

STRENGTH TRAINING AND CONDITIONING IN PADEL



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INTRODUCTION

- Racket sport that combines elements of **tennis** and **squash**
- Played in **pairs** and consists of **three** fundamental **elements**: the ball, the racket and the playing field
- Played on a **20x10m** court enclosed by transparent glass walls
- México, Argentina, Brasil, Spain... are countries where paddle tennis has had great **development**
- Popularity can be attributed to its easy **learning curve**



PADEL MATCHES

- Played in the best of 3 sets→ who has won 2 sets wins.
- Each set is made up of 6 games→ at least 6 games must be won.
- Each game lasts an average of 5 minutes→ a set could last 30 minutes, although this time will also depend on whether the couple ties and has to play the Tie Break or instead they manage to win the three sets from the beginning.
- Length of a paddle tennis match can reach 90 minutes, but this can last up to 2 hours.
- According to the padel regulations, each break can last 120 seconds, and is taken at the end of the set.
- There is no right to rest at the beginning of the tie break.
- 90 seconds rest are also allowed when players change sides.



PHYSICAL DEMANDS OF PADEL

Padel players need to be able to do quick movements, pivot and make shots with speed and precision, which demands:

- Speed abilities
- Hand-eye coordination
- Endurance
- Flexibility
- Muscular strength

Also, padel involves a combination of aerobic and anaerobic energy system, so requires high-intensity activity, which demands:

- Cardiovascular endurance
- Power
- Agility



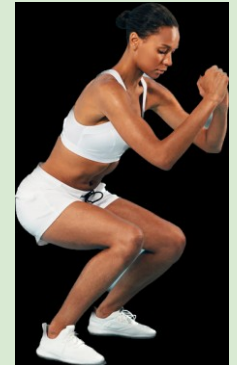
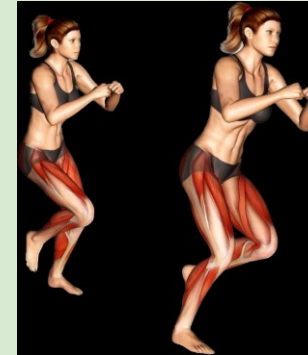
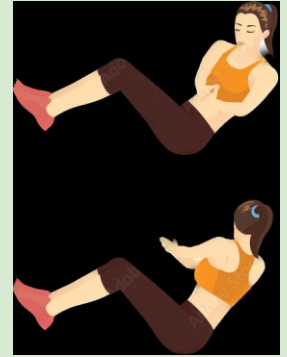
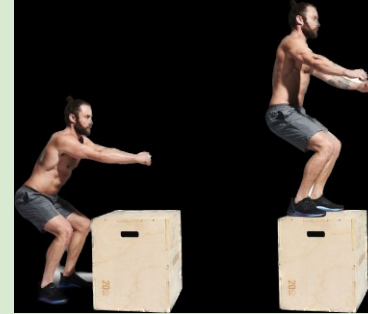
WHY STRENGTH TRAINING IS IMPORTANT IN PADEL PLAYERS?

- Improve performance
- Produces improvements in resistance to central and muscular fatigue
- In padel the movements must be fast and precise, so we must improve the increase in our maximum strength and explosive strength
- Enhance stability and balance, essential for executing precise shots
- Increase anaerobic capacity
- Prevents possible injuries



STRENGTH AND CONDITIONING EXERCISES FOR PADEL

- Lunges
- Squats
- Romanian deadlift
- Planks
- Medicine ball throws
- Box jumps
- Lateral bounds
- Russian twists
- Resistance band exercises



PREPARATION PRE-SEASON

- 6-8 weeks
- The first week is dedicated exclusively to gym sessions and fitness training
- Priority is given to physical fitness work
- 90 minutes - 2 hours and are usually in the morning
- Focus on develop strength, power, endurance and technique
- Weightlifting exercises, high-intensity interval training, and functional resistance work
- Involve tactical work as well
- Adjust the intensity and volume of exercises based on individual fitness levels
- Ensure proper hydration, nutrition, and sleep throughout the week to support recovery and performance
- Psychological preparation



COMPETITION PERIOD

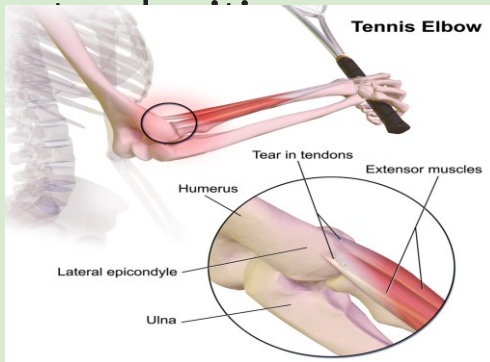
- Maintaining peak performance
- Enhancing specific skills
- Minimizing the risk of injury
- Typical training include→
 1. On-court practice
 2. Strength exercise
 3. Match simulation
 4. Injury prevention



FREQUENT INJURIES AND PREVENTION

Frequent injuries:

- Tennis elbow
- Ankle sprain
- Achilles tendonitis
- Rotator cuff



Prevention of injuries:

- Proper warm-up
- Proper technique and stretching
- Progressive intensity
- Rest and recovery



SOURCES

Amieba, C., & Salinero, J.J. (2013). Aspectos generales de la competición de pádel y sus demandas fisiológicas. [General aspects of padel competition and its physiological demands.] *AGON: International Journal of Sport Sciences*, 3(2), 60-67.

Baiget, E., Fernandez-Fernandez, J., Iglesias, X., & Rodriguez, F.A. (2015). Tennis play intensity distribution and relation with aerobic fitness in competitive players. *PLoS One*, 10(6), e0131304. doi: 10.1371/journal.pone.0131304

Baiget, E., Iglesias, X., Fuentes, J.P., & Rodríguez, F.A. (2019). New approaches for on-court endurance testing and conditioning in competitive tennis players. *Strength and Conditioning Journal*, 41(5), 9-16. doi: 10.1519/ssc.0000000000000470

Carrasco, L., Romero, S., Sañudo, B., & de Hoyo, M. (2011). Game analysis and energy requirements of paddle tennis competition / Analyse du jeu et exigences physiologiques dans la pratique du padel en compétition. *Science and Sports*, 26(6), 338-344.

Sánchez-Alcaraz Martínez, B.J., Courel-Ibáñez, J., & Cañas, J. (2018). Estructura temporal, movimientos en pista y acciones de juego en pádel: revisión sistemática. [Temporal structure, court movements and game actions in padel: A systematic review.] *Retos: Nuevas Perspectivas de Educación Física, Deporte y Recreación*, (33), 308-312.