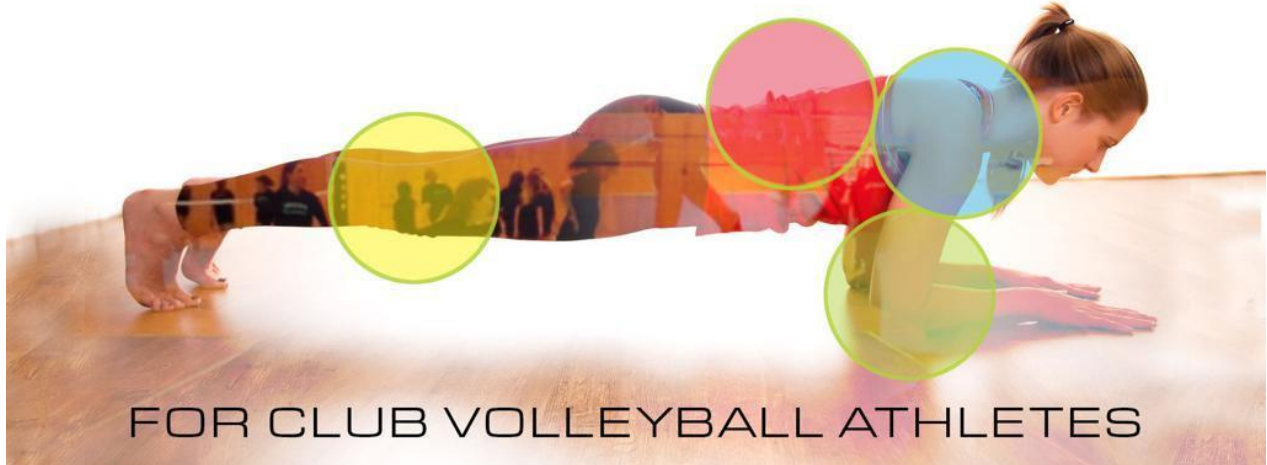


INJURY-PREVENTION TRAINING



FOR CLUB VOLLEYBALL ATHLETES

**Strength and Conditioning | Transitional Movements | Jump
Training | Plyos**

3 Reasons Why Volleyball Players Need Strength and Conditioning

A volleyball-specific strength and conditioning program can optimize a player's performance on the court. Whether athletes are still developing or competing at the highest level, spending time in the weight room building a strength foundation can be the difference between winning and losing a game. Here are three key reasons why volleyball coaches should incorporate strength training in their program.



#1 Strength and Power

Volleyball is a sport dominated by strength and power. Players need power in their legs to get high in the air and strength in their upper body to spike, block, and dig balls. Lifting weights stimulates muscle fibers to grow, which allows athletes to produce more force at faster rates. Thus, as players get stronger their explosive power also heightens on the court. Strengthening volleyball-specific muscles ensures that athletes are able to reach their maximum performance potential.

For example, core strength is vital for a player's stability and allows hitters to transition power more efficiently from their lower body to their upper body and arm swing. Muscle fibers grow when directly stimulated by the stress of strength training, which makes lifting an athlete's best tool for developing the power to jump higher and serve more forcefully.

#2 Jumping and Agility

Volleyball requires explosive jumps and rapid changes in direction. The ability to jump high is treasured among volleyball players because of the importance for spiking the ball as well as defending spikes from opponents. Vertical jumping is all about ground force production, core stability, and quick hips. In order for players to improve vertical jumps, they must spend time in the weight room doing dead-lifts, squats, and other exercises that strengthen leg and hip muscles.

Additionally, being able to track and quickly change directions to keep the ball in play is key to winning points. An effective strength and conditioning program incorporates agility drills and lateral movements to improve foot speed. Putting in the extra effort in the weight room will make players more dominant on the court.

#3 Injury Prevention and Flexibility

Not only do volleyball players need to be skilled, strong, and powerful, they also need to be healthy. Volleyball is a high-impact sport and with all the jumping, landing, cutting, and planting, an athlete's body can take a beating. The muscles, tendons, and ligaments surrounding joints help protect from injury, but strenuous volleyball movements can cause these joints to temporarily weaken.

