary is this: As humans migrated from Africa, the shape of the female pelvis CHANGED in each different continent and area. The modern day approach to childbirth delivery is based upon the pelvic shape of the European female. The medical practices (theories driven by males) are being found to be very harmful to females and their infants from other races. (1)(2)(3)

In the least harm, the infant and mother have a stressful delivery, and in the most harm, the infant is killed by the wrong medical intervention. But, many infants (born to non-European mothers with Western medical birth methods) will have damage to the fascia network, which is activated by the pumping of the cerebrospinal fluid out of the brain during the birth process. Associated problems: learning difficulties, socialization problems, health issues, etc. In our current culture, these issues are interpreted as “racial issues” of inferiority, rather than being seen as harm done during birth to the infant by a dominant medical culture. (4)

So, as we move forward, from this point onwards, we must carefully consider the “scientific facts” that I will present as perhaps not being applicable to your specific biological issues. Are we dealing with biased viewpoints, based upon excluding the female perspective and excluding the human bio-energy field? Can we “clear out” the bias and salvage the human factors without the “theories” attached? So, as we engage in various interventions and techniques, we will work as a team to modify the practices so they are most effective for you.

The Dance of Life Begins

The old viewpoint, examining only the embryo, excluded the “dance” with the mother, and could not perceive the energetic interchange going on between mother and child. We begin with the “dance” from the moment of conception. At this point, we do not know “why” the mother may have the pelvis shape she has, but this factor must be incorporated in all future “dances” if we want a culture of healthy racially integrated children.

However, we do know that the myofascial network is involved at every step in this “energetic dance.” The mother’s pelvis area (regardless of racial heritage shape) is primarily constructed of various types of fascia, each with specific functions related to reproduction. During pregnancy and childbirth, the pelvis fascia system adapts to the needs of the growth of the uterus and the child. This fascia system connects the embryo to all the mother’s biological systems and functions. The embryo’s own fascia systems is one of the first developments occurring after impregnation. During the third trimester of pregnancy, the hormones influence the histological field of the connective tissue to allow the passage of the child. (6)

Pregnancy is a hyperdynamic, hypermetabolic, hypervolemic, hypercoagulable, diabetogenic, and low vascular resistance state which is unique to each woman, though with some regularities (known by some research). As every organ system of the mother is changed, so every organ system in the embryo responds with growth. (5)

Hyperdynamic: marked by abnormally increased muscular activity of organic origin.

Hypermetabolic: elevated resting energy expenditure level.

Hypervolemic: elevation of fluid (blood/water) volume.

Hypercoagulable: blood platelet volume distribution width increases significantly and continuously as gestation advances and the platelet count tends to fall progressively.

Diabetogenic: elevation in blood-glucose concentration.

Low vascular resistance: blood pressure changes.

Each of these conditions could be viewed as a medical disease/illness if occurring in a non-pregnant state. Why does the “dance of life” entail such radical changes in the mother’s body? These are the adaptations required at the cellular level (maybe even molecular level) for the evolutionary physiological changes required for the current environment (recall: theories of brain neuroplasticity): Hematological system (plasma volume, red blood cells, white blood cells, immunological function, platelets, coagulation and fibrinolysis); Cardiovascular system (increasing circulating maternal blood volume, fetal nutritional requirement, placental circulatory system, mediation of circulating estrogens, progesterone, and other vasoactive substances); Respiratory system (increase in intro-abdominal pressure, thoracic configuration changes, hormonal and biochemical changes to the respiratory cycle); Renal system (increase in kidney size, dilation of urinary collecting system, changes to renal pelvis); Digestive system (displacement of the gastrointestinal tract by the growing fetus in the uterus, intragastric pressures, poor nutrition, dental problems).

In other words, the mother and fetus engage together in changes which impact the fascia network, the vagus nerve system, and all body systems which maintain human existence. The mother’s body is “teaching” the fetus “how to be human” and maintain its life “in the current environment.” This fact is the reason why we now view the mother’s life history (from her own birth trauma, childhood development, medical needs, etc.) as having an impact on the new embryo’s gestation and development. The “teaching” (via bio-chemicals of each organ network, the fascia network impacts) of the embryo will “carry forward” in an evolutionary manner into this new human life. We now speak of “multi-generational trauma” as the concept of the “teaching” to the new human life. Some of your IN SNYC techniques are focused on this “multi-generational trauma” though we may use psychological terms such as “enmeshed family structure” or other social terms.

The Evolutionary link between the Tongue and Eating

Recall this explanation from “A Short Story (Part 3)”: So, why perform pelvic exercises for throat tension? A) Because the mouth and jaw are connected to the pelvic, beginning at day 15 as an embryo. During the gastrulation phase, two depressions form next to each other. One will form the opening for the mouth and the other will form the openings for the urethra, anus, and reproductive organs. These two depressions rest at the each end of the growing spine. B) Because the fascia line runs from the pelvic floor to the muscles in the jaw. Sounds formed by the jaw and mouth “vibrate” in the pelvic floor with contractions and relaxations. C) Because the pelvic floor musculature has an important role in respiration, in the intro-abdominal pressure as a primary expiratory (exhalation) muscle. You cannot vocalize correctly when the pelvic floor has dysfunction.

