



Soccer Training Programs for Performance Enhancement & Injury Prevention

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Needs Analysis for Soccer (Defenders, Midfielders, Forwards)

- **Common Injuries:** ACL tears (higher risk for female players); Lower extremity sprains and strains; contusions or fractures from contact; neck sprains, concussions (Turner, Munro, & Comfort, 2013).
- **Sports Specific Movement Patterns Required:** Pressing (sprinting: acceleration & deceleration); Transition (multi-directional cutting); Heading (jumping & landing); Kicking (single leg stability, strength & power); Warding & contact (total body stability, strength, & power); Sliding (deceleration, acceleration, total body power to return to upright position quickly).
- **Multi-directional Agility and Quickness Demands:** with short acceleration/deceleration emphasis (80-90% of total game movement)
- **Linear Acceleration Demands:** 10-20% of total game movement; short distance acceleration (< 20 yards).
- **Absolute Speed Demands:** Absolute speed also relevant for some longer sprinting periods of 20+ yards.
- **Flexibility Demands:** Emphasis on ankles, hips, and thoracic spine in 3 planes of motion to meet movement demands listed above and reduce risk of injury. Asymmetries in mobility are expected in hip internal and external rotation between right and left leg based on dominant kicking leg.
- **Stabilization Demands:** Lower extremity (Foot, ankle, & hip) emphasis on multi-planar horizontal deceleration (jump, hop, bound); Upper extremity: (core, shoulder girdle, & neck) stabilization (for heading & warding opposition).
- **Power Demands:** Lower body horizontal power is highest priority for short distance acceleration and deceleration (horizontal plyometric & speed strength training emphasis); Total body rotational power for kicking (speed-strength emphasis); Lower body vertical power for jumping (for heading) & longer sprinting (horizontal plyometric & speed strength training emphasis);
- **Strength Demands:** Total body strength for efficient force transfer in linear sprinting, multi-planar cutting, delivering and absorbing contact, and injury prevention. Emphasis on periodized strength training with varying strength movements, volume, and intensity based on season.
- **Core Strength Demands:** core stability for efficient contact absorption (warding); core strength and power for efficient force transfer in multi-directional cutting, linear sprinting and kicking (rotational).
- **Energy System Demands:** 250 brief intense anaerobic actions, per player, with repeated sprints occurring 39 times, sprinting every 90 seconds, each lasting 2–4 seconds for a 90 minute match (Turner, Munro, & Comfort, 2013). Recovery between sprints will improve with an efficient aerobic system.
- **Common Soccer Performance/Athletic Profiling Tests:** Manchester United Fitness Test, Beep Test, Yo-Yo Intermittent Recovery Test, Star Excursion Balance Test, Single Leg Hops (Vertical, Horizontal, Triple, Multi-Directional), Linear Acceleration (0-20 m), Illinois Agility test, Pro-Shuttle, L Run, 5-0-5, Functional Movement Screen (Cone, 2012).

References:

- Cone, J. (2012). Soccer-specific performance testing of fitness and athleticism: The development of a comprehensive player profile. *Strength and Conditioning Journal*, 34(5), 11-19.
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- Turner, E., Munro, A. G., & Comfort, P. (2013). Female soccer: a needs analysis. *Strength and Conditioning Journal*, 35(1), 58–65.
- Verheijen, R. (2014). *The original guide to football periodisation: Part 1*. Netherlands: World Football Academy.

Benefits of Power Plate Training for Soccer

Performance Benefits: Strength & Power

Force Production

Pre-activation for Power Production

Elasticity

Injury Prevention Benefits:

Mobility

Knee Stabilization

Ankle Stabilization

Core Stabilization

Recovery: Circulation & Pain Dampening

Power Plate peer-reviewed research: <https://powerplate.com/education-training/research>

