THE POWER OF POSTURE
THE ULTIMATE GUIDE FOR BUILDING A FUNCTIONAL BODY

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I. Integrating To A New World
The purpose of this book is to use muscular structural integration to implement the physical aspects of biological stainability to the human body.

The concept of biological stainability is perhaps the most pressing issue presently facing us as humans, more so than any other point in our species’ existence. For the majority of our existence, we adapted to an environment that was much different to the one we live in today. We evolved into a world where our primary adaptations were biological in regards to our natural environment. We worked as tribal civilizations that would hunt and gather in a cooperative manner within our tribe, while competing with other species for survival. Due to the competition with other species, the slow progressive inclusion of technology would slowly start to influence our biological adaptations. For example: roughly 1 million years ago, man discovered how to use and manipulate fire. This discovery led a human to figure out how to cook meat, which invariably brought about a change in human evolution via the influence of diet. Since the changes at this point in time were still relatively gradual, humans were capable of making effective adaptations with very few negative byproducts. However, in recent times, making these seamless adaptations has proven to be a much more difficult task to accomplish. For example, if we fast track to 100 years ago, the industrial age was in full effect. This brought about a much different culture and environment than anything our species’ previously encountered. With agriculture, automobiles, electricity and other various technologies available to humans, it changed the scope of how we interact with our environment. Rather than walk, we drive. Rather than eat nutrient dense food, we eat factory farmed food. Rather than react to stressors with motion, we react to stress in stagnation. These are the types of issues most influential to human health at this stage of our existence.

Everything in our reality operates solely under the context of environmental interdependence. As humans living in this environment, we are not exempt from this phenomenon in nature. Even if we were to analyze light, it needs to operate within the confines of a gravity field. It cannot exist in isolation from the rest of its environment. This indicates that all things in the universe, including the human species, are interlinked deeply with their external surroundings. The universe itself runs on a set of rules that all things inhabiting its structure must abide by. When we analyze this from a standpoint of health, the person who can effectively incline their behavior towards the physical rules existing in nature is more likely to emerge as a healthy, adaptable human. The further humans decouple themselves from these natural laws, the more likely it is that they will fall victim to the symptoms of biological inefficiency (pain, illness, injury, etc.). Finding this point of harmony when adapting to the laws of nature is the ultimate guide to attaining a functional body that will perform optimally without pain and most importantly, sustain life for an extended period of time.

To grasp the base point of what efficiency means for our species, we must first
determine what functionality is relative to human biology. Every organism has a structural foundation written in its DNA. Learning what the foundation is for a human will require us to look back at our ancestral roots so that we can attain a better understanding of where efficiency lies relative to human biology. Only then can we have a starting point when attempting to condition a human towards good health and biological sustainability.

Structurally speaking, before we make a distinction upon what a human being is, we have to understand the causative mechanisms that make humans unique. From what we know through research, it is indicated that we are very closely related to the chimpanzees found in Africa. Although we see a resemblance in looks and behavior, we also see that we are obviously different in a few regards. The main influence that affects these differences are attributed to environment. Around 4-6 million years ago, the woodlands of east Africa were evolving into grasslands. The monkeys living in that transitioning territory dealt with a pressing issue that ended up being a pivotal point in shaping their evolution. For several million years, they lived in a habitat which was full of trees. They would swing from branch to branch (or tree to tree) with very little usage of walking on flat ground, since the trees in their environment were in close proximity to one another. This made movement on flat ground unnecessary. As the climate began to shift and the trees became sparser, the game changed for a portion of those monkeys. This change in environment invariably led certain monkeys from swinging on branches to eventually walking upright on two feet. For the next few million years, there were several different human hominids who moved in a bipedal fashion as a result of these changes. These hominids were able to evolve their structural path of movement integration and build a center of gravity into their musculoskeletal system (along with all the other systems). Over the course of a few million years, Homo Sapiens became the dominant bipedal human hominid at the top of the food chain due to the process of natural selection. Natural phenomena like this must shape the way we look at conditioning a human if we want them to run on optimal efficiency.

Humans have a biomechanical blueprint primarily catered towards standing and moving in a bipedal fashion (on two feet). Besides breathing, it is quite likely that standing and walking are the most common actions done by humans on a daily basis. This is the foundation we must work around if we expect to come to a definitive conclusion of conditioning a human body towards its biological strengths. Since standing upright is the fundamental element that shapes us as the human species, it has to be the base point of efficiency for any sustainable training system. Through my experience working with all types of individuals young and old, I have found that optimizing the standing position is the root of developing effective movement patterns, which in turn sets the foundation up for a neurologically and physiologically healthy human being. After the standing position has been mastered to its fullest extent, the tasks of bending down to lift, squatting deeply, jumping,
twisting, and throwing, along with many other bodily actions become streamlined almost automatically. Once this Human Foundation of efficient posture is wired in, the body becomes immediately more adaptable because it is operating efficiently from its biological base point.

