

SECTION ONE - THE FOUNDATIONS

Intro to programme

The human body's remarkable complexity is fuelled by its primary objective: survival. To accomplish this, the body relies on a sophisticated network of sensory receptors that perceive and interpret the world around us - our 5 senses! These receptors allow us to see, hear, smell, taste, and touch, providing crucial information to the nervous system and brain which is responsible for determining whether a stimuli is safe, dangerous or neutral and ultimately how to respond to it.

The key receptors we look here at El Habitus are our feet, eyes, jaw and the interconnectedness within it all - the fascia.

At El Habitus we take you through an eye opening journey into who you are and how you work. We aim to teach you the common dysfunctions that modern society has caused our bodies and the subsequent compensations that have occurred in our movement and quality of life. Along with our body's natural asymmetries, a lack of movement, too much time hunched over a screen and wearing overly padded shoes has led to a pandemic of misaligned posture, chronic pain, mobility and mental health issues.

Our groundbreaking programme will help you to realign your body's main structures and give you the tools to harmonise your movement, mental health, and general well-being.

In order to utilise your body's full capabilities, you have to give it the chance.

Welcome to EH.

1.1 – FASCIA

What the f*scia?

An introduction - video title with EH logo

Put simply, 'fascia' is the thin casing of connective tissue that surrounds and holds every organ, every blood vessel, every bone, nerve fibre and muscle in place.

Whereas fascia was once thought to be just simply connective tissue to support muscles, joints and movement, it is now being understood that it plays a large role in transmitting the bulk of the electrical energy and messages throughout the whole body, this information fed to it through its autonomous nervous system.

From the moment our bones start developing in our mother's womb, the intelligence behind connecting everything together: the organs, muscles, bones and vessels, comes from communication through the fascia.

Fascia is therefore now described as any tissue that contains features capable of responding to mechanical stimuli. It is everywhere and everywhere, it wraps around every part of us.

Imagine the fascia as a mesmerising three-dimensional web that transcends our body, seamlessly connecting disparate parts like a beautifully intricate tapestry. This extraordinary network not only embraces muscles, bones, and organs but also extends its embrace from one shoulder to the opposite hip, wrapping around our entire being. Its interwoven strands intricately interconnect, enabling coordinated movement and providing structural support.

However, this incredible expansiveness also leaves room for potential entanglements. Just as a twist can occur when a thread is pulled in opposite directions, the fascia can become twisted due to imbalances, postural misalignments, or traumatic injuries. By exploring and unlocking our fascia, we explore and unlock the potential of ourselves.

And this is where our journey starts.

1.2 – FEET

The dying, obsolete, and forgotten entity

Once upon a time, in a society that had achieved remarkable technological advancements, a peculiar and unnoticed transformation was underway. People were constantly on the move, engrossed in their bustling lives, but little did they know that their bodies were quietly losing their most vital connection with the world around them.

It all began innocently enough with the rise of comfortable shoes. These shoes, with their abundance of support and cushioning, were a symbol of progress and convenience. However, people began wearing them in sizes too small, unknowingly subjecting their feet to compression and constriction. With each step they took, their feet became mere platforms, devoid of sensation and feedback.

The receptors in the feet, responsible for relaying crucial information to the brain about movement, balance, and the environment, gradually became dampened and ineffective and effectively stopped working. The brain was no longer accepting their sensory feedback as accurate and was simply ignoring it!

As time went on, the people of this advanced society became increasingly detached from their own bodies as their brains became unable to interpret the information from their feet. As a result, the people of this society relied heavily on their eyes to maintain balance, compensating for the lack of sensory input from their feet.

Closing their eyes became an unsettling experience, as they would lose their equilibrium and their balance - their feet had lost their ability to feel, leaving the brain starved of essential information for proper movement.

Movement is a remarkable interplay of various forces and energy transmission within the human body. From the moment we are born we are always connected with the ground and our feet serve as the foundation for movement, but they also act as the first point of energy transmission throughout the kinetic chain. This movement occurs through something called inertia.

Energy production within the body is a fascinating catch-22. The more force we generate, the greater the responsibility of the body to redistribute those forces efficiently – the difference between running and walking. It becomes essential for the body to optimize the kinetic chain and ensure that energy is effectively transmitted through the various joints and muscles.

Neglecting the feet and their role in this process can lead to an imbalance in force distribution, imbalances in signals to the brain, imbalances in weight distribution in the each foot, all placing excessive strain on certain joints and structures and potentially leading to pain and injury and a suboptimal quality of life.

The root cause could be said to lay in the very foundation of their bipedal existence. Evolving to walk on two feet is perhaps the most amazing feat of evolution to date and the intricate process of walking and maintaining balance, which had once been second nature, now posed a daunting challenge to the people. The body's primary objective, survival through bipedal locomotion, had been compromised as movement became arduous and painful. In fact, maintaining any balance, even when seated, had become a challenge for the people of this society.

With the feet unable to communicate effectively with the brain, the entire system of movement and stability had faltered – and now put almost all of it's trust in it's eyes for not only it's perception of life, but it's internal sense of balance and stability.

The feet is where the story starts.

1.3 – EYES

The portals to your soul

A limitless universe exists behind your eyes. Your brain processes trillions of input to coordinate your life and help you navigate the world. Most of this information comes from the two orbs that have inspired centuries of poetic minds and the brain relies on the eyes for 85% of all information of the world around you!

Yet, herein lied another problem. The society had developed an infatuation with screens and technology leading to a new affliction - hours spent fixated on digital devices caused their eyes to strain and struggle with various tasks. It struggled to focus on targets, it struggled with peripheral vision, but mainly it struggled with convergence, the process of aligning both eyes inwards to focus on a target up close, which the body uses to perceive depth accurately.

To present images of what we see, the two eyes must rotate using the muscles behind the eyes.

The brain uses this information (amount of rotation) as a cue to construe how far away an object is. This works by detecting muscle differences the convergence causes in our eyes and analysing that information to decide the depth.

Humans are binocular, meaning we produce two separate images and then the brain superimposes them together to create the image you see - imagine having to watch the world through two screens all the time, you would go crazy! But often, the eyes are not giving the same image – so what happens?

To reconcile the problem of conflicting images, the brain decided to amend people's posture, twisting the neck and shoulders attempting to receive two images from the eyes that it can match up.

Inaccurate signals from the feet and now inaccurate signals from the eyes was wreaking havoc on the brain and nervous system trying to make sense of the contradictory signals, using huge amounts of energy and exhausting the body and mind.

Struggling now with basic evolutionary survival mechanisms, we turn our attention to the mouth and jaw, crucial for eating, drinking, swallowing and breathing.

1.4 – JAW

The silent nervous system destroyer

While the jaw may not be commonly associated with sensory perception, it does indeed function as an important sensory receptor and plays a significant role in both the alignment of the spine and overall movement, as well as mental health. The jaw, comprised of the temporomandibular joint (TMJ) and surrounding muscles, serves as a vital connection point between the skull and the rest of the body.

So in the technocratic, bustling modern society, people went about their daily lives unaware of the impact the lack of sensory feedback from the feet and inaccurate pictures from their eyes were having on them. But also unaware of the fascinating connection between their jaw, tongue, mouth, nasal breathing, and the profound impact it had on their nervous system.

Chewing food had become a mundane task, often hurried, food not chewed properly or replaced by processed alternatives that barely require chewing. Little did they know that the act of chewing played a crucial role in stimulating the trigeminal nerve and promoting optimal nervous system function.

The intricate link between the trigeminal nerve and the vestibular system, responsible for balance and spatial awareness, remained a mystery to the masses. With the rise of stress and anxiety, many found themselves unknowingly clenching their jaws, unaware of the negative consequences it had on their mental well-being and overall health. Jaw clenching causes mental health issues and mental health issues cause jaw clenching!

The tension in their jaws spread like wildfire, affecting their facial muscles, posture, the quality of their sleep and the integrity of the sensory signals.

As time went on, a growing number of individuals began to experience an array of physical and mental issues. The connection between their poor oral habits, lack of sensory information from their feet, poor signals from their eyes led to an absolutely exhausted brain and nervous system – and all it was trying to do is balance itself upright and move!

At least it was still able to breath correctly – right?

Wrong.

Proper nasal breathing, facilitated by a well-aligned jaw and tongue posture, is essential for optimal health and function. Nasal breathing allows for the filtration, humidification, and warming of the incoming air, while also stimulating the release of nitric oxide, a potent vasodilator that enhances oxygen uptake and circulation.

The people couldn't even breathe!!!

Additionally, nasal breathing engages the diaphragm and stimulates the vagus nerve, promoting a state of relaxation and activating the parasympathetic nervous system.

The deterioration of their mental health became more apparent. They discovered that through neglecting proper chewing and allowing jaw clenching to persist, they had unwittingly disrupted the delicate equilibrium of their nervous system, but were still unaware of how it affected their breathing.

But come forth EH... Where we explore the absolute synergy, the link and connection and explore the power of the parasympathetic nervous system, and in particular the vagus nerve, our EI Habitus journey to physical and spiritual realignment.

QUIZ

Think of some questions and facts?!

SECTION TWO – SELF ASSESSMENT

Intro:

Embarking on a transformative journey requires a deep understanding of oneself, both physically and emotionally. It is crucial to engage in a comprehensive self-assessment to gain insight into our strengths, weaknesses, and areas of growth. By being aware of our body's needs, limitations, and sensations, we can make informed decisions and tailor our transformational plan accordingly. This self-assessment extends beyond the physical realm and encompasses emotional well-being as well. Recognizing our emotions, triggers, and patterns empowers us to navigate challenges, cultivate resilience, and foster personal growth. A self-questionnaire form can serve as a valuable tool in this process, providing a structured framework to explore various aspects of our being. However, it is important to approach it not just as a checklist but as a profound learning tool. Embrace the opportunity to delve into self-reflection, gaining valuable insights, and deepening your understanding of yourself. Through this self-awareness, you can embark on a transformational journey that is aligned with your unique needs, aspirations, and personal growth.

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2.1 – BREATHING

Intro:

As living, breathing organisms, breath is so important and is our main conscious link to our nervous system. Interestingly, our breath, specifically its depth and rate, can subconsciously convey vital information to other living organisms, including animals and fellow humans. The way we breathe communicates our state of being and can be perceived as a reflection of our overall health and emotional state. Our breath acts as a subtle language, shaping how others perceive and interact with us on a subconscious level.

Many are used to not only exercising in a stressed state, but living in it.

Proper breathing is a fascinating interplay of various structures in our body. To breathe optimally, our ribcage must expand in a 360-degree fashion, allowing for three-dimensional movement. As we inhale, not only does the front of the ribcage expand, but the back of the ribcage also opens up, creating space for the lungs to expand fully. The diaphragm, a dome-shaped muscle located beneath the ribcage, plays a significant role in this process. As we breathe in, the diaphragm contracts and moves downward, creating space for the lungs to fill with air. During exhalation, the diaphragm relaxes and moves back up, pushing air out of the lungs. What's fascinating and a big part of the El Habitus journey is understanding the diaphragm's importance extends beyond breathing alone. It also plays a crucial part in our posture. The diaphragm attaches to various structures in the body, including the lumbar spine. However, it attaches to the lumbar on one side only, leading to natural asymmetry. This asymmetry can influence our posture, as the diaphragm's pull can affect the alignment and positioning of the spine.

Furthermore, the ribcage connects to the scapula (shoulder blades) through muscles called the serratus anterior. These muscles assist in stabilizing the scapula and play a role in proper shoulder movement and

posture. Additionally, the ribcage is connected to the pelvis through the side abdominal muscles, known as the obliques. These muscles provide support and help maintain the alignment and stability of the ribcage and pelvis.

During inhalation, as the diaphragm contracts and moves downward, the zone of apposition becomes crucial. It represents the area of contact or overlap between the diaphragm and the lower ribs. This zone allows for an efficient transfer of forces, enabling the diaphragm's downward movement to transmit tension to the ribs. As a result, the ribs are lifted outward and laterally, expanding the rib cage in a 360-degree fashion.

This is a key component to each exercise we perform, and is why our initial assessment is breathing.

