

Anaerobic Training Adaptations

Increase testosterone	Increase 22 kDa GH	Increase adrenal hormones
Use large group exercises Heavy resistance (85-95% 1 RM) Mod to high volume multiple sets, multiple exercises Short rest (30-60 sec)	Workouts with increased lactate concentrations and acid/base disruption High intensity 10 RM Heavy resistance 3 sets of each exercise 1 min rest Supplement diet with carbs and protein before and after exercise	High volume Large muscle groups Short rest vary training protocol and rest period length from short to long over time Provide complete days of rest Prevent overtraining

Haff and Triplett

Metabolic Specificity of Training

Duration	Intensity	Primary System
0-6 sec	Extremely high	Phosphagen
6-30 sec	Very high	Phosphagen and fast glycolysis
30 sec – 2 min	High	Fast glycolysis
2-3 min	Moderate	Fast glycolysis and oxidative system
> 3 min	Low	Oxidative system

Haff and Triplett

Metabolic Specificity of Training

Interval Training

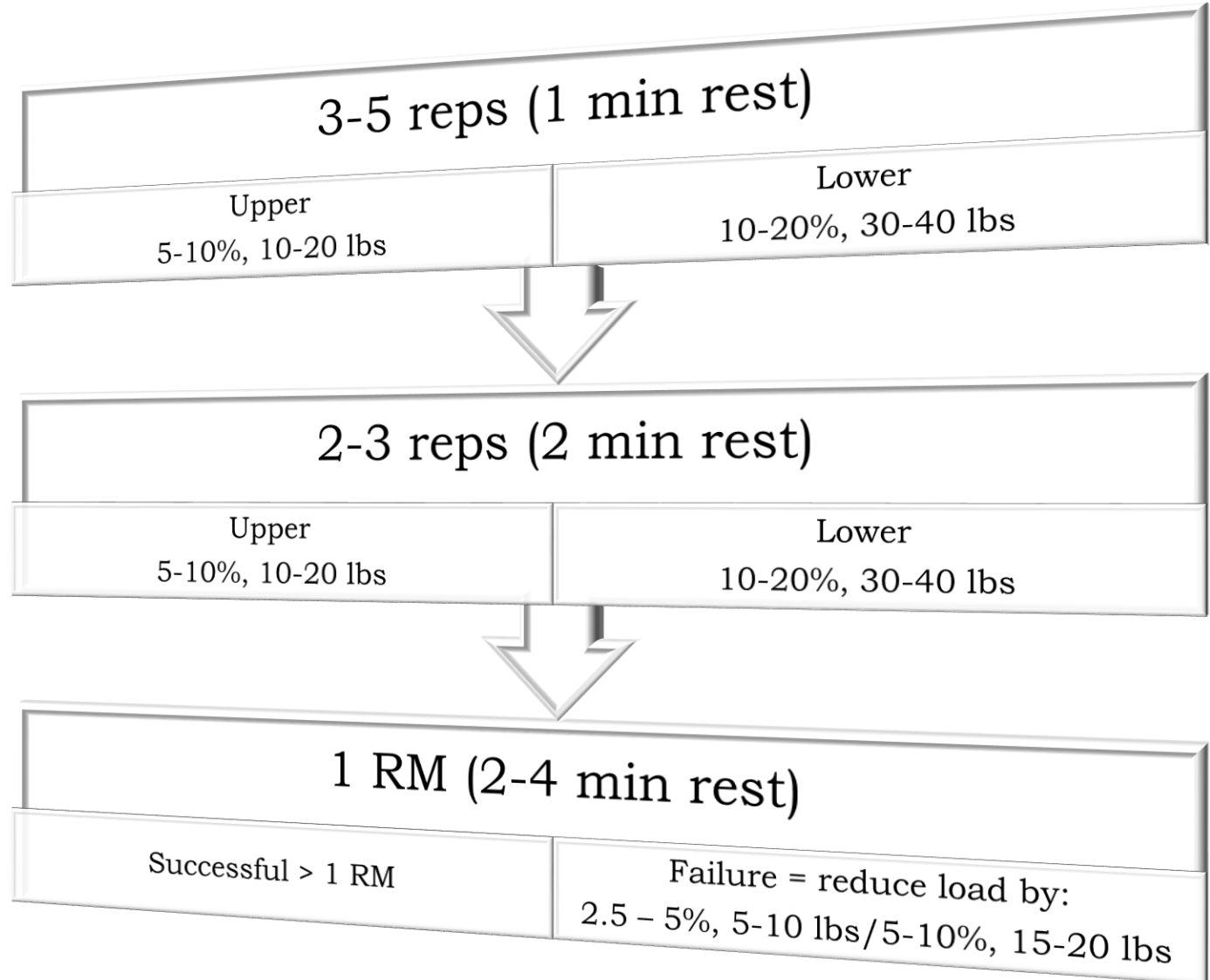
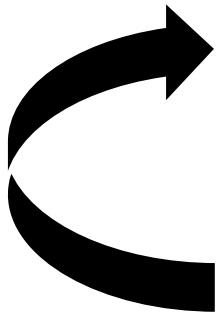
% maximum power	Primary system stressed	Typical exercise time	Range of work to rest ratios
90-100	Phosphagen	5-10 sec	1:12 to 1:20
75-90	Fast glycolysis	15-30 sec	1:3 to 1:5
30-75	Fast glycolysis	1-3 min	1:3 to 1:4
20-30	Oxidative	➤ 3 min	1:1 to 1:3

Haff and Triplett

1 Repetition Max

The greatest amount of weight that can be lifted with proper technique for only one repetition

Warm up:
5-10 reps @
approximately
50% 1 RM



Haff and Triplett