

Progressive Muscle Relaxation

A systematic method for reducing physical tension and anxious arousal, developed by physician Edmund Jacobson in 1938 and validated across decades of clinical research. This guide walks through the full 16-muscle-group sequence, the physiological mechanism behind it, and how to practice it correctly.

The Mechanism

Progressive muscle relaxation (PMR) works by deliberately tensing a muscle group for 5-7 seconds, then releasing it abruptly and noticing the sensation of relaxation for 15-20 seconds before moving to the next group. The tension-release contrast is the active ingredient — it is easier for the nervous system to recognize deep relaxation immediately after tension than to relax from a resting state directly.

Jacobson's original research, and later controlled trials through the 1970s and 1980s, found that PMR reliably reduces muscle electromyography (EMG) readings, heart rate, and self-reported anxiety. A meta-analysis of relaxation techniques for generalized anxiety disorder found PMR produced effect sizes comparable to other first-line behavioral interventions when practiced consistently.

The technique also serves an interoceptive function: many people with chronic anxiety lose the ability to accurately notice bodily tension until it has built to an uncomfortable level. Practicing the tense-release cycle rebuilds that awareness, making it easier to catch and release tension earlier in the day, before it accumulates.

The 16-Group Sequence

Work through each group in order. Tense for 5-7 seconds at roughly 70% of maximum effort — not painful — then release completely and rest for 15-20 seconds before continuing.

1. Dominant hand & forearm — make a tight fist
2. Dominant upper arm — bend elbow, tense bicep
3. Non-dominant hand & forearm — make a tight fist
4. Non-dominant upper arm — bend elbow, tense bicep
5. Forehead — raise eyebrows as high as possible
6. Eyes & cheeks — squeeze eyes shut, scrunch face
7. Jaw — clench teeth, corners of mouth back
8. Neck & throat — pull chin toward chest, resist
9. Chest & shoulders — take a deep breath, hold, pull shoulder blades together
10. Upper back — pull shoulders back and down
11. Abdomen — tighten stomach muscles as if bracing for impact
12. Dominant upper leg — tense thigh, push knee down
13. Dominant lower leg & foot — point toes toward face
14. Non-dominant upper leg — tense thigh, push knee down
15. Non-dominant lower leg & foot — point toes toward face
16. Whole body — briefly tense everything at once, then release fully

Practice Notes

When to practice

Once daily during a calm period builds the skill fastest. Once the sequence is familiar, a shortened version (4-6 major muscle groups) can be used in the moment during acute anxiety.

Session length

A full 16-group session takes 15-20 minutes. A shortened version takes 5-7 minutes.

Environment

A quiet space where you can sit or lie down without interruption. Not required once the skill is well-practiced.

Common mistake

Tensing too hard, to the point of cramping. Aim for firm, deliberate tension, not maximum effort.

What to expect

The relaxation response typically becomes noticeable within 1-2 weeks of daily practice, and more pronounced within 4-6 weeks.