

Using General Strength in the Training Regimen

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General Strength exercises are exercises that develop strength, using the athlete's bodyweight as the sole load or resistance. In general strength work no external loading is applied. General strength exercises can run the gamut from simple traditional exercises like the pushup or the situp, to highly advanced, complex exercises designed to address very specific goals. These exercises train a variety of abilities and should comprise a large part of any strength development program.

Strength Development. When dealing with young, developmental athletes, general strength exercises are a safe way to provide a variety of strength development activities in the program. The absence of external loading keeps injury risks minimal and makes them applicable for athletes of any age. Also, unlike weight training, the safety characteristics of general strength work mean that large numbers of athletes can be managed efficiently with a minimum of individualization. Skilled exercise choice can make the program as easy or as difficult as the coach desires.

Improving Coordination. General strength exercises use the athlete's bodyweight as the resistance load. For this reason generous doses of general strength work teach athletes to better manipulate their bodies, improving general coordination and flexibility and enhancing technique in any sport. Many coaches regard general strength work as a mix of strength and coordination training.

Body Balancing. The lack of external loading in general strength exercises virtually eliminates the possibility of overtraining and developing muscle imbalances. Also, general strength work is capable of activating, training, and strengthening small muscles and muscle groups that other means of strength training don't reach, further improving agility, mobility, and many other qualities.

Recovery. General Strength exercises affect the body's recovery processes as well. These exercises, when done in certain ways, increase the level of certain hormones related to recovery from exercise. For this reason, many coaches use general strength exercises on recovery-themed days, in order to accelerate the recovery from the previous day's work.

Developing Endurance. General strength exercises can be combined into circuits or groups that challenge and develop an athlete's endurance abilities. A skilled coach can administer these exercises with carefully chosen work and rest intervals to train aerobic or anaerobic

fitness. Very short sprints can be mixed in to increase demand. These circuits can be made as easy or as difficult as desired.

Injury Prevention. Using general strength to develop endurance has the added advantage of minimizing injury risk when compared to using running workouts for the same purpose. The variety of movements employed in a general strength circuit virtually eliminates all overuse injuries and repetitive movement syndromes. Also, fatigue-related degradation of running mechanics is eliminated as well.

Types of General Strength Exercises

- **Calisthenics** are simple, gross body movements. Often these exercises involve body positions that create resistance or challenge ranges of motion. These exercises are typically arranged into circuits, with specified work and rest intervals. This type of work is commonly used to develop basic general strength qualities, coordination, and energy system fitness.
- **Abdominal/Spinal Work** consists of callisthenic exercises designed to address these particular areas. Because of the importance of this body region to performance, most training programs address this area separately and specifically.
- **Stabilization Routines** develop the ability to stabilize joints and large muscle groups during activity. These muscle groups must possess enough strength endurance to function throughout the course of the activity. Often these exercises require joints or body parts to remain stationary under circumstances of loading or instability. At other times they may require very slow, uniform movements of body parts. Strengthening of postural muscles and improvement of coordination, flexibility and balance result from this type of work.
- **Connective Tissue Routines** are exercises that create great tension in the connective tissue, under conditions of very slow movement. These also address muscle tissue as well, and help to improve flexibility, muscular strength and endurance as well as connective tissue strength.

Sample General Strength Applications

1. Scramble Circuit. This is a good way to train basic general strength and endurance. The athletes are placed on a start line, facing in the same direction, with another line designated 10 meters from the start line. The coach gives a start command, and the athlete begins to perform a designated general strength exercise. After the work interval, the coach shouts “Sprint”, and the athletes quickly get to their feet and sprint 10 meters to the next line. They then walk back and reset for the next exercise. Performing pushups, squats, situps, and back hyperextensions (3 sets of each) are suggested, although nearly any simple movement can be used. The circuit should include 12 total sets of work, with 20 seconds of work/40 seconds of rest being a good starting point for most levels of athletes.



2. Burnouts. The athlete is asked to perform 10 squats, 10 lunges, then 10 squat jumps, continuously, at a consistent cadence. After a rest period of 2 minutes, another set is performed. The workout can consist of 2 or 3 sets. The same concept can be applied to the upper body, choosing exercises for the arms, chest, and upper back.



3. Pillar Circuit. This circuit should include a variety of exercises that concentrate on the abdominals, the lumbar spine, and the obliques. 12-16 total sets, with 20 seconds work/20 seconds rest being a good starting point. Suggested exercises can include situps, crunches, back hyperextensions, sideways situps, crunches and hyperextensions combined with twisting movements, etc.



4. Duck Walks. These exercises are a good but simple way to train connective tissue. Athletes assume a deep squat position and without rising, walk 10 meters at a slow but consistent pace. The entire circuit consists of 2 sets of 10 meters each of forward walks, backwards walks, and lateral walks to each side.



5. Planks. Plank exercises require an athlete to maintain a stable posture while assuming an inherently unstable position. For example, an athlete might assume a pushup position, prone, with weight on the hands and feet and the body held straight. Once assuming this position, the athlete slowly raises and lowers one foot while maintaining stability in the remainder of the body. Other variations might place the body in a supine position or on the side, with the hands or elbows supporting body weight. 8-10 exercises, using 15 seconds of work with each leg, followed by 15 seconds of rest are suggested.



These by no means are representative of all of the variety of exercises and workout constructs available to the coach, but are meant as a starting point to demonstrate potential applications of this type of work. Once the coach gains experience in administering circuits like these, one can quickly adapt them to a variety of goals by choosing different exercises, work intervals, and rest intervals.