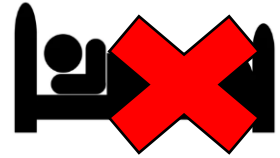


TENDON RECOVERY

1

"REST ISNT BEST"



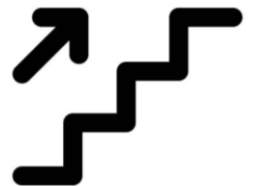
2

"TENDONS TAKE TIME"



3

"CLIMB THE STEPS"



4

"BUILD CAPACITY"



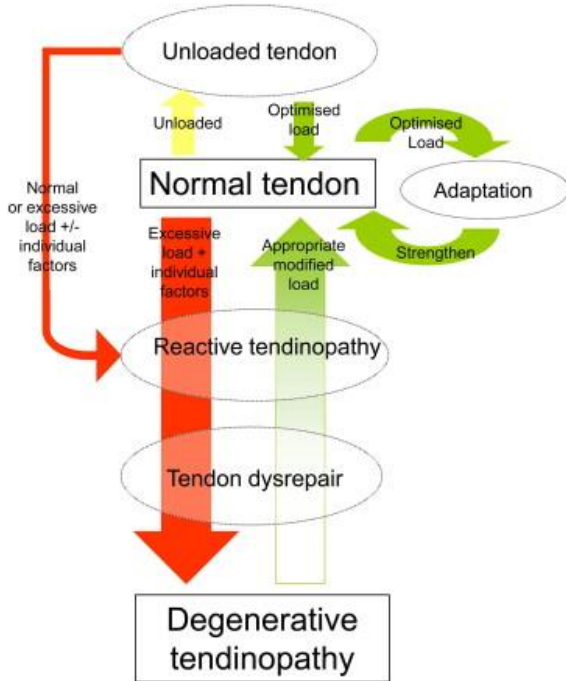
5

HOW ATHLETEfix  *CAN HELP*

1

“REST ISN’T BEST”

People approach tendon injuries in the same way they do a muscle strain or ligament sprain, rest followed by an attempted return to activity, often at an arbitrary point. *“Overuse is the mother of tendon injuries”* meaning that they born out of a mismatch between stress/recovery either over a short or prolonged period of time. Tendons are slow to up the stairs and quick to fall down. This means that if you want to build their strength it takes time, but if you stop using them they are quick to lose their resilience. This is why so many people get injuries in January after the Xmas break as they go back to exercise. The moral of the story is that tendons always need to be loaded, including when painful, but how you go about loading them in this instance needs to be different to promote recovery. If you rest for too long they will lose their capacity to tolerate stress and if we overload them they will become painful. The road to recovery starts by selecting the most appropriate starting point on the spectrum (see image below).



Tendon Response to Load



Rest



Low load



Optimal load



Excessive load

Prolonged complete rest leads to loss of stress capacity
“Shrinking”

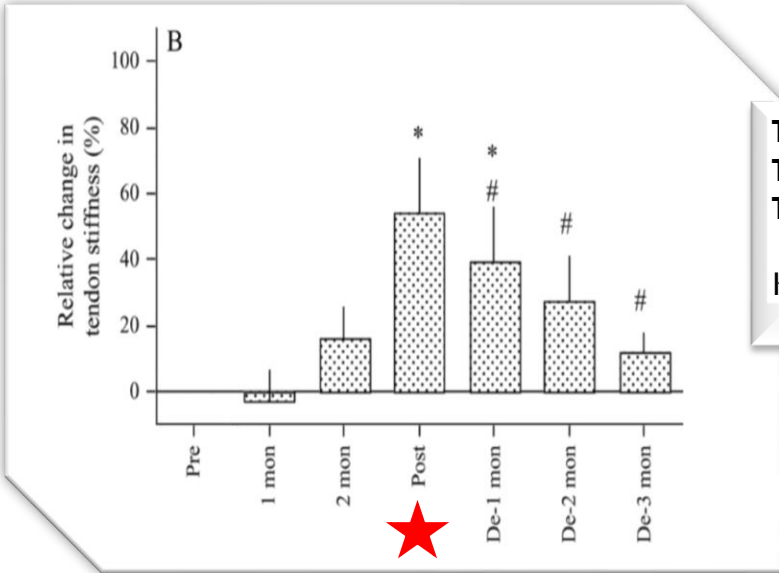
Loading sufficient to sustain stress capacity
“Break-even”

Loading enough to stimulate increase in stress capacity
“Growing”

