

## Plyometric Training for Power

### Power

- $P = W/T$
- $P = \text{force} \times \text{velocity}$
- Refers to the relationship between force and time
- Peak power is the highest power output achieved in a short high intensity test. It is averaged over 1 sec and is measured in watts or  $\text{watts} \cdot \text{kg}^{-1}$

### Training Prescription

#### Power Single Effort:

- Load (%1RM) = 80-90%
- Rep = 1-2
- Set = 3-5
- Rest = 2-5 min

#### Power Multiple Effort:

- Load = 75-85%
  - Rep = 3-5
  - Set = 3-5
  - Rest = 2-5 min
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- Athlete must progress through the training cycle,
  - Work Capacity > Strength > Speed Strength > Speed Power
  - Develop strength then move to multi joint ballistic exercises

### Prescription of Plyometric Training

- Once speed strength is developed, there is a need to reduce the load applied to improve RFD (rate force development)
- Research suggests that 50-60% of 1RM allows the optimum relationship between force development and movement velocity
- Such training requires short effort (4-8 reps) and long rest periods (3-5 mins)

### Prescription of Power Training

- Rest periods of 3-5 mins
  - Allows ATP/PC resynthesis and quality of work output
- Quality and technique the focus
- Power training can be performed 3 days a week, aim to vary the intensity eg.2 "heavy" days and 1 "light" day
- Needs to be performed at certain times of the year, cannot perform such high loads continuously (periodization)
- Then incorporate plyometric training (athlete required to apply force quickly)