

Intro to Self Physical Therapy: Student Handout

I. The Core Philosophy: Imbalance is the Root Cause

- **Definition: Muscle Imbalance** is a state where opposing muscles around a joint have **unequal strength or length** (*tight/overactive* vs. *weak/inhibited*), and **Muscle Compensation** is the resulting action where an unaffected muscle takes over the job of the weak muscle to complete a movement.
- **Goal:** To safely identify and correct common **muscle imbalances** and **postural faults** that lead to non-acute, repetitive stress pain.
- **Disclaimer:** This is for minor aches and generalized stiffness. **SEE A PROFESSIONAL (PT or MD)** if you experience sharp/shooting pain, numbness, tingling, or pain that worsens rapidly or doesn't change with movement.

II. The Self-Assessment "Rule of 3"

1. **Check Posture:** What is the resting position? (e.g., Forward head, rounded shoulders, pelvic tilt.)
2. **Check Range of Motion (ROM):** Is one side significantly stiffer than the other?
3. **Check Muscle Strength/Activation:** Can you contract the target muscle *without* compensating (e.g., can you squeeze your lower traps without shrugging)?

III. Common Pain Areas & Mitigation Strategies

Area & Self-Diagnosis	Common Culprits	Mitigation Exercise (Sets/Reps)	Key Cue
NECK PAIN (Usually Forward Head Posture)	Weak: Deep Neck Flexors, Mid/Lower Trapezius	1. Chin Tucks (3 sets of 15 reps, 5-sec hold)	Gently pull your head straight back, making a double chin. Keep your eyes level.
		2. Prone "Y" or "W" Raises (3 sets of 15 reps)	Squeeze your shoulder blades down and back, imagining putting them in your back pockets.

	Tight: Upper Trapezius, Pectoralis Muscles	3. Upper Trapezius Stretch (3 sets of 30-sec hold per side)	Sit tall, keep your shoulders down, and gently tilt your head away from the stretching side.
		4. Pectorals Door Stretch (3 sets of 30-sec hold)	Place forearms on a door frame, step through, and gently feel the stretch across your chest. Do not let your shoulders hike up.
LOW BACK PAIN (Often Pelvic Imbalance)	Weak: Gluteus Maximus, Core Stabilizers	1. Glute Bridge (3 sets of 15 reps, 2-sec hold at top)	Squeeze your glutes <i>before</i> lifting, do not arch your lower back.
		2. Dead Bug (3 sets of 12-15 reps, slow and controlled)	Slowly extend the opposite arm and leg while keeping your lower back pressed into the floor (no arching!). Imagine a string pulling your belly button down.
	Tight: Hip Flexors	3. Half-Kneeling Hip Flexor Stretch (3 sets of 30-sec hold per side)	Tuck your pelvis under (posterior tilt) before leaning forward to feel the stretch high up on the front of the hip.
KNEE PAIN (Often Poor Foot/Hip Control)	Weak: Gluteus Medius, Arch/Foot Intrinsic Muscles	1. Clamshells (3 sets of 15 reps per side)	Keep your feet touching, and your hips stacked (don't rock back) as you lift your top knee.
		2. Resisted Inversions (3 sets of 15 reps per side)	Keep your knee still and relaxed and do not allow your knee or hip to rotate

			or lift. Move slowly in both directions.
	Tight: Hip Adductors, Tensor Fasciae Latae (TFL) / IT Band, Peroneals	3. Kneeling Adductor Stretch (3 sets of 30-sec hold per side)	Kneel with one leg extended out to the side, foot flat. Gently lean your weight back, pushing your hips away from the extended leg.
		4. Calf Stretch (3 sets of 30-sec hold per side)	Stand facing a wall, place one foot back with the knee straight and heel down. Lean into the wall until you feel the stretch in the middle of your calf.

IV. Training Principles for Success

- **Consistency is Crucial:** Perform your exercises **daily** or at least 5 times per week. This is **re-education**, not strength training.
- **Low Load, High Repetition:** Focus on high-repetition ranges (15-20) with little to no weight to promote muscle endurance and awareness.
- **Quality Over Quantity:** If you feel the wrong muscle working (e.g., your neck tenses during a chin tuck), stop and re-set. The goal is to isolate the weak muscle.