

# Mesocycle Construction for Bodybuilding:

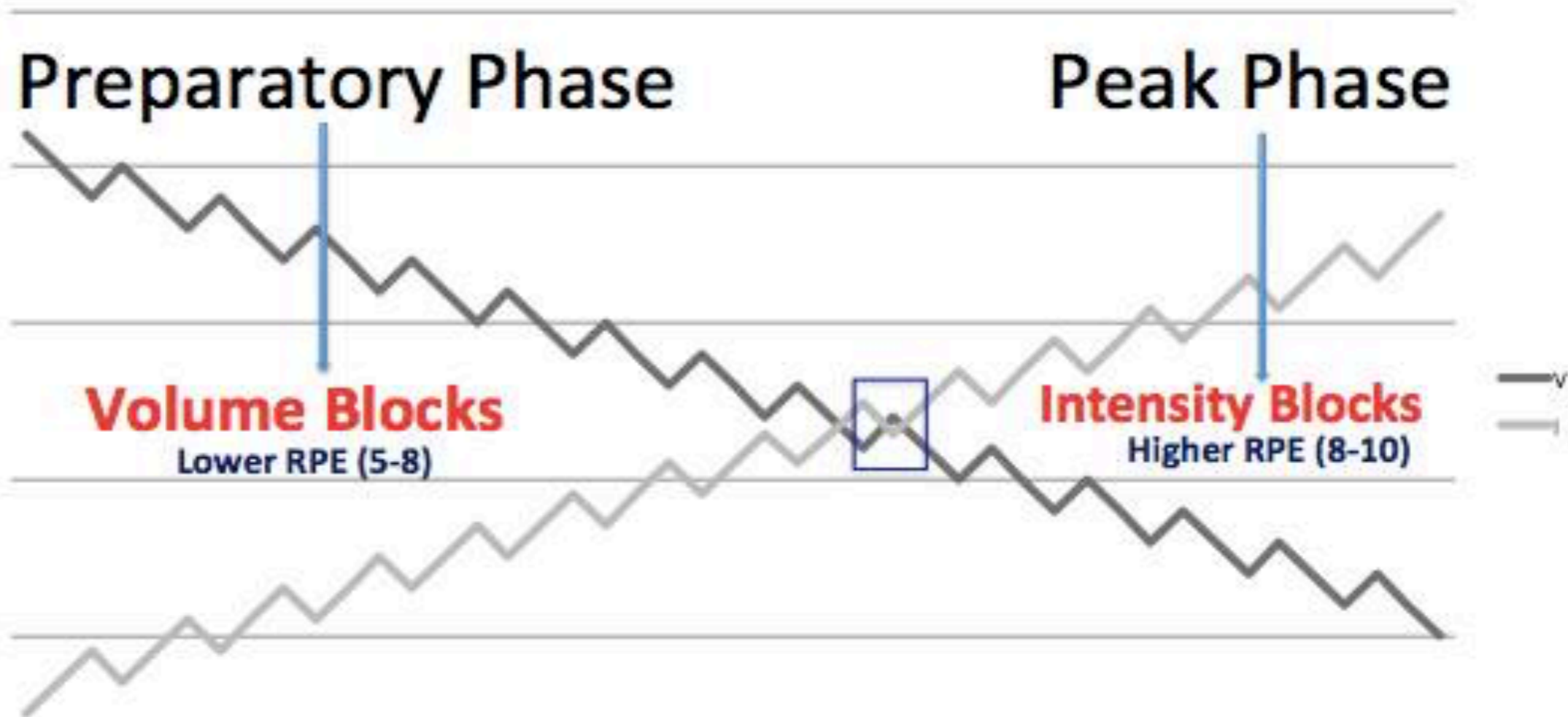
*What's Important and What's Not?*

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## Today's Objectives

1. Investigate importance of periodization for bodybuilding
2. What are the basic training tenants for hypertrophy?
3. Determine how to allocate weekly training volume
4. Examine the inclusion of various “programming” strategies
5. Understand the importance of having some “main” lifts (whatever they might be) in a hypertrophy oriented program
6. How can RPE be used when focusing on hypertrophy?
7. How should load and volume be progressed within this construct? And, when to deload/taper?
8. Understand when intensity blocks may be performed

