

THE BIOMECHANICS BLUEPRINT

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INTRODUCTION

Welcome to the Biomechanics Blueprint! In this simple, straightforward ebook, I want to give you valuable tools and insights into how to get better outcomes fixing movement, posture, and pain in your clients. All while, and this is key, not sacrificing gains or improving fitness.

I have worked with 10,000+ personal trainers, coaches, physical therapists, and so many more fitness & health professionals.

When it comes to movement, posture, and pain management, there is one theme I see that stands out more than any other when it comes to why they're frustrated:

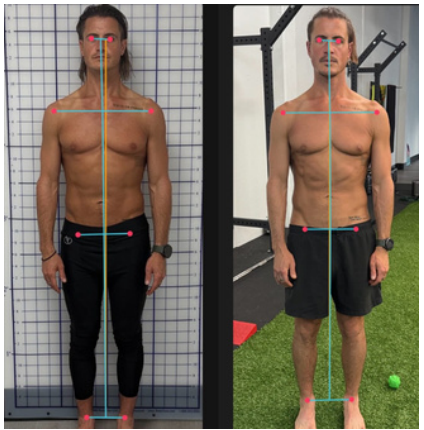
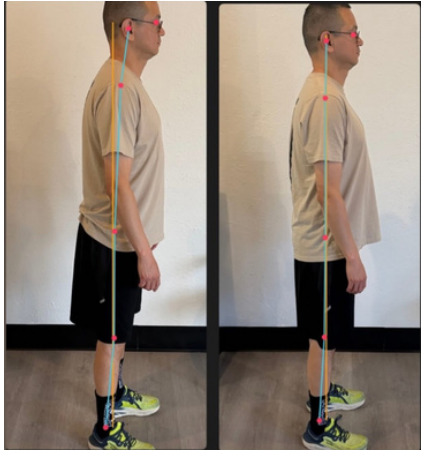
They don't get lasting results that stand out.

Their clients plateau and don't actually fix their problem 100%, or to an extent that they want.

This is the #1 complaint I hear for a very specific reason. It's not the coach or therapist's fault - they're doing the best they can with the tools they've learned or been given,

The real problem is that they lack the ability to understand how the body functions as one interconnected unit, and how dysfunction in one area can drive problems and compensations in another. They're missing the bigger picture because everything they've been taught is commonly so symptom-driven.

Take a look at some of these changes in posture, both in the short and long-term, I've achieved with my clients:



All of these occurred within 5 sessions or less. I am showing you these because it illustrates my point - my goal wasn't even remotely to fix their posture

It was to fix the most glaring problem in their movement patterns. See, when you fix the underlying movement problems, posture tends to fix itself as a natural byproduct. The body doesn't need to compensate as much any more because you filled in the missing gaps.

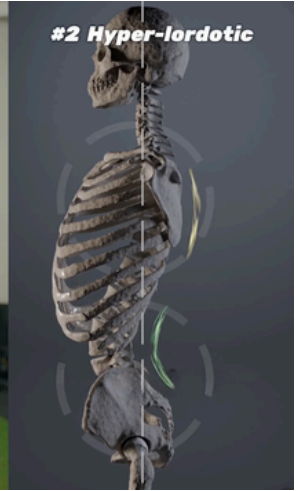
THE 3 KEYS TO SUCCESS

In order to get results that stand out, you need to understand a few key things I will address in this ebook:

- 1.) Understanding what posture is**
- 2.) How breathing underpins all movement & posture dysfunction**
- 3.) How to get changes in mobility & movement that stick**

VIDEO WALKTHROUGH

If you want a visual demonstration of me talking you through each of these concepts, check out these videos below:



1.) Understanding what posture is

[WATCH HERE](#)



2.) How breathing underpins all movement & posture dysfunction

[WATCH HERE](#)



3.) How to get changes in mobility & movement that stick

[WATCH HERE](#)