Self Assessment Exercise: Holding your breath

Intro:

The fascinating disparity between holding your breath with your eyes open versus closed can be attributed to the intricate interplay between sensory perception and internal sensory awareness. When your eyes are open, your visual stimuli engage your attention, keeping your mind occupied and potentially diverting your focus away from the seeming urge and need to breathe. The world around you provides a captivating distraction that may contribute to a longer duration of breath-holding. On the other hand, when you close your eyes, your attention turns inward, heightening your awareness of bodily sensations, including the urge to breathe. Without visual stimuli to capture your attention, your focus may become more attuned to the physical cues associated with breathlessness if you are not good with being “left alone with your mind”, leading to a self induced state of anxiety and a shorter duration of breath-holding.

The intricate relationship between our senses and mind demonstrates the remarkable ways in which perception and attention can influence our subjective experiences, even within the seemingly simple act of holding our breath.

Self Assessment Exercise: hold your breath for as long as you can with your eyes open – repeat with eyes closed

Instructions:

1. With your eyes open, take a few calm breaths, and when ready, take a full breath and hold for as long as you can.
2. Mark how long you managed down on your self assessment sheet
3. Close your eyes, take a few calm breaths, and when ready, take a full breath and hold for as long as you can
4. Mark how long you managed down on your self assessment sheet
5. Do not repeat this test – mark down your first hold with eyes open and closed

What to note:

Holding your breath requires focused attention and body awareness. This can strengthen the mind-body connection, promoting a deeper understanding of your physical sensations and improving your ability to listen to your body's needs.

The aim is to also start to learn to hold the side abdominal contraction with each breath and breathe and learn how much you need to breathe in and out to hold without stressing the body.

Extra Info: What are the benefits of holding my breath?

Holding your breath, when done in a controlled and safe manner, offers a range of benefits that extend beyond the immediate act itself. Here are some potential advantages of breath-holding exercises:

Increased lung capacity: Regular breath-holding exercises can expand your lung capacity over time. By challenging your lungs to hold more air, you strengthen the respiratory muscles and improve overall lung function.

Improved breath control: Breath-holding exercises require conscious regulation of your breath. Practicing breath control can help you develop better control over your breathing patterns in daily life, leading to enhanced relaxation, reduced stress, and improved focus.

Enhanced mental clarity: Holding your breath triggers a cascade of physiological responses, including increased oxygen and carbon dioxide levels in the blood. This can stimulate brain activity, promoting mental clarity, alertness, and concentration.

Stress reduction: Breath-holding exercises have been shown to activate the parasympathetic nervous system, responsible for promoting relaxation and reducing stress. By engaging in these exercises, you can induce a state of calmness and improve your overall stress management abilities.

Improved athletic performance: Breath-holding exercises, such as breath control during physical exertion, can enhance athletic performance. By training your body to use oxygen more efficiently, you may experience increased endurance and better performance in sports or physical activities.

2.2 - EYES

Intro:

In the captivating realm of modern lifestyle, screens and phones have stealthily altered the way our eyes perceive and function, veering them off their natural course. These extraordinary organs, designed to absorb and process the intricacies of our visual world, are bombarded with stimuli from the day you are born and are hold primarily responsible for deciphering your reality.

Your brain must process all the different stimuli arriving to it, but 85% of it comes from the eyes.

Yet, their significance is often overlooked. Your eyes are vital to your perception of the world still few health professionals consider them in the pain or performance discourse. El Habitus explores the role played by your vision to keep your body upright and your movements fluid, as well as keeping your nervous system calm and under control.

Our eyes from birth remain tirelessly vigilant - their work never tops. But as our reliance on screens intensifies, our inherent ability to use them, to focus and track objects has begun to wane. Convergence, that harmonious orchestration of ocular muscles, eludes many of us, leaving behind a trail of compensatory orientations in posture as a result.

So we address these next in our El Habitus self assessment.

Self Assessment Exercise: Ocular Dominance Test

Intro:

Before engaging in convergence corrective exercises, it is essential to determine your dominant eye. Once identified, eye exercises can be utilized to correct various issues, ranging from mobility restrictions to fatigue

Instructions:

1. Extend both arms in front of you and create a small triangular opening by overlapping your thumbs and index fingers.
2. Focus on a distant object through the opening while keeping both eyes open.
3. Slowly bring your hands towards your face while maintaining focus on the distant object.
4. As your hands approach your face, you will notice that the triangular opening will naturally align with one eye and shift away from the other.
5. The eye aligned with the opening is your dominant eye.

What to note:

if you are unsure of what hand to bring your eye to, it means your brain is unsure of its dominant side. If this is the case, mark this down on your self assessment sheet

Extra Info: Laterality:

The phenomenon of the brain preferring to have the same dominant eye, hand, and foot is known as lateral dominance or laterality. Lateral dominance serves as a practical strategy employed by the brain to optimize sensory and motor processing. By establishing a consistent dominance pattern, the brain can streamline neural connections and allocate specialized resources for specific functions. Having a dominant eye

enhances visual perception and depth perception, while a dominant hand facilitates fine motor skills and precise manipulation. Similarly, a dominant foot aids in maintaining balance and coordinating movement. The brain's affinity for lateral dominance enables efficient communication and coordination between these body parts, ultimately enhancing overall sensory-motor abilities and reducing cognitive load. This specialization aligns with the brain's inclination to organize and streamline its functions to maximize efficiency and performance.

Self Assessment Exercise: Convergence Test

Intro:

Proper convergence, the ability of both eyes to focus on an object as it moves closer to the face, is essential for accurate depth perception and visual coordination. When one eye does not converge properly, it can result in various compensatory mechanisms within the body and you may feel noticeable shifts occur in the transverse plane – leading to twists of the hips and shoulders.

Instructions:

1. Draw a line in the middle of your index finger. Hold your finger at arm's length in front of you and focus your gaze on the line on your finger.
2. Slowly bring the finger closer to your nose while maintaining clear, single vision. Stop if you notice double vision and bring your finger back to the starting position. Repeat 3 times
3. Hold your finger close to your nose without focusing on your finger (look forward) and then focus inwards on the line on your finger. Look forward again, and then come back to the line on your finger. Repeat 3 times

4. Make sure the background does not come in focus and that you do not have double vision
5. Put your tongue at the top of your mouth and do not clench your jaw!

What to note:

You are trying to assess whether both eyes accurately and evenly follow the target (the line on your finger) or whether one eye "checks out" or struggles with coming into the middle

Extra Info: Not to be confused with a lazy eye!

Issues with convergence of the eyes, known as convergence insufficiency, should not be confused with a lazy eye (amblyopia). While both conditions involve visual abnormalities, they are distinct and have different underlying causes.

Convergence insufficiency refers to a difficulty in coordinating the eyes to converge properly when focusing on nearby objects, such as when reading or working on a computer. People with convergence insufficiency may experience symptoms like eyestrain, double vision, headaches, and difficulty maintaining clear and comfortable vision during close work. It is primarily a problem with eye coordination and can often be improved with vision therapy exercises and specialized eyeglasses or lenses.

On the other hand, a lazy eye, or amblyopia, occurs when there is a significant difference in vision between the two eyes, leading to reduced vision in one eye that cannot be fully corrected with glasses or contact lenses. Lazy eye is typically caused by underlying conditions such as strabismus (misalignment of the eyes) or significant refractive errors. Treatment for lazy eye often involves patching the stronger eye or using other methods to encourage the weaker eye to develop better vision.

While both convergence insufficiency and lazy eye can affect vision, they have distinct causes and require different approaches for diagnosis and

treatment. It is important not to confuse the two conditions, and seeking professional evaluation from an eye care specialist can help determine the specific issue and develop an appropriate treatment plan.

Extra Info: What happens if my eyes don't converge properly?

Head Tilt:

When one eye does not converge effectively, a person may experience head tilting. This compensatory mechanism aims to align the visual axis of the deviated eye with the object of focus. The head tilts towards the side of the properly converging eye, allowing the eyes to work together to maintain binocular vision.

Postural Asymmetry:

Improper convergence can lead to postural asymmetry, affecting how the body is aligned in the transverse plane. To compensate for the visual disparity caused by the non-converging eye, the body may shift subtly. This shift is commonly observed in the upper body, with one shoulder appearing higher or more forward than the other. It can also affect the alignment of the hips and lower extremities.

Gait Abnormalities:

The misalignment resulting from improper convergence can affect gait patterns. As the body adapts to the visual disparity, individuals may exhibit changes in their walking style. This may include a wider base of support, uneven stride lengths, or an altered arm swing to counterbalance the visual disturbances. Such gait abnormalities aim to maintain stability and reduce the impact of the compromised visual perception.

Muscular Imbalances:

The body's compensatory adjustments due to improper convergence can contribute to muscular imbalances. For example, the muscles on one side of the neck, shoulder, or torso may become overactive or hypertonic, while

the corresponding muscles on the opposite side may become weak or inhibited. These imbalances can lead to discomfort, pain, and decreased functional efficiency.

Decreased Spatial Awareness:

Improper convergence affects the perception of spatial relationships. Individuals may struggle with accurately judging distances, depth perception, or object localization. This can impact daily activities such as reaching for objects, hand-eye coordination, or participating in sports that require precise spatial awareness.

Self Assessment Exercise: Saccades Test - testing lateral and vertical eye movement

Saccade eye training is a remarkable technique that focuses on improving the rapid eye movements known as saccades. These quick eye movements allow us to shift our gaze from one point to another rapidly. Saccade eye training is amazing because it enhances several crucial visual skills, including visual processing speed, eye-hand coordination, reading efficiency, and overall visual attention. By engaging in specific exercises that target saccadic eye movements, such as tracking moving objects or reading words in a timed manner, individuals can strengthen their eye muscles, improve visual accuracy, and enhance their ability to quickly process visual information. This training is especially beneficial for athletes, individuals with reading difficulties, and those seeking to enhance their overall visual performance. Saccade eye training offers a powerful and effective way to optimize visual skills, leading to improved performance in various tasks requiring rapid and precise eye movements.

To find out more about this please refer to our Brain Training programme.

Instructions:

1. Start by reaching both hands out in front of you side to side and doing a “thumbs up”. Make sure your hands are not too wide apart.
2. Without moving your head, focus on one thumb and then move your eyes to focus on the other thumb. You want to start slowly and make sure you are focusing on each thumb – pick a wrinkle or draw a line or dot and keep trying to come back to the same target.
3. Swiftly shift your gaze to the next target as quickly and accurately as possible and repeat this for as long as possible. Time how long you can do this before losing focus and/or concentration.
4. Ensure that the movements are smooth and controlled, without any jerky or abrupt motions. It's important to maintain a relaxed and steady gaze throughout the exercise.
5. Be mindful of accuracy. The goal is to accurately and quickly shift your focus between different targets, so pay attention to hitting the targets precisely.

What to note:

Monitor your eye coordination in the videos. Saccade exercises involve coordinating both eyes to move in unison, so ensure that both eyes are working together without any noticeable discrepancies or lag.

Can you focus quickly from object to object? Are you having difficulty concentrating or refocusing on the lines in your thumb?

Saccade exercises are highly effective because they train and improve the speed, accuracy, and coordination of eye movements.

Importance of eye exercises

1. **Mobility Restrictions:** Eye exercises can improve mobility restrictions, such as limited eye movement or difficulty focusing on objects at different distances. Consistency is key when it comes to eye exercises. Regular practice ensures optimal benefits and prevents regression.
2. **Strengthening Eye Muscles:** Similar to other muscles in our body, eye muscles require consistent exercise to remain strong and agile. Regular eye exercises help maintain muscle tone and improve overall eye health.

3. Retaining Visual Functionality: By engaging in eye exercises regularly, you can preserve and enhance your visual functionality. This is particularly beneficial for individuals with certain eye conditions or those who engage in visually demanding activities.

4. Prevention and Long-Term Maintenance: Regular eye exercises can help prevent certain eye conditions from worsening or developing in the first place. They also contribute to long-term maintenance and overall eye health.