Recovery can't keep up with stress
“Overflowing”

2

“TENDONS TAKE TIME”

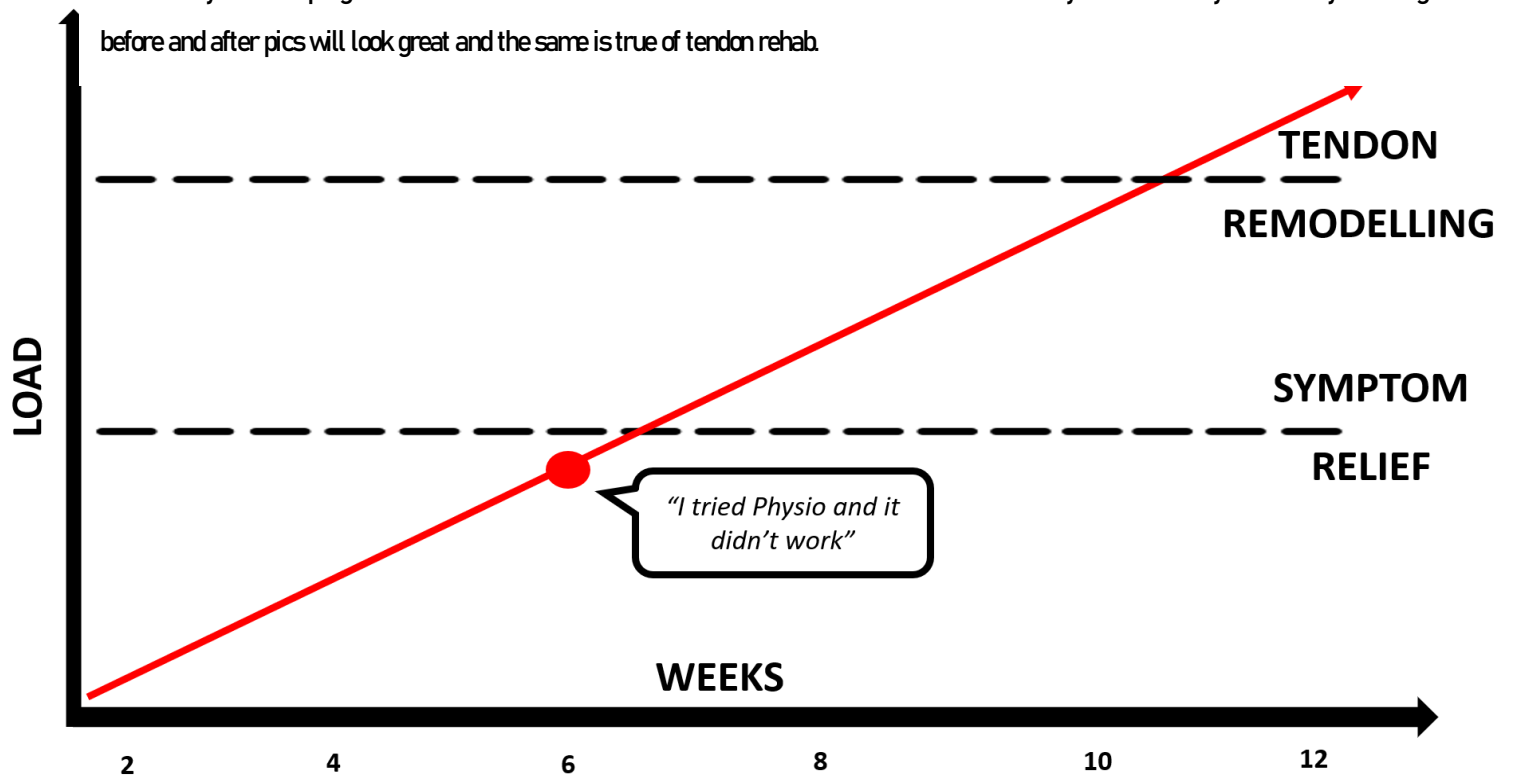


Time Course of Changes in Muscle and Tendon Properties During Strength Training and Detraining
 Kubo et al (2010)

Kubo, K., Ikebukuro, T., Yata, H., Tsunoda, N., & Kanehisa, H. (2010). Time course of changes in muscle and tendon properties during strength training and detraining. *The Journal of Strength & Conditioning Research*, 24(2), 322-331.