Although the importance of posture may be acknowledged by most health/wellness practitioners, most are unaware of what an actual efficient posture is supposed to look like. I would attribute this to the fact that humans are unaware of how out of balance their body is in relation to the adaptations that have been made to the current environment. It is hard to measure one’s own distortions on what “normality” or “efficiency” are if our perspectives are skewed due to our inability to witness personal shortcomings, even for us health professionals. If we as the professionals are operating out of imbalance, it will become very difficult for us to determine what balance is. To the somewhat educated practitioner, it becomes obvious that there is a disharmony between us as a human species and the way we interact with our environment. To gain a deeper understanding of the crucial mechanisms of why posture is so negatively ingrained in a human body and why it is so unclear what efficient posture is, we will have to delve deeper into the rabbit hole.

All species have lived in scarcity and have made adaptations based on scarcity over a very long period of time. When we analyze the more complex life forms (animals) that have a nervous system, we begin to see that biology physically morphs to its environment. The stress from living in scarcity becomes the sculptor of an organisms mechanical structure. Stress is the ultimate mechanism behind shaping biology. If we expect to understand why we are so biologically decoupled from our homeostatic and foundational posture as human beings, we will have to examine how we orient to our stressors in scarce environments.

In order for an organism to adapt to anything, it has to do so within the context of the environment in which it inhabits. All organisms must adapt in accordance to a situational stressor, otherwise the organism will eventually go extinct. Neurologically, when natural life stressors affect an organism, it directly sculpts the way that organism will behave. The behaviors that are repeated over the course of time will encode in genetic sequences. When we look at this from the perspective of the neuro-muscular system in a human body, there is a pattern which will emerge that shapes the way we move, specifically when faced with stressful or anxious. For example, if a human being was in nature and was about to be hunted down by a leopard, their “fight or flight” mechanisms for survival would kick in at the point of attack, which delivers blood flow into the muscular system, promoting movement to escape from the leopard. This is the exact situation our bodies have adapted to over the course of a few million years. This is an example of how a stressor affects survival, when it is coupled with a specific type of movement response. When analyzing how we adapt to our current environment in conjunction with today’s stressors, it becomes evident
that it is a much different story than how we adapted to our environment previously.

The sedentary lifestyle is a common element of our current culture. In addition to being a sedentary population, our lack of physical movement is coupled with a constant, heightened stress response. It is now widely known that physical stress and psychological stress are one in the same in terms of physiology within a human body. The book “Why Zebras Don’t Get Ulcers” by Robert Sapolsky goes into great depths when explaining the many foundationally rooted problems that occur with poor adaptation in regards to psychological stress and the human body. Sapolsky gives the analysis of how a person can stimulate their own stress response via the use of human thought process. To put it this way, a human does not need an external force to go through the neural process of a stress response. This means your thoughts (conscious or unconscious) can influence your stress mechanisms. This becomes quite disturbing to me when I analyze people’s bodies in relation to our culture and how they adapt on a daily basis. Perhaps the most disturbing of all are the neural adaptations that are wired in when a person is in a seated position throughout the day.