2.3 – FEET

Intro:

Your feet have supported your bodyweight since you stood for the first time. These pillars are your first point of contact with the ground and absorb thousands of shocks a day to keep you upright when you move. They get limited attention in today's health discourse, even though the average American is estimated to take over 5000 steps a day. Chronic knee and low-back pain are on the rise, and falls amongst older adults have become a serious concern as the population ages.

Your feet are a complex universe – Each foot has 26 bones connected by 33 joints and over one hundred other tissues. This shape adapted through millions of years of evolution to move in many directions and balance your vertical body against gravity. Notable features range from the lower ankle bone known as Talus to the Calcaneus heel in contact with the ground, the boat-like Navicular bone, and your three Cuneiforms at the midfoot. These bones work together to spread your body weight over your feet. They also serve as anchors for the tendons and ligaments of the lower leg. This synergy makes up the formation known as the arches of the foot, one of the most critical aspects of human motion.

Every step you take has the potential to collapse your body to the ground. Your arches create the space needed for the soft elastic tissues of your foot to absorb this shock and store the force. The loaded springs from the heel to the toes then release the tension when your foot hits the ground again. This dynamic keeps you upright and lessens the energetic cost of walking or running. Problems arise when the arches fail to pull their part. The foot collapses inward, and the full sole touches the floor. Causes vary from lack of development during childhood to overused tendons, injuries, and poor footwear choices. These conditions impair your feet's shock absorption capacity. Other joints above have to compensate because you lose the spring-like properties of your tissues. The collapsed foot also internally rotates the shin, which throws your leg out of alignment and overloads your

knee and hip, even when you stand. Such stress is a recipe for chronic pain when compounded over the years

Self Assessment Exercise: Tandem Test – assessing proprioception with added instability and eyes closed

Intro:

The act of placing one foot directly in front of the other and practicing walking in a straight line is commonly referred to as "tandem walking" or "heel-to-toe walking." This exercise is highly effective at training the nervous system and proprioception, which is our body's ability to sense its position, movements, and forces acting upon it.

Tandem walking challenges the body's balance and coordination by reducing the base of support and altering the normal gait pattern. By placing one foot directly in front of the other, it requires increased neuromuscular control and proprioceptive feedback to maintain stability and perform the task accurately.

When performed with closed eyes, tandem walking becomes even more demanding on the proprioceptive system. Without visual input, the reliance on proprioception and other sensory systems, such as the vestibular system, is heightened. Closing the eyes removes visual cues that typically assist in refining movement and balance, forcing the nervous system to rely solely on internal feedback from the body.

When an individual puts one foot in front of the other, such as during a tandem stance, and closes their eyes, losing balance can be an indicator of the reliance on the vestibular system for maintaining balance. The vestibular system, located in the inner ear, plays a crucial role in detecting head position, movement, and acceleration. It provides sensory information to the brain about the body's orientation in space.

The loss of balance when closing the eyes and adopting a tandem stance suggests that the vestibular system and feet receptors are not adequately compensating for the absence of visual input. It highlights the significant role that vision plays in maintaining balance and stability. When visual input is removed, the reliance on the vestibular and proprioceptive systems becomes more pronounced. If these systems are compromised, it can lead to balance disturbances and an increased risk of falls.

Instructions:

1. Start by putting your hands out in front of you to create some instability in the body, then try to place one foot directly in front of the other.
2. Look forward and see if you can balance. Once you have managed to balance, close your eyes. Record how long you can stay balanced without falling over.
3. Then, place the other foot in front of the other (right in front of left or left in front of right). Repeat the process and record how long you can stay balanced on your self assessment sheet.
4. If possible, repeat this process but tandem stance walking, for 10 steps. Record how many steps you managed before falling over.
5. Repeat this process, but this time with your eyes closed, if possible. Record how many steps you could take before falling over.

What to note:

Whole foot must contact the floor before taking another step. You should stay balanced for 2-3 seconds before taking another step.

Do not keep repeating. If you keep repeating, your body will be quickly learning what it needs to do. It will be doing this subconsciously as you are forced to apply pressure to different parts of your feet to try to balance. This in turn stimulates the mechanoreceptors with more pressure than they are used to, and as they body tries to stabilise itself, the harder you are trying,

the more it will be learning. Therefore, results are best taken on the first couple of attempts.

Mental notes:

- Which foot do I find it easier to balance on?
- As soon as I lift one foot off the floor, does my foot immediately turn in, or out?
- How long does it take for me to fall over on each side?
- If you don't fall, how much of you is moving?
- If whole body, how much and how long until your top half stabilises?
- How long does it take before your bottom half stabilises?
Basically until your foot stops pronating and supinating? How many times back and forth between the two and which one is it doing more of?
- Why is this important?
- Explain how if one foot keeps losing balance as it supinates, that it doesn't have the strength or awareness or proprioception to catch itself
- Notice was your foot gripping the floor or were your toes inactive?

Self Assessment Exercise: Toe Test and Single Leg Balance

– assessing balance and neurological connection between different parts of each foot and brain – assessing the neurological connections between toes and brain

Intro:

The toes serve various functions in our daily movements and contribute to overall foot function and stability. Learning to isolate the movement of the big toe while relaxing the small toes, and vice versa, is important for establishing neurological pathways between the brain and the feet. This

ability to control toe movement demonstrates fine motor control and coordination.

In particular, isolating movement in the big toe is essential for proper push-off during walking and running, aiding in propulsion and maintaining balance. In contrast, the small toes assist in maintaining stability and gripping surfaces during activities like standing, walking on uneven terrain, and toe-off during running. If an individual struggles to isolate movement in the big toe or the small toes, it can indicate a lack of neuromuscular control or potential nerve or muscle impairments, especially with gluteal contraction.

Similarly, an inability to evenly distribute weight across both feet suggests an imbalance in weight-bearing forces, potentially indicating muscle weakness, poor proprioception, or biomechanical issues. Properly coordinating and controlling toe movements and weight distribution are integral for optimal foot function, stability, and overall biomechanics.

Instructions:

1. Start by standing or sitting and squeezing/gripping all toes against the floor. Then, lift and stretch your big toe whilst still gripping with the other 4 little toes, and stretch as much as you can. Record if this is possible.
2. Then swap, and grip the floor with your big toe, whilst pulling up your little toes.
3. If you can do this, lift one foot up off the floor a few inches, bending your knee forward and your foot coming in front of you, not behind, and see if you can balance/support yourself on one foot in that position – big toe flexed or extended. Record how long you can maintain strength and balance, if possible, on one foot.
4. Repeat in the second position, big toe up/down, and repeat. See if you can stand on one leg and if so, for how long.

5. If you can also do this, close your eyes and do the same on each foot in both positions. Please note this will be almost impossible for most people!

What to note:

Does your foot cramp? Are some movements not possible for you? If you can't do this, just try balancing on one leg and record the results.

Self Assessment Exercise: Fukundo Test – assessing vestibular system and feet imbalances

Intro:

The Fukuda test is a diagnostic tool used to assess the presence of vestibular dysfunction or asymmetry. It helps evaluate the integrity of the vestibular system, which contributes to balance and spatial orientation. It includes marching on the spot with your eyes closed and assessing how much you move without realising!

Instructions:

1. Begin by standing comfortably in an open space, such as a room or hallway, with enough room to move freely and with limited to no noise
2. Put your hands out in front of you, close their your and maintain a stationary position throughout the test.
3. Now, march in place while keeping your eyes closed. You should lift each leg and alternate marching movements, as if you were walking on the spot – do not walk forward or sideways

4. On the recording, observe your body movement in relation to the transverse plane (a line perpendicular to the body's midline) and see how much you twist and what ways
5. Observe any deviations in the marching pattern. If you have a healthy vestibular system, you should remain relatively stationary and continue marching in a straight line.

What to note:

such as audiologists or vestibular specialists, who can accurately interpret the results. The test outcome can provide valuable information about potential vestibular impairments or asymmetries that may be contributing to balance issues or other symptoms experienced by the individual **BUT ANY CONCERNS YOU HAVE YOU SHOULD TAKE UP WITH A MEDICAL PROFESSIONAL.**

Mental notes:

- How nervous you get
 - How much you walk forward
 - Which way you shift round
 - How much you shift round
 - Did you make the 15 steps?
 - Could you have gone on for longer?
 - Did you stay on the same spot?

2.4 – JAW

Intro:

Our jaws are not only essential for survival but also play a crucial role in our movement and overall well-being. They are responsible for important

functions such as eating, speaking, and expressing emotions. The proper alignment and function of our jaws contribute to our overall comfort and physical health.

Imbalances in the jaw can have far-reaching effects on our body impacting the alignment of our head, neck, and spine, affecting our overall posture and movement patterns. The jaw's alignment can even influence our motor skills and coordination. This reduced coordination can lead to a difficulty performing certain tasks that require precise movements.

Self Assessment Exercise: Jaw Stretch – 3 finger test and TMJ pain test

Intro:

The ability to open the jaw wide holds significant importance for various aspects of our daily lives. Inability to put three fingers in your mouth, known as restricted mouth opening, can indicate underlying issues such as temporomandibular joint (TMJ) disorders, muscle tension, or joint inflammation. It may result in pain, difficulty chewing, and restricted movement. Seeking professional evaluation and appropriate treatment for restricted mouth opening is essential to address the underlying cause, relieve discomfort, and restore optimal function to this pivotal part of our anatomy.

Instructions:

1. Open your mouth as wide as possible without feeling any discomfort. Hold this position for a few seconds and see if you notice any pain.
2. Then aim to put your first 3 fingers comfortable in your mouth. Record if you can do this.
3. Place your tongue behind your front teeth on the roof of your mouth. Allow your jaw to hang loose and gently move it from side to side. Does this hurt and do you notice any clicking?

4. With your tongue still at the top of your mouth, place your fingers just below your ear, and open and close your mouth and feel where the joint movement occurs.
5. Move your fingers across off the joint to the tender part just inside near your face and poke your fingers in until you feel a bit of pain – only a little! You'll know whether or not you have a tender TMJ or not straight away.

What to note:

Do you feel pain? Many think it's normal to have pain in this area but it isn't. It usually indicates that you are a jaw clencher!

How much of the rest of your face scrunches up to open your mouth? Does it hurt to go from side to side? Do you have a crossbite?

Do you have any major dental surgery? Do you have missing teeth?

Extra Info: What benefit can engaging in jaw exercising have?

Engaging in jaw exercises can help strengthen the muscles and improve jaw alignment. These exercises can involve gentle movements such as opening and closing the mouth, moving the jaw from side to side, or performing light resistance exercises using the fingers.

By incorporating jaw massages and exercises into our self-care routine, we can alleviate tension, improve jaw alignment, and promote a sense of calm. These practices can help relax

2.5 – NERVOUS SYSTEM

Intro:

Adrenal load is closely tied to the nervous system, specifically the autonomic nervous system. The autonomic nervous system regulates many involuntary processes, including the stress response. When the body perceives a threat or stressor, the sympathetic branch of the autonomic

nervous system is activated, triggering the release of stress hormones, including adrenaline and cortisol, from the adrenal glands. These hormones prepare the body for the "fight or flight" response. However, chronic or prolonged stress can lead to an overload on the adrenal glands, causing imbalances in hormone production and affecting the body's stress response system. Adrenal load is a reflection of the interplay between stress, the autonomic nervous system, and the adrenal glands, emphasizing the importance of maintaining a balanced and healthy nervous system for overall well-being.

Self Assessment Exercise: Testing Adrenal Load

Intro:

Adrenal load refers to the stress placed on the adrenal glands, which are responsible for producing hormones that regulate our response to stress. When we experience chronic or prolonged stress, the adrenal glands can become overworked and fatigued, leading to imbalances in hormone levels.

Testing adrenal load by exhaling and holding your breath can be a way to assess the body's stress response. This test involves exhaling fully and then timing how long you can hold your breath before feeling the urge to breathe. The idea is that individuals with a higher adrenal load may have a reduced ability to hold their breath for an extended period.

Increasing the challenge by performing exercise while holding your breath, particularly with no air in the lungs, adds additional stress to the body. This intensified exercise-induced breath-holding can trigger a stronger stress response and potentially elicit panic or discomfort in individuals with a higher adrenal load.

