



The Effect of Sport-Specific Resistance Training on Athletic Performance Outcomes of College Rodeo Athletes

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Introduction

Resistance training yields significant improvements to athletic performance outcomes among multiple sports. A sport-specific approach for resistance produces greater adaptation and transfer to various sports. However, few studies have examined the potential benefit of sport-specific resistance training for the sport of rodeo.

Purpose Statement

The aim of the current investigation was to assess the effect of sport-specific resistance training on athletic performance outcomes of rodeo athletes.

Method

Seventeen college rodeo athletes (12 females; 5 males) participated in an 8-week, 3-days per week, sport-specific resistance training program and Post-testing was administered to assess effect of sport specific training program.

Pre- and Post-Testing Procedures

Sessions 1:

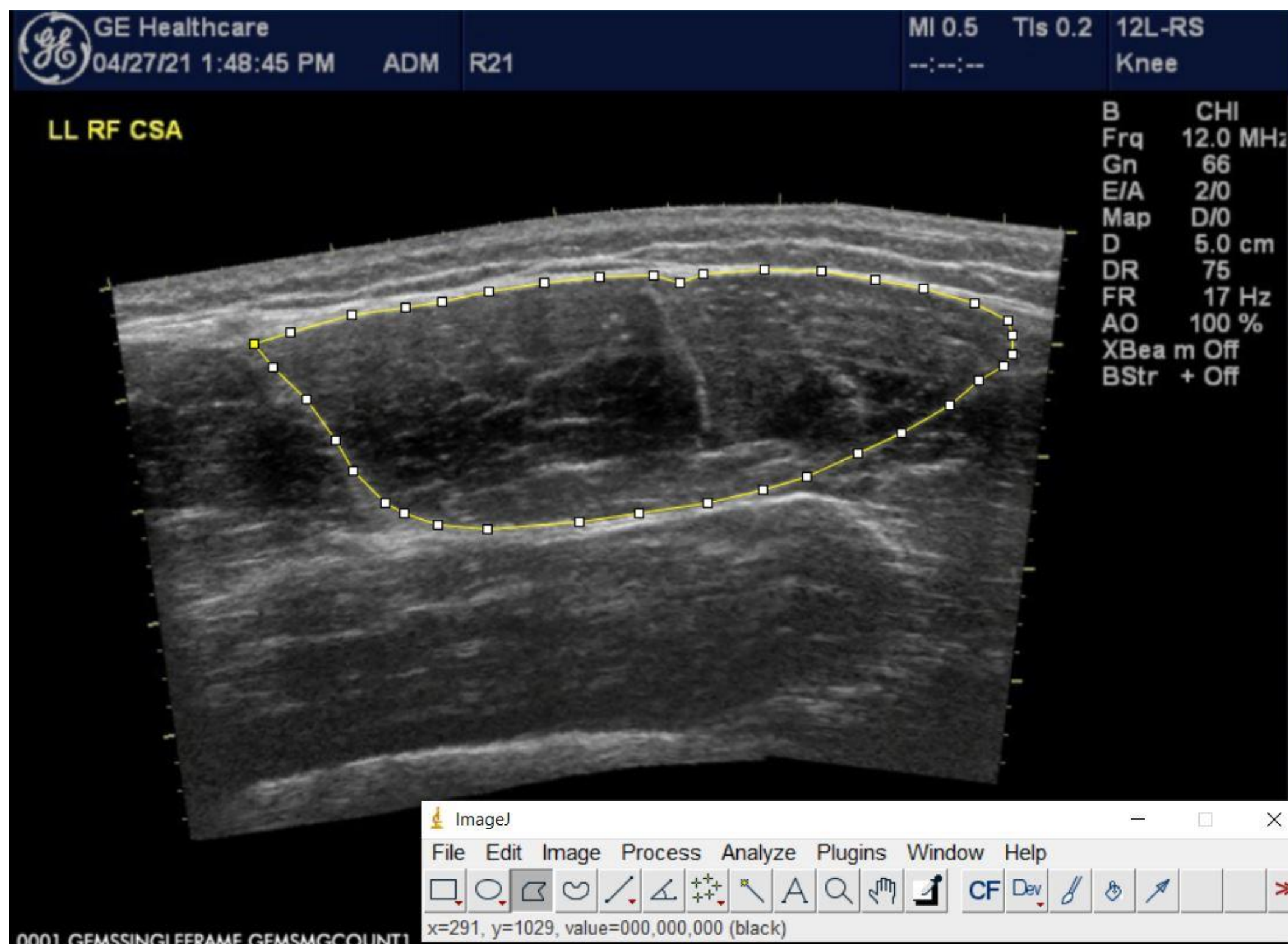
- Muscle Cross Sectional Area (CSA) utilizing b-mode ultrasonography.
- Mid Thigh Pull utilizing a bar with a load cell attached.
- Body Composition (Height, Weight, Body Fat)

