



Program Overview

SCIENTIFIC PRINCIPLES FOLLOWED BY THE CHESTATEE HIGH SCHOOL STRENGTH AND CONDITIONING PROGRAM

Ground-Based Exercises: Ground-based, or closed chain, movements mean that the activity is being performed with the athlete's feet on the ground. The more force you can exert against the ground, the faster you can run, and the higher you can jump. Our athletes training requires the majority of exercises to be ground based in order to develop muscle recruitment patterns from the ground up.

Multiple Joint Movements: All athletic skills require multiple joint actions. We maximize the efficiency of each workout by prescribing multiple joint movements as much as possible.

Explosive Training: One of the most critical training aspects for our athletes. Training explosive, quick muscular contractions with free weights allows for a more fast twitch muscle fibers to be recruited which results in power.

Progressive Overload: The load of weight lifted for each exercise is a very fundamental component of strength training. Overload happens when the body responds to training loads greater than normal. This causes muscle tissue to go into a catabolic state or to break down. The body then adapts, through good nutrition and rest. By compensating repeatedly over and over, the muscle develops more strength and endurance.

THE PROGRAM

Our primary purpose is to assist Chestatee High School athletes in the development of their physical potential. This is undertaken in an effort to minimize athletic related injuries and to enhance athletic performance.

Acceleration: The ability to reach top speed in the shortest amount of time. Measuring acceleration is a great indicator of performance.

Training Focus:

- Developing Leg Strength
- Increasing Lower Body Explosive Power
- Performing Resisted Running and Training The ATP Energy System

Flexibility: The range of movement in a joint and its surrounding muscle. This is a key component of improving athletic performance and avoiding injuries.

Training Focus:

- Using passive and active static stretching
- Focusing on the importance of a proper warm-up
- Practicing dynamic (Full range of movement) flexibility drills

Speed: The combination of stride length (The amount of ground covered between steps) and stride frequency (The number of steps per second).

Training Focus:

- Developing leg strength with ground based power movements
- Improving running mechanics
- Training the ATP energy system

Agility: The ability to change directions with good body control and without a loss of speed.

Training Focus

- Performing both programmed (Cone, line and bag drills) and reaction
- (Visual stimulus directed movements) agility drills
- Improving acceleration and lower body power

Strength: Strength is defined as $Mass \times Distance$. Research shows that there is a positive correlation between improvement in strength and improvement in athletic performance.

Training Focus

- Following a program that includes a carefully monitored progressive overload and
- Variety of multiple joint exercises.

Power: Defined as $Mass \times Distance / Time$. In other words, it is the combination of strength and speed.

Training Focus

- Performing Olympic Lifts
- Employing Plyometrics

HIGHLIGHTS OF OUR STRENGTH AND CONDITIONING FACILITY

- Over 4,000 Square foot strength complex