



SUMMARIES of the FITNESS TESTS

**BE SURE TO VIDEO TAPE ALL TESTS AND PROVIDE
SCORE RESULTS ON THE EEvaluation Results Chart**

**Video should show the player's entire body so that
Pat can evaluate technique as well as the tested activity**

REQUIRED TESTS

#1 First Step:

PURPOSE: This test measures your fitness for tennis, and how quick your first step is.

PROCEDURE: How many lines between the center and the singles alley can the player touch? Have the player stand at the center line in the service box. The player will sprint to the alley line and then back to the center line alternately. Count the number of lines the player touches with their racquet in a 30 second period. Have the player rest for 30 seconds, and repeat the test a total of three times. Be sure the player touches the lines. At the end of 30 seconds estimate where the player is and assign a value to that part of the interval (halfway to the alley is 0.5).

MEASURING: Count the number of touches for each of the three tests and enter the results of each on the **EEvaluation Results Chart**.

#2 Footwork to Forehand:

PURPOSE: To measure quickness to a forehand return, and to demonstrate proper techniques with footwork and racquet, including proper recovery to mid court.

PROCEDURE: Place a cone 5 feet in front of the baseline on the singles alley line on the player's forehand side. Have the player start at the baseline center position. The player sprints to the cone and takes a forehand stroke, recovering to mid-court after each stroke. Count the number of strokes the player is able to take in a 30-second interval. Have the player rest for 30 seconds. Repeat the test three times. Be sure the player returns to mid court each time. Observe the player's footwork as the test is being performed. At the end of 30 seconds estimate where the player is and assign a value to that part of the interval (halfway to the alley is 0.5).

MEASURING: Count the number of forehand swings for each of the three tests and enter the results of each on the **EEvaluation Results Chart**.

#3 Footwork to Backhand:

PURPOSE: To measure quickness to a backhand return, and to demonstrate proper techniques with footwork and racquet, including proper recovery to mid court.

PROCEDURE: Place a cone 5 feet in front of the baseline on the singles alley line on the player's backhand side. Have the player start at the baseline center position. The player sprints to the cone and takes a backhand stroke, recovering to mid-court after each stroke. Count the number of strokes the player is able to take in a 30-second interval. Have the player rest for 30 seconds. Repeat the test three times. Be sure the player returns to mid court each time. Observe the player's footwork as the test is being performed. At the end of 30 seconds estimate where the player is and assign a value to that part of the interval (halfway to the alley is 0.5).

MEASURING: Count the number of backhand swings for each of the three tests and enter the results of each on the **EEvaluation Results Chart**.

#4 Band Jump:

PURPOSE: The Band Jump is a test of agility and lower body strength endurance.

PROCEDURE: Stand comfortably with both feet flat on the ground, perpendicular to the band or hurdle. Assuming the player is of normal height and weight for his or her age, the band/hurdle should be 18 inches above the ground for boys 12 and over (12 inches for younger boys), and 18 inches for girls 14 and over (12 inches for younger girls). Older players or those with physical limitations (knee, hip problems, etc.) should use a height that works best for them and indicate that height on the **EEvaluation Results Chart**.

The timing starts from the first movement. The athlete jumps off both feet and lands on the other side of the band/hurdle on both feet, then back again. The test continues for 20 seconds, with the total number of jumps counted. Have the player rest for 2 minutes and repeat the test.

MEASURING: Record the better of the two scores of the total number of completed jumps in a time period on the **EEvaluation Results Chart**.

#5 STANDING LONG JUMP:

PURPOSE: To measure the explosive power of the legs.

PROCEDURE: The athlete stands behind a line marked on the ground with feet slightly apart. A both-foot take-off and landing is used, with swinging of the arms and bending of the knees to provide forward drive. The subject attempts to jump as far as possible, landing on both feet without falling backwards. Three attempts are allowed.

MEASURING: The measurement is taken from the take-off line to the nearest point of contact on the landing (back of the heels). Record the longest distance jumped -- the best of the three jumps -- on the **EEvaluation Results Chart**.

#7 MEDICINE BALL TOSS (Forehand, Backhand & Serve):

PURPOSE: This test measures core strength and total body power. For tennis players, it simulates the rotational core movement common to the forehand, backhand & service.

