

Ask the Lab: Strength Training

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From: Steve, Michigan: I am 16 years old, and have been playing tennis for most of my life. I realize to become a better tennis player, I have to improve strength. When I go to the gym, I just do random exercises, not really knowing what I am working. What kind of exercise routine should I be doing in the gym to prepare my body to play tennis?

Satoshi Ochi, MA, CSCS*D: Steve, thank you for your question. Tennis requires great muscular strength and a great fitness level. Therefore, as you noticed you need to improve your strength to be a better tennis player. However, so many tennis players, especially young players like you do not always have access to the correct resources for your strength training. Improper techniques or incorrect program design might slow your improvement and could lead to injury if not performed correctly. Here are basic step by step instructions to help create your own strength training program.

*Please consult your physician before participate any strength training programs. Also, you must not work out / lift weights by yourself. As your age, adult supervision is important in the gym. Please remember that #1 cause of severe injuries in the gym is unsupervised lifting by young / high school age athletes.

1. Selecting exercises: For basic strength training, which you probably need at this point, you should select one exercise for each muscle group. This will maintain your muscle balance. Also, select one or two multi-joint movement exercises, especially for major muscle groups, such as Legs, Chest, and Shoulders. Lunges (Figure 1) are examples of multi-joint exercises that are great way to develop tennis specific muscles. Since you have been playing tennis for most of your life, you probably have already developed some muscular imbalances, such as weakness on upper and lower back muscles. Therefore, it is important for you to work on upper and lower back muscles. Seated Row, Lat Pulldown, Bent Over Rows, RDL (Figure 2a, b) are examples of upper or lower back exercises. Tennis players should include tennis specific exercises, such as Core (Abdominal / lower back) exercises and shoulder prehab (rotator cuff) exercises (some examples of these can be found on strength and conditioning section of the Player Development website.

2. Arranging exercises: You should perform large muscle group exercise, such as Squat, Lunges, Bench Press, etc, at the beginning of your program. When you are arranging exercises, make sure to perform smaller muscles groups (i.e. triceps exercises) after larger muscles groups (upper body pushing exercises, such as bench press, chest press, shoulder press, etc).

3. Determining Exercises Loads: Find out the weight you can perform 12 to 15 repetitions. This means that you should feel your muscles fatigue around repetition number 12, 13, 14, and 15. For your basic strength programs, these are the weights you should use for to start with and should help develop your initial strength levels.

4. Determining the Number of repetitions, sets, and rest: 12-15 repetitions of each exercises performed for 2-3 sets is a good starting program. Take as much as time you need for your resting at beginning. As you establish your foundation and move to more advanced programs, you should be able to perform 6-12 repetitions 3-5 sets and limit your resting time about 30-90 seconds.

5. Determining the frequency of training: Basic strength training should be performed three days a week, every other day, such as Monday, Wednesday, and Friday.

Sample Basic Strength Training Program for a Young Tennis Player

Frequency: 3 days a week (Monday, Wednesday, and Friday)

Exercise	Muscles	Sets x Reps
Squat or Lunges	Hip and Thigh	3 x 12
Bench Press (Dumbbell or Barbell)	Chest	3 x 12
Seated Row or Lat Pulldown	Upper Back	3 x 12
RDL or Leg Curl	Hamstrings	3 x 12
Shoulder Front/Lateral	Shoulders	3 x 12 (Front raise x6;



Figure 2a - RDL Start Position
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Figure 2b - RDL finish position
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Raise		Lateral raise x6)
Biceps Curls	Biceps	2 x 15
Triceps Extension	Triceps	2 x 15
Core (Abdominal and Lower Back)		3-5 different exercises; total reps= about 100
Shoulder Prehab		1-2 x 15

It is recommended to consult a certified strength and conditioning specialist in your area for more individualized tennis specific strength training and visit the [Player Development website](#) for more information.

About the Author

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