Power Plate Soccer Strength & Power: Base Conditioning

Movement Preparation	Sets	Frequency & Amplitude	Duration	Load	Rest
Soft-Tissue					
Lateral Gastroc/Anterior Tibialis	1	40 Hz/High	1:00 each	BW	0
Medial Hip: Adductor	1	40 Hz/High	1:00 each	BW	0
Lateral Hip: IT Band/TFL	1	40 Hz/High	1:00 each	BW	0
Anterior Hip: Quadriceps	1	40 Hz/High	1:00 each	BW	0
Mobility					
Standing Posterior Hip Stretch	1	35-40 Hz/Low	:30 each	BW	0
Kneeling Adductor Stretch	1	35-40 Hz/Low	:30 each	BW	0
Hip Swing: Rotational w/Gastroc Stretch	1	35-40 Hz/Low	:30 each	BW	0
Anterior Hip w/Overhead Reach (Rear Foot on Plate)	1	35-40 Hz/Low	:30 each	BW	0
Lateral Hip Stretch w/Frontal Reach	1	35-40 Hz/Low	:30 each	BW	0
Activation					
Single Leg Supine Hip Extension	1	35-40 Hz/Low	:45 each	BW	0
Split Squat w/Contralateral Rotational Reach	1	35-40 Hz/Low	:45 each	BW	0
Single Leg RDL (Hold) w/Hip Rotation	1	35-40 Hz/Low	:45 each	BW	0
Pushup w/Rotational Holds	1	35-40 Hz/Low	:45	BW	0
Athletic Base w/Mini-Band Hip Rotations	1	35-40 Hz/Low	:45 each	Mini-Band	:60
Strength & Power Circuit					
1a.) 1 Arm Kettlebell Swing	2-3	N/A	6 ea.	KB	0
1b.) Single Leg Squat	2-3	35-40 Hz/High	:30-:45 ea.		0
1c.) Pushup Hold w/1A DB Row	2-3	35-40 Hz/High	:30-:45 ea.		:60
2a.) Med Ball Vertical Throw	2-3	N/A	:30	MB	0
2b.) Single Leg RDL	2-3	35-40 Hz/High	:30-:45 ea.		0
2c.) Push Up Walkover	2-3	35-40 Hz/High	:30-:45		:60
3a.) Med Ball Rotational Wall Throw @ Hip	2-3	N/A	:15 ea.	MB	0
3b.) Rotational Step Up	2-3	35-40 Hz/High	:30-:45 ea.		0
3c.) Split Stance 1A Cable or Strap Row	2-3	35-40 Hz/High	:30-:45 ea.		:60
Post- Session Recovery					
Upper Trap/Lateral Neck Stretch w/Straps	1	40 Hz/High	:30 each	BW	0
Anterior Hip: Quadriceps	1	40 Hz/High	1:00 each	BW	0
Medial Hip: Adductors	1	40 Hz/High	1:00 each	BW	0
Lateral Hip: IT Band/TFL	1	40 Hz/High	1:00 each	BW	0
Gastroc/Hamstrings	1	40 Hz/High	1:00 each	BW	0
Notes for Strength & Power Circuit:					
<ul style="list-style-type: none"> • Load and Duration: TBD by athlete • High Volume: 3 circuits each • Low Volume or In-Season: 2 circuits each • Frequency: 1-2 days per week • Cycle Duration: 4 weeks; can also alternate with “Endurance” or “Pre-Activation” Programs if using non-linear periodization 					