PROCEDURE - Forehand & Backhand: The test involves throwing a medicine ball across the chest for maximum distance. The athlete starts by standing perpendicular to the start line (such as in the forehand and backhand). The ball is held in both hands with the back hand on the back of the ball and your front hand under the ball. The ball is drawn back, with only a slight bend at the elbows allowed, keeping the ball between the waist and chest. Then in one motion the ball is flung forward from the forehand position and then from the backhand position.

PROCEDURE - Serve: The player stands at a line with the feet side by side and slightly apart, and facing the direction to which the ball is to be thrown. The ball is held with the hands on the side and slightly behind the center. The throwing action is similar to that used for a soccer/football sideline throw-in. The ball is brought back behind the head, and then thrown vigorously forward as far as possible.

MEASURING: For all three tosses, the distance from the starting line to where the ball first lands is measured. Record the longest distance thrown -- the best of the three throws for the forehand, the backhand and the serve – on the **EEvaluation Results Chart**.

#6 SHOULDER FLEXIBILITY:

PURPOSE: To test the flexibility of the shoulder joint is important for injury prevention, particularly in tennis.

PROCEDURE: Begin by holding a towel or a stick in front of the body with both hands wide apart and palms facing downwards. Lift the stick over the head to behind the back, maintaining the hand grip on the object. Repeat the test, moving hands closer together each time until the movement cannot be completed.

MEASURING: Measure the *minimum* distance achieved between hands and record it on the **EEvaluation Results Chart**.

OPTIONAL TESTS

#8 GRIP STRENGTH:

PURPOSE: To measure the maximum isometric strength of the hand and forearm muscles. Handgrip strength is important for racquet control and movement. Also, as a general rule people with strong hands tend to be strong elsewhere, so this test is often used as a general test of strength.

PROCEDURE: The subject holds a handgrip dynamometer in the hand to be tested, with the arm at right angles and the elbow by the side of the body. The handle of the dynamometer is adjusted if required - the base should rest on first metacarpal (heel of palm), while the handle should rest on middle of four fingers. The personnel at the fitness center you are working with can be helpful in this regard.

When ready, the player squeezes the dynamometer with maximum isometric effort and maintains it for 5 seconds. No other body movement is allowed. The player should give a maximum effort. The test should be given for both the stronger or dominant hand, and

the weaker hand. The player can make three attempts for each hand, with approximately 15 seconds recovery between each effort.

MEASURING: Record the best score for each hand on the **EEvaluation Results Chart**.

#9 Forehand Power/Strength:

PURPOSE: To measure the player's arm and shoulder power & strength in their *forehand* using a *Keiser Infinity Cable Machine*. [If access to this machine is unavailable, results will be derived from Tests #6-8.]

PROCEDURE: The first set focuses on speed. Females set the weight to 10 lbs. while males use 15 lbs. Hold the cable with both hands and start in the forehand position. Mimic a forehand stroke and hit as hard as you can while extending the cable through the shot. Do this 3 times and record your best peak power score from the screen.

The second set focuses on power and strength. Females increase the weight to 20 lbs. and males increase the weight to 30 lbs. Hold the cable and start in the forehand position. While holding the cable with both hands, mimic a forehand stroke and hit as hard as you can while extending the cable through the shot. Do this three times and record your best peak power score from the screen.

MEASURING: Record the best *power* result and the best *strength* result for the player's forehand on the **EEvaluation Results Chart**.

#10 Backhand Power/Strength:

PURPOSE: To measure the player's arm and shoulder power & strength in their *backhand* using a *Keiser Infinity Cable Machine*. [If access to this machine is unavailable, results will be derived from Tests #6-8.]

PROCEDURE: The first set focuses on speed. Females set the weight to 10 lbs. while males use 15 lbs. Hold the cable with both hands and start in the forehand position. Mimic a backhand stroke and hit as hard as you can while extending the cable through the shot. Do this 3 times and record your best peak power score from the screen.

The second set focuses on power and strength. Females increase the weight to 20 lbs. and males increase the weight to 30 lbs. Hold the cable and start in the backhand position. While holding the cable with both hands, mimic a forehand stroke and hit as hard as you can while extending the cable through the shot. Do this three times and record your best peak power score from the screen.

MEASURING: Record the best *power* result and the best *strength* result for the player's backhand on the **EEvaluation Results Chart**.