Out of all the physical influences that could possibly affect posture and efficient movement, I have found that the most significant is sitting. To be more specific: sitting while simultaneously stimulating the stress response. This becomes more problematic when we assess the way our biological adaptations would be made in nature (as opposed to our current environment). If we look at the muscular recruitment patterns when a human adapts to a stressful situation in nature efficiently (such as being chased), it would rely upon muscular usage in the legs (mainly Gluteus Maximus), in conjunction with the core stabilizers along with the rotationally dominant muscle systems. This web of musculature explains how the human organism can optimally leverage its own body to sprint if it was operating from an efficient base point. When analyzing and working with a wide variety of people, I have observed that they fail to make these neural associations when attempting to engage in a function as rudimentary as walking (let alone a dynamic functional movement). Why does this happen? It is quite simple. When we are in a seated position while under stress, we are going to stimulate the musculature in closest proximity to an activation. This means if I am in a seated position and my hip flexors are in a shortened state, it is likely that when I stress in that given situation my neural associations are going to hardwire stimulation to the hip flexors in an attempt to adapt to the stressors in that environment. If we repeat that process for hours, years or even decades, the brain then ties in new associated responses, handing out new tasks to a set of integrated muscles that do not work well together. This consequently creates a dysfunctional body which fails to utilize the efficient musculature it took millions of years of evolution and optimal adaptation to associate. The problem of associative neuromuscular dysfunction then kicks in...
to full gear affecting the body when it is attempting to utilize integrated muscular function during simple tasks of movement. These poor reactions will definitively lead to poor stress adaptations in a neuro-physiological fashion as well, thus leading to illness in all varieties. It ultimately comes down to this: the body is wiring its mechanics towards sitting in an attempt to adapt to a new environment. The problem is that this adaptation is way off from the ones made in our natural environment for millions of years. These attempts to adapt cannot be made functional because the changes are too extreme for the body to immediately change in its biological DNA structures. If it cannot adapt biologically to its environment, it will likely not survive and the byproducts of inefficiency will then become present. This underlines the importance of knowing where an organism needs to start from in terms of conditioning, but it also indicates that we must look at the current environment that they inhabit to get a clear understanding of what approach one needs to take to condition it towards balance. Essentially, if your method of application towards training and conditioning the human body is still wiring in the same neurological dysfunctions that are already wired in when sitting, it is likely that your training may be doing more damage than good.

The purpose of conditioning a human body is to make it more neurologically adaptable to stress and training systems need to adhere to this logic.

After witnessing so many training methodologies ignore the seemingly simple yet complex muscular involvement during a standing position, it became apparent to me why the industry as a majority is completely out of line with objective reasoning in terms of conditioning a human body. Everywhere we look, we see people doing an assortment of strange movements that “mix things up” without a specific purpose, in attempts to preserve their vanity in a socially projected perspective. We witness bodybuilders consistently put effort into making themselves bigger, when in reality it is likely that they are attempting to mask an internal problem. We witness enormous amounts of weight lifted in the name of developing “functional strength.” We see people attempting gymnastics type moves in the arena of “fitness” who are looking to test their body’s limits with these proprioceptively demanding exercises (and perhaps gain more attention). This is the question I have put forth: What is the point?

Every organism on the planet has a functional capacity to stand out. If we take a look at a cheetah, it has the capability of accelerating from 0-62 mph in 3 seconds, and it can attain a top speed of 75 mph. Looking at a Silverback Gorilla, it is rumored to be capable of lifting 10 times its own bodyweight. Paragon Falcons have the capability of diving at 180 mph. If we were to compare the direct physical capabilities of humans in relation to most other animals in the kingdom, it would no doubt lead to us coming up short in several circumstances. We are a physically slow and weak organism with many direct limitations in terms of physicality. One thing is certain however: We as humans
are at the top of the chain. Although we
know this to be true, the next question to
ask would be: why so?

When comparing the capabilities of humans
relative to other organisms on this planet,
it becomes evident that our advantage over
other species is not physical. Since we
are often times the weaker and slower of
existing species, it has led us on a path to
developing a skill other species have yet
to attain: the ability to innovatively create
new things. The point in which a monkey
decided to walk upright on 2 feet not only
changed the structural path for movement,
but it also changed its capacity for brain
function. Walking on 2 feet enabled the
upright standing monkeys to utilize the 2
limbs of their upper body, which in turn
fostered the ability to make tools. Millions
of years of simultaneous technological
and biological progression since that point
causled the development of a part of the
brain called the neo-cortex. This part of the
brain is what distinguishes the behaviors
of mammals from reptiles. Although
the neo-cortex is a distinguishing factor
for all mammals, humans have a much
more enhanced and developed neo-cortex
in relation to other mammals. A highly
developed frontal lobe has given humans
the capability of developing more advanced
levels of mental adaptation. Our neo-
cortex has been the override switch for the
impulsive limbic brain and reptilian brain
structures beneath it. The Neo-Cortex
enables us to plan and react to situations in
an intentionally strategic manner (whether
it’s social, scientific, etc.) For example:
Let’s say you are driving in traffic and
someone cuts you off. You get absolutely
enraged and begin to tail gait this person. In
this frame of mind, you are thinking about
how much you would love to crash into
this person, but at the same time, you also
know the repercussions of committing this
act. The part of your brain which enables
you to understand the consequences in
order to strategically adjust your behavior
is your neo-cortex. If we look at this from
an evolutionary standpoint, we can imagine
how a smarter monkey will develop the
technology for a gun for the purpose of
dominating another monkey, as opposed to
using a club in a combative context. It is
this simple aspect in our neuroanatomical
structure that distinguishes us from other
species, while leading to the proliferation
of accomplishments that our civilization
has put forth. We have a capability of
thought that no other species on this
planet has been able to develop. If we
can expect to condition a human being
towards their biological strength (in terms
of physical adaptation), then an optimal
conditioning regimen should be catered
towards developing and nurturing our
“higher brain” structures, due to the fact
that advanced cognitive abilities have been
responsible for our species success up to
this point.