### Integrated Periodization Macrocycle



-Daily Undulating Programming Strategy is used within each week

-Yet, this fits into Yearly Linear/Block Periodization Design

**Stress per set increases as intensity increases**

**High Volume = Lower RPE Per Set**

**High Intensity = Greater RPE Per Set**

# ***Periodization in the Traditional Sense?***

***Decrease Volume Over Time?***

**NO**

***Increase Intensity Over Time?***

**NO**

***However, Should There Be Variation Among These Variables?***

***OF COURSE, there can still be volume-focused and intensity-focused blocks***

## Hypertrophy Training Tenants

- ▶ 1. 10+ sets per week for hypertrophy
  - ▶ Per muscle group
  - ▶ I “believe” more than 10 is better for highly trained
- ▶ 2. Frequency of 2-3 times per week
  - ▶ This allows you to “allocate” volume, rather than packing too much into one session
- ▶ 3. Allocate volume appropriately
  - ▶ Mostly avoid failure
  - ▶ If you can't recover, then it's too much

## Example of 3 times per week lower body training

**Frequency = 2-3 times per week**

**Sets = 19 (25 w/ Deadlift)**

**Short of failure, closer to failure with 72 hrs of rest coming**

**Nuanced points: back/frt. squat distribution, less overall on Wednesday to manage recovery/fatigue**

| Week 1        | Monday       | Wednesday    | Friday       |
|---------------|--------------|--------------|--------------|
| Squat         | 3X12 @60%    |              | 4X8+ @70%    |
| Front Squat   |              | 3X10 @6-8RPE |              |
| Deadlift      | 3X5 @70%     |              | 3X3 @80%     |
| Leg Extension | 3X15 @6-8RPE |              | 3X10 @7-9RPE |
| RDL           |              | 3X8 @5-7RPE  |              |

## Programming Strategies

*Periodization are short term changes or organizational techniques, periodization is long-term trends*

- ▶ 1. Within Week Repetition Undulation
  - ▶ A good idea to manage fatigue and train across rep ranges
  - ▶ Essential each week? **No**. A good idea? **I think so, at least over time.**
- ▶ 2. Within Week RPE Targets
  - ▶ Essential each week? Don't *have* to use RPE, but it should be essential to be cognizant of failure...so **yes**.
- ▶ 3. Drop Sets, Cluster Sets, Rest-Pause Sets
  - ▶ Essential each week? **No**. *But, time efficient, fun, and an easy way to add volume, so a good idea over time...yes.*
  - ▶ *These are not “standalone” training strategies.*

## Periodization?

*Periodization are short term changes or organizational techniques, periodization is long-term trends*

- ▶ 1. The previous programming strategies were likely a good idea over time, what is periodization? **Long-term trends.**
- ▶ 2. So, over time altering volume and intensity is still periodization, even if not in the traditional sense.
- ▶ 3. *Rhea 2004*, Periodization...***In line with the overload principle, additions to volume, intensity, and frequency result in additional training adaptations.***
  - ▶ ***Goal = Progress which seems to come from volume, periodized training (simply organizing variables) allows for more volume/overload over the course of time***

## Why is it Important to Include Main Lifts?

*It's important to be able to gauge progress and strength as an indirect measure of hypertrophy, especially if you are dieting*

