PRACTICE GUIDE • TAI CHI WUJI

Zhan Zhuang: A Stage-by-Stage Practice Guide

What you will feel, and which muscles are doing the work — a printable reference for the first year of standing practice.

Format: Reference sheet / practice specification

Audience: Desk workers & people in rehabilitation

Companion to: the long-form article on zhan zhuang sensations

> How to use this sheet. This is a reference document, not an article and not a lesson. Print it, keep it where you practise, and work through it in order — check the stance, learn the stage table, then start the plan that matches you. The practice itself needs a teacher or a demonstration.

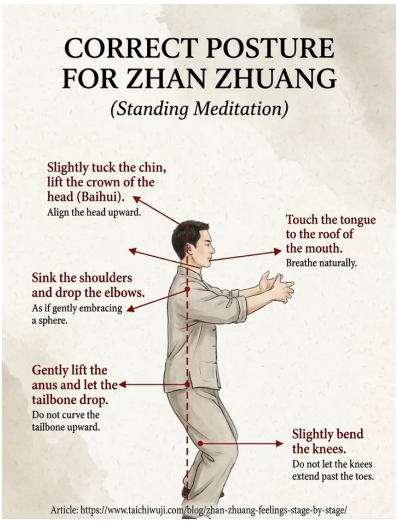
- Sections 1–2 are the technical core: how to stand, and what is happening at each stage.
- Sections 3–5 are the practical core: the muscles involved, your starting plan, and the stop signals.
- Section 6 lists what research has measured, so you know which claims are data and which are tradition.

SECTION 1

The Stance — Six Checkpoints

Every sensation later in this document is a consequence of the shape below. Get the shape wrong and the joints pay for it instead of the muscles. Tick each box before each session for the first month.

- Feet. Hip-width apart, toes pointing forward, weight spread across the whole foot — not pressed into the heels, not lifted onto the balls.
- Knees. Softly bent, tracking in the same direction as the toes, and never travelling forward past them.
- Pelvis. Tailbone gently tucked so the lower back lengthens rather than arches. No tucked belly, no pushed-out chest.
- Spine and head. Sit back as if resting on a high stool; crown of the head lifted as if a thread draws it upward; chin level.
- Shoulders and arms. Shoulders sunk and relaxed, elbows heavy and pointing down, armpits open to about one fist. Arms rounded in front of the chest as if holding a ball — shaping it, not squeezing it.
- Breath. Natural, unforced, into the lower abdomen. If you are holding your breath to hold the posture, the posture is too deep.



Side view. The posture is a stack, not a squeeze: feet grip lightly, knees stop short of the toes, pelvis is tucked, the crown is lifted, and the arms shape a ball they do not grip.

> Most common error. Raising the shoulders to hold the arms up. The arms should hang from the shoulders, not be carried by them — otherwise the upper trapezius takes the load and your shoulders fail before your legs do.

SECTION 2

What You Will Feel, Stage by Stage

Sensations arrive in a fairly predictable order. Each one is a report on which muscles are currently carrying the load.

Week 1–2 — the burn

Feels like: a burn in the front of the thighs after 2–3 minutes; heavy calves; the urge to shift position.

Working: the quadriceps — four muscles on the front of the thigh that hold the knee bent against gravity, isometrically, the entire time.

Do this: three minutes, not twenty. If the ache is in the knees rather than the thighs, reduce the bend and check that the knees are not past the toes.

Week 2–3 — the shake

Feels like: visible trembling in the thighs and around the knees, usually from minute three onward.

Happening: motor units recruited to their ceiling. Normal, not a warning sign. The posture stealer is the upper trapezius, which takes over the arms if the shoulders lift.

Do this: sink the shoulders, keep the armpits open, hold the shape without gripping. Distinguish long from tight.

Month 1 — heat

Feels like: hands and feet warming first, then the lower back and abdomen; light sweating from the low back.

Happening: circulation opening up. Measurable rather than merely felt: 10 weeks of practice raised SDNN, RMSSD and pNN50, and shifted autonomic balance toward the parasympathetic side (Yan et al., 2019).

Do this: keep the breath natural; this is the stage where sitting shorter and more often beats one long session.

Month 1–3 — the difficult stretch

Feels like: numb or tingling feet and a crawling sensation — then old injuries waking up and aching more than usual.