When analyzing the true assets humans
possess based upon the information just
mentioned, it becomes clear that our
physical attributes are not fundamentally
responsible for putting ourselves at the top
of the food chain. Moreover, our physical
attributes are not at the root of what has
given us the capacity to create the reality
that surrounds us today. If we take a look
around ourselves, we see automobiles,
toilets, irrigation systems, electricity, light bulbs, houses, supersonic jets, maglev train systems, satellites in outer space, internet, computers, smart phones, and skyscrapers, along with many other gizmos that come directly from the intelligence and ingenuity of the human species. No other species, regardless of strength or speed, can come remotely close to what a human being is capable of. If we were to have a battle of brute strength with any animal in the kingdom, we would battle them with a tractor and win every time. If we compete for speed with the fastest animals on the planet, we compete with automobiles or jets. The examples could go on for days as to how dominant the human brain is over all other species on our planet. The presence of a vast variety of training systems that apply so many nonsensical concepts of movement stems from a failure to understand the logic behind what truly makes us human. Since the practitioners do not understand this concept, they become locked in the box of their indoctrinated thoughts and ideals.

There are many who claim to optimize human performance through the utilization of their specific system(s). Although there are some out there who have addressed certain human elements of adaptation, I have yet to see anyone break it down to the root of the problem. About 10 percent of every system I have witnessed carries some practical use to the foundation of human biology. However, the problem is that other 90 percent is completely detached from the foundation of a human being. As a result, the physical training will eventually do more damage, or at best merely help fan the flames off of the imbalance until the body inevitably falls apart.

We have the Crossfit’s of the world implementing their style of metabolic conditioning type training mixed with gymnastics and Olympic lifting, in attempts to create a lean muscular body that can move functionally. There is a Primal community obsessing over how humans lived 150,000 years ago who look back at our deepest ancestral roots for the blueprint to physiological success in attempts to restore balance. There are dietary programs which insist that they are the saving grace of human health physiologically and hormonally via the use of an organic non-processed eating program. Yogis are pushing the notions of having a flexible body and putting emphasis on breathing in attempts to help center the body and promote physical balance. There are movement and pain management specialists addressing physical dysfunction so that a human is able to move comfortably without painful restriction. The list goes on. But one thing is certain in all of this: while they are all on the right track, I will also conclude that the rationale behind the aforementioned systems is extremely vague and in dire need of an objective referent based thought process revolving around practical application. Everywhere we look in the fitness industry, we witness intriguing theories which make sense under certain context, but these systems are missing the point of what a human should be conditioned towards at a foundation.

The purpose of conditioning a human body towards structural integration is so that it can be more neurologically adaptable to
stress. According to current knowledge, it is not the stressor itself that will kill an organism, but the reaction to the stressor that will. This means that two different people could encounter the same situation, yet have completely different physiological responses to that scenario. My concern is that we meet the physical stressors in our environment with an efficient neurological response, so that we are more apt to return to our homeostatic balance after the stressor has passed. To elaborate, if I decided to go on a sprinting session, I would adapt to the environment more effectively if I were to integrate intrinsic core stability into my movement, since it promotes the powerful and efficient musculature of the Anterior Oblique System and Posterior Oblique System. This type of neuro-adaptability will not only produce more force due to the high amounts of muscular recruitment in the body, but will also be sustainable in the long run. When stress is more evenly dispersed throughout the body, it will equate to less of the negative byproducts that are associated with stress. Conversely, if I was adapting inefficiently while running, I would be operating within the confines of muscular recruitment that is incapable of producing effective force (most likely the lower back, upper gluteal systems and neck). These types of compensatory movements promote a poor adaptation to stress and will typically lead to injury. To ensure that our adaptations are built from a solid foundation, it is crucial to first focus on obtaining the optimal neutral standing position, seeing as it’s the ultimate base from where a human will set up their structure.

It is my intention to clarify the missing links of application so that you may begin to understand the setbacks that are keeping you from achieving your potential for functionality and efficiency in your posture and movement. Utilizing the techniques in this book will enable us to optimize the body by addressing its fundamental deficiencies while unveiling the direct associations you have likely made throughout your life (perhaps unknowingly). Although it may be possible that every single person reading this book might not elicit the postural deficiencies which are outlined, it is likely that the majority of the material within this book will be extremely useful for setting up the groundwork for good functional movement dynamics. With all things said, the postures and compensations have been tested on many and have proven to be very similar from individual to individual. I thank you for your support in purchasing this book and wish you the best in your endeavors to maximize your own personal potential.

