FABE 985.1

Fitness for Farm Life: Stretches

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Importance of Exercising and Stretching Throughout the Day:

Farming can add unnecessary fatigue on the body. Engaging in repetitive tasks (stacking straw bales, weeding a garden) maintaining one position for too long (sitting in the cab of a tractor for hours) or putting excessive stress on your joints (heavy lifting, jumping off the bottom step) can make your body fatigued at the end of the day.

Engaging in simple exercises and stretching out tight muscles can help to correct muscle imbalances and reduce risk of injury. Regular exercise helps stretch muscles so they are less likely to strain, tear or spasm. These exercises and stretches can also help to relax your muscles, as tense muscles are more likely to be injured. Additional benefits of exercises include increased balance and flexibility, improved circulation, stress relief, improved posture, enhanced coordination, increased energy levels, reduced muscle tension, improved joint range of motion and helping to combat age-related functional declines. These simple exercises and stretches can be done anywhere on the farm throughout the workday.

Tips for Safe Stretching:

1. Stretching should not be considered a warm-up

a. A good tip before stretching is to get in some movement such as light walking or a low intensity activity, as stretching cold muscles could cause injury. Throughout the day, prepare for strenuous farm activity by first getting your body moving, then stretching your muscles once they are warm. If able, in preparation for a laborious task such as baling hay or loading feed bags onto a truck, perform the motions you will be doing during the activity, but at a lower intensity and without the weight, gradually building up to the task.

2. Breathe normally

a. While stretching, be conscious of your breathing, inhaling and exhaling at a normal pace. This helps to regulate the body physically and allows for a greater performance of the stretch or exercise.

3. Avoid pain

a. The saying, "No pain no gain" only supports future injury. When performing stretches and exercises, you should aim for a feeling of tension and relief and avoid pushing yourself to the point of pain.

4. Stay consistent

The benefits of exercises and stretches are only maintained if done on a consistent basis.
Try to add exercises throughout your normal day, no less than 2-3 times per week.

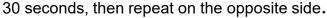


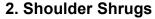
Ten Exercises and Stretches on the Farm:

1. Neck Stretch

Purpose: To ease pain and relax the upper back and neck muscles.

Starting in either a standing or seated position place your right hand on your left ear. Keeping shoulders relaxed, pull your right hand to your right shoulder (try to pull out into the space above your shoulder, not straight down) until you feel tension on the left side of your neck. Hold for 15-





Purpose: To strengthen your shoulder muscles which can help stabilize you neck and upper back and reduce the strain on your neck and shoulder muscles.

Start either in a standing or seated position, begin by moving your shoulders forward, up, back, and down in one continuous circular motion. Repeat 10 times then switch directions- shoulders back, up, forward, down.

3. Back/Triceps Stretch

Purpose: Relaxing your upper back and bringing these muscles out of their typically shortened positions.

Start in an upright standing position. Place elbows or hands (arms straight) on chair & take one step back. Bending at the waist, fold forward with back straight until you feel slight tension in the upper backs and/or triceps. Hold for 15-30 seconds.



Figure 1. Neck Stretch



Figure 2. Shoulder Shrugs



Figure 3. Upper Back/Triceps Stretch

4. Chest Stretch

Purpose: By opening your chest, you are allowing for better lung function and better posture.

Start either in a standing or seated position and place both hands on the back of your head. Pull your elbows back as far as you can while sticking your chest out. Hold for 15-30 seconds.



Figure 4. Chest Stretch

5. Way-Backs

Purpose: Both way-backs and side-bends help to keep the cushions, or shock absorbers of your spine, healthy.

Start either in a standing or seated position. Place hands up as far as you can reach. Bend backwards until a slight tension; hold for 3 seconds. Keeping legs straight, fold forward and hold for a few seconds. Repeat 10 times.









6. Side Bend

Purpose: Like way-backs, side-bends help to keep the cushions, or shock absorbers of your spine, healthy.

Start either in a standing or seated position with hands to your side. Arch your left arm over your head. While bending at the waist and sliding your right hand down your side. Hold with slight tension for 15-30 seconds. Repeat on the opposite side.



Figure 6. Side Bend

7. Hamstring Stretch

Purpose: Relieves pressure on the lower back and reduces pain.

Start standing in an upright position. Place right foot one stride length ahead of left foot with hands on hip. Bend at the waist until you feel a slight tension in the back of your right leg. Hold for 15-30 seconds. Repeat on the other side.

8. Hip Stretch

Purpose: Helps to maintain stability and balance. Opens the hips, which can become tight from sitting for long periods.

Start by sitting in an upright position in the front half of the chair with knees bent at 90-degree angle with feet outside of shoulders at a 45-degree angle (legs open). Place right elbow on the inside of right knee to push knee out. Place left arm up in the air in a hook position and try to touch left hand to right elbow. Hold for 15-30 seconds. Repeat on the other side.

9. Quad Stretch

Purpose: Eases tension in the lower back and hips. Soothes stiffness in the back and legs and improves posture. Also, helps to tone the abdominal muscles.

Start in an upright standing position. Keeping leg straight from hip to knee, bend the right knee to bring the heel to your right hand. Grab foot and pull back until slight tension in top of leg. Hold for 15-30 seconds. Repeat on the other side.



Figure 7. Hamstring Stretch



Figure 8. Hip Stretch



Figure 9. Quad Stretch

10. Calf Stretch

Purpose: Stabilizes your ankle and relieves tension in your calf muscles.

Start in an upright standing position with arms straight and hands against a surface. Take one step back with the right leg, bending the left leg slightly; right leg is straight. Bend left knee forward until you feel slight tension in right calf. Hold for 15-30 seconds. Repeat on the opposite side.



Figure 10. Calf Stretch

The exercises and stretches provided are a general guideline and do not replace medical advice. They should not be done with any conflicting medical diagnoses or performed to the point of pain.

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References:

Stretches and Exercises were provided by Josh Winn, MS, CHWC, the Wellness Program Manager of Buckeye Wellness at The Ohio State University.

- Elbert, K. K., Kroemer, H. B., & Hoffman, A. D. K. (2018). *Ergonomics: how to design for ease and efficiency*. Academic Press.
- Gothe, N. P., & McAuley, E. (2015). Yoga is as good as stretching–strengthening exercises in improving functional fitness outcomes: Results from a randomized controlled trial. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences*, 71(3), 406-411.
- MayoClinic Staff. (2019). Stretching: Focus on flexibility. Retrieved from https://www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/stretching/art-20047931
- Page, P. (2012). Current concepts in muscle stretching for exercise and rehabilitation. *International journal of sports physical therapy*, 7(1), 109.
- Salmon, P., Lush, E., Jablonski, M., & Sephton, S. E. (2009). Yoga and mindfulness: Clinical aspects of an ancient mind/body practice. *Cognitive and Behavioral Practice*, *16*(1), 59-72.
- Tul, Y., Unruh, A., & Dick, B. D. (2011). Yoga for chronic pain management: a qualitative exploration. *Scandinavian journal of caring sciences*, *25*(3), 435-443.
- U.S. Department of Health and Human Services. (2018). Physical Activity Guidelines for Americans, 2nd edition. Washington, DC: U.S. Department of Health and Human Services.