★ Post = after 3 months of training

Loading programs for tendons are very effective but you need to be doing them for at least 12-weeks to see results. One of the best pieces of advice I can give you when recovering from a tendon injury is to measure your recovery “month to month” and not day to day. You will have good days and bad days, flare ups, that’s normal. You will get disheartened and discouraged if you try to judge whether you are getting better or not on a daily or weekly basis. Think of it like weight-loss. If you step on the scales after a day or two or even a week you aren’t going to witness any massive progress. Does that mean exercise and diet doesn’t work? N! Of course not. If you stuck with your “90-day challenge” the before and after pics will look great and the same is true of tendon rehab.

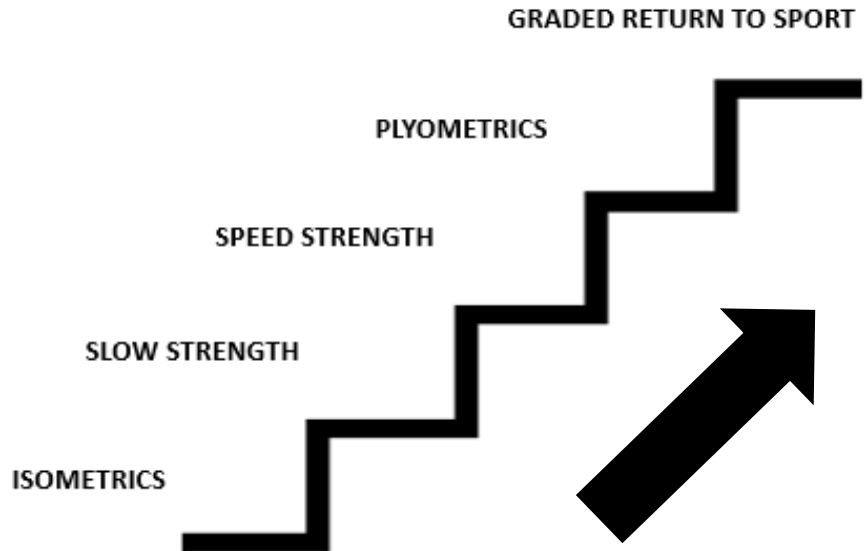


3

“CLIMB THE STEPS”

Isometrics

static strength



Isometrics are sustained contractions where you fight to hold a position. There has been a lot of research (mainly in lower limb tendons) that show their effectiveness as “pain-killers”. These form your foundation, your base to build up from

Eccentrics

Strengthen as you Lengthen

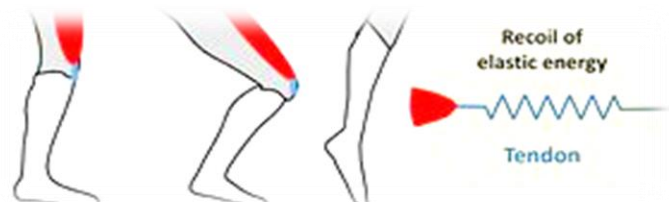


Slow strength is the next step up the ladder where we focus on slowly lengthening the tendon, “building your brakes” so to speak. Training your ability to decelerate. The key ingredients here are “time-under-tension” in other words, how long you spend under load and “load intensity” aka how heavy. This is why I call it “slow-strength”. Slow and heavy is the aim of the game

Plyometrics

Load to Explode

The most challenging task for a tendon is to quickly absorb load and then release it. Skipping is a perfect example of “load to explode”. As you land your Achilles stores energy from the impact and releases it on the rebound. It’s the most stressful type of contraction which is why it is left until last, but it forms a crucial step in the road to recovery.





“BUILD CAPACITY”

LOAD > CAPACITY = **INJURY**

LOAD = CAPACITY = **REHAB**

CAPACITY > LOAD = **PREVENTION**

When you get injured, it ultimately boils down to the fact that the load aka stress aka usage of the tendon exceeded its capacity or tolerance. *Your cup overflowed!* When it comes to rehab, we have to calm things down before building you back up. Once you've recovered, **PREHAB** is bullet proof training, building your capacity to far exceed the demands of your exercise of activity you love whether that be the gym football, running, Zumba, hiking, you name it!



How can **ATHLETEfix** help?

Bespoke 121 Coaching

Tailor-made Virtual Rehab / Prehab

- Includes 45min initial consultation
 - Bespoke structured program
- Remote support / form correction & feedback
- Perfect for those with a history of injuries / prone to injury / post-op



Rehab / Prehab / Fitness

Programs



Education Hub



Membership



podcast