I proudly present to you:

THE POWER OF POSTURE
II. Why is Posture Important
PAIN

The majority of the American population experiences joint pain, and non-contact joint pain is likely an outcome of poor posture. Clinically speaking, pain is the number one patient complaint. However, pain still lingers for a majority of people even after seeking out medical care. This is where proper postural dynamics can help alleviate pain. When more musculature is recruited to support the body, it becomes more structurally sound. Aligning your posture in an optimal position eliminates the dysfunctionally altered length tension relationships of the core and spine muscles, consequently relieving the pressure placed on your disks which leads to peripheral muscular pain. For example, a rotator cuff problem can be directly attributed to a poorly functioning TVA which causes the thoracic spine dysfunction of kyphosis (rounding of the shoulders). This in turn puts the glenohumeral joint in a compromised position.

BREATHING

All organisms on this planet rely on the presence of oxygen for survival. An adequate oxygen intake is at the foundation of good health. If we look at the body in terms of needs, often times you will see many talking about the importance of hydration and nutrition. However, analyzing how well you can live without food and water it pales in comparison of how long you can live without oxygen. Good posture naturally promotes proper breathing. Excessive lordosis and kyphosis will alter length tension relationships within your breathing muscles, which make proper and efficient breathing impossible. When an optimal posture is attained, it becomes evident that the body has built in mechanisms for breathing correctly and efficiently.

STRESS

It has become increasingly recognized that psychological stress plays a key role in increasing the likeliness of acquiring chronic diseases that wreak havoc on the body. This is due to the fact that stress will stimulate the catabolic “fight or flight” response that is present within the sympathetic nervous system. Unlike animals that only turn on their stress response during life or death situations, humans are in a constant state of stress, thus unable to return to their homeostatic balance. When a body is continually bombarded with excessive stress, the body begins to neurologically wire in the physiology of ‘break down’ (catabolism). This will then create a dysfunction that inhibits the stimulation of the anabolic systems of your physiology. When you are effectively able to deal with your stressors and return to your homeostatic balance, chances are your livelihood will be immensely enhanced. By implementing good postural habits the body can transmit the stress response equally through all systems, which makes it more resilient to the stressors encountered on a daily basis. It is not the stress itself that will kill us, but
rather our response to the stressor that will. Aligning your posture will ensure that you will be able to physically cope with your external reality.

DIGESTION

Digestion itself is at the foundation of the majority of nutritional deficiencies. When discussing treatment of nutritional deficiencies, discussing diet and hormones is all too common. However, digestion is an important but often overlooked factor as well. If you eat the most nutrient dense food and your body is not able to assimilate the nutrients into its bodily functions, it will give no positive effect. Structurally speaking, poor posture will limit how well you will be able to assimilate nutrients from the food you consume. The digestive tract needs to have optimal alignment in order for stool to be passed through. Since most people have a posture that is out of alignment, it becomes difficult for the body to work around these dysfunctions. Utilizing effective posture building techniques helps align the spinal structures, which in turn assist the alignment of the digestive structures to promote optimal digestion. Since stress also affects digestion, it becomes clear how dysfunctional posture universally affects multiple problems the body encounters. When we are in a constant state of stress, our parasympathetic nervous system is suppressed, therefore shutting down our digestive system and sending blood flow and energy to the muscular systems. If a human was to eat the most biologically compatible food for its specific metabolism, and immediately after a Lion was introduced into the environment. If the human knew of the dangers of the Lion, the stress response would inhibit the functional capability to digest the food and assimilate the nutrition. This underlines the effects of any type of stress upon the human body. If the body is more adaptable to stress via good posture, it will automatically regulate the stress response efficiently, which enables better digestive tract function.

CIRCULATION

Poor circulation often times stems from poor cardiovascular and energy deficiencies. If your muscles and bones are out of optimal alignment, they may impinge upon essential nerves and arteries that facilitate movement and blood flow. For example, if your shoulder is out of position, it is likely that some of the arteries in your arm are inhibited which fails to allow full oxygenation of the arm. This further promotes dysfunction and inhibits you from achieving desired results. With good posture you’ll be able to open up your circulatory system to let all of your muscular systems receive the blood flow and nutrients that they require to optimally function.

