Weight Training Considerations

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“There is no perfect training program. All programs work and all programs fail. It all depends on context and the level of effectiveness.”
Identify the Purpose and Goal of the Program

Throw Farther, Jump Higher, Run Faster

- Increase Force Production - Max Strength (MXS)
- Increase Rate of Force Production (RFP)
- Basic Power Development (BPD)
- Reactive Strength (RS)
- Special Strength (SS)
- Metabolic Recovery Circuit (MRC)
  *Hypertrophy - (HYP)
“The majority of our time and effort should be spent training movements as opposed to training individual muscles. The Global effects of training should not be underestimated.”
Weight Training Byproducts

• Endocrine System Adaptations (Global Training Effect)
  • Insulin Sensitivity
  • Testosterone
  • Growth Hormone
• Injury Prevention
• Alleviate Imbalances
• Improve Posture and Stability
• Improve Range of Motion and Flexibility
• Improve Bone Mineral Density
• Work Capacity Fitness
• Improve Fiber Recruitment
Periodization is the systematic planning of athletic or physical training. The aim is to reach the best possible performance in the most important competitions of the year. It involves progressive cycling of various aspects of training programs during a specific period.
Hans Selye
Periodization Examples

- No Periodization (Random Implementation)
- Linear Periodization (GP, SP, PC, Comp)
- Non-Linear (Static)
- Block Periodization - (Concentrated Training Segments)
Volume / Intensity Curve

Block A = Accumulation
Block B = Transmutation
Block 3 = Realization

3 Consecutive Blocks is a Phase
1 Training segment is a Block
1 Training week in a block is a Micro cycle
Programming

Traditional Block - Hyp. ➔ MXS ➔ BPD/RS

Parallel - MXS/RFD- BPD - HYP

Power First - BPD/MXS Prep ➔ RFD Prep/MXS/BPD ➔ RFD/BPD/RS
Exercise Selection

- Max Strength - Static Lifts - Variations of Squats and Presses
- Rate Of Force Production - Olympic Lifts - Variations of Cleans, Snatches and Jerks
- Basic Power Development - Variations of Squats, Presses and Olympic Lifts
- Reactive Strength - Rhythm Cleans, Snatches, Jerks, and Squat Jumping Movements
- Special Strength -
  - Shot - Neider Press, Bench Variation, Cable Work, Twisting Exercises
  - Discus - Chest Fly’s, Cable Work, Twisting Exercises
  - Pole Vault - Bar Plant Drills, Pullovers, Step up Jerk Variations
- Recovery - Regional Lifts (Muscle Work)
- Hypertrophy - Static and Regional Lifts
“Intensity and Recovery Determines the Training Effect”
# Intensity-Sets-Recovery Continuum

Based on USTFCCA Guidelines

<table>
<thead>
<tr>
<th>Classification</th>
<th>Reps</th>
<th>Intensity</th>
<th>Sets</th>
<th>Total Reps</th>
<th># Exercises</th>
<th>Recovery</th>
<th>Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>MXS Prep</td>
<td>5-8</td>
<td>60-80%</td>
<td>3-6</td>
<td>30-45</td>
<td>2</td>
<td>3-6m</td>
<td>Static</td>
</tr>
<tr>
<td>MXS</td>
<td>1-5</td>
<td>80-100%</td>
<td>4-8</td>
<td>15-30</td>
<td>1-2</td>
<td>3-6m</td>
<td>Static</td>
</tr>
<tr>
<td>RFD Prep</td>
<td>2-4</td>
<td>70-80%</td>
<td>4-9</td>
<td>1 + var</td>
<td>3-6m</td>
<td>Olympic</td>
<td></td>
</tr>
<tr>
<td>RFD</td>
<td>1-2</td>
<td>90-100%</td>
<td>5-9</td>
<td>1 + var</td>
<td>3-6m</td>
<td>Olympic</td>
<td></td>
</tr>
<tr>
<td>BPD</td>
<td>4-5</td>
<td>50-65%</td>
<td>4-9</td>
<td>1+</td>
<td>60-90 s</td>
<td>Olympic/Static</td>
<td></td>
</tr>
<tr>
<td>RS</td>
<td>5-12</td>
<td>10-50% BW</td>
<td>3-8</td>
<td>1-3</td>
<td>60-90 s</td>
<td>Olympic/Static</td>
<td></td>
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<tr>
<td>HYP</td>
<td>6-12</td>
<td>1 RIR</td>
<td>3-5</td>
<td>6-8</td>
<td>45-60s*</td>
<td>Regional/Static</td>
<td></td>
</tr>
<tr>
<td>MRC</td>
<td>10-12</td>
<td>2 RIR</td>
<td>2</td>
<td>12</td>
<td>60-90sec</td>
<td>Regional</td>
<td></td>
</tr>
</tbody>
</table>
Volume

Volume = Reps x Sets x Weight Lifted

“Volume unlike Intensity is the key determinate indicator of the magnitude of the training effect. Volume is cumulative”
Volume vs. Recovery
“Density is simply how often an athlete completes a specific protocol or exercise. The duration is very individualized as is based on many factors but most often related to training age/volume relationships”
Optimal Recovery
Undertraining vs. Overtraining
## Sample 5 Day Block 2 Shot Program

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFDP</td>
<td>BPD - Lower</td>
<td>MRC</td>
<td>BPD - Olympic</td>
<td>MXS</td>
</tr>
<tr>
<td>Snatch 5-6 x 3 @ 75%</td>
<td>B.C. Squat 8 x 3 @ 60%</td>
<td>Split Jerk 8 x 3 @ 60%</td>
<td>Squats 6 x 4 @ 85%</td>
<td></td>
</tr>
<tr>
<td>Jerks 3 x 2 @ 80%</td>
<td>Good Morn. 5 x 5 (2RIR)</td>
<td>Hang Snatch 3 x 3 @ 60%</td>
<td>RDL 5 x 5 (2RIR)</td>
<td></td>
</tr>
<tr>
<td>Land Mine Press 4 x 6</td>
<td>1BC. Bench 8 x 3 @ 60%</td>
<td>Neider Press 4 x 6</td>
<td>Incline Press 6 x 4 @ 85%</td>
<td></td>
</tr>
<tr>
<td>Torso Rotations 3 x 10</td>
<td>N.G. Incline 5 x 5 (2RIR)</td>
<td>Plate Bends 3 x 10</td>
<td>JM Press 5 x 5 (2RIR)</td>
<td></td>
</tr>
<tr>
<td>Hanging Leg L’s 3 x 10</td>
<td>Rev Hyper 3 x 10</td>
<td>L Overs 3 x 10</td>
<td>Rev Hyper 6 x 6 (6/6)</td>
<td></td>
</tr>
</tbody>
</table>

### Notes
- RFD: Regional Force Development
- BPD: Basic Performance Development
- MRC: Maximal Resistance Conditioning
- MXS: Maximal Strength Systems
Metabolic Recovery Circuit 3 x 10 (2RIR)

- Incline Lunges
- Leg Curl
- Back Hypers
- Glute Ham Raise
- Bent over Rows
- Lat. PD

- Face Pulls
- DB Mil Press
- Side Lateral Raise
- Dips
- Arm Curls
- Triceps PD
Thank You - Questions?

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