Session 2:

- 1 RM: Squat (SQ), Bench Press (BP), and Deadlift (DL).

Statistical Analysis

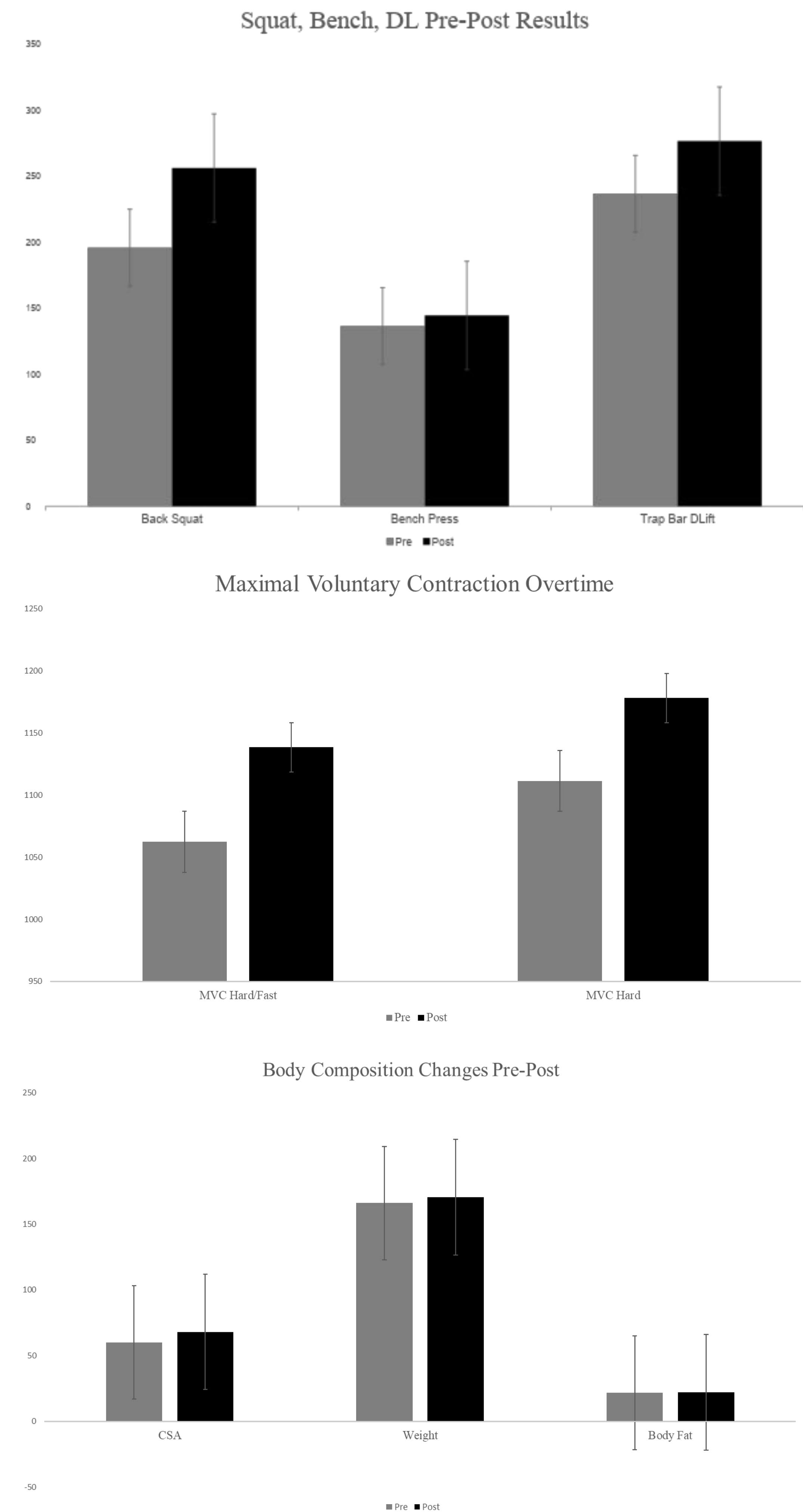
A paired sample t-test ($p < .05$) was employed to assess differences between pre- and post-test of athletic performance outcomes.