AESTHETICS

Having good posture is also a physically attractive asset. A body with good postural dynamics will likely have equal proportion of musculature throughout the entire body.
Symmetry has been shown to be one of the foundations of attractiveness. When learning how to activate your deep core muscles you engage a muscle called the Transverse Abdominis. This muscle acts like a corset for your abdomen, allowing it to look smaller and more toned, while keeping your spine stable and in its optimal position.

**NON-VERBAL COMMUNICATION**

It is shown that 93% of all communication is non verbal. When we look at the implications of this, it becomes clear that an effective posture communicates and exudes confidence. Within time, people make associations of stress and emotion through their muscular systems, so they tend to wire in a lot of subconscious behavior through their postural dynamics. It is shown that your body language influences your brain patterns and can significantly change the way you react when communicating with others. If we eliminate the dynamics hindering efficient nonverbal communication, it will greatly enhance one’s life (whether it is in a personal or business sense).

**FLEXIBILITY**

Many people believe they are flexible, yet still have imbalances that make them inflexible in certain areas. Regardless of stretching and physical activity, it is still highly probable that a majority of people have tight muscles. A ballet dancer can have tight hip flexors which impedes a range of motion when they perform. I have learned this to be true work with several myself. This book will depict which muscles are likely tight due to your compensations. Once these tight muscles are released, your movements will be even more streamlined, whether it’s an everyday movement like walking or a specialized movement for sports. Good flexibility is important because it enhances movement. By having efficient length tension relationships via efficient posture, we can optimize functional flexibility which will then lead to effective athletic performance.

**ATHLETIC PERFORMANCE**

If we are able to maintain our functional dynamics when doing an exercise, then our performance is enhanced. Every muscle is similar to a rubber band, in the sense of elasticity. When you stretch a rubber band, it will return to its normal size and shape. However, if you continuously pull a rubber band past the point of where it can be stretched, the rubber band stays stretched out and doesn’t return to its normal size and shape. Your muscular system works in the same way. Poor posture is similar to the stretched out rubber band. If we set up the core foundations of all movement (posture) your body will automatically use the powerful musculature that needs to be operating when performing athletic movements. It is deficiencies in posture that will often lead to poor recruitment
patterns from major muscle groups leading to poor performance and poor integrated neuromuscular function.

**STABLE FAT LEVELS**

Attaining a stable body fat is one of the reasons people seek out fitness professionals. The problem with most fitness professionals approach is that they fail to get at the root of the dysfunction. When body fat increases, it is primarily a symptom of a structurally and physiologically inefficient body. An inefficient body, body does not operate in regards to prioritizing the reduction of body fat. It is possible that training very hard and dieting will yield results that most people are looking for in their training regimens. The question is whether or not they can sustain it. For the people who still have issues with decreasing body fat, it is important to note the body’s relationship with excessive amounts of fat is purely a result of a neurological deficiency communicating that the increased levels of fat are normal. Body fat was never a priority in nature for millions of years. There is no reason why it would be now. Following the traditional calories in vs calories out approach fails to adhere to this evolutionary light. Having a structurally sound posture and nervous system will get at the root at dealing with the symptoms of excessive body fat increases through the implementation of efficiency.

**ENERGY**

Most people will use energy supplements and drinks in an attempt to increase their productivity throughout the day. The problem with this approach is that we are attempting to treat the symptoms rather than address the issue of why we are feeling tired in the first place. Essentially, we address a neurological deficiency as a physiological deficiency. The problem with this logic is that the brain does not have a physiological response first. Before the pituitary gland can be stimulated, the brain must go through a neurological through process first. A structurally optimal posture leads to an optimal nervous system where the brain can wire in an appropriate circadian rhythm clock which releases hormones that give you energy and hormones that make you sleep at appropriate times.

Energy is a measure of how well a person is operating within a balanced circadian rhythm. Your circadian rhythm is a biological base point for balanced energy levels.

**LIBIDO**

It is shown that excessive amounts of stress by itself will significantly decrease a person’s sex drive. Since both the stress response and the sex hormones stem from the endocrine system, the better the body can regulate stress, the less problems it will have in regards to sexual performance. It is also important to note that sex can also be a physically taxing task for the body since it requires significant amounts of muscular integration and dynamics. For example, the utilization of the posterior pelvic tilt and anterior pelvic tilt are quite common in sexual encounters. The mastery of the pelvic maneuver with good postural dynamics will significantly improve ones ability in a sexual context.
III. What is an Ideal Posture
WHAT IS A DEFICIENT POSTURE

A structurally deficient posture is one with no stable base of support to work from. A body with no support, in terms of intrinsic core stability, will likely be flimsy and incapable of structurally integrating efficiency into functional movement in reality.