Happening: prolonged stillness affects circulation and nerve signalling; a corrected posture redistributes load onto structures that had been quietly compensating for years.

Rule: continue if the reaction comes in waves and your energy outside practice improves. Stop and reassess if it locks onto one spot and worsens each session.

Month 3–12 — the handoff

Feels like: the same stance becoming warm, heavy and supported; the shoulders dropping without effort; steadiness replacing bracing.

Working: the deep stabilizers — the gluteus medius holding the pelvis level, the transversus abdominis wrapping the waist, and the multifidus supporting the spine segment by segment.

Note: the core half of this is measured — a stance position significantly raised erector spinae, multifidus and left transversus abdominis activation versus relaxed standing (Zhou, 2019). The hip half is not yet measured.

Year 1+ — maintenance

Feels like: breathing lengthening, chest loosening, drowsiness mid-session and a clear head afterwards; practice becoming upkeep rather than training.

Happening: slow changes that are hard to detect from inside. One year of practice produced a measurable EEG shift toward synchronisation, with no change detectable at six months (Yang et al., 1994).

Do this: stop benchmarking by sensation and benchmark by consistency instead.

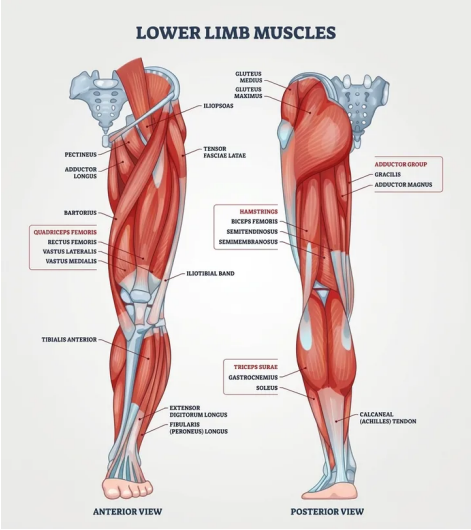
SECTION 3

Muscle Reference

Six groups decide whether a stance holds or collapses. For each one: where it is, what it does in the stance, and what fails when it never takes over.

Ordered roughly by the sequence in which each group becomes the limiting factor.

MUSCLE	WHERE IT IS	ITS JOB IN THE STANCE	IF IT NEVER TAKES OVER
Quadriceps	Front of the thigh	Holds the knee bent against gravity, isometrically, without rest	Burn within minutes; the practitioner concludes they have no talent for standing
Hamstrings	Back of the thigh	Brakes the knee and gives the joint a slight backward pull	The knee feels unsupported, or wobbles back and forth
Calf & foot	Lower leg and arch of the foot	Keeps the ankle stable so the whole foot stays connected to the ground	Weight rolls to the outer edge; standing feels like balancing, not standing
Gluteus medius	Outer hip, above and behind the hip joint	Keeps the pelvis level and stops the stance collapsing inward	The hips drift, one leg quietly takes more weight, and one knee starts to complain
Transversus abdominis	Deepest layer of the abdomen, wrapping the waist	Acts like a corset: stabilises the lumbar spine without flaring the ribs	The lower back arches and aches; the practitioner braces by tightening the chest instead
Multifidus	Small muscles threaded along the spine, deepest layer	Supports and stabilises each vertebra individually	The back feels empty and fatigue arrives early, however strong the legs are



The major lower-body muscle groups that carry the load in a standing post.

> One muscle to keep deliberately quiet. The upper trapezius, running from the neck to the shoulder blades. If it is holding your arms up, you are carrying the pose rather than standing in it.

SECTION 4

Starting Plans

The governing rule for both groups below is the same: frequent and short beats rare and long.

A. If you sit for a living — four-week build

Standing up for three minutes every hour matters more than the length of any single session.

WEEK	DURATION	FREQUENCY	FOCUS
1	3–5 min	Morning & evening	Standing correctly, not standing long
2	5–8 min	Twice daily	Check for raised shoulders and knees past the toes
3	10 min	Once or twice daily	Add a 3-minute stand every sitting hour
4	15 min	Once daily	Walk five minutes afterwards, before sitting down

- Keep the daily total between 10 and 30 minutes. More is not better here.
- Do not sit down straight after a session — walk first.
- Interrupt sitting every 45–60 minutes, even if only to stand for one minute.