Results

- Analysis of data indicated significant differences between:
- SQ ($r = .952$, $p < .001$, Pre= 198.83 ± 87.28 , Post= 256.25 ± 104.14),
 - BP ($r = .985$, $p = .046$, Pre= 136.58 ± 70.3 , Post= 144.58 ± 69.36),
 - DL ($r = .937$, $p = .005$, Pre= 236.25 ± 113.059 , Post= 276.66 ± 114.22),
 - CSA ($r = .581$, $p = .046$, Pre= 60.17 ± 6.73 , Post= 72.19 ± 8.69)

Results Cont.



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Discussion

Comparison of pre- and post-test data indicated that an 8-week rodeo-specific resistance exercise program elicited improvements in 1RM and overall muscle quality. While there was no significant difference in MVC, a practical increase was indicated between pre- (1062.35 ± 468.15 N/m) and post-test (1138.49 ± 329.24 N/m). These results suggest a sports-specific resistance training approach should be employed to improve the athletic performance and potential competition performance of rodeo athletes.

References

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- Fukumoto, Y., Ikezoe, T., Yamada, Y., Tsukagoshi, R., Nakamura, M., Mori, N., . . . Ichihashi, N. (2011, August 17). Skeletal muscle quality assessed from echo intensity is associated with muscle strength of middle-aged and elderly persons. Retrieved May 05, 2021,
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wk1	wk2	wk3	wk4	wk5	wk6	wk7	wk8	wk9	wk10	wk11	wk12	wk13	wk14	wk15	wk16	wk17			
BASE 1	LOAD	LOAD	LOAD	LOAD	SHDNG	BASE 1	LOAD	LOAD	LOAD	LOAD	SHDNG	BASE 1	LOAD	LOAD	LOAD	SHDNG			
Neuro Prep - LATERAL																			
SL ISO SQT w/ MB Anv RCT																			
2x50a	2x50a	2x50a	2x50a	2x100a	2x100a	2x50a	2x50a	2x50a	2x50a	2x100a	2x100a	2x50a	2x50a	2x50a	2x50a	2x50a			
SL Depth Jump with Lz Leap																			
2x50a	2x50a	2x50a	2x50a	2x50a	2x50a	2x5	2x5	2x5	2x5	2x5	2x5	2x5	2x10	2x5	2x5	2x5			
LAT PARTNER LEG THROW																			
CRACK THE EGG																			
2x50a	2x50a	2x50a	2x50a	2x100a	2x100a	2x5	2x10	2x5	2x5	2x10	2x10	2x5	2x5	2x5	2x5	2x4			
PRIMARY & SECONDARY BLOCK																			
Back Squat					Bench Press					TrapBar Deadlift									
10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%	10 @50%			
6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%	6@75%			
AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%	AMRAP @85%			
AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP	AJ AMRAP			
Goblet Lateral Lunge (Bikes)								KB RDL				KB Swing							
Erected Row				Same as Lateral Lunge				Landmine Press				Same as RDL				Single Arm Band PullApart Pull Up			
T Arm Farmers Walk																			
w/ 1 @ DIB 12 w/ 4 @ DIBs																			
Hammer sled																			
1 Leg Hamming Side (Eccentric)																			
CH MB Toe to Sprint																			
# Body weight																			
# Body weight																			
# Body weight																			
ENERGY SYSTEM DEVELOPMENT																			
Change Of Direction																			
Anaerobic (Red Zone)																			
Active Recovery (Long Stretch)																			
60v540f																			
60v540f																			
60v520f																			
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