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THE LEVEL UP GUIDE

The Limitations of Common Training Methods for Athletes

While jumping rope, running long distances, and performing agility ladder drills are popular training methods among athletes, they often fall short in developing specific skills like vertical jump, sprint speed, and agility.

Jumping Rope and Vertical Jump: Jumping rope primarily enhances cardiovascular stamina and coordination rather than maximizing explosive power. Although it can help improve overall fitness, it does not engage the fast-twitch muscle fibers needed for a powerful vertical leap. This is because jump rope exercises typically involve a rhythmical, repetitive motion that does not require the maximum effort or explosive force necessary for increasing vertical jump height. To effectively improve vertical jump, athletes need to incorporate plyometric exercises that focus on explosive movements, such as max reach jumps or depth jumps.

Running Miles and Sprint Speed: Similarly, running long distances can actually hinder sprint speed development. Endurance running primarily recruits slow-twitch muscle fibers, which are beneficial for stamina but do not significantly contribute to the explosive power required for sprinting. To enhance sprint speed, athletes should focus on sprint-specific drills that activate fast-twitch fibers, allowing them to build the speed and power needed for short-distance sprints.

Agility Ladders and Agility: The use of agility ladders is often thought to improve agility; however, these drills lack the reactive component and the force application necessary for true agility development. Agility involves quick, explosive movements that require athletes to change direction rapidly while applying high levels of force into the ground. Ladder drills typically involve low-intensity footwork that does not mimic the forceful, dynamic movements seen in competitive sports. For more effective agility training, athletes should engage in sport-specific drills that incorporate cutting, jumping, and reactive movements.

In summary, while these training methods have their benefits, they do not adequately target the specific physical qualities required for enhanced performance in vertical jump, sprinting, and agility. Athletes looking to improve their capabilities should focus on more targeted, high-intensity training that activates the fast-twitch muscle fibers and emphasizes explosive power and reactionary movements.

WARMUP

1-Minute Jog at “conversation pace”... if you’re breathing too hard, you’re running too hard.

Dynamic Warmup

(Perform each exercise for 20 Yards)

- Knee Pulls
- Leg Cradles
- A Skips
- B Skips
- Slide and Glides
- Carioca w/ High Knees
- Heels & Toes
- 20 Yard Sprint at 85% Effort

Additional warmup recommended for Jump Workout:

- 15 seconds of mini pogos
- 15 seconds of front-to-back pogos
- 15 seconds of side-to-side pogos
- 15 seconds of W-shaped pogos
- 30 seconds rest
- 15 seconds of mini pogos on L leg
- 15 seconds of mini pogos on R leg
- 15 seconds of high intensity pogos on R leg
- 30 seconds rest
- 5-10 Practice “Max Reach Jumps” with 50-80% intensity

Additional warmup recommended for Sprint Workout:

- Wall Drill: Leg Swings in Sagittal and Frontal Planes to loosen up the hips
- Run 4-6 sprints at increasing intensities until you feel ready to run full speed

AT HOME WORKOUTS

IMPROVE SPRINT SPEED

- **Distance:** Choose a sprint distance between 10 and 60 yards (shorter distances are better).
- **How to Sprint:** Run at full speed, then gradually slow down.
***Optional:** Have someone clap or blow a whistle to create a reactionary start.
- **Rest:** Rest for at least 20 times the duration of your sprint.
 - For example, if your sprint took 4 seconds, rest for 80 seconds.
- **Reps:** Do 3 to 12 sprints.
 - Do more sprints for shorter distances and fewer sprints for longer distances.
- **Frequency:** For best results, this should be done 2-4 times per week. High consistency and frequency in these short duration workouts is more impactful than doing “super intense” and long duration workouts. If you do these sprints right, you should not feel fatigued within 20-45 minutes of finishing the workout.

Key Points:

- If your sprint times are 5% slower than your best, take more rest or stop the workout. Quality is more important than quantity.
- If you're sprinting at less than 95% of your top speed, you won't improve your sprint speed.
- **Pro Tip:** Race against another athlete or use a timer to hit your true top speed. Adjust the head start to keep races competitive.

IMPROVE JUMPING

- **Setup:** Set a basketball hoop to a height where it's hard to touch the rim.
- **How to Jump:** Practice jumping as high as you can off your right foot, left foot, and both feet, trying to dunk a small ball (like a golf ball).
- **Progression:** Over time, as this gets easier, increase the ball size (tennis ball, softball, soccer ball, then basketball).
 - Once you can dunk a basketball at that height, raise the hoop and start over with a golf ball.

Key Points:

- Don't perform more than 150 max effort jumps per week to avoid knee/joint pain
- Don't perform more than 40 max effort jumps in a day to avoid knee/joint pain

IMPROVE AGILITY

OPTION A: PLAY YOUR SPORT!! (**THE BEST OPTION**)

Some people may not like the simplicity of this answer... but playing your sport is one of the best ways to improve agility because it allows you to practice movements in a game-like environment where quick decisions and reactions are essential. During gameplay, athletes constantly encounter unpredictable scenarios, forcing them to adapt and respond rapidly, which enhances their agility skills. Additionally, sport-specific drills and movements developed during practice help build muscle memory, making athletes more efficient in their footwork and coordination.

In doing agility drills like this, it's crucial to prioritize quality rest while training (similar to the sprint speed and vertical jump workouts on the previous page). Playing through fatigue can be beneficial for conditioning during the season, but practicing while fatigued in the offseason can hinder your body's fast-twitch muscle development, which is vital for agility.

OPTION B: Reactive Agility Sprints

Starting Position: The athlete starts behind the starting line, and the training partner stands at the finishing line, ready to initiate the drill.

Initiating the Sprint: The training partner blows the whistle to signal the athlete to sprint forward 10 yards toward them.

Changing Direction: While the athlete is sprinting, the training partner yells "left," "center," or "right," or points in the specified direction. Upon hearing the command or seeing the signal, the athlete must change direction and sprint in that direction as fast as possible.

Repetition: After the first sprint and direction change, the athlete can jog back to the starting line for the next round.

Variations: To increase difficulty, the training partner can use different commands (e.g., "backward" or "shuffle") or vary the distance and angles.

Emphasis: Focus on explosive starts, quick pivots, and maintaining balance while changing directions. Encourage the athlete to keep their head up to enhance their ability to react to commands and maintain awareness of their surroundings.

OPTION C: Modified Oklahoma Drill (2-Hand Touch Version)

Setup:

- Create a 20-yard-wide by 20-yard-long 'mini field' using cones
- Divide the grid into two equal halves with a line down the center (this will be the "midline").
- Designate one individual as *offense* and the other as *defense*.

How to Play:

1. Starting Position:

- The offensive individual starts on one side of the grid
- The defensive individual starts on the opposite side facing away from their opponent

2. The Drill:

- On the coach's signal, the offensive team tries to advance the ball across the grid and past the defense by running, passing, or lateral movement.
- The defense attempts to touch the offensive player with two hands to stop their progress. If an offensive player is touched, the drill is over and the athletes return to their starting position.

4. Scoring:

- The offensive team scores 1 point for making it 10-yards (to the midline) without getting tagged OR 2 points if they make it past the defender to the other side of the 20-yard mark (the end zone).
- After a set number of attempts or time limit, individuals switch roles.

5. Emphasis: Focus on quick decision-making, footwork, and strategic movement. **This drill only improves agility when performed at full speed.**