Instructions:

1. Take a few normal breaths, then take a normal-deep exhalation, releasing all the air from your lungs and mouth and hold your breath. Record how long you held your breath for.
2. Take 15-30 short but quick and powerful breaths in and out through both your nose and mouth
3. Don't try to hyperventilate, but continue this and on your last breath, breath all the way out as before, as calmly as you can without it being overly exaggerated, then hold your breath.
4. With your breath held, immediately perform as many star jumps as you can before you have to take a breath
5. Make sure you do this in a safe place and do not push yourself too far – it is a generalised self assessment test to be performed within your normal capabilities. It is not test to see how far you can push yourself, especially not to unsafe limits

What to note:

It is important to note that this test and the associated method of exercise-induced breath-holding are not extensively supported by scientific research. Adrenal function and stress response are complex and multifaceted, involving various physiological and psychological factors. It is advisable to consult with a healthcare professional or qualified specialist to assess adrenal function accurately.

This programme/self assessment merely a means by which to explore yourself and capabilities and response to stressors – the same principle as cold water submersion, which we cover later, never put yourself in unsafe situations.

2.6 – BRAIN

Intro:

Cross lateral exercises are closely linked with brain and cognitive function. These exercises involve coordinated movements that cross the midline of

the body, engaging both hemispheres of the brain. By activating and integrating both sides of the brain, cross lateral exercises promote enhanced communication and synchronization between different brain regions. This can have positive effects on cognitive processes such as attention, memory, problem-solving, and creativity. Additionally, these exercises stimulate neural pathways and support the development of new connections, known as neuroplasticity. Regular practice of cross lateral exercises can help improve brain function, boost cognitive abilities, and support overall brain health.

Self Assessment Exercise – Cross Lateral Brain Exercise

Intro:

Cross-lateral exercises are physical movements that involve crossing the body's midline, meaning they require the coordination of both sides of the body. These exercises have been shown to have various benefits, including improving coordination, brain function, and overall readiness for the day. Engaging in cross-lateral exercises also increases blood flow and oxygen delivery throughout the body. This enhanced circulation helps wake up your muscles, joints, and organs, providing a natural energy boost and helping you feel more alert and ready to tackle the day.

By stimulating the corpus callosum, a bundle of nerve fibers that connects the brain's left and right hemispheres, facilitating better communication between the hemispheres, promoting holistic brain function and enhancing creativity, problem-solving abilities, and overall mental agility.

Extra Info: Try other exercises

Examples of cross-lateral exercises include marching while touching opposite knees, cross-crawl movements (touching opposite elbow to knee), arm and leg extensions while crossing the midline, and yoga poses such as the spinal twist. Try others out by searching them on youtube!

Instructions:

1. Stand up straight or sit down with your feet hip-width apart, and relax your shoulders.
2. Start by crossing your right hand over your body and touching your left ear and touching your nose with your left hand
3. Now bring both hands together and touch your thigh
4. Next, bring your left hand up to your right ear. Place your fingertips gently on your earlobe or the side of your head, maintaining a light touch.
5. Repeat and note how accurate you are with touching your nose and ear. Note how you found the exercise on your self assessment sheet

What to note:

Remember to perform the movements in a controlled and coordinated manner. Focus on crossing the midline of your body with each movement to engage both sides of your brain and body. Maintain a relaxed and steady breathing pattern throughout the exercise.

This cross-lateral exercise helps improve coordination, brain function, and overall readiness for the day. It stimulates the neural pathways connecting the left and right hemispheres of the brain, facilitating better communication and enhancing cognitive abilities.

SECTION THREE - EH MORNING ROUTINE

Introduction to programme:

How to use programme:

3.1 – BREATHING

Intro:

Breathing exercises are truly amazing due to their profound impact on physical, mental, and emotional well-being. By consciously directing our breath, we can regulate and influence our body's physiological responses, such as heart rate, blood pressure, and stress levels. Deep and controlled breathing triggers the activation of the parasympathetic nervous system, promoting relaxation and reducing the effects of the sympathetic "fight-or-flight" response. This, in turn, helps to reduce anxiety, improve focus, and enhance overall mental clarity. Breathing exercises also increase oxygen intake, supporting cellular function and providing a natural energy boost. They can be practiced anytime, anywhere, and are accessible to everyone. Whether it's through diaphragmatic breathing, box breathing, or other techniques, incorporating breathing exercises into our daily routines can bring about a sense of calm, balance, and improved well-being.

Morning Exercise: Box breathing with holding breath and Valsava manoeuvre

Intro:

The Valsalva manoeuvre is a breathing technique that involves forcefully exhaling against a closed airway (a closed glottis). This maneuver can increase pressure within the chest and abdomen, which has various physiological effects. It can help stabilize blood pressure, improve circulation, and enhance the efficiency of certain bodily functions. When combined with box breathing, a controlled breathing technique that involves equal durations of inhalation, breath holding, exhalation, and another breath hold, the Valsalva maneuver can further amplify its benefits. Box breathing promotes relaxation, reduces stress, and enhances mental focus.

Instructions: Box breathing

1. Find a comfortable seated position.
2. Inhale slowly and deeply through your nose for a count of four.
3. Hold your breath for a count of four.
4. Exhale slowly and fully through your mouth for a count of four.
5. Hold your breath for a count of four.

Repeat these steps for 6 or more cycles, focusing on the rhythmic pattern and maintaining a calm and controlled pace. You can do this with your eyes open or closed. On the final breath or when you're ready, move onto the Valsava manoeuvre

Extra info: Box Breathing

Box breathing is a powerful breathing technique that has gained popularity for its ability to induce calmness, enhance focus, and promote overall well-being. It involves consciously controlling the breath in a specific pattern, typically with equal durations for inhalation, breath holding, exhalation, and another breath hold. This rhythmic breathing activates the parasympathetic nervous system, triggering a relaxation response and reducing the body's stress response. Box breathing helps regulate heart rate, blood pressure, and oxygen intake, promoting a state of calm and mental clarity. Its effectiveness lies in its simplicity, adaptability, and accessibility, making it a valuable tool for managing stress, improving performance, and enhancing resilience. Navy SEALs and other elite military personnel often utilize box breathing to maintain composure and focus in high-pressure situations, recognizing its ability to optimize performance under stress.

Instructions: Valsalva manoeuvre,

1. Take a deep breath in.
2. Hold your breath for a short-medium period of time

3. Close your mouth and pinch your nose shut with your fingers.
4. Attempt to exhale forcefully against the closed airway, as if you are trying to blow air out through your closed nose.
5. Maintain this pressure for a few seconds, then release and breathe normally.

What to note:

Remember to exercise caution and avoid excessive straining during a Valsalva maneuver, especially if you have certain medical conditions or are pregnant. Consult with a healthcare professional if you have any concerns or questions about incorporating these techniques into your routine.

Extra Info: Valsava Manoeuvre

The Valsalva maneuver is a technique that involves forcibly exhaling against a closed airway, leading to several physiological changes in the body. Initially, during the straining phase of the maneuver, the increased intra-abdominal and intra-thoracic pressure created by exhaling against a closed airway can compress blood vessels and impede venous return to the heart. This reduced blood flow back to the heart triggers a reflex response, resulting in an increase in heart rate, known as the Valsalva reflex. This reflex is an autonomic response aiming to compensate for the reduced blood return to the heart. However, once the straining phase ends and the airway is opened, the heart rate tends to decrease, as the blood flow normalizes. Additionally, during the maneuver, the act of forcefully exhaling and closing the airway can help activate the parasympathetic nervous system, promoting a relaxation response and leading to a decrease in respiratory rate. Therefore, while the Valsalva maneuver initially speeds up the heart rate, it is followed by a decrease in heart rate and a slowing of the breath once the straining phase is released.

3.2 – EYES

Intro:

Eye exercises are remarkable due to their ability to improve and maintain optimal eye health and visual function. These exercises target the muscles and coordination of the eyes, helping to enhance eye movement, focus, and eye-teamwork. By engaging in regular eye exercises, individuals can alleviate eye strain, reduce symptoms of digital eye strain from excessive screen time, and improve visual acuity and clarity. These exercises can also be beneficial for addressing specific vision issues such as convergence insufficiency or difficulties with eye tracking. Moreover, eye exercises can stimulate blood flow and oxygenation to the eyes, promoting overall eye health. Whether it's through eye movements, focusing exercises, or eye yoga techniques, incorporating eye exercises into our daily routines can contribute to maintaining clear, comfortable, and resilient vision.

Morning Exercise: Figure 8

Intro:

The figure 8 eye exercise is a beautifully beneficial technique that helps improve eye coordination, flexibility, and focus. By tracing the pattern of a figure 8 with your eyes, you engage both the central and peripheral vision, stimulating the eye muscles and promoting better eye tracking abilities. This exercise can enhance visual processing, reduce eye strain, and increase overall eye agility. It will also help to correct convergence issues, but more attention would be needed for this – please get in contact or refer to our brain training programme.

Instructions:

1. Take your index finger and draw a line on it and focus on it. Bring the finger close to your eyes but without seeing double or seeing the background come into focus
2. Imagine drawing a horizontal figure 8 shape in front of you. Start by focusing on a point at the leftmost part of the figure 8, then smoothly trace the shape with your eyes, following its curves and crossing points.
3. Maintain a relaxed and fluid motion as you track the imaginary figure 8, allowing your eyes to move naturally and comfortably.
4. The whole figure 8 should be as slow really as you can – 8 reps for at least 8 seconds for 8! You want to try hard to keep concentration and keep focus on the line at times.
5. Repeat the exercise several times in both clockwise and counterclockwise directions. Remember to keep your head still while performing the exercise, allowing your eyes to do the work.

What to note:

Ensure smooth and fluid eye movements as you trace the figure 8 pattern. Avoid any jerky or strained movements. Maintain a relaxed gaze and focus on the imaginary figure 8 in front of you allowing your eyes to move naturally and comfortably. Pay attention to the coordination between your eye movements and your breathing and also where your tongue is and whether or not you're clenching your jaw!

Try to synchronize your breath with the rhythm of the figure 8, promoting a sense of relaxation and flow, relax your jaw, and put your tongue at the top of your mouth.

FOCUS!

By focusing and paying attention to these key points, you can maximize the benefits of figure 8 eye exercises.

3.3 – FASCIA

Intro:

Fascia exercises are truthfully extraordinary for their ability to improve overall body movement, flexibility, and postural alignment and so much more. Fascia is a complex network of connective tissue that surrounds and supports muscles, organs, and bones. When the fascia becomes tight or restricted, it can lead to discomfort, limited range of motion, and postural imbalances. Fascia exercises, such as myofascial release or foam rolling, target these tight areas and help release tension, promoting better mobility and reducing pain. These exercises also stimulate blood flow and improve the health and elasticity of the fascia, enhancing overall physical performance and preventing injuries. Moreover, fascia exercises can have a positive impact on the nervous system and promote relaxation, as tension in the fascia can be associated with stress and emotional holding patterns. By incorporating fascia exercises into our fitness routines, we can experience the amazing benefits of improved movement, increased flexibility, and enhanced overall well-being.

Morning Exercise: MFR Full twisted myofascial release

With eyes closed

Intro:

The human body is a complex network of interconnected tissues, including a web-like structure called fascia, which surrounds and supports muscles, bones, and organs. Fascia plays a vital role in providing stability, transmitting forces, and facilitating movement. In its healthy state, fascia allows for multidirectional movement and twisting in various parts of the body, such as the feet crossing over each other, the head rotating, or the tongue maneuvering. However, in our modern sedentary lifestyle, we often engage in repetitive and linear movements, neglecting the natural capacity for lateral and twisting motions. This lack of movement variety can lead to restrictions and tightness in the fascia, affecting overall mobility and causing discomfort. Incorporating twisting movements into our exercise routines and daily activities can be an excellent way to release tension in the fascia. Twisting engages multiple muscle groups, stimulates circulation, and promotes a more balanced and flexible body. By reintroducing twisting and lateral movements into our lives, we can help restore the natural

elasticity and mobility of our fascia, supporting overall well-being and functional movement.

By using our breath we also learn to take the releases to a new level.