Without sufficient recovery time or muscle strength, players will experience injuries over time. Overuse injuries include patellofemoral syndrome, shoulder impingements, shin splints, and back pain. Undoubtedly, increasing strength levels will lower the risk of injury and muscle vulnerability. Stronger muscles are better able to absorb the shock from landings and quick change of directions.

Additionally, developing a foundation of balanced strength and flexibility allows muscles to work together to minimize stress on the joints and ligaments. Flexibility increases range of motion, improves technique, and enables more force to be exerted. Therefore, implementing a volleyball-

specific strength and conditioning program significantly helps prevent injuries.



Transitional Movements

Include Speed, Strength & Agility

Speed and agility are important attributes if you're a volleyball athlete. While the importance of agility training or change of direction is clear and widely accepted, classic speed training such as sprinting is not as important in volleyball as with other sports such as basketball. However, many sports conditioning experts agree that there is a place for some other types speed training for volleyball players.

Foot Speed In Volleyball

The type of foot speed needed in volleyball is characterized by the athlete being able to quickly get from point A to point B. This rarely entails taking more than three or four steps in any one direction, so long-

distance sprint-speed training is not very functional for the volleyball athlete. Instead, reaction drills that require you to react to a stimulus and move quickly are critical. Hops — both single- and double-legged — and quick jumps, as with jumping rope, are good ways to improve your foot speed for volleyball.

Speed Contributes to Power

Power is extremely important in volleyball. Spikes, jumps and serves are all examples of the use of power in volleyball. Power can be defined as a combination of strength and speed, so by incorporating speed training specific to common movements in volleyball, you can improve your power in the sport. You can enhance upper-body power important to striking the volleyball through specific exercises such as medicine ball throws and plyometric push-ups.

Agility

Agility in volleyball requires quick and sometimes awkward movements as you adjust your body position to the ball during play. A volleyball player, you must be able to change direction — sometimes in midair — in a split second to adjust to the ball. Volleyball agility or movement exercises should be modeled after what you might experience during the course of a match. For example, use simple movement patterns to improve agility, such as side-shuffles and backpedals, as well as more complex movements such as short shuttles — which include multiple movement patterns from multiple angles.

Keep It Short

Because most if not all of your movements on the volleyball court are short, powerful and quick movements, train that way. Keep your speed and agility training short since this is what mimics what you'll need on the court.

Ladders

If you are wanting to increase the agility and footwork of your players, try these seven agility ladder drills designed to help prepare your players to be neurologically ready for more explosive movements.

1. Two in One Out (some people call this the Icky Shuffle)
2. Cross Over Step (the outside foot is the only foot the steps in)
3. One-Two forward One-Two back (stepping in from the side)
4. Single leg hops (hop diagonally thru the ladder on one leg – controlled exercise. Down and back on each leg)
5. High Knees to Sprint (step 1-2 into each space and pull knees up as high as possible)
6. Two in, Two out. (straddle the ladder. Step 1-2 into the ladder, then step 1-2 out as you move down the ladder)
7. Scissor Jumps (Jump into the ladder and alternate your feet as you travel down the ladder)

Coaching Points:

1. Move your feet as fast as possible
2. You should be “pumping” your arms as you move through the ladder
3. After exiting the ladder the athlete should explode with into a 10 yard sprint. Emphasize a quick explosive start to the sprint.

Flexibility

Flexibility not only improves your range of motion, but also your power and agility as a result. Dynamic stretching before your practice or match, and static stretching afterwards, is the recipe called for by sports conditioning experts.



Jump Training

A volleyball player has to jump many times during a game. According to the statistics, on average a volleyball player jumps 80 – 100 times during a match. The statistics also says that a volleyball player has to jump 4 – 5 times to earn a point for his/her team. It goes without saying that having a high vertical jump is incredibly important for the success of both volleyball attackers and defensive volleyball players.

Volleyball hitters need to jump high in order to carry out a successful attack hit. Volleyball blockers need to jump high in order to resist the opposite team's attacks. Obviously, jump training needs to be a key part of a volleyball training program. Both blockers and hitters should do their best to increase their vertical jump for volleyball.

This concentrates on jump training for volleyball players. Today, we'll provide you with effective volleyball jump training drills and volleyball jump training exercises. Also, we'll provide you with workout tips for increasing a vertical jump for volleyball. Hopefully, all of this will help you develop an effective volleyball jump training plan that works.