KEY #1: HOW POSTURE (ACTUALLY) DEVELOPS

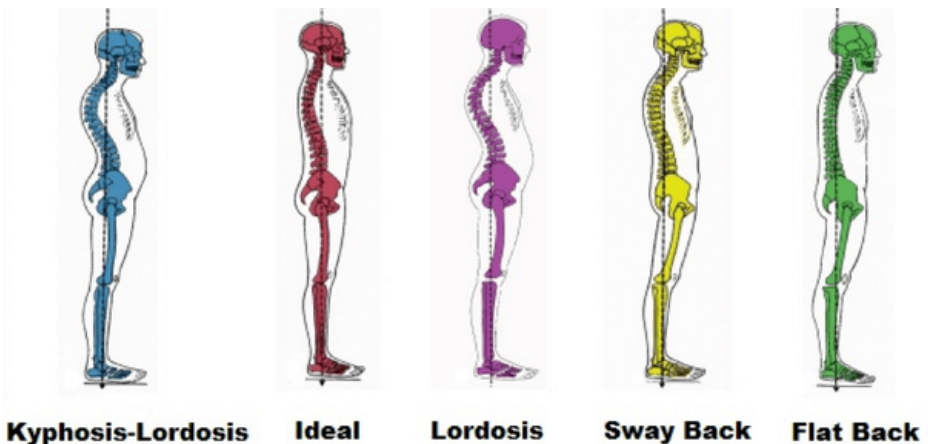
Posture is a representation of how we manage our center of gravity of gravity.

Our center of gravity can be described how we distribute our bodyweight from head to toe in relationship to the ground.

Essentially, all our body is trying to do is keep itself upright against gravity.

Gravity is constantly pushing us down, so we need to find the strategy that is best available to us based on our genetics, movement capabilities, and injury history to stay upright.

Therefore, we will find a way to organize our spine curves around an invisible line that runs down the center of our body. **This is what every single posture has in common:**



We will tilt our pelvis forward, backward, and side-to-side to best accomplish this.

But then, our shoulders have to adjust to accommodate for that to balance out our center of gravity.

For example, if my pelvis tilts forward, my ribcage has to move back, or else I will fall forward:



If my pelvis tilts back, my head/neck has to move forward, or else I will fall backward:



If my pelvis tilts up on one side, the shoulder on that side will tend to shift down in many cases:



Hopefully you're starting to get the picture.

The point is, we can't keep looking at posture as if:

"Oh these muscles are tight/overactive and these other ones are long/underactive, so all I need to do is stretch the tight ones and activate the long ones!"

No. That is addressing the symptom, not the actual cause.

We need to ask **WHY**.

Why are those muscles tight in the first place?

Did your body decide to wake up one day and create tight hip flexors and pec muscles?

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Why are those muscles tight in the first place?

Did your body decide to wake up one day and create tight hip flexors and pec muscles?

Did your body think it was a good idea for you to live with Anterior Pelvic Tilt because it thought it would be fun?

Of course not. Everything our body does happens for a reason.

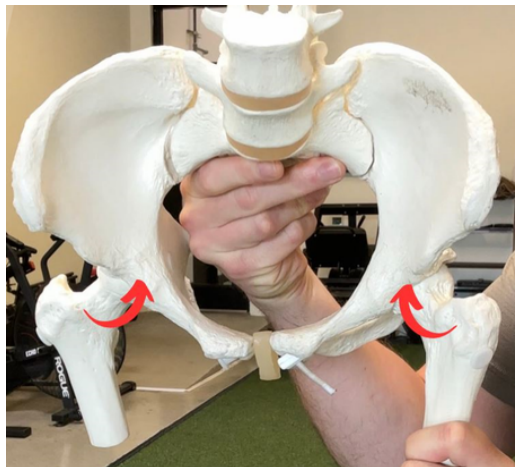
Our bodies are not stupid. Our brains, working constantly at a sub-conscious level to monitor our center of gravity, balance, and threat level, are not stupid.

The Real Answer

Going back to the example before, maybe your pelvis is tipped forward into Anterior Pelvic Tilt because you are trying to find something you're lacking.

For example, we generally need internal rotation at the hips to produce force and move forward in the gait (walking) cycle.

If we lack this ability to create internal rotation at the hips, we will need to find it somewhere else. When our pelvis tilts forward, we pick up internal rotation:

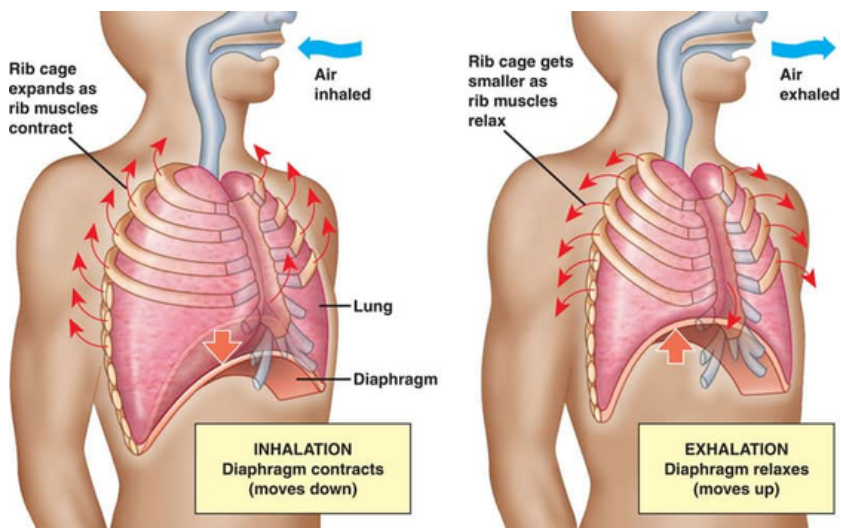


This is a strategy to pick up compensatory internal rotation. Now you can produce that force you previously couldn't, but you also set off the cascade of compensations that lead to the pelvis tipping forward and ribcage tipping back:



Hopefully you're starting to get the idea.

KEY #2: BREATHING AFFECTS EVERYTHING



Breathing is foundational to all posture and movement.

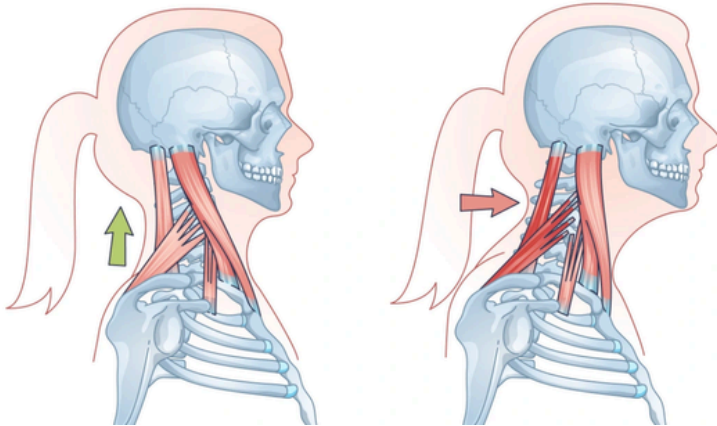
Why?

Because it's quite literally the most important thing you do.

Research strongly suggests that if you don't breathe, you die ;)

But in all seriousness, think of it this way - If it's the single most important thing you do, and your body (for a variety of potential reasons), deems you can't do it optimally enough, you will do whatever it takes to pull air into your lungs consistently.

When the diaphragm doesn't function properly, the most common mechanism is altering one's posture to create an ability to leverage neck as a compensatory mechanism to pull in air.



Then if your neck comes forward, we fall right back into the initial discussion in the section above about posture. There will have to be a compensatory re-organization of spine curves to balance the center of gravity as the neck pulls forward.

So, one of the best things you can do initially with a client that can have massive benefits is to train them how to breathe with their diaphragm, both with and without external load present.

Here is a quick step-by-step guide to get started:



KEY #3: MOVEMENT-SPECIFIC MOBILITY

Once you understand how posture and breathing mechanics influence posture, you're off to a great start.

But we have to finally appreciate one key element that is what I believe the main reason why most coaches, trainers, and PTs aren't making optimal progress with their clients: They aren't integrating their corrective strategies properly into their client's movement strategy, if at all.

What I mean by this is that in order to improve movement quality, we have to teach the body how to functionally use that muscle and/or range of motion in a context specific to how we actually move.

For example, let's say your client had a weak Gluteus Medius muscle and you theorize that it's a significant factor in their knee pain. So you do some banded clamshells or monster walks:

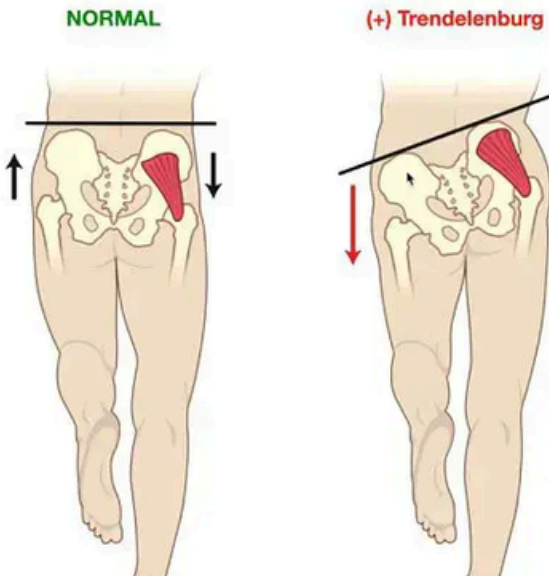


But it doesn't work, or is very limited in success.