As you can see in the images depicting bad posture, the hips are forwardly shifted and the pelvis is anteriorly rotated. The main culprit for this postural deficiency is hip flexor tightness. When the hip flexors become overactive and shortened, it leverages the pelvis to rotate anteriorly. An anteriorly rotated pelvis causes the lumbar spine to go into extension, which causes the lower abdominal and gluteal muscles to lengthen. Within time, the lengthening of these muscles triggers dissociation, primarily in the gluteals, lower abdominals and core stabilizers. The synergists that assist in hip extension and core stability now take over for the dissociated muscles, in a phenomenon known as synergistic dominance. The gluteals will now start activating in the context of external rotation instead of extension, and the upper/mid abdominals will start taking over core function and core stability instead of the lower abdominals/TVA. Moving superiorly, the upper abdominals will depress the rib cage, putting the thoracic spine into flexion. When the thoracic spine is in flexion, it will cause a suppression of the transverse abdominis and diaphragm, leading to postural kyphosis and shifted breathing patterns. The body goes into kyphosis in a poor attempt to regain a center of gravity since it is out of position due to the synergistic dominance. Kyphosis leads to shortened upper abdominals and internally rotated shoulders which cause a protraction of the scapula. This protraction of the shoulders and scapula cause shortened pectorals, lats, subscapularis. Additionally, the scapular retractors and depressors such as mid/lower trapezius become lengthened. Since kyphosis alone cannot efficiently offset the dysfunctional core, the cervical spine also compensates by becoming protracted and flexed. This shortens the upper traps, sternoclidomastoid, scalenes and other nearby cervical musculature. This is the posture I have most commonly found in the majority of the people I have worked with. The deficiencies found in this typically will manifest into deficient movement kinetics as soon as a person moves. When the body starts from a flimsy standing position, the movements thereafter will also become flimsy.
LATERAL VIEW OF STRUCTURALLY DEFICIENT POSTURE

Starting at the lumbo-pelvic-hip-complex you can see that the hips are forwardly shifted and the pelvis is anteriorly rotated, which causes a sway in the lumbar spine. This can be attributed to poor gluteal activation. Attempting to activate the glutes when the hips are out of position increases the compensation that takes place within the body in order to make up for the underactive glutes. The forward position of the hips also leads to an ineffective recruitment of the lower abdominals. When the hips are in a forward position and the lower abdominals are lengthened, the thoracic must go into kyphosis in order to compensate for center of gravity, which shortens the upper abdominals giving the stereotypical slouched posture. In a state of compensation due to poor activity happening in the thoracic spine, the shoulders forwardly protrude, which causes a shortened position of the pectorals, lats, and subscapularis. Last in the structural chain will be the forward head posture, which is a result of the body trying to ineffectively stack itself. The forward head posture leads to shortened muscles in the neck, primarily the scalenes and sternocleidomastoid. As you can see, there is a pattern emerging as multiple systems try to play catch up with the shifted lumbo pelvic hip complex.
DEFICIENT POSTURE
(LATERAL VIEW)

FORWARD HEAD
Once the lumbo-pelvic region and thoracic region have been rendered to a weak point, the cervicle spine will then move into an anterior shift to compensate for balance, creating a new associative path for cervical stability and movement.

THORACIC ROUNding
When the lumbo-pelvic region have completely been put out of alignment anteriorly, the thoracic spine then has to round in an anterior position. This is what creates the rounding.

ANTERIOR PELVIC SHIFTING
This phenomenon will take place when the glutes are not capable of effectively recruiting. Since the glutes are weak do to hip flexor tightness, it inhibits gluteal function, in turn forcing the lumbo-pelvic region to shift forward in compensation.

POOR GLUTEAL ACTIVATION
At the foundation of our base (pelvis), we can see the gluteal systems completely out of place and incapable of securing an efficient point of activation. This is due to the restrictive hip flexors at the opposite end of the body inhibiting their full functional potential to activate.

ANTERIOR SHOULDER SHIFTING
As a result of poor spinal positioning, the humerus and scapulae will fall forward in compensation.