Squat Jumps

A lot of volleyball players choose to do squat jumps. Doing this type of volleyball jump training has a profound positive impact on volleyball player's explosive power. Also, you'll be able to strengthen your calves, glutes, quads as well as hips significantly if you do squat jumps regularly. However, the most important thing is that you'll be able to increase your vertical jump dramatically over time.

It's worth noting that squat jumps are an easy to do exercise. First of all, you have to do is to squat down and jump up explosively. It's clear that you should try to jump as high as you can. Finally, you have to land on your toes. It's incredibly important for you to do this volleyball jump training exercise correctly. When squatting down, make sure that your hips are parallel to the floor. The angle between hips and knees has to be about 90 degrees.

Jumping Rope

Jumping rope is another good jump training drill for volleyball. Doing this volleyball drill will positively affect your food speed and improve your coordination significantly. In addition, jump roping will have a huge positive impact on your calves and the explosive muscles.

However, you'll be able to get the most out of jumping rope only if you do this volleyball jumping exercise the right way. Make sure that you don't touch the ground with your heels while jumping. That's the reason why you should do your best to keep on your toes when doing jumping rope exercise.

Single Leg Bound

It's no surprise that volleyball players have to jump off one leg during the match very often. You should definitely focus on doing single leg bound exercise if you would like to master this type of movement.

It's important to note that doing single leg bound delivers multiple significant benefits to a volleyball player. Keep in mind that doing single leg bound exercise has a positive impact on athlete's hip flexor and quads. The exercise also has a positive impact on volleyball player's explosive speed. On the other hand, doing this type of jump training helps a volleyball player stay balanced and control his/her body during the game.

When practicing single leg bound exercise you should use the power of one leg to explode off the ground. At the same time, you need to drive the opposing leg's knee as high as possible. So, it will look like you are doing a backward bicycle motion.

Hop Over Drill

Hop over drill is the right type of training for volleyball players who would like to jump higher. While doing hop over drill you need to move front to back and jump over barriers at the same time. It's very important for a volleyball player to jump up and leave the ground immediately after landing. This is something that helps volleyball players jump higher. So, you'll be able to build your explosive power and increase your vertical jump over time if you practise hop over drill regularly.

Lateral Jumps

Volleyball players usually jump laterally on the court. That's why lateral jumps need to be a part of a volleyball player's jump training program. When doing this type of jump training a volleyball player has to jump high vertically and move side to side at the same time. You need to know

that doing lateral jumps help a volleyball player increase his/her vertical jump dramatically. If you do lateral jumps, you'll be able to strengthen your hips as well as glutes. Above all, doing lateral jumps helps volleyball players prevent different types of knee injuries.

Lunges

Lunges are known for being one of the most effective lower body and leg exercises. Doing lunges is something that strengthens the muscles around knees. If these muscles are weak, a volleyball player may experience pain during games and practices. The main goal of lunges is to make these muscles as strong as possible. That means that you will be able to build your leg strength over time if you do lunges on a regular basis.

The big question is – how to do a lunge correctly? We'll help you get the answer right now. First of all, you have to put one foot in front of the other. You shouldn't make any movement staying in this position. Next, you have to drop your body straight down. When doing this exercise you need to make sure that your knees stay behind your toes. As a result, your knee will stay right over an ankle. You should go down, but you shouldn't go forward. All that you need to do is to drop your upper body straight down.

Make sure that your chest is up. When doing lunges you also need to look forward. Your task is to do 10 repetitions on one side. Then, you need to switch your legs and do 10 repetitions on the other side. Normally, an athlete has to do about 100 lunges during a workout.

Another cool thing about lunges is that this type of volleyball jump training has a positive impact on athlete's jumping muscles (such as quads and hamstrings). Therefore, lunges need to be a part of your jump training if you would like to build your explosive power and jump higher vertically. It's important for you to know that lunges can be done both by beginners and professional volleyball players.

Repeat Jumping

Repeat jumping is known for being one of the best jump training exercises for volleyball players. It's worth noting that repeat jumping is the type of jump training that can be done by volleyball players of all skill levels. That means that you'll find it easy to do repeat jumping by yourself.

