

TAKE CONTROL OF YOUR JUMPERS KNEE

TOP 5 SECRETS



PROCESS

PHYSICAL THERAPY &
PERFORMANCE

Disclaimer

All the material contained in this book is provided for educational and informational purposes only. No responsibility can be taken for any results or outcomes resulting from the use of this material.

While every attempt has been made to provide information that is both accurate and effective, the author does not assume any responsibility for the accuracy or use/misuse of this information.

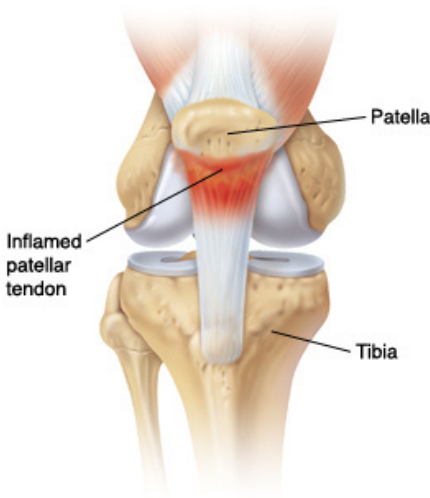


PROCESS

PHYSICAL THERAPY &
PERFORMANCE

WHAT IS JUMPER'S KNEE?

Jumper's knee is also known as patellar tendinopathy¹. It is a common tendon injury that is typically related to **a change in load**, leading to pain or stiffness in the front of the knee. Jumper's knee commonly affects athletes who play basketball, volleyball, football, or other athletic events that involve jumping and **repetitive load** of the patellar tendon².



Symptoms appear **here** (see above)

If you are feeling symptoms in other areas, there is a high chance you may be dealing with another diagnosis, which is not patellar tendinopathy.

1

IT'S TIME TO LOAD

Question: "How do I improve my symptoms?"

Answer: **LOAD**...rest is NOT the answer.



While taking a rest often helps improve pain in the short term, upon returning to the previous aggravating activity, the knee often becomes painful again.

The love language of tendons is LOAD. The key is to channel your inner Goldilocks and progressively load the tendon to find the optimal amount of load that you can handle. Over time you will be able to gradually increase the load until you return to your sport or previously aggravating activity. We don't want to underload. We will discuss a few ways to load the muscles surrounding the knee, specifically the quad.

TOP 5 TO START

In the next few pages, you will see my top 5 exercises to help with jumper's knee.

These exercises are by no means, an end all be all. In fact, rehab and returning to 100% can take months to a year for some. These exercises are a starting place for you.

FAQ

How often should they be done?

Encouraged to perform 3-5x/week.

When to do them?

Whenever you are more likely to do them. We want to set you up for success. However, it may be better to perform tendon and isometric exercises in the morning or evening, separate from practice or other training. Tendons respond the best with loading for 10 minutes or less, followed by 6 hours of rest³.

What if it hurts when I do one of the exercises?

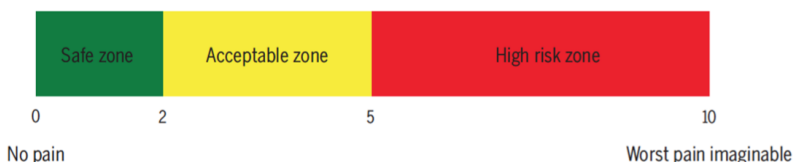
It is okay to work with low levels of pain. Typically with tendinopathies, like jumper's knee, research has shown that you can safely continue the activity, by using a pain monitored scale. See next page.

2

UNDERSTAND TENDON PAIN SCALE

Pain Monitoring Model

Numerical Pain Rating Scale (NPRS)



1. The pain is allowed to reach 5 on the NPRS during the activity.
2. The pain after completion of the activity is allowed to reach 5 on the NPRS.
3. The pain the morning after the activity should not exceed a 5 on the NPRS.
4. Pain and stiffness is not allowed to increase from week to week.

0-3/10: Safe Zone

4-5/10: Acceptable

6-10/10: Excessive/STOP

(Silbernagel 2015)

If symptoms increase to $> 5/10$, decrease the load the next time you exercise. Symptoms up to 24 hours after, are just as important as symptoms during or immediately after. Decreasing the load could mean dropping the weight, running distance, time played, etc.

Modifying load is CRITICAL for settling tendon pain. It is important to remember that tendons need to be loaded progressively so they can adapt. We are looking for a sweet spot.

WALL SIT



PROCESS

PHYSICAL THERAPY &
PERFORMANCE

SPANISH SQUAT



PROCESS

PHYSICAL THERAPY &
PERFORMANCE

REAR FOOT ELEVATED SPLIT SQUAT



PROCESS

PHYSICAL THERAPY &
PERFORMANCE

BACKWARD WALKING



STEP DOWN LATERAL & FORWARD



3

SLEEP

Sleep is "the greatest performance-enhancing drug no one is using⁵." Sleep is powerful for performance and recovering from injury. Muscles and tissues repair and rejuvenate as we sleep⁶. If you're not getting a good night's sleep (quality and quantity), it will be harder for your body to recover from an injury.



TIPS TO HELP YOU SLEEP BETTER⁷

- Cold, dark room (~60 degrees Fahrenheit if possible)
- No blue light within 2 hours of bed
- No large meals within 2-3 hours of bed
- No alcohol within 2-3 hours of bed
- Use a white noise machine/app
- Ideally, 8-10 hours for active individuals

4

NUTRITION

There has been an increase in evidence about the importance of nutrition with tendinopathies. One of the major findings has been the benefits of Vitamin-C enriched gelatin⁸ or hydrolyzed collagen peptides⁹.