### ▶ **Are squat, bench, and deadlift necessary?**

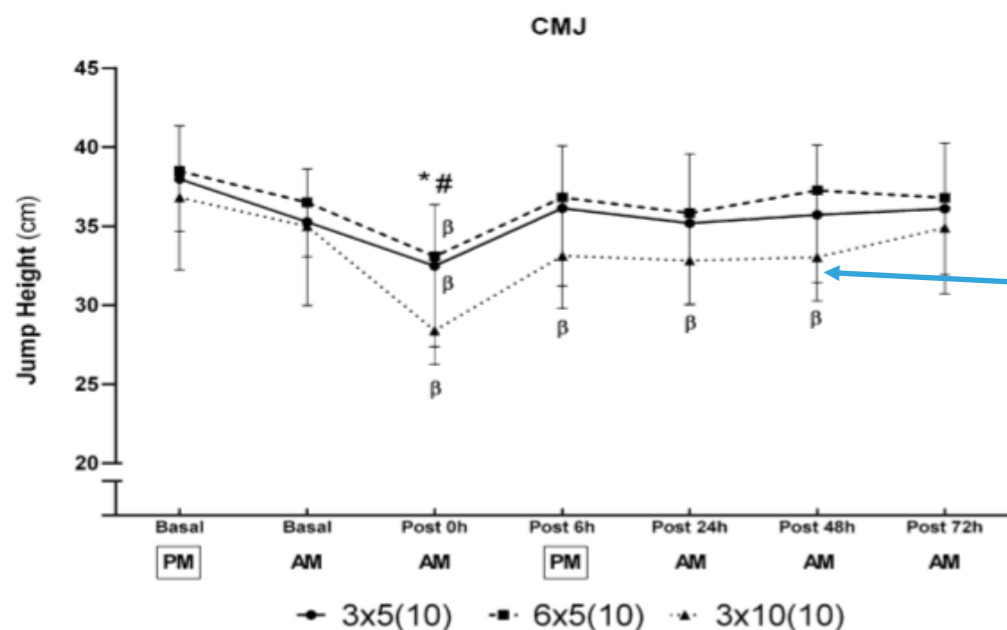
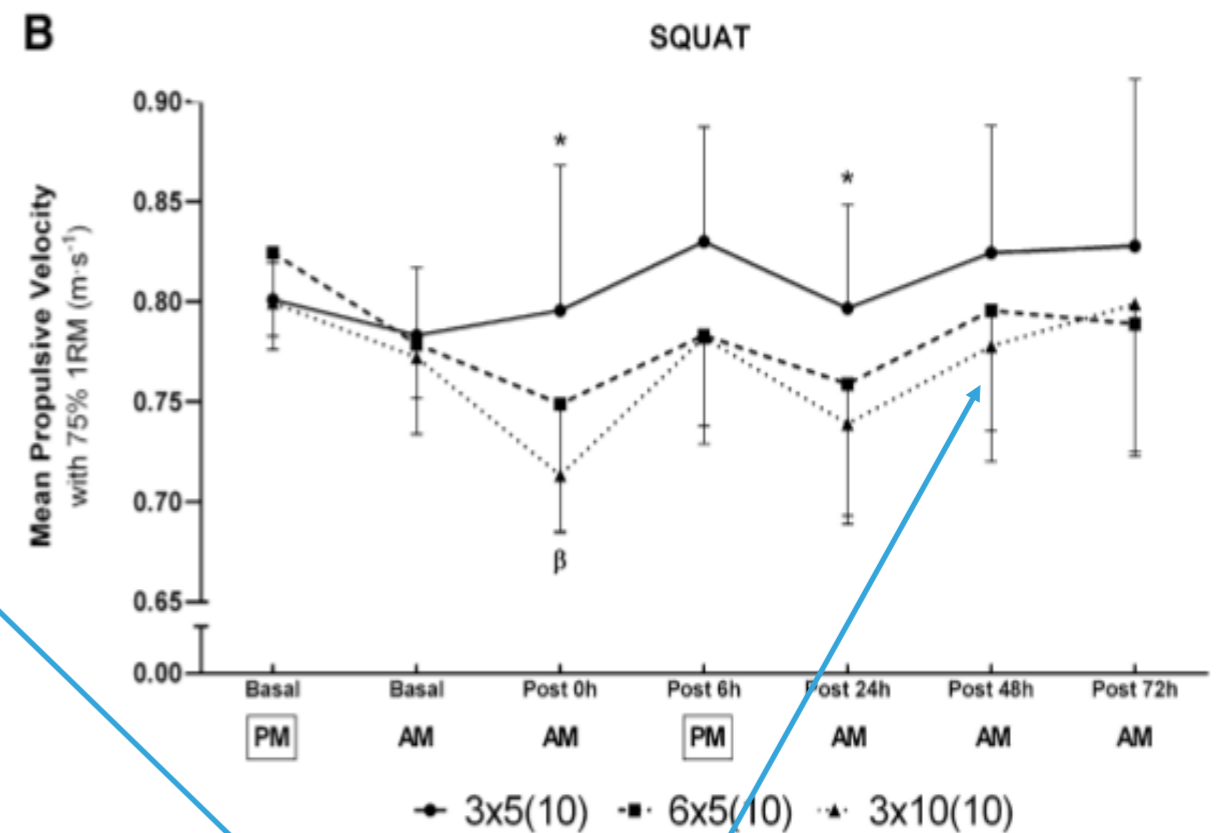