First of all, you have to stand in front of a wall. Then, you have to jump as high as possible. Try to jump 10 – 20 times if you have just started practicing repeat jumping. Later, you'll be able to increase the number of jumps per workout. It's recommended for volleyball players to do repeat jumping 3 – 5 times per week.

Another important thing that you need to be aware of is that you have to jump up as soon as possible after landing. By doing so, you'll be able to get the most out of repeat jumping and increase your explosive power significantly.

What is great about repeat jumping is that this type of jump training provides volleyball players with quick results. It usually takes a volleyball player no longer than 2 – 3 weeks to see improvements. So, you'll definitely begin to jump higher vertically if you practice this type of volleyball jump training for about 2 – 3 weeks.

Frog Hops

You'll hardly be able to jump high vertically if you don't work on explosive jumping power. So, it's very important for a volleyball player to develop explosive power and strengthen the quadriceps and hamstrings. This is something that helps an athlete to jump higher vertically during a game.

Keep in mind that you'll be able to jump high and far only if you have strong tight muscles. Would you like to strengthen your tight muscles? If so, you obviously need to focus on doing such a jump training exercise as Frog Hops.

In fact, this type of jump training exercise is easy to do. All that you have to do is to jump like a frog. It's pretty easy, isn't? When doing this type of jump training you should aim to jump as high and far as possible.

You may find it hard to do Frog Hops at the beginning. However, things will definitely go easy when your muscles get stronger. Without a doubt, you'll be able to jump higher and faster over time. The distance of your jump will increase as well.



Plyometric Exercises For Volleyball Players

Ever notice the player who is spiking the volleyball with incredible jump height and power? The ball is so fast and at a steep down angle that it is nearly impossible to return. That's what volleyball coaches are looking for. Plyometrics training with Kbands will enable volleyball players to

increase their jump height for spiking and blocking. These plyometric exercises involve quick repeated muscle contractions that enable volleyball players to increase their muscle power for higher vertical jumps to enhance spiking and blocking.

One Legged Tuck Jump Shuffle Combo | Spiking Volleyball Drill

This volleyball plyometrics drill is a One Legged Tuck Jump Shuffle Combo that is great for volleyball spiking and blocking. The way to set this volleyball plyometrics drill up is to first get comfortable with the tuck jump. Each volleyball player must first stand on just one foot and gather balance. Volleyball players will then use a double arm swing to jump as high as possible and then tuck the leg that was on the ground up near the chest. Volleyball players will then land back on that foot and immediately do a plyometrics vertical jump up again. The only way to improve a vertical leap for spiking and blocking is to work quickly off the floor. Plyometric exercises are great for increasing vertical jumps for spiking and blocking. As soon as the foot hits the ground the volleyball player must immediately jump again tucking her knee up. Often when volleyball players start this plyometrics drill they will not use a double arm swing to get maximum jumping height. Volleyball players will simply leave their arms down to the side which will not help increase jump height for spiking and blocking. The double arm swing is really important. After volleyball players are comfortable with the plyometrics tuck vertical jump on one side, move to the other side and complete a couple reps.

Now volleyball players will line up parallel to the net. Each athlete will then complete 3 one legged vertical tuck jumps with their outside leg. When volleyball players are facing the net they will use their left leg to complete 3 jumps and then 3 shuffles to the right where volleyball players will again do 3 jumps but with the right foot. On the shuffles make sure volleyball players are down in an athletic position and their heels are not clicking as they shuffle. The proper shuffle with the bands should have feet wide and never touch. Similar to a basketball shuffle

volleyball players must not cross their feet because it may cause them to fall. When volleyball players are shuffling they need to be conscious not to let the knees shift in front of the toes. In the squatted position volleyball players, or any athlete for that matter, must be sure to keep the body's forces shifting in their hips and not their knees. Plyometrics exercises are great for increasing volleyball player's vertical jumps for spiking and blocking.

How Many Sets

Volleyball players should complete 4 to 6 sets of this volleyball drill for spiking and blocking moving both to the left and right with the shuffles. This means 2 to 3 shifting to the right first and then go to the other side of the court doing 2 to 3 to the left. Notice in the video that volleyball players are actually doing 2 sets on the left foot and only one on the right. This means volleyball players need to shift over to the other side of the gym to equal out the amount of sets. Volleyball players will do sets of 3 jumps then 3 shuffles then 3 jumps again and then take a break.