Instructions:

1. Cross right foot over left and “hug yourself” either right arm over left or left over right. Start by trying to rotate your hips one way and your head and shoulders the other. Start with your head facing the same way as your shoulders, and push your tongue into your cheek. When comfortable, close your eyes and take 3 deep breaths in and out of your nose and mouth – 6 breaths in total.
2. With your eyes closed, start to rotate your head slowly from side to side, and then start to experiment moving your tongue too.
3. Move down your body and practise moving your thoracic spine (mid back) and lower back and pelvis from side to side, slowly and smoothly. Repeat this process whilst breathing smoothly and controlled, in and out through nose and mouth, alternating between the two.
4. Take your hands and hug yourself the other way! Placing the other arm on top of the other, and repeat the above steps.
5. Now, cross your legs over the other way, and repeat steps 1-4!

What to note:

Your body will learn what it needs to do if you allow it to. By this, I mean you need to learn to breathe relaxed, and let your body relax, for the fascia to unwind and relax. Let this be a process over the next month. Do not take your body further than it wants to go, these are not “stretches”. Allow your body to go when it feels ready to twist further, but the aim is to keep trying to twist more, and using your breath to help you. Focus on squeezing your pelvic floor at all times. Also take note of what your feet are doing, what the differences are being crossed over different ways. Note all the differences you feel twisting different ways – are some easier, some harder? Do some feel really strange? Like you haven’t ever twisted that way before? Or not for years?

3.4 – TOES

Intro:

Foot and toe exercises are truly amazing because they promote the strength, flexibility, and overall health of our feet, which are the foundation of our body's movement. These exercises help to improve foot stability, balance, and proprioception, enhancing our overall athletic performance and reducing the risk of injuries. By strengthening the muscles in our feet and toes, we can improve our gait, enhance arch support, and prevent common foot problems such as plantar fasciitis or bunions. Toe exercises also help to improve foot mobility, promote proper alignment, and stimulate blood circulation. Additionally, engaging in foot and toe exercises can have a positive impact on the entire kinetic chain, improving posture and reducing strain on other joints and muscles in the body. By dedicating some time to foot and toe exercises, we can experience the amazing benefits of healthier, more resilient feet, and improved overall movement and well-being.

Exercise: Toe/Foot stretch and ball of foot
Ball in hell and balance

We must begin to learn how the foot functions and the various different movements capable of the foot. An inability to form neurological connections between the brain and feet/toes will have huge implications on your movement and life. We start by learning a few basic toe movements and practising them first thing in the morning. Depending on your ability level, you will go through the following sequence:

Morning Exercise: Big Toe Flex

Intro:

The benefit of these exercises is that they strengthen the muscles in your feet and toes, particularly the intrinsic muscles responsible for toe flexion and gripping. By practicing this exercise regularly, you can improve the

strength and flexibility of your foot muscles, enhance toe dexterity, and promote better balance and stability. Stronger foot muscles can also contribute to improved foot arch support and alleviate certain foot conditions or discomfort. It is important to perform the exercise with control and without straining, stopping immediately if you feel any pain or discomfort.

Instructions:

1. Sit or stand in a comfortable position with your feet flat on the floor or rest your foot on a stable surface.
2. Relax your feet and toes, ensuring that your muscles are not tense. Start by focusing on your big toe. Slowly flex your big toe upward, aiming to move it independently of the other toes.
3. While keeping your big toe flexed, gently curl your small toes inward, as if you're trying to grip the floor or surface with them. Hold this position for a few seconds while maintaining a steady breath. If this is too easy for you, go this on one foot.
4. Slowly release and repeat the clenching of your small toes while keeping your big toe flexed.
5. Release the toes and relax the whole foot before repeating

What to note: If you aren't able to do this, then focus on trying to find the neurological connections. Understand the limitations in movement and proprioception you'll have without your feet.

Morning Exercise: Little Toe Flex

Intro:

By practicing this exercise regularly, you can strengthen the muscles in your small toes and improve their flexibility and control. This exercise targets the intrinsic muscles of your feet and promotes better toe coordination and mobility. Strengthening your small toe muscles can help

with balance, foot arch support, and overall foot function. As with any exercise, it is important to perform it with control and without discomfort or pain. If you experience any discomfort, stop the exercise and consult with a healthcare professional.

Instructions:

1. Sit in a comfortable position with your feet flat on the floor or rest your foot on a stable surface. Relax your feet and toes, ensuring that your muscles are not tense.
2. Focus on your small toes. Curl them upward, trying to bring them closer towards you, while gripping the floor with your big toe. Your foot may be slightly pronated (turned inwards)
3. Hold this position for a few seconds, maintaining a relaxed breath. Slowly release the extension of your small toes, allowing them to return to a relaxed position.
4. Repeat this exercise for a few repetitions, allowing your foot and toes to relax between each repetition. If this is too easy for you, do this on one foot.
5. Slowly release the toes and relax the whole foot before repeating

What to note:

If you aren't able to do this, then focus on trying to find the neurological connections. Understand the limitations in movement and proprioception you'll have without your feet.

3.5 – FEET

Intro:

In today's modern lifestyle, many people have lost connection with the natural alignment and proper use of their feet. Finding the ball of the foot, also known as the metatarsal heads, can be a challenge for some individuals. However, it is crucial for foot health and optimal movement. Rediscovering the ball of the foot through exercises like this can have significant benefits for foot health and overall well-being in our modern world.

Morning Exercise: Ball of Feet Stability

Intro:

One effective way to train the muscles in the foot and find the ball is by using a tennis ball. By placing the tennis ball between your heels and lifting your heels off the floor, you create a dynamic exercise that engages the muscles in the foot, including the arches and metatarsals. This exercise helps to activate and strengthen the foot muscles while providing feedback to locate and connect with the ball of the foot. Regular practice of this exercise can help improve foot stability, balance, and overall foot function, allowing for a more grounded and efficient movement pattern.

Instructions:

1. Put a tennis ball in between heels or ankle and push up onto ball of foot (not toes but you can push up onto toes later too) and try to balance
2. If you need, hold onto something to keep your balance, and keep trying to let go
3. Keep your knees bent at all times, aiming to push your knees over the front of your toes

4. If this is easy, close your eyes and keep balance
5. If you want, add another tennis ball in between your knees to add more adduction and more pelvic floor squeeze creating stronger co-contractions

What to note: as you get better with this you can play around with coming more off your heels and onto your toes, squatting on the balls of your feet, reaching back and touching your heels. But make sure you work your way up. Your feet will have lost a lot of strength if nothing else over the years. It will take time to build this strength up and the muscles up. But every journey starts with a single step, and this is where you need to start. You want to really push yourself here, not neurologically but physically. Let your foot ache, and the muscles in your foot ache. Try everything in your power to stay balanced without holding on, but hold on if you need to.

3.6 – BRAIN

Intro:

Engaging in cross lateral exercises presents a profound opportunity for the two hemispheres of our brain to establish a harmonious connection, fostering enhanced communication and cognitive coordination. The simplicity of exercises such as synchronizing fingers on our hands unveils a remarkable effectiveness in achieving this synchronization. As we intertwine the movements of our fingers, we unlock a cascade of neural pathways, activating both the left and right hemispheres of our brain simultaneously..

Morning Exercise: Hand and Gun Cross Lateral Brain Exercise

Intro:

This symphony of coordination not only stimulates the growth of new connections but also strengthens existing ones, leading to improved cognitive functions and overall brain health. Moreover, these seemingly basic movements inadvertently serve as excellent exercises for our arms, providing a dual benefit to both mind and body

Instructions:

1. Start by sitting or standing in a comfortable position with your arms relaxed by your sides. Lift one hand and extend your index finger, pointing it straight ahead while keeping your other fingers relaxed and slightly bent.
2. At the same time, take your other hand and turn it palm down, extending your fingers and holding your hand flat.
3. Hold this position for a few seconds, focusing on the sensations in your hands and fingers.

4. Now, switch the movements between your hands. Lower the hand that was pointing and extend the index finger of the other hand, while turning the palm of the previously flat hand down and relaxing the fingers.
5. Continue alternating between pointing with one hand and holding the other hand flat, maintaining a smooth and rhythmic transition between the two positions. Once you've achieved this, point two fingers instead of just your index finger! Then three, then four!

What to note:

Hold each position for a few seconds, paying attention to the sensations in your hands and fingers. Notice what your arm and shoulder have to do even on a biomechanical level just to rotate your hands and wrist. Notice how when you get good at the co-ordination, you'll probably notice your hands and arms start to ache!

This cross lateral exercise engages both hemispheres of the brain by coordinating movements between opposite sides of the body. It promotes neural integration and enhances communication between the brain's hemispheres, potentially improving coordination, concentration, and cognitive function. Remember to perform the exercise at a comfortable pace and listen to your body, adjusting the intensity or duration as needed.

SECTION FOUR - PELVIS REALIGNMENT

4.1 – INTRO TO PR & WARM UP

Intro:

In our first programme we discover the astonishing power of gravity as a formidable ally in the quest for optimal posture and physical well-being. By assuming the 9090 position, lying on the floor with legs raised, we unlock a fascinating realm of possibilities. Using gravity we increase posterior ribcage expansion, and as the ribcage expands, the spine is gently neutralized. With the assistance of the feet and hamstrings, the pelvis can be artfully tilted, paving the way for the alignment of the ribcage and scapula. In this captivating dance of positioning, the body finds its equilibrium, forging a symphony of strength and neuromuscular connections that transcends mere exercise. The floor and wall become sacred canvases where the transformative forces of gravity and deliberate movement of the feet converge, unveiling a path towards a more aligned and vibrant existence.

Warm up:

Main 4 reminders:

1. TAKE FULL EXHALATION AND SIGH THE REMAINING AIR OUT THROUGH YOUR MOUTH AT THE END
2. BREATHE IN AS QUIETLY AND SMOOTHLY BUT AS CALMLY AS POSSIBLE TO RAISE THE PARASYMPATHETIC TONE
3. DO NOT LOSE CONNECTION WITH YOUR FOOT AND THE WALL
4. LET THE EXERCISES DO THE WORK AND RELAX

4.2 – PELVIS ALIGNMENT

Exercise: 90/90 against wall version 1

Intro:

Instructions:

1. Place ball (or pillow/cushion) in between knees and lay down with feet against wall in 90/90 positions
2. With feet just outside shoulder/hip width apart, pull down with heels until the hip just lifts off the floor
3. Ensure you do not lift too far off the floor, and do not lose connection with the whole foot against the wall
4. Use your hands to pull on the floor and keep your whole back flat on the floor at all times
5. Do not raise your head or shoulders and any point, keep your body relaxed and breathing relaxed





Main 4 reminders:

1. TAKE FULL EXHALATION AND SIGH THE REMAINING AIR OUT THROUGH YOUR MOUTH AT THE END
2. BREATHE IN AS QUIETLY AND SMOOTHLY BUT CALMLY AS POSSIBLE
3. DO NOT LOSE CONNECTION WITH YOUR FOOT AND THE WALL
4. LET THE EXERCISES DO THE WORK AND RELAX

4.3 – PELVIS ALIGNMENT

Exercise: 90/90 against wall version 2

Intro:

Instructions:

1.

- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. TAKE FULL EXHALATION AND SIGH THE REMAINING AIR OUT THROUGH YOUR MOUTH AT THE END
2. BREATH IN AS QUIETLY AND SMOOTHLY BUT CALMLY AS POSSIBLE
3. DO NOT LOSE CONNECTION WITH YOUR FOOT AND THE WALL
4. LET THE EXERCISES DO THE WORK AND RELAX

4.4 – PELVIS ALIGNMENT

Exercise: 90/90 against wall version 3

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. TAKE FULL EXHALATION AND SIGH THE REMAINING AIR OUT THROUGH YOUR MOUTH AT THE END
2. BREATH IN AS QUIETLY AND SMOOTHLY BUT CALMLY AS POSSIBLE
3. DO NOT LOSE CONNECTION WITH YOUR FOOT AND THE WALL
4. LET THE EXERCISES DO THE WORK AND RELAX

4.5 – PELVIS ALIGNMENT

Exercise: 90/90 against wall version 4

Intro:

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. TAKE FULL EXHALATION AND SIGH THE REMAINING AIR OUT THROUGH YOUR MOUTH AT THE END
2. BREATHE IN AS QUIETLY AND SMOOTHLY BUT CALMLY AS POSSIBLE
3. DO NOT LOSE CONNECTION WITH YOUR FOOT AND THE WALL
4. LET THE EXERCISES DO THE WORK AND RELAX

4.6 – PELVIS ALIGNMENT

Exercise: 90/90 against wall version 4

Intro:

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. TAKE FULL EXHALATION AND SIGH THE REMAINING AIR OUT THROUGH YOUR MOUTH AT THE END
2. BREATH IN AS QUIETLY AND SMOOTHLY BUT CALMLY AS POSSIBLE
3. DO NOT LOSE CONNECTION WITH YOUR FOOT AND THE WALL
4. LET THE EXERCISES DO THE WORK AND RELAX

SECTION FIVE - GET ON UP

5.1 - INTRO TO GOU & WARM UP

Intro:

Modern lifestyle, characterized by prolonged sitting, sedentary activities, and increased use of technology, has significantly impacted our shoulders and thoracic spine. Spending long hours hunched over desks and electronic devices has led to poor posture, with the shoulders rounded forward and the thoracic spine becoming increasingly rounded. This postural imbalance, often referred to as "upper-crossed syndrome," affects our breathing mechanics. The forward shoulder position restricts the movement of the rib cage and limits the expansion of the lungs, leading to shallow breathing and reduced oxygen intake. To address this issue, it is important to focus on external rotation of the shoulders. By consciously engaging in exercises and stretches that encourage external rotation, such as shoulder-opening stretches and strengthening exercises for the muscles responsible for external rotation, we can help counteract the internal rotation caused by our modern lifestyle. By improving shoulder alignment, we can restore optimal breathing patterns and promote better overall posture and well-being.

Warm up:

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

5.2 – SCAPULA ALIGNMENT

Exercise: Wall walk down hinge

Intro:

Instructions:

1. Feet in line with knees and knees in line with hips, place a ball of around 2-5kg in between your thighs. If you don't have a ball, use 2 cushions or pillows to squeeze against.
2. With hands at shoulder height, place them against a wall and start to walk back until your whole foot is rested comfortably and firmly on the floor, to the point that you are at a small incline. Then bend your knees
3. You want to feel on both feet equally, the ball of your foot, and the inside edge of the heel, and then start to hinge backwards and slowly walk your hands down the wall. Walk your hands down until you reach your end range. Your centre of mass should be going back onto your heels as you go down, and should feel a stretch in your hamstrings and glutes
4. Squeeze ball about 4/10 whilst breathing, taking full exhalation and feeling oblique contraction whilst you breathe in,
5. Repeat this for 10 breaths

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

5.3 – SCAPULA ALIGNMENT

Exercise: Floor push with scapula dips

Intro:

Scapula dips, as opposed to normal dips that primarily target the triceps and chest, are a highly beneficial exercise for scapular stabilization and overall upper body mobility. By focusing on just the scapula when “dipping”, you specifically engage the muscles responsible for scapular depression and elevation. As you lower your body, the scapulae move downward, opening up space in the posterior rib cage and activating the muscles that control scapular movement. This exercise promotes improved mobility and coordination of the shoulder blades, which is crucial for healthy shoulder function. Additionally, scapula dips can also serve as an excellent core exercise, as they require maintaining stability through the trunk and engaging the abdominal muscles. By also consciously emphasizing external rotation of the shoulders during the push phase of the exercise, you further enhance scapular and shoulder stability and help counteract the rounded shoulders and hunched back we see prevalent in society. Overall, scapula dips offer a comprehensive workout for the upper body, targeting scapular mobility, core strength, and shoulder stability, making them a core part of the El Habitus programme.

Instructions:

1. Gripping some paralettes and with your feet at a comfortable position, push the floor away from you, keep your sternum up, and rotate your elbow away from your body as much as you can
2. When you're at the end range top position, take a full exhalation and hold the abdominal contraction as you dip your scapula down as far as you can comfortable go while inhaling
3. Keep your elbows straight, a small bend is okay, but you are not supposed to bend your elbows at any point during this exercise

4. Concentrate on what your feet are doing, whether what you're doing with them is even. If they're flat on the floor, think about pulling with your feet slightly, or lifting up onto your heels

5. If you find this too easy, add a ball into the mix and squeeze between your thighs while you perform the scapula dips, but make sure you focus on the external rotation of the shoulders and keeping your sternum up

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

5.4 – SCAPULA ALIGNMENT

Exercise: All four posterior push

Intro:

The kneeling on all fours floor push away is a highly effective exercise that offers multiple benefits. It can be particularly valuable for opening up space in the posterior rib cage and scapula, while simultaneously engaging the core and providing shoulder and scapula stabilization. As you position yourself on all fours, the exercise requires you to push your hands into the floor and protract your shoulder blades, actively creating space in the posterior rib cage. This promotes better thoracic extension and counteracts the rounded posture often associated with modern lifestyles.

Simultaneously, the exercise engages your core muscles, helping to improve stability and control throughout your torso. By maintaining proper form and focusing on scapular stability, this exercise strengthens the muscles surrounding the shoulder blades, fostering better shoulder

alignment and reducing the risk of injuries. Overall, the kneeling on all fours floor push away is a well-rounded exercise that addresses various aspects, making it a valuable addition to a routine aimed at enhancing posture, core strength, and shoulder stability.

Instructions:

1. The aim here is to push the floor away and open up some space in the thoracic spine, mainly the back of the ribcage and open up the shoulder blades (scapula). We can add yoga block or a book under the left hand to drive more expansion into the left side.

2. In an all four 90/90 position, making sure your hands are directly underneath your elbows and not in front of you, start to push the floor away, rounding your back as much as possible but keeping your shoulders relaxed

3. When you've reached the full end range top position, take a full exhalation and hold the contraction in your side abdominals

4. When you breathe in, hold the contraction, and be aware of your feet and where they are. Think about your knees too, and everything in contact with the floor. Aim to keep each side balanced and even.

5. If possible, pull down with your hands slightly to depress your scapula. If you want to take this exercise further, you can also put a ball in between your knees, or focus on squeezing the floor with your knees

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

5.5 – SCAPULA ALIGNMENT

Exercise: Wall push with alternating reach

Intro:

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

5.6 – SCAPULA ALIGNMENT

Exercise: Scapula press on knees & in press up position

Intro:

Scapula presses, as an alternative to traditional press-ups that primarily involve elbow bending, can provide significant benefits for scapular stabilization and upper body mobility. By incorporating scapula presses into your routine, you specifically target the muscles responsible for scapular retraction and protraction. As you perform the exercise, the scapulae move closer together during retraction and then separate during protraction,

facilitating improved mobility and activation of the muscles controlling scapular movement. This exercise helps open up space in the posterior rib cage and promotes healthy posture by counteracting the effects of slouching or rounded shoulders. Moreover, scapula presses can effectively engage the core muscles, enhancing overall stability and control through the torso. By consciously focusing on depressing the scapulae as you push by pulling the floor towards you, you further strengthen the shoulder and scapula stabilizers and increase core activation, promoting optimal function and reducing the risk of imbalances or injuries. In summary, scapula presses offer a comprehensive workout that targets scapular mobility, core strength, and shoulder stability, making them an huge part of the El Habitus way.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

SECTION SIX - SUPPLEMENTARY VIDEOS

6.1 - HYDRATION

6.2 – NUTRITION

6.3 – NERVOUS SYSTEM & COLD WATER

6.4 - BATHING

SECTION SEVEN - BRACE, BRACE

7.1 - INTRO TO B, B & WARM UP

Intro:

Warm Up:

Main 4 reminders:

1. REMEMBER TO TAKE LONG, RELAXED BREATHS, A FULL EXHALATION AND HOLD CONTRACTION IN SIDE ABS
3. THINK ABOUT PUSHING THE FLOOR AWAY AND STABILISING THE SCAPULA
4. REMEMBER TO KEEP ALL CONTRACTIONS EQUAL
5. THINK ABOUT DEPRESSING THE SCAPULA AT ALL TIMES

7.2 – CORE

Exercise: Reverse Plank Bridge

Intro:

In today's day and age, with hunched over posture and weak extensor muscles becoming increasingly common due to sedentary lifestyles and excessive screen time, the reverse plank bridge emerges as a fascinating and highly effective exercise. This unique variation of the plank targets the often neglected extensor muscles of the body, including the erector spinae, gluteus maximus, and posterior deltoids.

As we spend more time sitting and engaging in forward-focused activities, our extensor muscles weaken and become imbalanced compared to our flexor muscles. This muscular imbalance can contribute to poor posture,

back pain, and decreased overall strength. However, the reverse plank bridge offers a powerful solution by actively engaging and strengthening the neglected extensor muscles.

By assuming a bridge position with the body facing upwards and supported by the hands and heels, the reverse plank bridge requires significant activation of the posterior chain. The erector spinae muscles in the lower back and gluteus maximus in the buttocks engage to stabilize the spine and extend the hips. Additionally, the posterior deltoids and triceps contribute to shoulder stability and upper body strength.

The reverse plank bridge serves as a powerful counterbalance to the effects of modern lifestyle habits. By regularly incorporating this exercise into a fitness routine, individuals can combat hunched over posture, strengthen weak extensor muscles, and improve overall postural alignment. Not only does this result in a more aesthetically pleasing and confident appearance, but it also enhances functional strength and reduces the risk of injury.

As you engage in the reverse plank bridge, take a moment to appreciate the transformative effect it has on your body. With each repetition, you are actively reversing the negative impact of hunched posture and weak extensor muscles, fostering strength, stability, and balance throughout your entire musculoskeletal system. Embrace this fascinating exercise as a tool to restore optimal posture, enhance your physical capabilities, and unlock a more balanced and resilient body in today's modern world.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. REMEMBER TO TAKE LONG, RELAXED BREATHS, A FULL EXHALATION AND HOLD CONTRACTION IN SIDE ABS
3. THINK ABOUT PUSHING THE FLOOR AWAY AND STABILISING THE SCAPULA
4. REMEMBER TO KEEP ALL CONTRACTIONS EQUAL
5. THINK ABOUT DEPRESSING THE SCAPULA AT ALL TIMES

7.3 – CORE

Exercise: Side Plank

Intro:

Side planks are a captivating exercise that go beyond merely targeting the obliques and transverse abdominis. When performed correctly, side planks engage the entire lateral chain, creating a remarkable whole-body experience. By assuming a side plank position, you activate not only the oblique muscles but also the deeper stabilizing muscles of the hip, including the gluteus medius and minimus.

The lateral chain, encompassing the muscles along the sides of the body, plays a crucial role in stabilizing the pelvis and maintaining proper posture. During a side plank, these muscles work in harmony to prevent excessive lateral movement and promote core stability. Moreover, the engagement of the lateral chain extends beyond the hip and waist, involving the shoulder girdle, back, and even the lower extremities.

Maintaining proper alignment in a side plank activates the shoulder muscles, such as the deltoids and rotator cuff, as they work to stabilize the upper body. The back muscles, including the erector spinae and quadratus lumborum, are also recruited to maintain spinal alignment and prevent sagging or rounding.

The beauty of the side plank lies in its ability to integrate multiple muscle groups and challenge the body in a functional way. It highlights the

interconnectedness of the lateral chain, emphasizing the importance of core stability and lateral strength for optimal movement patterns. As you progress in your side plank practice, you'll discover how this seemingly simple exercise can unlock a wealth of benefits for your entire body.

