# Weight-Bearing

## Edited Video Transcript

The next thing that we can look at as a tool is weight bearing. So when I say weight bearing, this is simply putting weight through that limb of interest. We think most about weight bearing through our legs—walking, going upstairs, standing, whatever, right? We can also put weight bearing through our arm. What is one task that we do often that does require weight bearing through our arms? Yeah, push like when you push up from this low surface, you’ve got to put a lot of weight through your arms. Other activities of daily living (ADL) tests have a little bit of weight, really not that great amount. So this tends to that theory to normalize tone. If it's too low, it tends to increase, Still, if it's too high, it tends to decrease it a little bit. The reasoning behind this is that by increasing joint protection, that is going to effectively send signals back to the brain, give them appropriate proprioceptive stimuli, and cause that co-contraction around muscles—contraction of both sides of the flexor and the extensor. And the data does support some amount of normalizing of tone, at least in this pretty small study. So in this case, what I’m going to have you do is work on different positions where you can have the person weight-bear through their arm, all right?

### Weight-Bearing to Normalize Tone

So Penny, if you would just have a seat to start with. So if this right side is affected by putting her hand down and having her lean over to this side and then back, one thing that you may need to do if she has this difficulty of motor control with elbow extension and she goes to lean on this arm, right, that arm is going to go like that… So you can actually use your hand to help support the elbow. Keep it from buckling, alright? So when she comes down, if her elbow goes to buckle, my hand is right here to help her back. You can use an elevated surface and have her go down into the elbow as well. You can actually work on positioning. “So, if you would stand, right, and then yeah. Turn around to the mat. What we can do is actually switch your side again —this side.” So by having her lean in that arm, you can actually do this during functional activities. You could do a functional activity of having her stand and reach with this arm’s reaction. Numerous things you can do: the simple is getting a towel and elevating the wrist, so the wrist is in that little bit of flexion. Usually that's enough. You can also switch your weight-bearing positions, having them lean through the elbow if necessary. Simply raising the surface up higher would work. I’ve also created effectively…yes, because you're still putting that weight into the arm. It's just working its way up, so you can even go to advanced stuff by having them be in quadruped or prone with weight-bearing back onto the mat. “But in a quadruped position—yep, all fours. So doing this, all right, and weight-bearing, you can actually go all the way down to your forearms. Yep, you could do the legs extended.”

All right, it's really whatever way that you're wanting to apply pressure into that joint that would be as they got stronger. So what we kind of showed as a grading of this activity, seated and leaning into it would be easiest, standing and leaning into it is a little bit harder. Doing quadruped is a little bit harder, doing prone is harder. “You could, yeah, there's a lot of stuff you can do with this.” All right, practice that with your partner.