Power Plate Soccer Strength & Power: Endurance Complexes

Movement Preparation	Sets	Frequency & Amplitude	Duration	Load	Rest
Soft-Tissue					
Lateral Gastroc/Anterior Tibialis	1	40 Hz/High	1:00 each	BW	0
Medial Hip: Adductor	1	40 Hz/High	1:00 each	BW	0
Lateral Hip: IT Band/TFL	1	40 Hz/High	1:00 each	BW	0
Anterior Hip: Quadriceps	1	40 Hz/High	1:00 each	BW	0
Mobility					
Split Stance Hamstring Stretch	1	35-40 Hz/Low	:30 each	BW	0
Standing Adductor Stretch w/Rotational Reach	1	35-40 Hz/Low	:30 each	BW	0
Hip Swing: Rotational w/Gastroc Stretch	1	35-40 Hz/Low	:30 each	BW	0
Anterior Hip w/Overhead Reach (Front Foot on Plate)	1	35-40 Hz/Low	:30 each	BW	0
Lateral Posterior Hip/Shoulder Stretch	1	35-40 Hz/Low	:30 each	BW	0
Activation					
Supine Hip Extension w/Mini-Band	1	35-40 Hz/Low	:45 each	BW	0
Single Leg Squat w/Contralateral Rotational Reach	1	35-40 Hz/Low	:45 each	BW	0
Prone Plank to Pushup 1 Arm Holds	1	35-40 Hz/Low	:45	BW	0
Single Leg RDL	1	35-40 Hz/Low	:45 each	BW	0
Athletic Base w/Mini-Band Hip (1 Leg Rotations)	1	35-40 Hz/Low	:45 each	Mini-Band	:60
Strength & Power Circuit					
1a.) Speed Deadlift	2-4	N/A	3-6	50%	0
1b.) Front Squat	2-4	35-40 Hz/High	:30		:60
2a.) Speed Rotational Lift	2-4	35-40 Hz/High	3-6 ea.	Cable	0
2b.) Rotational MB Slam or Wall Throw	2-4	N/A	3-6 ea.	MB	0
3a.) Rotational Lunge	2-4	N/A	6 ea.		0
3b.) Lateral Lunge (Weight Shift on Plate)	2-4	35-40 Hz/High	:30 ea.		:60
4a.) Pullup	2-4	N/A	:15 ea.	MB	0
4b.) Pushup (Feet Elevated)	2-4	35-40 Hz/High	:30-:45 ea.		0
4c.) Lateral Plank	2-4	35-40 Hz/High	:30-:45 ea.		:60
Post- Session Recovery					
Lateral/Posterior Thoracic Spine	1	40 Hz/High	:30 each	BW	0
Anterior Hip: Quadriceps	1	40 Hz/High	1:00 each	BW	0
Medial Hip: Adductors	1	40 Hz/High	1:00 each	BW	0
Lateral Hip: IT Band/TFL	1	40 Hz/High	1:00 each	BW	0
Gastroc/Hamstrings	1	40 Hz/High	1:00 each	BW	0
Notes for Strength & Power Circuit: <ul style="list-style-type: none"> • Load and Duration: TBD by athlete • High Volume Day: 4 sets each • Low Volume or In-Season: 2 sets each • Frequency: 1-2 days per week • Cycle Duration: 4 weeks; can also alternate with “Base” or “Pre-Activation” Programs if using non-linear periodization 					

Power Plate Soccer Strength & Power: Pre-Activation

Movement Preparation	Sets	Frequency & Amplitude	Duration	Load	Rest
Soft-Tissue					
Lateral Gastroc/Anterior Tibialis	1	40 Hz/High	1:00 each	BW	0
Medial Hip: Adductor	1	40 Hz/High	1:00 each	BW	0
Lateral Hip: IT Band/TFL	1	40 Hz/High	1:00 each	BW	0
Anterior Hip: Quadriceps	1	40 Hz/High	1:00 each	BW	0
Mobility					
	Sets	Frequency & Amplitude	Duration	Load	Rest
Split Stance Hamstring Stretch	1	35-40 Hz/Low	:30 each	BW	0
Standing Adductor Stretch w/Rotational Reach	1	35-40 Hz/Low	:30 each	BW	0
Hip Swing: Rotational w/Gastroc Stretch	1	35-40 Hz/Low	:30 each	BW	0
Anterior Hip w/Overhead Reach (Front Foot on Plate)	1	35-40 Hz/Low	:30 each	BW	0
Lateral Posterior Hip/Shoulder Stretch	1	35-40 Hz/Low	:30 each	BW	0
Activation					
	Sets	Frequency & Amplitude	Duration	Load	Rest
Supine Hip Extension w/Mini-Band	1	35-40 Hz/Low	:45 each	BW	0
Single Leg Squat w/Contralateral Rotational Reach	1	35-40 Hz/Low	:45 each	BW	0
Prone Plank to Pushup 1 Arm Holds	1	35-40 Hz/Low	:45	BW	0
Single Leg RDL	1	35-40 Hz/Low	:45 each	BW	0
Athletic Base w/Mini-Band Hip (1 Leg Rotations)	1	35-40 Hz/Low	:45 each	Mini-Band	:60

***For the full programming , feel free to
contact us!***

-the Power Plate Team