By embracing the side plank as a whole-body exercise, you tap into the power of lateral chain activation, developing strength, stability, and resilience throughout the entire body. So the next time you engage in a side plank, take a moment to appreciate the interconnectedness of your muscles and the remarkable way they work together to create a harmonious and functional movement experience.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. REMEMBER TO TAKE LONG, RELAXED BREATHS, A FULL EXHALATION AND HOLD CONTRACTION IN SIDE ABS
3. THINK ABOUT PUSHING THE FLOOR AWAY AND STABILISING THE SCAPULA
4. REMEMBER TO KEEP ALL CONTRACTIONS EQUAL
5. THINK ABOUT DEPRESSING THE SCAPULA AT ALL TIMES

7.4 – CORE

Exercise: Bird Dog

Intro:

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. REMEMBER TO TAKE LONG, RELAXED BREATHS, A FULL EXHALATION AND HOLD CONTRACTION IN SIDE ABS
3. THINK ABOUT PUSHING THE FLOOR AWAY AND STABILISING THE SCAPULA
4. REMEMBER TO KEEP ALL CONTRACTIONS EQUAL
5. THINK ABOUT DEPRESSING THE SCAPULA AT ALL TIMES

7.5 – CORE

Exercise: Ball Pull Through

Intro:

Leg pull-throughs with a ball in between the knees emerge as a brilliant exercise for targeting the often neglected hip flexors and lower abdominals while incorporating a unique element of adduction. In today's sedentary lifestyle, these muscle groups tend to weaken and become overshadowed by dominant muscle groups. However, the leg pull-throughs with a ball provide a captivating solution.

By lying on your back and gripping a stability ball between your knees, you engage the hip flexors as you extend your legs and pull the ball towards you using your lower abdominals. This movement activates the deep muscles of the hip flexors, including the psoas major and iliacus, which play a crucial role in maintaining pelvic stability and supporting proper posture.

The inclusion of the ball between the knees adds an additional dimension of adduction, challenging the muscles responsible for bringing the legs closer together. This targeted adduction intensifies the engagement of the inner thighs and contributes to a deeper squeeze of the pelvic floor muscles, promoting core strength and stability.

The brilliance of leg pull-throughs with a ball lies in their ability to address the often neglected hip flexors and lower abdominals, which are essential for maintaining a balanced and functional body. By regularly incorporating this exercise into your fitness routine, you can restore strength and balance to these muscle groups, improve pelvic stability, and enhance overall core strength.

As you perform leg pull-throughs with a ball, take a moment to appreciate the deep activation and integration of these often overlooked muscle groups. Embrace this captivating exercise as a means to reconnect with your hip flexors and lower abdominals, unlocking their full potential and promoting a strong, stable, and balanced body.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. REMEMBER TO TAKE LONG, RELAXED BREATHS, A FULL EXHALATION AND HOLD CONTRACTION IN SIDE ABS
3. THINK ABOUT PUSHING THE FLOOR AWAY AND STABILISING THE SCAPULA
4. REMEMBER TO KEEP ALL CONTRACTIONS EQUAL
5. THINK ABOUT DEPRESSING THE SCAPULA AT ALL TIMES

7.6 – CORE

Intro:

Exercise:

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. REMEMBER TO TAKE LONG, RELAXED BREATHS, A FULL EXHALATION AND HOLD CONTRACTION IN SIDE ABS
3. THINK ABOUT PUSHING THE FLOOR AWAY AND STABILISING THE SCAPULA
4. REMEMBER TO KEEP ALL CONTRACTIONS EQUAL
5. THINK ABOUT DEPRESSING THE SCAPULA AT ALL TIMES

SECTION EIGHT - BUILD FROM THE BOTTOM

8.1 - INTRO TO BFTB & WARM UP

Intro

Why these exercises?

As we learn how sensory receptors work and detect pressure, we can start to understand how and why weighted exercises can be so effective – the increased weight downwards can increase stimulation in the feet in turn, create a bigger body wide response! This is why full body exercises can stimulate a bigger hormone response!

Have you ever noticed how with some exercises you actually feel more stable and balanced with weight? This is because weight causes the whole body to contract and tense and in essence “stabilize” itself and the increased stimulation in the feet from the added weight contributes to increased internal awareness and proprioception – more balance!

When we perform weight-bearing exercises in the gym, such as squatting with added weight on our backs, the additional load placed on our feet and the resulting pressure stimulates the mechanoreceptors in our feet and lower limbs. These mechanoreceptors are specialized sensory receptors that detect mechanical stimuli, such as pressure, stretch, and vibration. The increased stimulation of these mechanoreceptors triggers a cascade of neural signals that travel up the sensory pathways, informing the central nervous system of the added load and creating a heightened bodywide response.

This response includes increased muscle activation, improved joint stability, and enhanced proprioception, which is our body's ability to sense and perceive its position in space. The heightened awareness and readiness of the body for training allow for more efficient and effective performance in weight-bearing exercises, ultimately leading to greater gains in strength, stability, and overall fitness.

But herein offers another dilemma. The added weight intensifies this sensory feedback, making it even more critical for the body to distribute the load evenly on the feet – any imbalances will be much more quickly highlighted in pain in the joints or uneven pushing in each foot.

We must try to ensure even weight distribution to promote optimal biomechanics, stability, and joint alignment during each exercise. You can see now how the whole EI Habitus understanding of the body works.

This not only reduces the risk of injuries but also allows for more efficient force transmission through the kinetic chain, resulting in improved performance and strength gains – more power, more speed, higher jumps, more ability to go stretch deeper in yoga. Thus, developing the ability to distribute weight evenly on the feet becomes paramount to optimize our training and reap the benefits of all type of exercise and movement.

Warm up - airplane hip opener

Added: banded squats – understand placement of bands and why they can be so effective – explain how they are in essence, the opposite of having a ball inbetween your legs for internal rotation – bands around knees and/or ankle help external rotation

Main 4 reminders:

1. YOUR BREATHING MAY NOT STAY RELAXED BUT KEEP IT DEEP AND SMOOTH
2. REMEMBER TO THINK ABOUT FEET POSITIONING AND PRESSURE AT ALL TIMES
3. REMEMBER TO TAKE FULL EXHALATION AND HOLD SIDE AB CONTRACTION
4. KEEP THE WHOLE BODY CONTRACTED AT ALL TIMES

8.2 – LEG

Exercise: Cossack Squat

Intro:

Focusing on different movement patterns, including side to side movements, is essential for comprehensive training. Many traditional exercises primarily emphasize forward and backward movements, neglecting lateral movement. We must teach our bodies how to distribute load onto different parts of the feet, and stimulate the mechanoreceptors on the lateral edge of the feet, to enhance the neural connections between the feet and the brain. This in turn vastly refines our internal kinetic chain understanding leading to improved balance and stability.

This is where exercises like cossack squats shine. Cossack squats target lateral movement and help develop strength, flexibility, and stability in the lateral hip muscles and adductors. Incorporating both split stance and lateral movements into our training routine ensures a well-rounded approach, improving our overall movement capacity, reducing the risk of imbalances, and enhancing functional fitness.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. YOUR BREATHING MAY NOT STAY RELAXED BUT KEEP IT DEEP AND SMOOTH
2. REMEMBER TO THINK ABOUT FEET POSITIONING AND PRESSURE AT ALL TIMES
3. REMEMBER TO TAKE FULL EXHALATION AND HOLD SIDE AB CONTRACTION
4. KEEP THE WHOLE BODY CONTRACTED AT ALL TIMES

8.3 – LEG

Exercise: Goblet squat with kettlebell

And weight under heels

Intro:

Goblet squats with weights placed under someone's heels provide a fascinating approach to teaching individuals to push their knees over their toes during the squat movement. By elevating the heels, this modification alters the distribution of pressure in the feet, particularly emphasizing the heel region. This increased pressure stimulates the mechanoreceptors in the heels, which play a vital role in proprioception and balance. As a result, the brain receives heightened sensory feedback, signaling the need for adjustments throughout the kinetic chain. By pushing the knees forward, the body adapts to maintain proper alignment and stability, engaging the quadriceps, glutes, and core more effectively. This unique technique challenges the conventional belief that pushing the knees over the toes is inherently harmful. Instead, it highlights the importance of understanding how our bodies respond to different stimuli and how the brain can adapt the kinetic chain accordingly. Goblet squats with weights under the heels provide a valuable training tool that not only enhances squat mechanics but also fosters a deeper connection between the feet, the mechanoreceptors, and the brain, promoting optimal movement patterns and improved overall performance.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. YOUR BREATHING MAY NOT STAY RELAXED BUT KEEP IT DEEP AND SMOOTH
2. REMEMBER TO THINK ABOUT FEET POSITIONING AND PRESSURE AT ALL TIMES
3. REMEMBER TO TAKE FULL EXHALATION AND HOLD SIDE AB CONTRACTION
4. KEEP THE WHOLE BODY CONTRACTED AT ALL TIMES

8.4 – LEG

Exercise: Leg extension

Intro:

The leg extension is an isolation exercise that specifically targets the quadriceps muscles, located in the front of the thigh. Though we would not often advise incorporating too many isolation exercises into your programme, it is fundamental to have an understanding of both compound exercises and isolation exercises and why to use them,

Compound exercises are exercises that involve multiple muscle groups and joints working together in a coordinated manner. These exercises typically target multiple muscle groups simultaneously, allowing for efficient and effective use of time in the gym. Examples of compound exercises include squats, deadlifts, bench presses, and pull-ups. On the other hand, isolation exercises focus on targeting and isolating specific muscles or muscle groups. These exercises typically involve movements that focus on a single joint and primarily work one muscle group at a time. Examples of isolation exercises include bicep curls, tricep extensions, and calf raises.

While compound exercises are beneficial for overall strength and functional movement, isolation exercises can be useful for targeting specific muscles or addressing muscle imbalances. A well-rounded workout program often includes a combination of both compound and isolation exercises to achieve balanced muscular development.

The leg extension can and should be done at home, on your sofa for example, where you extend your leg in front of you and create an internal and isometric contraction (internal because your leg is suspended and not pushing against anything so the energy is coming from whatever is in contact with something – this is why gripping and creating full body tension is always advised with exercises, as this is the best way to keep energy in the body without losing it)! Energy is commonly lost for individuals in the core/trunk region – another big reason why we “brace” the core. It is to protect the spine and back etc, but the way it does this is by creating a strong contraction in the kinetic chain which in turn keeps the body in an optimal state for transferring large amounts of energy through training. This is the science and is why places get injured when we get fatigued, a certain area because vulnerable when “energy” or load or

weight is placed on that area through the kinetic chain and it fails or cannot cope – the body then gets injured here.

The leg extension is a highly effective especially for individuals who do not engage their quads properly due to poor posture and sedentary lifestyles. By isolating the quadriceps, the leg extension exercise helps strengthen and develop these muscles, enhancing overall leg strength and stability – remember the quadriceps are the opposing muscle group to the hamstrings, and these two must work together (contract and relax) in order for either to work.

To perform a leg extension,

To increase awareness of the kinetic chain and engage the quadriceps further, it is recommended to perform the leg extension exercise slowly and in a controlled manner, keeping the weight extremely light – only 1 or 2 weights down. Create the contraction internally – this is one of the only times I will advise this (it's often advised to squeeze the glutes but this can keep them in a shortened position – we always want to shorten and then lengthen muscles). But in this exercise, we know we will be getting a good range of motion through it, just increasing the contraction in the shortened state, and taking that contraction through to a lengthened state and back again, keeping the whole kinetic chain engaged (tensing the whole body).

Additionally, pulling your toes up during the movement will help activate the entire anterior kinetic chain, from the foot up to the quadriceps, improving overall muscle engagement and strengthening the muscle groups involved in the exercise and this is also hugely important.

By all means, vary between a flexed foot and not but bear in mind as humans our foot spends far too much time relaxing – meaning the foot doesn't get pulled up enough and the calves take more load because the tibia is inactive. A lack of pelvic alignment means the hamstrings get lengthened and the muscles in the leg do not effectively co-contract with the muscles they're supposed to. We need to try to restore this understanding and equilibrium.