Benefits

- Increased collagen synthesis (important for tissue repair + healing)
- Increased return to sport

Methods (per research)⁸

- Participants consumed 1 hour before "tendon session" or isometrics. It takes 40-60 minutes for amino acids to peak. Research additionally reports greater collagen synthesis after 1 hour.
- Vitamin C is required for collagen synthesis¹⁰. Studies include vitamin C enriched gelatin or collagen peptide with vitamin C.



5

SEE A PERFORMANCE THERAPIST

As mentioned previously, this is a place to start addressing your pain and symptoms. It will be essential to locate a performance-based physical therapist that you trust, to evaluate your body and give you more insight specific to YOU. We are all created differently and may have different factors contributing to our injury and different goals.

Your visit with a physical therapist should include at least 45 minutes to 1 hour of 1-on-1 attention with a physical therapist directly.

Your physical therapist should include a customized exercise program for you, that you can perform at home.

Typical treatment include hands-on/manual treatments, corrective exercises, strengthening/loading as tolerated, and return to sport assessment and activity.



GET PT 1ST

Physical therapy is the most effective, conservation, and efficient 1st choice for knee pain or tendinopathy.

You do not need a referral from a doctor or physician to get seen by a physical therapist at our clinic. You don't need to talk to your insurance either.

You can be seen NOW, without having to wait weeks for an appointment with your physician to get a referral or prescription.

Call today at (301) 531-5347 if a FREE Discovery Call to discuss the best options to improve your knee pain and return to 110%, is something you think will help you right now.

"My experience working with Jasmine has been great. She takes the time to work with you in understanding your problem then properly mapping out a plan to your full functionality without having those problems. You don't get the feeling that you are just a patient but a member and part of her external family. Great communication skills, always checks on you a couple of days after each session to inquire of progress or issues arising. I have worked with her many times and will recommend her every time for her great work and passion in what she does."

If you already know that you want to start getting better as soon as possible and return to the activities you love pain free

[**CLICK HERE**](#)

to schedule your visit with a knee specialist.



PROCESS

PHYSICAL THERAPY &
PERFORMANCE

A PERSONAL MESSAGE FROM DR. JASMINE

Thank you very much for taking the time to read this report. Jumper's knee and tendinopathy are one of the #1 reasons for injury with jumping and running activities. Unfortunately, many don't fully understand what is going on and what they can do about it. The truly hope this report serves as a guide to help guide your next steps toward living a pain-free life and enjoying the things you love to do! My ultimate mission is you help you feel better, remain active, and get the results to deserve.

Sincerely,



Jasmine Jackson, PT, DPT, CMTPT/DN
Process Physical Therapy and Performance



REFERENCES

1. Scott A, Squier K, Alfredson H, et al. ICON 2019: International Scientific Tendinopathy Symposium Consensus: Clinical Terminology. *British Journal of Sports Medicine*. 2019;54(5):260-262. doi:10.1136/bjsports-2019-100885
2. Lian ØB, Engebretsen L, Bahr R. Prevalence of Jumper's Knee among Elite Athletes from Different Sports: A Cross-sectional Study. *The American Journal of Sports Medicine*. 2005;33(4):561-567. doi:10.1177/0363546504270454
3. Paxton JZ, Hagerty P, Andrick JJ, Baar K. Optimizing an Intermittent Stretch Paradigm Using ERK1/2 Phosphorylation Results in Increased Collagen Synthesis in Engineered Ligaments. *Tissue Engineering Part A*. 2012;18(3-4):277-284. doi:10.1089/ten.tea.2011.0336
4. Grävare Silbernagel K, Crossley KM. A Proposed Return-to-Sport Program for Patients With Midportion Achilles Tendinopathy: Rationale and Implementation. *Journal of Orthopaedic & Sports Physical Therapy*. 2015;45(11):876-886. doi:10.2519/jospt.2015.5885
5. Walker MP. *Why We Sleep : Unlocking the Power of Sleep and Dreams*. Scribner, An Imprint Of Simon & Schuster, Inc; 2018.
6. Suni E. *What Happens When You Sleep: The Science of Sleep*. Sleep Foundation. Published October 30, 2020. Accessed September 28, 2021. <https://www.sleepfoundation.org/how-sleep-works/what-happens-when-you-sleep>
7. Siengsukon CF, Al-dughmi M, Stevens S. Sleep Health Promotion: Practical Information for Physical Therapists. *Physical Therapy*. 2017;97(8):826-836. doi:10.1093/ptj/pzx057
8. Shaw G, Lee-Barthel A, Ross ML, Wang B, Baar K. Vitamin C-enriched gelatin supplementation before intermittent activity augments collagen synthesis. *The American Journal of Clinical Nutrition*. 2016;105(1):136-143. doi:10.3945/ajcn.116.138594
9. Praet S, Purdam C, Welvaert M, et al. Oral Supplementation of Specific Collagen Peptides Combined with Calf-Strengthening Exercises Enhances Function and Reduces Pain in Achilles Tendinopathy Patients. *Nutrients*. 2019;11(1):76. doi:10.3390/nu11010076
10. Robertson W van B, Schwartz B. ASCORBIC ACID AND THE FORMATION OF COLLAGEN. *Journal of Biological Chemistry*. 1953;201(2):689-696. doi:10.1016/s0021-9258(18)66226-x