

Session 210

POWER TRAINING: THE ULTIMATE TRAINING TOOL

Presented by: Krista Popowych, BHKin

2014 IDEA Fitness Instructor of the Year; 2016 canfitpro Canadian Presenter of the Year
Keiser Global Director of Group Education; Balanced Body Integrated Movement Specialist
Vancouver, BC, Canada info@kristapopowych.com

Overview Athletes need power to hit a home run, score the winning three-pointer on the buzzer or sprint to the finish line. Our clients need power to climb stairs, lift a bag of groceries or even get out of a chair. We all need to be more powerful. In this session, learn what power is, its benefits, and how to train to improve power regardless of your client's age, activity choice or fitness level. Power is the elixir of life, and we have just the right recipe. Are you ready to be more powerful?

The 5 Trainable Qualities Muscular Hypertrophy, Muscular Endurance, Strength, Power, Speed

Teaching Progression Technique, Tempo, Load/Force, Velocity

What Is Power? Force x Velocity

Why Train Fast? Real World Examples

Who Needs Power Training?

- Active Adult/Weekend Warrior
- Rehabilitation
- Job Related
- Athlete

Why Train for Power? Power = Performance

Power Force x Velocity (Strength at Speed)

Power is the ability to produce force at speed. Power is highly regarded as the most important measurable matrix in human performance.

How the Human Body Responds

- Recruits large amounts of muscle fibers
- Recruits more fast twitch muscle fibers
- Improves the magnitude and velocity of force production
- Enhanced activation of the nervous system
- Aggressive concentric, controlled eccentric

Speed

Speed is the ability to produce force at relatively high velocities. Speed, in resistance training, is the ability to generate velocity through a given movement.

An improvement in speed will correspond to an increase in limb velocity.

Reaction time is important in everyday life.

How the Human Body Responds

- Recruits more fast twitch muscle fibers
- Enhanced activation of the nervous system
- Improves reaction time in everyday life
- Aggressive concentric, controlled or aggressive eccentric

Force Power Relationship

3 Ways to Improve Power with Resistance Training

1. Increase Force
2. Increase Velocity
3. Produce more force at higher velocity

Speed vs Velocity

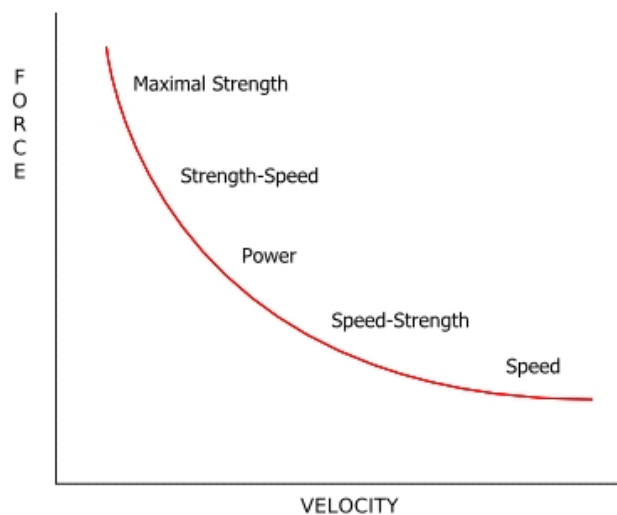
Speed = is the ability to perform any sort of movement (such as a throw, a sprint, or a jump) in as short amount of time as possible

Speed is also heavily related to power, or your ability to produce as much force as quickly as possible

Speed is the time rate at which an object is moving along a path; while **velocity** is the rate and direction of an objects movement.

Force Velocity Curve

When the load (i.e. weight) of the exercise increases, the movement velocity decreases



Where do we need to be training your clients? Velocity or Force?

Programming and Training Let's Move. Plyometrics / Resistance Training

Thank you!