# Proprioceptive Neuromuscular Facilitation (PNF)

## Edited Video Transcript

### Stretching Stimulates the Proprioceptive System

Now, our next skill we've already talked about—proprioceptive neuromuscular facilitation (PNF). When we talk about PNF stretching, the idea behind PNF is [that] we're going to stimulate the proprioceptive system. They came up with some theories on all of these ways: we can stimulate the proprioceptive system by these alternating patterns of flexion extension, by engaging the agonist antagonist combinations fire and release, and by opposing muscle groups. And this reciprocal inhibition, when you enable, when you engage an agonist, having the antagonist relax one of the core principles, proximal stability promotes distal mobility. So we need stability at the shoulder if we're going to reach with the hand. We have two applications of these—PNF stretching and PNF relaxation techniques. We already did this earlier this semester with our PNF stretching. We did the contract-relax version with the hamstring stretch. You would have them engage that hamstring and then relax, and then you got more range out of it.

### PNF Diagonals: Stimulate Proprioception and Promote Neural Recovery

Yes, now [the] technique [that] we're going to practice today is our PNF diagonals. There are two diagonals: diagonal one on your left; diagonal two on the right. Diagonal one on the left involves moving from that open same-side position to cross body overhead. Yep, so starting at same side of the body at the hip, cross body above the head. Diagonal two is the opposite: start cross body at the hip, move up to same side above the head. Your idea here is [that] by doing this, you're going to facilitate the proprioceptive system.

The examples here, you're seeing it done passively. You can do this technique passively. You can do it active assist, actively with resistance combined with function. It really goes back to what is the right thing for that client. That… was our PNF stretching that we practiced before two different techniques. This… is also a form of PNF, all right?

“Let's see if you would scooch forward.” So with this again, you can do it passively. You could do it active assist. You could do actively. If you've got somebody who's weak and unable to do this…, we could do this active assist. We can start with our diagonal one, starting at our same side hip. “I’m going to have you reach up overhead to that side. You're going to help, and then back down.” You could do it with resistance with a TheraBand or a weight. You could do it functionally. What's a functional task? Putting on a seatbelt, washing your back, combing your hair, grabbing your jacket over on that side. There's a bunch of things you could do. Your diagonal two, starting with cross body at the hip, coming up to same side. What are some functional tasks? Putting away dishes, right, something about grabbing a dish off the counter, putting it up into that cabinet. Think about taking off your seat belt; think about reaching up to put your arm in a jacket and then go up, or cleaning, cleaning a window. There's actually a bunch of things that you can apply. Yes, this is to help them get proprioception. And by getting proprioception, we hope to promote that neural recovery.