ONE MUSCLE TWO DYSFUNCTIONS
As the lower abdominals elongate due to lumbo pelvic positioning, the upper abdominals will tight as the thoracic flexes for compensation.
ANTERIOR VIEW OF STRUCTURALLY DEFICIENT POSTURE

The forward position of the hips caused by an anterior pelvic tilt affects the recruitment patterns of the glutes. Instead of working in their primary function of extension, dysfunctional posture leads the glutes to work in their secondary function, externally rotating the femurs. An association between gluteal activation and external rotation is apparent in both gait patterns and standing posture. An externally rotated femur also puts the adductors out of position to activate, thus weakening those muscles as well. Femoral external rotation in turn causes the feet to externally rotate, which causes the inner portions of the calves to become shortened and overactive. As mentioned before, an anterior pelvic tilt elongates the lower abdominals which causes a kyphosis consequently shortening the upper abdominals. Shoulders protrude forward due to the upper body’s attempt to stack itself. This causes an overactive serratus anterior, intercostals, pectorals, lats and subscapularis. This creates the palms backwards look seen in the majority of individuals in our culture. When looking at the cervical portion of the spine, it becomes apparent that the forward head posture stems from overactive cervical flexors and protractors.
DEFICIENT POSTURE
(ANTERIOR VIEW)

ANTERIOR SHOULDER
Over stimulation of this region of the body is commonly what produces the rounded shoulder palm backwards stance.

LOWER ABDOMINALS
Weakness is the lower abdominals is attributed to the mispositioning of the lumbo-pelvic region, due to hip flexor overactivity.

ADDUCTORS
As a result of having poor gluteal function happening due to hip flexor restriction, a new association must be made by the glutes (external rotation). With that imbalance comes a set of weak adductors.

ANTERIOR NECK
Once thoracic flexion and shoulder internal rotation are present in the body, the anterior cervical spine muscles will soon follow.

UPPER ABDOMINALS
The most influential region affecting posture in the upper body, the upper abdominals will be responsible for flexing the thoracic anteriorly, creating the rounded upper back seen in the majority of people in our culture.

HIP FLEXORS
Dysfunction in this region is at the root of the sway backs found in the people of our culture. When these muscles tilt the pelvis anteriorly it produces the swayed look in the lower back.

INNER CALVES
This area of the calves are typically overactive due to the positioning of the femurs when external hip/femur rotation is present. Poor pelvic function will lead to poor connectivity with the lower extremities.
POSTERIOR VIEW OF STRUCTURALLY DEFICIENT POSTURE

The compensations the body makes to deal with an anterior pelvic tilt also affect the lower extremities. The outer portions of the calf become overactive due to the fact that the inner portions of the calf become tightened. This causes the peroneals to become elongated and weak. Since the primary gluteal function (extension) is inhibited, the glutes rely heavily on their secondary function (external rotation and abduction) when recruited. This causes the lateral stabilizing system to become dominant over the prime mover (gluteus maximus), which in turn leads to the synergistic dominance of the hamstrings, hip external rotators, and lumbar extenders. Common muscles used in compensation are the gluteus medius, piriformis, gluteus minimus, bicep femoris, and inferior portion of the erector spinae. In terms of the thoracic region, since the internally rotated shoulders move the scapula into protraction, an elongation of the mid/lower trapezius occurs, which in turn causes a shortened position of the pectorals, lats, and subscapularis.
DEFICIENT POSTURE
(POSTERIOR VIEW)

POSTERIOR NECK
A rounded posture in the upper body is usually what leads to over-compensation of the muscles in the neck. Since there is no base underneath, this region will have to compensate for balance.

LOWER BACK
If gluteus maximus and transverse abdominis are not functioning optimally, the structures in the lower erector spinae will bare the load for stability.

THORACIC/SCAPULAE
When the upper body is in a forward rounded position, the thoracic spine musculature will stretch into a position where extension in this region is an impossibility.

GLUTEAL SYSTEMS
Over-active hip flexor musculature will be responsible for dysfunctional gluteal activation.

LATERAL STABILIZERS
When the gluteal systems are not working optimally, it is likely a person may begin to move with their feet pointed outward. External rotation in the hip and femur will reposition the bone structures, forcing the lateral stabilizer to compensate for movement.

OUTER CALVES
These muscles will eventually become dormant from excessive ankle supination happening within gait.
WHAT IS AN EFFICIENT POSTURE

An efficient posture is one that promotes stability from a point of effective muscle integration. When effective postural dynamics are in place, it will center around the 3 pillars of posture. Those pillars being the pelvic floor, transverse abdominis, and thoracic spine musculature. When these three pillars work in sync with each other, a biomechanically efficient posture will become present. To put this in perspective, posture is simple. When a body orients its stability around 3 major muscle systems, it leaves room for relaxation in all of the others. In ideal circumstances, the body will be as stable as a rock, but then flow like water when it needs to. Posture is efficiency and the 3 pillars are the simple groundwork of what will need to integrate if we can expect to attain homeostatic muscular stability.
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