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

Training Plan Design

Periodization Programming Exercise Selection Intensity/Recovery Volume Density

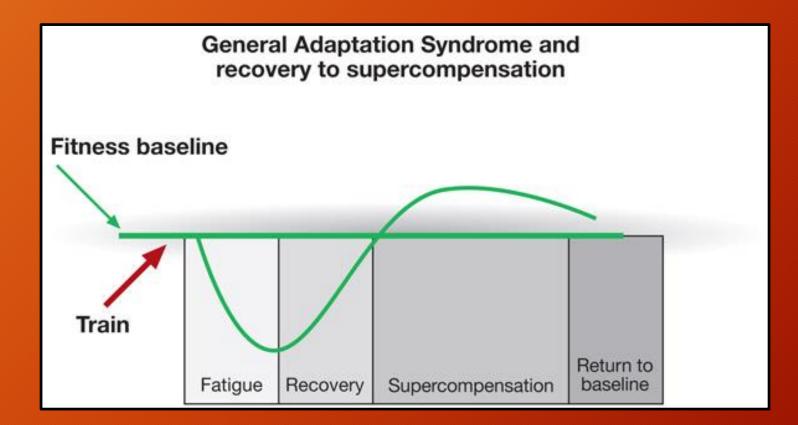
Periodization



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

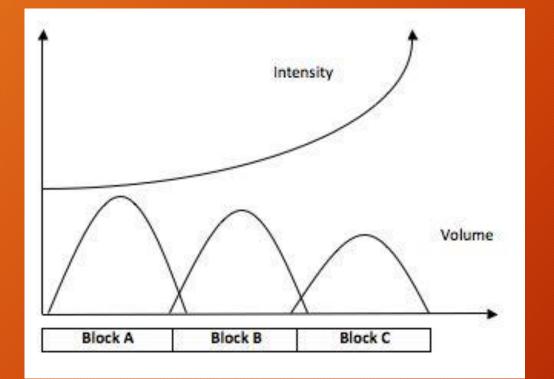




Periodization Examples

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 Phase1 Training segment is a Block1 Training week in a block is a Micro cycle

Programming



Traditional Block - Hyp. \rightarrow MXS \rightarrow BPD/RS

Parallel - MXS/RFD- BPD - HYP

Power First - BPD/MXS Prep \implies RFD Prep/MXS/BPD \implies 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/Recovery

"Intensity and Recovery Determines the Training Effect"

Intensity-Sets-Recovery Continuum

Based on USTFCCA Guidelines

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

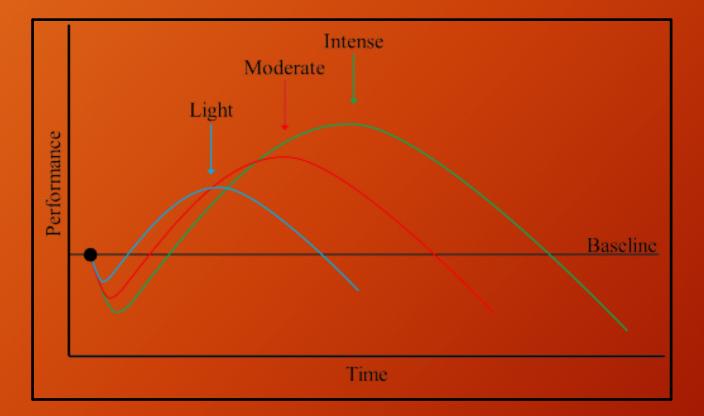




Volume = Reps x Sets x Weight Lifted

" Volume unlike Intensity is the key determinate indicator of the magnitude of the training effect. Volume is cumulative"

Volume vs. Recovery



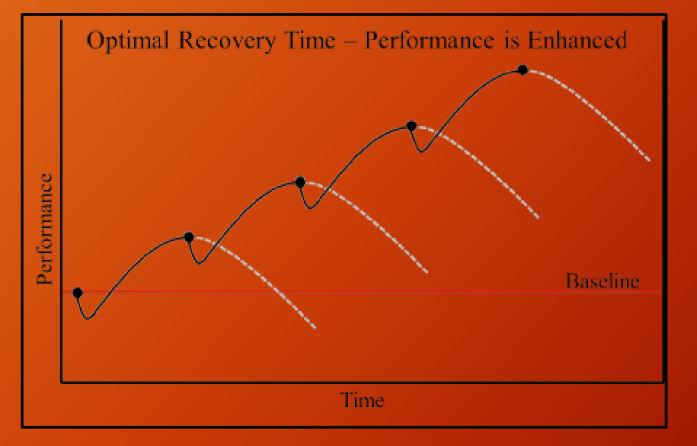


Density

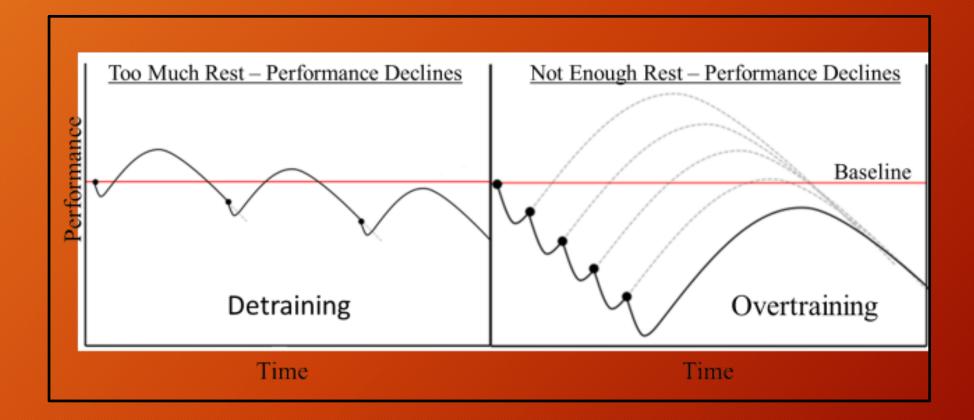


"Density is simply how often an athlete completes a specific protocol or exercise. The duration is very individualized as is based on many factors but most often related to training age/volume relationships"

Optimal Recovery



Undertraining vs. Overtraining



Sample 5 Day Block 2 Shot Program

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

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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