Instructions:

1. Start by sitting on a leg extension machine with your back pressed against the backrest and your legs positioned in front of you..
2. Adjust the machine so that the leg pad rests just above your ankles.
3. Keeping your upper body still and creating tension in the whole kinetic chain, take a full, calm inhalation and slowly extend your legs by contracting your quadriceps muscles until your legs are fully extended.
4. Hold the extended position whilst you make a full exhalation and hold for 3 seconds, then lower the weight back down in a controlled manner, returning to the starting position whilst inhaling and holding the contraction in your side abdominals
5. Repeat this for 6 repetitions

Main 4 reminders:

1. YOUR BREATHING MAY NOT STAY RELAXED BUT KEEP IT DEEP AND SMOOTH
2. REMEMBER TO THINK ABOUT FEET POSITIONING AND PRESSURE AT ALL TIMES
3. REMEMBER TO TAKE FULL EXHALATION AND HOLD SIDE AB CONTRACTION
4. KEEP THE WHOLE BODY CONTRACTED AT ALL TIMES

8.5 – LEG

Exercise: Deadlift with kettlebell

With weight under toe

Intro:

When it comes to learning and mastering the deadlift in the gym, incorporating a band to pull your hips back can be a game-changer. By attaching the band to something behind you and creating tension, it helps promote proper hip hinge mechanics and encourages optimal positioning throughout the movement. However, there is an often-forgotten key to deadlifting success: the importance of establishing a solid lat connection and engaging the lats effectively. The lats, with their extensive attachment points, provide a foundation of stability and strength for the entire upper body. When deadlifting, activating the lats creates a synergistic connection between the upper body and lower body, enhancing overall stability and power transfer. Unfortunately, many individuals neglect this crucial aspect, leading to suboptimal deadlift performance and increased risk of injury. By focusing on initiating the movement with a strong lat engagement and maintaining it throughout the lift, you tap into a powerful source of stability and strength.

We learn with a kettlebell and pay particular attention to what is actually required in our core to actively engage the back, by trying to emphasize retraction of the scapula at all times of the movement at first, and then also learn to retract and protract whilst keeping core engagement.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. YOUR BREATHING MAY NOT STAY RELAXED BUT KEEP IT DEEP AND SMOOTH
2. REMEMBER TO THINK ABOUT FEET POSITIONING AND PRESSURE AT ALL TIMES
3. REMEMBER TO TAKE FULL EXHALATION AND HOLD SIDE AB CONTRACTION
4. KEEP THE WHOLE BODY CONTRACTED AT ALL TIMES

8.6 – LEG

Exercise: Split Squat

Intro:

Incorporating exercises in a split stance, such as split squats, into our training routine is crucial for various reasons. Split stance exercises mimic the walking pattern, which is a fundamental human movement. By performing exercises in this stance, we teach our bodies how to distribute the load onto different parts of the feet, stimulating the mechanoreceptors on the front parts of the foot.

Performing split squats with the front foot elevated is indeed a fascinating exercise that intensifies the need for the body to push more through the front foot. However, it's worth exploring the equally intriguing alternative of raising the back leg during split squats. By elevating the back leg, the emphasis shifts to the rear leg, creating a different dynamic and training effect. Raising the back leg challenges the stability and strength of the lead

leg even more, as it takes on the majority of the load and demands greater control and balance. This variation places a greater emphasis on the glutes, hamstrings, and hip stabilizer muscles of the lead leg, making it an excellent option for targeting these muscle groups specifically. It also increases the range of motion and stretch felt in the hip flexors of the back leg. Both variations—elevating the front foot or raising the back leg—offer unique challenges and benefits, making them fascinating choices to incorporate into your training routine.

Experimenting with both options allows you to target different muscle groups, challenge your balance and stability from varying perspectives, and discover the nuances of each variation to optimize your overall lower body strength and functional performance. We will focus on the front foot being elevated, as having the back foot up can create too much instability for the front foot and the back foot struggles for accurate sensory feedback with the lack of connection with a surface and lack of stability.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

1. YOUR BREATHING MAY NOT STAY RELAXED BUT KEEP IT DEEP AND SMOOTH
2. REMEMBER TO THINK ABOUT FEET POSITIONING AND PRESSURE AT ALL TIMES
3. REMEMBER TO TAKE FULL EXHALATION AND HOLD SIDE AB CONTRACTION
4. KEEP THE WHOLE BODY CONTRACTED AT ALL TIMES

SECTION NINE - BACK TO THE GYM

9.1 - INTRO TO BTTG & WARM UP

Intro

It is truly fascinating that the intricate connection between the lats and glutes often goes unnoticed, leading many to overlook their critical role in the trunk and core. Despite being located in different areas of the body—the lats spanning the sides of the back and the glutes residing in the buttocks—these muscles are intricately linked through a network of fascia and muscle fibers. This connection creates a dynamic interplay between the upper and lower body, facilitating optimal movement, stability, and power transfer. Recognizing the integral relationship between the lats and glutes sheds light on the complexity and synergy of our musculoskeletal system that we are aiming for by the end of the build from the bottom training programme. We want to be opening up new avenues for understanding and maximizing our physical potential at all times.

The scapula, or shoulder blade, is a remarkable structure that plays a crucial role in our overall movement and function. However, it often goes unnoticed and underappreciated in our daily lives and exercise routines. We rarely give thought to the intricate movements and positioning of the scapula, nor do we actively isolate and train its specific motions. The scapula is involved in nearly every upper body movement, acting as a dynamic base for the shoulder joint and facilitating proper arm and shoulder mechanics. By neglecting the isolation and training of scapular movements, we miss out on optimizing our upper body function and stability.

Understanding and actively engaging in scapular movement exercises can improve posture, enhance shoulder mobility, prevent injuries, and promote optimal movement patterns. So let us not overlook the marvel of the scapula, and instead, explore its potential and incorporate targeted exercises to unlock its full range of motion and optimize our overall upper body performance.

Warm up

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

9.2 – BACK

Back Exercise: Scapula pull down followed by lat pull downs

Narrow for lower lat focus

Why this exercise?

The lower lats, also known as the latissimus dorsi muscles, play a significant role in our overall musculoskeletal function, particularly in relation to the pelvis. These large, fan-shaped muscles extend from the mid-back and connect to the pelvis. In a healthy and functional body, the

lower lats assist in stabilizing the pelvis, maintaining proper posture, and contributing to efficient movement patterns. However, in our modern sedentary lifestyles, where pulling actions are limited, the lower lats often remain underutilized and fail to reach their full potential. Traditional back exercises and pulling movements, such as rowing or pull-ups, tend to predominantly engage the upper lats, leaving the lower portion neglected. By neglecting the activation and strengthening of the lower lats, we risk developing muscle imbalances, compromising posture, and limiting our overall functional capacity. Therefore, it is essential to incorporate exercises that target the lower lats specifically to improve their strength and activation. By doing so, we enhance our musculoskeletal balance, promote optimal posture, and unlock the full potential of these crucial muscles, leading to improved performance and reduced risk of injury in our daily activities.

To specifically target the lower lats during lat pull-down exercises, several key factors need to be considered. First, grip width plays a significant role.

Secondly, it is crucial to avoid pulling the bar or handle too far down. While it may be tempting to bring the bar all the way down to the chest, doing so can shift the focus away from the lower lats and engage the upper back muscles instead. Instead, aim to pull the bar or handle down until it reaches the level of the upper chest or just below the collarbone. This range of motion helps maintain the tension on the lower lats throughout the exercise.

Additionally, paying attention to form is vital. Keep the torso upright, maintain a slight lean back, and engage the core muscles for stability. As you initiate the pull, focus on squeezing the shoulder blades and pulling your scapula down together as well as in, and pulling with the elbows, rather than relying solely on the arms. Pulling with the elbows is key.

Instructions:

1. - Opt for a narrow grip bar, approximately shoulder-width apart, as it encourages greater activation of the lower lats. This grip places the emphasis on the lower portion of the latissimus dorsi muscle group
2. Start by depressing scapula, keeping arms straight, but back arched and “chest up”
3. Row “down” and make sure you stop at less than 90 degrees! It is a small movement.
4. When starting to row, after 6 scapula depressions, do not separate the motions too much, instead focus on pull down elbows down and depressing and pulling at the same time
5. Complete full exhalation at the “bottom” and then hold, before inhaling on the way back up

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

9.3 – BACK

Back Exercise: Scapula presses with barbell

Why this exercise?

Scapula presses are an incredibly effective exercise that often goes unnoticed in the realm of fitness. This exercise targets the scapular muscles, including the rhomboids, trapezius, and latissimus dorsi, offering a multitude of benefits. Emphasizing scapular depression during scapula presses can enhance overall posture, reduce the risk of shoulder injuries,

and promote a balanced musculoskeletal system. By this, I mean pull your hands and scapula down towards you at the same as retracting and protracting – teaching the body to stabilise the body, using it's bodyweight and gravity, with the scapula going through protraction and retraction in a depressed state. This is to get ourselves out of always having hunched shoulders and elevated shoulders. The body needs to squeeze and pull itself back together, and we do this by utilizing the connection of the lat and the glute

Instructions:

1. Begin by laying on a bench and grabbing the bar at slightly wider than shoulder-width apart.
2. Keeping your arms straight with a slight bend in the elbow, lower the bar, focus on actively retracting and protracting your scapulae, mimicking a push-up motion.
3. Push the bar back up and focus on protracting the scapula as much as you can, similar to how we have in other exercises in the programme
What sets scapula presses apart is the additional emphasis on scapular depression. Concentrate on pulling your scapulae downward, engaging the latissimus dorsi muscles. By incorporating this element, you not only strengthen the scapular muscles but also activate the lats, leading to improved upper body stability and functional strength.
4. If you can, think also about depressing the scapula as you stabilise the bar through the range of movement – this is to make sure you avoid shrugging!
5. Try and keep the bar in a straight line at all times and remember to breathe

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

9.4 – BACK

Back Exercise: Scapula dips and hang shrugs

Why this exercise?

The fascinating connection between the latissimus dorsi (lat) muscle, the glutes, and the pelvis reveals a remarkable interplay within our musculoskeletal system. The lat muscle, located in the back, connects all the way up to the thoracic spine and the humerus bone of the upper arm. But its influence extends beyond the upper body. The lat has a unique connection to the gluteal muscles and the pelvis through a network of fascia and connective tissue.

This connection forms what is known as the lumbodorsal fascia, a thick band that runs from the lower back, along the side of the trunk, and continues to the gluteal muscles and pelvis. This intricate relationship plays a crucial role in transmitting force and promoting coordinated movement patterns between the upper body and lower body.

Engaging the lat and activating its connection to the glutes and pelvis can enhance stability, power, and efficiency in various activities such as lifting, throwing, and running. Understanding and utilizing this interconnectedness can lead to improved athletic performance, optimal movement mechanics, and a more integrated and functional musculoskeletal system.

We do this using a ball to squeeze to optimize pelvic stability and to create a pelvic floor contraction along with adduction. Doing these like this we eliminate foot imbalances, but do not cross your legs over! Connect the lower extremities through the breath as we do with all the exercises.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.

9.5 - BACK

Back Exercise: Scapula retraction with single arm rows

With added internal and external rotation

Why this exercise?

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

- 1.

- 2.
- 3.
- 4.

9.6 – BACK

Back Exercise: Overhead press with scapula depression and iso

Why this exercise?

Performing an overhead press is a captivating exercise that highlights the critical role of the scapula in stabilizing the shoulder complex. The scapula, or shoulder blade, provides a foundation for optimal shoulder function and proper movement mechanics. One key aspect of scapular function during the overhead press is its ability to depress, or downwardly rotate, in conjunction with other movements.

Many individuals struggle with scapular depression due to factors like poor posture, muscular imbalances, and limited mobility. Interestingly, even foot imbalances can affect stability and shoulder movement through their impact on pelvic positioning. Exploring the overhead press in a seated position can help isolate and emphasize the activation of the scapular depressors, enabling individuals to develop a stronger mind-muscle connection and enhance their overall stability.

When performing the overhead press, consciously focusing on scapular depression adds an extra layer of engagement and stability to the exercise. It involves actively pulling the shoulder blades downward, engaging muscles such as the lower trapezius and serratus anterior. This isometric contraction creates a solid foundation for the shoulder joint, improving its stability and reducing the risk of injury.

By incorporating an isometric movement, where the focus is solely on scapular depression and stabilization while holding the weight overhead,

individuals can further enhance scapular strength and control. This isolated focus helps improve proprioception and reinforces proper scapular mechanics during overhead movements.

Instructions:

- 1.
- 2.
- 3.
- 4.
- 5.

Main 4 reminders:

- 1.
- 2.
- 3.
- 4.