

# CONDITIONING FOR PLATFORM TENNIS

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AN ACADEMIC AND ILLUSTRATED GUIDE TO SPORT PREPARATION AND INJURY PREVENTION



FIGURE 1

FIGURE 2

FIGURE 3

There haven't been any studies done on the physical demands and injury profiles for paddle tennis. Yet. However, many conclusions can be drawn from the study of tennis and padel, which require a mixture of speed, agility, and power combined with sport specific endurance. Players must display supreme reactive, anticipatory, and decision-making capacities while under fatigue and under the pressure of match-deciding points. The smaller court size of platform tennis adds a strong emphasis on net play and creates a fast and reaction-based game. Our sport requires high-level biomechanical and physical demands. This article will provide some exercises to prepare athletes physically to perform at their best and to avoid potential injuries.

## CONDITIONING FOR ENDURANCE

Documented evidence suggests that motor qualities such as power, strength, agility, and speed are correlated with enhanced tournament performance. When considering the sport specific endurance requirements for paddle, investigating the movement patterns and distances covered for a given period of match play is very helpful. A study done for padel [a similar outdoor game mostly played overseas] gives insight into the

endurance demands of this sport. Researchers in Spain recorded the movements of 20 male pros for successive 5 minutes of match play. In 5 minutes of play, each player had approximately 16 lateral movements, just over 14 head-on accelerations, just over 1 backward movement, and roughly 2 pivots in each direction.

So, in just 5 minutes of play, each competitor had approximately 30 short bursts, with most being less than 2.5 meters, or 8.2 feet, in distance.

It can be assumed that amateurs at various levels would likely have fewer accelerations in a 5 minute period than pros and most likely that total match time is shorter on average for amateurs versus pros.

Similar to tennis and padel, platform tennis is primarily dependent on anaerobic endurance with aerobic recovery between high intensity bouts. Therefore, the best conditioning for paddle should incorporate a series of short bursts with recovery intervals. Because lateral

Exercise	Week	Sets	Time/Distance	Rest Period
A: Partner Directed Forward, Backward, and Lateral Accelerations	1	3	10s	60s
	2	4	10s	60s
	3	3	10s	40s
	4	4	10s	40s
	5	5	10s	40s
	6	6	10s	40s
B: Lateral Sled Drag	1	4	5m	30s
	2	6	5m	30s
	3	4	5m	20s
	4	6	5m	20s
	5	8	5m	20s
	6	8	5m	20s
C: Prowler Push	1	4	5m	30s
	2	6	5m	30s
	3	4	5m	20s
	4	6	5m	20s
	5	8	5m	20s
	6	8	5m	20s



FIGURE 4



FIGURE 5

movements compose about 52% of observed movements, side-to-side movements as well as forward accelerations should be included. See the sample six-week program for energy system, speed, and agility preparation for platform tennis. It is suggested that you warm-up with jogging, skipping, shuffles, and lunges before starting each exercise.

## AVOIDING POTENTIAL INJURIES

While there isn't much research on platform tennis injuries, anecdotally some of the most common injuries seen are rotator cuff injuries, Achilles tendon tears, tennis elbow (epicondylitis), and biceps tendon tears. This is similar to tennis, in which the most commonly injured areas are the shoulder, elbow, knee, and ankle.

### > Shoulder

It has been shown that the muscles that cause internal or inward rotation—pectorals, Latissimus dorsi (in the back), deltoids, etc.—are excessively strong compared to the muscles of the rotator cuff, which externally rotates the shoulder. The rotator cuff along with the muscles that stabilize the scapula (shoulder blade) are important for decelerating the arm during serves



FIGURE 7

and ground strokes. An imbalance between these stabilizers and rotators can increase the risk of impingement syndromes and other shoulder issues in paddle players. It has also been found that tennis players have large left-to-right strength discrepancies. This, too, can increase the risk of shoulder injury. Because of these imbalances, it is important to include unilateral, or one arm, conditioning. Two exercises that are effective for this are the Scott External Rotation (see Figure 1, 2, and 3) and the Bent Over Trap 3 exercises (see Figure 4 and 5).



FIGURE 8

### > Elbow

Most of the injuries to the elbow involve the tendon structures inserting on the medial, (inside) and lateral (outside) epicondyle (bony attachment sites) of the elbow. Elite players tend to get more problems on the medial side of the elbow from serves and ground strokes, whereas recreational players tend to get more pain on the lateral side from backhand strokes. Strengthening the muscles of the forearm can greatly reduce the risk of developing tennis elbow. Some exercises that can accomplish this are wrist flexion and extension and radial and ulnar deviation (see Figure 6).

FIGURE 6



### > Knee And Ankle

Because the knee and ankle can also be at great risk of injury for paddle players it is important to develop both strength and mobility in these areas. The split squat is an extremely effective exercise at strengthening the hip and knee extensors as well as increasing stability and mobility in the hip and ankle (see Figure 7). An imbalance between the quadriceps and the hamstrings can increase the risk of knee injury. The posterior chain—hamstrings, glutes, and lower back—are also important for acceleration. A simple exercise for developing the posterior chain is the hip extension leg curl combo on the Swiss ball (see Figure 8).

The exercise program in this article is by no means comprehensive, nor does it address individual limitations and injury history. It does, however, provide the platform tennis player with some tools to train their bodies for demands of the sport. A little extra preparation in the development of sport specific endurance, speed, and agility adds up to more physical toughness to grind out the point. Additionally, by addressing some of the common areas of injury—the shoulder, ankle, knee, and elbow—you will not only play well, you will play healthy. ■



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