So, why perform exercises for the tongue and eating? Let’s look at the development of the fetus. When the fertilized egg travels down the fallopian tube to the womb, it grows into a ball of cells (called a blastocyst). Once the blastocyst reaches the uterus, it embeds itself into the uterine wall. The blastocyst then divides itself into two layers: one layer becomes the embryo and the other becomes the placenta. (7) The fascia is the first “organ” which develops as it becomes the “supporting system” for all the various functional organs (i.e., heart, lungs, etc) and bones and muscles of the skeletal system. It is from this fascia that the various cells develop into these functional organs. (8) The tongue is the first “functional organ” to form. It is a highly complex organ and its evolutional history was vital for the social development of humans. It was fundamental for the articulation of different sounds and its neurofascial connections impact the digestive, respiratory, and continuity of all movement to the pelvis. The development of taste sensitivity is closely related to the evolution of various human brain sensory capabilities. (9) In Chinese medicine, the study of the tongue is related directly to the study of the body’s health condition, and both fascia and acupuncture reflect this connectivity. (10)

The movement of the tongue begins as a reflection of the expansion and contraction qualities of the fascia network. This early movement generates brain activity and the corresponding neuronal communication throughout the growing body of the fetus. (11) (12) Then, as the pelvic area develops, with the diaphragm—the muscle dedicated to respiration —was differentiated from the parietal muscles of the neck region, the larynx became engaged in regulating respiration. This laid the groundwork for vocal movement. Evolutionary terms: This demonstrates that standing upright did not simply lead to vocalization and language, but that standing, chewing, and diaphragmatic breathing led to the current shape of the larynx in humans. In other words, once a person walks upright, chews food and breaths efficiently by primarily using the diaphragm, the lower jawbone, hyoid bone, and larynx begin to separate from each other.

To sum up, the vertical suspension of the larynx from the cranium via the lower jawbone and hyoid bone in humans freed the human larynx from body wall movements, inhalation movements, and lower jaw movements due to the infrahyoid muscles, and enabled true diversity of vocalization movements, which are stimulated by exhalation. However, this was only realized for the first time when erect positions and respiration stabilized, and these ensured free movement of the lower jawbone. If these are upset, vocalization is easily impaired. Moreover, emotional difficulties and coercion affect the muscles derived from the body wall more than the muscles derived from the branchia, which can have a negative impact on human vocalization since this disturbs posture and respiration and induces tension in the infrahyoid muscles. (13) (14)

IN SYNC exercises for the pelvis (in Step 10) removes tension which interferes with you being able to perform the exercises of Step Eleven for your tongue and mindful eating/smelling. This step 11 prepares you for the most important social skill, that of Speaking, which is the focus of Step 12.

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6234894/> (Human variation in the shape of the birth canal is significant and geographically structured)
2. <https://pubmed.ncbi.nlm.nih.gov/18378751/> (Racial differences in pelvic anatomy by magnetic resonance imaging)
3. <https://www.glowm.com/womens-medicine-series-amp.html?id=413053&name=vol-11--labor-and-delivery--the-biology-of-parturition-pelvic-anatomy>
4. <https://www.glowm.com/article/heading/vol-1--pregnancy-and-society--birth-systems-across-the-world-variations-in-maternity-policy-and-services-across-countries/id/415183#.YunZm3bMKUl>
5. <https://www.glowm.com/article/heading/vol-4--fetal-development-and-maternal-adaptation--maternal-physiological-changes-in-pregnancy/id/411323#.YunbqXbMKUl>
6. <https://www.ncbi.nlm.nih.gov/books/NBK518984/> (Anatomy, Bony Pelvis and Lower Limb, Pelvic Fascia)
7. [https://www.nichd.nih.gov/research/supported/HPP/research\_funding/human-placenta#](https://www.nichd.nih.gov/research/supported/HPP/research_funding/human-placenta) (Human Placenta Project: How Does the Placenta Form?)
8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7524024/> (Embryology of the Fascial System)
9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7524024/> (Embryology of the Fascial System)
10. [https://carolinanaturalmedicine.com/about/oriental-medicine/brief-overview-of-chinese-tongue-and-pulse-diagnosis/#](https://carolinanaturalmedicine.com/about/oriental-medicine/brief-overview-of-chinese-tongue-and-pulse-diagnosis/)
11. <https://www.frontiersin.org/articles/10.3389/fnbot.2018.00023/full> (Fetal Origin of Sensorimotor Behavior)
12. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4561979/> (Fascia and Primo Vascular system)
13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6390887/> (The Anatomical Relationships of the Tongue with the Body System)
14. <https://www.med.or.jp/english/journal/pdf/2011_04/241_247.pdf> (Comparative Anatomy of the Larynx and Related Structures)