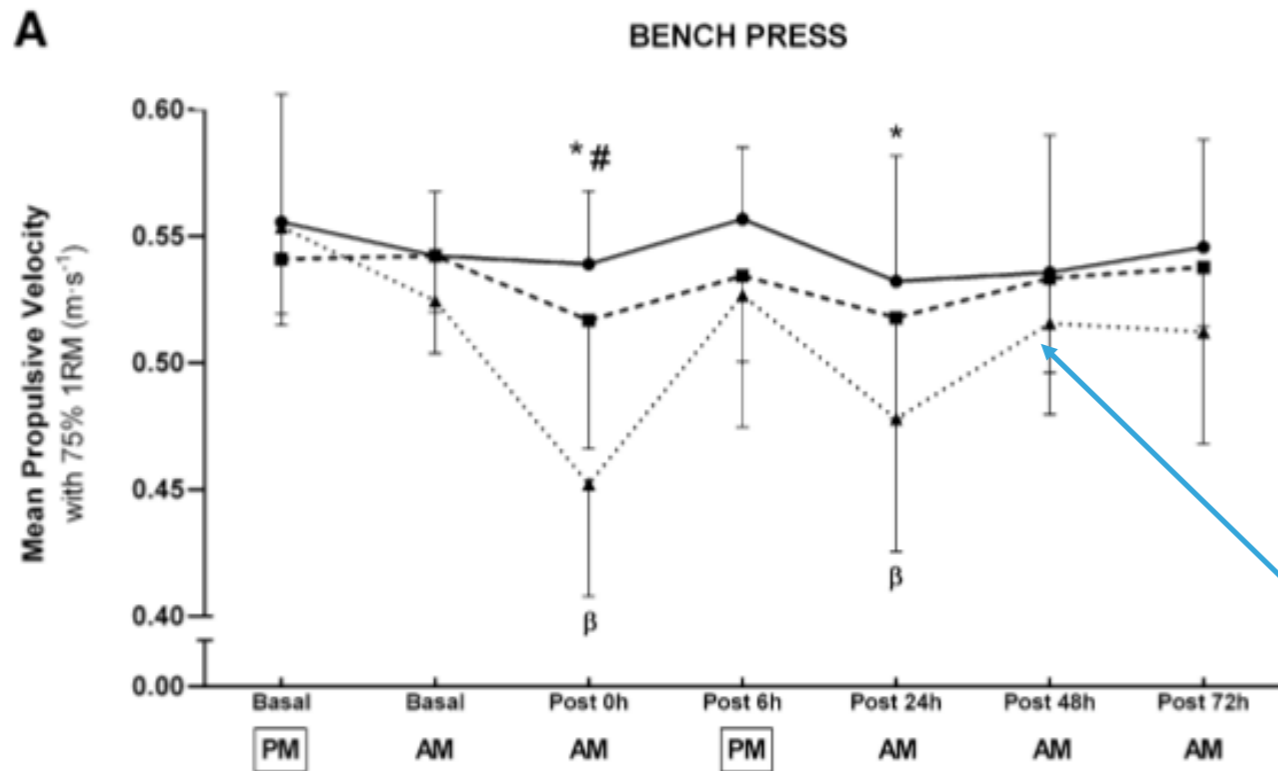
- ▶ No, but there probably a good idea, and they also don't *have to be 3 times per week, but they can be*

