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Why Rotational Movement Matters

When it comes to strength training, squats and bench presses have their place. But bilateral movements shouldn't be the entirety of any workout because they neutralize rotation. As a physical therapist, you likely already understand rotational movement, but take time to stress its importance with your patients and remember to train for it in your own life. Let's start by recognizing the prevalence of rotation in real-world movement.

Recognizing Rotational Movement
Rotation shows up in everyday life. Take walking up the stairs, for example. Rotation is taking place throughout the body to keep your center of mass controlled over your base of support. As this happens, notice that your torso will naturally rotate away from the back leg to help counterbalance.

Now consider daily movements, such as picking up a heavy box, grabbing a dish from a high shelf, or taking out the garbage. To move efficiently, your body needs to synchronize individual joint movements in a deliberate pattern to create or manipulate movement. Showing your patients how it appears during their day can help explain to them why you're addressing rotational movement in their therapy.

Side Effects of Restricted Movement
But what happens if you don't have good functional movement patterns? Things get complicated. For example, if you try to run with limited rotation in your midback, your brain will quickly calculate another solution to this puzzle.

The result: You'll likely borrow rotation or range of motion from another joint that isn't as well-suited to support this motion. That's why a lack of mobility in one area can show up as pain or an overuse injury. Knee pain when running could be directly related to poor rotation in the midback and addressing that overall alignment issue is key to solving the issue. Your physical therapy patients might seem confused about this at first, but explaining how interconnected the body is will help them understand.

Training the Right Way for Better Movement
Just because your patients are able to grind their way through a pickup game, a heavy squat, a longer run, or moving furniture, doesn't mean that they're doing it optimally. To move better, each joint needs to be able to absorb and produce force at various speeds. You need the ability to create rotation, flexion, and extension through various coordinated joint systems throughout the body. That's important because life exists in more dimensions.

Instead of traditional strength training routines, make sure to show your patients unilateral exercises that require stabilization as well as whole patterns that require coordination between the left and right side of your body (marching, skipping, bear crawling), or even transferring force between your lower and upper body (squat to press, rotational lift, plank with arm lift). These moves translate directly to real-life movement.