

# ANOTHER ANNOYING EFFECT OF REDUCED ESTROGEN AND WOMEN'S BODIES Tendon Injury and Repair

So here is another one ladies..... result of low estrogen and the effects on our tendons and recovery. Estrogen seems to have many miraculous benefits that nature somehow thinks we don't need as we age. It helps keep cortisol levels down which can lead to increased inflammation and weight gain, it helps keep calcium in our bones, and it aids in digestion to name a few. So why is it when we "mature" our bodies think it no longer needs the benefits of estrogen? Million dollar question. There is another effect of estrogen on our bodies and that is to enhance collagen growth, and cell repair. Estrogen is not an anabolic hormone, but does slow down the catabolic effects that occur after exercise. Meaning it aids in recovery and tendon growth. (Review).

It seems that estrogen can enter the cell membrane of the muscle fiber through estrogen receptors. It then can signal the cell to repair, slowing the whole breakdown process that can occur after exercise or injury. This process of breaking down and building up...AKA Catabolic and Anabolic reactions is a process in cell repair and growth. When muscle and tendon tissue repairs as a result of exercise it gets stronger. If estrogen levels drop the process is interrupted. In a low estrogen state when a tendon breaks down or gets injured its ability to repair slows down, because estrogen promotes collagen turnover. Muscle fibers are also affected and repair slowly. This is why older woman can have tendon injuries more often than men, and are more susceptible to injury. (Review)

All this does not mean that muscle mass and tendon injury are inevitable as we age. It just means there is yet another reason why it is so important for us to take care of ourselves and especially our muscles as we age. Strength training can not only slow this process dramatically, but can also reverse it. You can still build more muscle tissue after menopause, and can strengthen the tendons, but the way you strength train may need to change. Heavy lifting and fast motions with little rest is not a very good way for a "mature" woman to exercise. So your body needs a little more recovery time, give it! Remember strength training will increase muscle mass, bone mass, and promote weight loss, at any age if done correctly. This is your defense ladies. I cannot stress it enough. You DO NOT HAVE TO GIVE INTO NATURE'S CRUEL JOKE . You can take care of yourself! Remember, Fittec can help you develop a program that will result in muscle growth with no injury. It is not difficult, but needs to be a consistent part of your health defense. *From Jen Morin*

A large, solid pink circle is centered on the page. Inside the circle, the text "Women's Health and Fitness Circle" is written in a bold, white, sans-serif font. Below this, the text "Wellness 360" is also written in the same font style.

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