



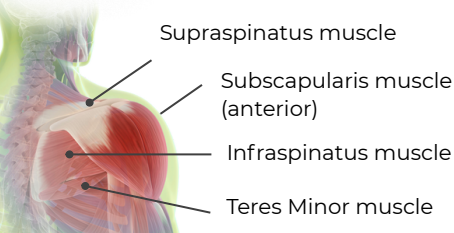
LEAN, GREEN SHOULDER MACHINE

BY MITCHEL MUSSELMAN, ATC

The shoulder is one of the most complex yet most free moving joints in the human body. Given its design and complexity this also makes it one of the most vulnerable joints we have. [Studies show 18-26% of people](#) will experience some sort of shoulder injury and pain, making it one of the most commonly injured regions of our bodies. In the industrial setting, the shoulder is often placed in awkward and repetitive positions resulting in some of the most debilitating long term injuries we can face. This is why maintaining shoulder integrity and health, while using proper form, is crucial to our future well-being.

THE ROTATOR CUFF

With the shoulder joint's complexity, it relies on four muscles - the infraspinatus, supraspinatus, subscapularis, and teres minor - to form the rotator cuff, which allows the shoulder to move in its unique patterns. These muscles work together to provide stability and enable high performance.



Ironically, the shoulder's versatility is also its weakness. Our ability to put our shoulders in awkward yet functional positions make them vulnerable to a multitude

of injuries. Often in the industrial setting, shoulders are positioned overhead or extended away from the body, requiring the rotator cuff to work overtime to stabilize the joint. With the combination of repetition and force applied to these positions and without the proper preparation and form, this creates a breeding ground for multiple different shoulder pathologies.

SHOULDER PATHOLOGIES

Shoulder pathologies - a term we use to describe injuries and conditions that affect the shoulder - can be some of the most serious and debilitating in the industrial setting. These can range from

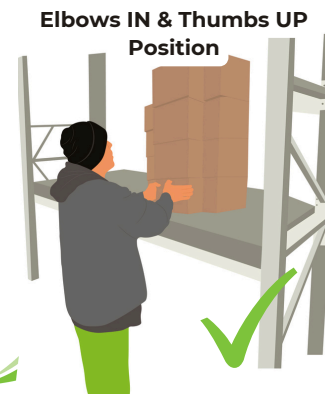


rotator cuff impingement, tears, and frozen shoulder to arthritis. While some of these conditions are simpler fixes and may be temporary, others can result in life-altering solutions such as surgery - which can demand six months to a year of recovery - or even shoulder replacement, where full range of motion is never fully restored.

ELBOWS IN & THUMBS UP

Correct form is key to preventing these pathologies from occurring. The shoulder's ability to rotate and move in multiple planes also puts the rotator cuff tendons in vulnerable positions.

This is why the [E] Elbows In & Thumbs Up principle is so important. Most of us naturally wing our elbows out and up while working and lifting, causing the head of the humerus to press and pinch the rotator cuff tendons in the glenohumeral joint. Keeping our elbows in and thumbs up while reaching helps the shoulder stay in natural alignment, improving strength and stability. You can easily test this theory by picking up a weighted object with your elbows flared out compared to elbows close to your body. You'll quickly notice which method finds you tiring out faster and which is the one that feels most uncomfortable.



Mitchel Musselman, ATC || Mitchel has his Bachelor's in Athletic Training along with over 8 years of athletic training experience. In addition to the industrial setting, he has worked in the high school and orthopedic clinic settings. Outside of work, he enjoys golfing, video games, spending time with his wife, two young children, and two dogs (Jordy and Oakley).



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