

weightlifting & power development



There are several forms of exercise using weights as resistance, but they are not all the same, nor do they produce the same results.

The most common approach to using weights is for general fitness. Most often selectorized machines, barbells, dumbbells, and resistance bands are used to perform exercises that work an isolated muscle or muscle groups. The general goal is to maintain or improve overall fitness, muscle strength, and endurance. Usually this type of program will work all the major muscle groups, using a variety of exercises, with every workout. Sometimes these workouts are broken up into upper and lower body on selected days.

The next three types of exercise are body building, powerlifting, and weightlifting. They are very different in their approach and goals and are often confused.

Body building is a very specific method of using weights to maximize muscle size and tone.

Exercises are generally performed with lower weight and high repetitions. Emphasis is placed on working individual muscles and a particular body part with each exercise session.

A typical workout might be working the legs with a series of exercises designed to target individual muscle groups in them.

Powerlifting is defined as a competitive form of lifting weights using three specific exercises, the bench press, dead lift, and back squat. While this sport is called powerlifting it is in reality strength lifting, since all of these exercises are performed without a speed component. These exercises are often a vital part of a well-rounded sport-specific workout, but by themselves do not enhance power production. Therefore they have little direct applicability or carry-over to most sports.

Weightlifting, by definition, comprises two lifts, the clean and jerk and the snatch. These are often referred to as the Olympic lifts, since this is the only form of lifting weights that is an Olympic sport.

Weightlifting is the true power producer. The main goal of weightlifting is to train and condition the athlete to generate maximal muscular force at an ever-increasing speed. Power is the capacity to perform a given amount of work as rapidly as possible. It is dynamic strength coupled with movement speed. A powerful athlete can accelerate to full speed faster than an athlete who

has just developed strength through his workouts. In competition, the ability to move with power is often the deciding factor between winning or losing. Peak power production for world class weightlifters versus world class powerlifters is from four to six times greater.

Training with the Olympic lifts and the associated accessory lifts accelerates the development of full-body athletic power, speed, mobility, and flexibility. When these techniques are combined with other sport-specific training approaches, optimal transfer of these important variables occurs.

Understanding power capacity and how to develop it is a primary key to optimizing athletic performance.

ABOUT THE AUTHOR Doctor John Spoto graduated from SUNY Cortland with a BS in Physical Education and Athletic Training. He obtained a Doctor of Chiropractic degree in 1982 and is the CEO of Star Physical Therapy and Sports Performance. He enjoys weight lifting, biking and sculling. Contact him at starsportsperformance@hotmail.com.

COVER MODEL Caryn (our first cover model) has built a comprehensive home gym with her husband. "It keeps us motivated and it is an activity we enjoy together." Caryn starts her morning with a workout and aerobics which energize her for the day. She believes in maintaining a healthy and balanced diet year round and consumes protein shakes daily. Caryn enjoys cooking and is always looking for healthy and tasty recipes.