B. If you are recovering from an injury

Recovery plans are specific to the tissue involved. These are starting points, not prescriptions — clear them with your clinician or physiotherapist before you follow them.

Angles and durations for any post-surgical case should be set by your own clinician.

STARTING POINT	HOW TO SET UP	FIRST TARGET
Knee injury or knee surgery	Back flat against a wall, knee bent to about 45°, knee never past the toes	30 seconds, building toward 5 minutes
Lower back problems	Wall-supported stand, five contact points: head, upper back, buttocks, calves, heels; tailbone tucked, lower back long	5 minutes; stand higher, never lower
Balance or blood-pressure instability	One hand resting on a chair back; eyes open or half-closed at most	3 minutes, seated rest afterwards; avoid heel raises entirely

- Do not practise within 30 minutes of a meal, and empty the bladder first.
- If a clinician has told you not to bear weight statically, that instruction overrides this sheet.

SECTION 5

Stop Signals

Fatigue, soreness and shaking are the practice working. The following are not fatigue.

Stop the session if you get: Sharp or pinpoint joint pain, or pain in one leg only. Chest tightness, palpitations, dizziness or faintness. Pain that worsens as you continue rather than plateauing. A session that ends in exhaustion rather than ease.

Do not begin a self-guided practice if you have any of: Meniscus tear, ruptured cruciate ligament, or patellar dislocation. An acutely inflamed, swollen or hot joint. Severe osteoporosis, or uncontrolled severe hypertension. Significant cardiac or cerebrovascular disease, or severe vertigo. Zhan zhuang supports rehabilitation. It does not replace treatment, and it is not a substitute for a diagnosis.

SECTION 6

What Has Actually Been Measured

Keep these two lists separate. The first is data; the second is tradition that has not yet been instrumented.

Measured findings, with the caveat that decides whether each one can be quoted as a zhan zhuang result.

FINDING	SOURCE	CAN YOU CALL IT A ZHAN ZHUANG RESULT?
Core activation rises in a stance position	Zhou, 2019 — 21 participants, surface EMG	Yes — but small sample, healthy adults
Autonomic balance shifts toward parasympathetic	Yan et al., 2019 — 10 weeks, three-circle zhan zhuang	Yes
Resting blood pressure falls	Edwards et al., 2023 — 270 RCTs, 15,827 participants	Only as 'isometric exercise' — not zhan zhuang alone
Four weeks of home wall-sit training lowers blood pressure	O'Driscoll et al., 2023 — 18 participants	No — the exercise studied is a wall sit
One year of practice shifts EEG toward synchronisation	Yang et al., 1994	Yes — cite as 'tendency,' no numbers
Surface muscles hand the load to deep stabilizers	Traditional teaching (换勁 / 'changing the force')	No — never directly measured
The gluteus medius relay	Established in rehabilitation; not measured in standing post	No

> The one sentence to avoid. "Zhan zhuang lowers blood pressure by 8 mmHg." The 8.24/4.00 mmHg figure belongs to isometric exercise as a category. The defensible version is: "isometric exercise — the category zhan zhuang belongs to — ranked first for lowering resting blood pressure in a 270-trial meta-analysis."

RELATED READING

Where to Go Next

These pages are linked in the digital version. Listed here as titles and paths so the printed sheet still works.

Zhan Zhuang (站桩) — glossary — taichiwuji.com/glossary/zhan-zhuang/
Wuji Stance: How to Practice Standing Meditation Before Tai Chi — taichiwuji.com/blog/what-is-wuji-in-tai-chi/
The 3 Golden Signs of Effective Tai Chi Stance (Zhan Zhuang) — taichiwuji.com/blog/how-to-master-tai-chi-stance-zhan-zhuang/
How Qi Feels: Common Sensations in Qigong and Tai Chi — taichiwuji.com/blog/how-qi-feels/
Dantian Breathing: How It Actually Works, Step by Step — taichiwuji.com/blog/dantian-breathing/
Does Tai Chi Build Muscle? — taichiwuji.com/blog/does-tai-chi-build-muscle/
Zhan Zhuang for Weight Loss — taichiwuji.com/blog/zhan-zhuang-weight-loss/
Rooting (扎根) — glossary — taichiwuji.com/glossary/rooting/
Yi (意) — glossary — taichiwuji.com/glossary/yi/