Why?

Well, you aren't training the glute med specific to how we actually move.

When we are moving through the gait or running cycle the gluteus medius works to help stabilize the hip during mid-stance, or else the hip will be imbalanced:



During mid-stance, for proper mechanics, we should be doing two main things:

- 1.) Turning the pelvis towards the leg that's on the ground
- 2.) The foot is in a position of a higher arch (supination)



So if you want to train specificity of the glute med working to stabilize the hips in mid-stance, you need to train the Glute Med under the context of a pelvis turning towards that side + a foot shape that is supinated.

If you want a more extensive explanation, watch this video.



And here is a way to train exactly that:



So the short explanation is this:

- 1.) Find out what your clients are most limited in**
- 2.) Open up space for that movement or capacity for the muscle to function (often involves creating more mobility around a given joint)**
- 3.) Train the muscle/joint specific to when it is used in the gait cycle**

This is the exact process I use that's helped catapult me to growing my business and achieving stand-out results with clients.

EXAMPLE EXERCISES FOR QUICK WINS

On the next few pages are a few examples of how you can integrate these steps together.

1.) 90/90 Half-Roll

Why: Opens up space for internal & external rotation movement within hips



WATCH HERE



What To Do:

1. Lie on your side with a small towel rolled up under your pelvic crest. If it's painful, just don't use the towel. Ensure your hips are bent around a 60 to 90 degree angle - whatever allows you to comfortably keep your whole down-side leg flat from your hip to outside knee.
2. Support your head with something so your neck can stay relaxed and neutral
3. Exhale and gently roll your top knee forward just 1-2 inches ahead of your bottom knee. Make sure you're moving through your hips more than low back.
4. Inhale and gently roll your top knee back just 1-2 inches behind your bottom knee.
5. Repeat for 15 reps on each side.

2.) 90/90 Hip Lift

Why: Creates better alignment of head, rib cage, and pelvis with people who have Anterior Pelvic Tilt. Creates connection between heel pressure and the hamstrings having better control over the tilt of pelvis.



WATCH HERE



What To Do:

1. Lie on your back with your feet on a wall and knees bent to 90 degrees.
2. Tip your chin to the ceiling and place your hands on your low ribs.
3. Gently pull down on the wall with your heels (keeping your whole foot flat) as your low back flattens out & remains on the ground, but your tailbone lifts off of the floor slightly. You should feel the back of your thighs (hamstrings) engage.
4. Maintain this position as you breathe similarly to the sequence in Step 1: Full, gentle exhale, pause. Then silent but full inhale, keeping your neck disengaged. Repeat this for 8-10 breaths.

3.) Adductor Pullback

Why: Trains body how to “use” that new space for internal rotation via training the adductors to internally rotate the hip when the pelvis and foot are in a specific position that represent turning towards that side.



WATCH HERE



What To Do:

1. Lie on your side with your feet on the wall + hips and knees bent to around 90 degrees (or slightly less)
2. Support your head so your neck can stay relaxed and place a slightly compressible object between your upper thighs.
3. Maintain full foot pressure with both feet on wall. Inhale gently while you pull your top knee slightly behind your bottom knee. This will turn your pelvis to that side.
4. Exhale as you gently push down into the ball/object with your top thigh, not allowing your top knee to come forward.
5. Release the squeeze, and repeat 3-5 more times.

RECAP

In short, here are the three keys that will help you immediately get better results:

1.) Understand the true root cause of posture – it's not tight muscles or joints.

Those muscles and joints are tight because the body is using a strategy to better stand upright against gravity.

2.) Breathing is the #1 thing our body is concerned with from a biomechanical perspective. We will do whatever it takes to breathe. Taking this lens to understanding your client's posture and movement limitations will teach you a lot.

3.) Improve movement and range of motion specific to the gait cycle.

Gait is what our body does most in terms of locomotion. Educating better movement and muscular recruitment patterns under the context of the gait cycle is the key to unlocking movement.

WANT MORE?

Want to go deeper? I encourage you to join my free webinar.

If this blueprint opened your eyes to what's possible with biomechanics...

Then you'll love the webinar's concept:
"Asymmetry 101 - A Beginner's Guide To Fixing Movement & Posture Imbalances"



Inside this 60-minute session, you'll learn:

1. How asymmetrical & imbalanced posture/movement patterns develop over time + why it matters
2. Simple assessments for identifying dysfunction
3. Learn effective exercises that get results fast

This is not theory. I'll walk you through real strategies you can use immediately.

👉 [Watch it for free here](#)