### ▶ **When do you not include squat, bench, or deadlift?**

- ▶ *If you hate doing them or have an injury which is exacerbated by them*
- ▶ *Maybe someone has very long femurs and squatting frequently causes a ton of damage and is an uncomfortable movement...then squat maybe once per week with a high bar position, and use front or hack squats as a main movement*

***Have a main upper body and a main lower body lift that you do at least 1-2 times per week per mesocycle that you can gauge progress on, even if that lift is not one of the powerlifting three***

## Importance of RPE / Not Training to Failure?



All groups trained at 10RM, thus the 3X10 group went to failure and the other groups did not

Training to failure, might not coincide with the “tenants”, meaning decreased frequency, which can in turn harm volume.

## Load Progression

- ▶ Do not have to progress load every week
  - ▶ Sometimes you can progress volume (i.e. add a set or add a rep)
  - ▶ Add volume by adding in a programming strategy (cluster or RP sets)
- ▶ How to progress load
  - ▶ Arbitrary? Maybe use RPE...
  - ▶ Lower the RPE, the greater the load progression
- ▶ But, it won't progress every week, especially on some exercises
  - ▶ Are you going to progress DB lateral raise load every week? Of course not, so don't stress over it, focus on volume/mechanical loading for these types of exercises, eventually you'll be picking up heavier dumbbells, but that's not the focus here.

## When to Deload / Taper?

- ▶ There doesn't have to be an exact time, but every 6-10 weeks isn't a bad idea
- ▶ General Rule for “Down” Week
  - ▶ Cut volume by about 50%
  - ▶ Reduce RPE to 5-6
- ▶ Testing
  - ▶ Don't have to test, but you can do some sort of rep test if you choose to, maybe max reps (or reps to @9 RPE at 80%) on one of the lifts you've been using as a main lift
- ▶ Measuring Strength
  - ▶ *Can* be a good guide to gauge hypertrophy progress since most don't have access to very sensitive hypertrophy measurements (ultrasound, DXA, etc.)

## Volume and Intensity Blocks

- ▶ Intensity blocks can still be performed when focusing on hypertrophy, but they're not quite the same as for maximal strength
- ▶ 2-3 typical volume blocks for every one intensity block
- ▶ In an intensity block, reps don't have to drop as much as in a powerlifting intensity block

| Week 1 | Monday    | Wednesday | Friday   |
|--------|-----------|-----------|----------|
| Squat  | 3X10 @65% | 3X7 @70%  | 4X5 @75% |

## **Hypertrophy-Focused Blocks in Practice**

## Intermediate Client

| Design: Volume | Week of November 6th, 2017          | WEEK 2 (10/30/2017) |          |  |
|----------------|-------------------------------------|---------------------|----------|--|
| DAY            | LIFT                                | SETS X REPS         | WEIGHTS  | RPE  |
| MONDAY         | BENCH                               | 4X8                 | 155      | 155x8 (6)  |
|                | SEATED DB MILITARY PRESS            | 4X7 @8-10RPE        | 40s      | 40s x7 (7)                                       |
|                | DB FLY                              | 3X8 @7-9RPE         | 35s      | 35s x8 (7)                                       |
|                | DB LATERAL RAISE                    | 4X10 @6-8RPE        | 20s      | 20s x10 (7)                                      |
|                | SEATED ALTERNATE DB CURL            | 4X15 @6-8RPE        | 20s      | 20s x15 (7.5)                                    |
| WEDNESDAY      | SQUAT                               | 4X8                 | 160      | 160x8 (6)  |
|                | LEG CURLS                           | 3X10 @8-10RPE       | 85       | 85x10 (7)  |
|                | T-BAR ROW                           | 4X10 @7-9RPE        |          |  |
|                | DB BENT OVER ROW (INSIDE GRIP)      | 4X12, 3X8 @7-9RPE   | 65/75/85 | 65x12 (1st set - 5)/75x12 (4th set - 7)/85x8 (7) |
|                | <i>Machine</i> REAR DELT            | 2X15 @6-8RPE        | 100      | 100x15 (6)                                       |
| FRIDAY         | BENCH                               | 5X4+ (PLUS SET)     | 190      | 190x4 (4th set - 7)/190x8 (+)                    |
|                | DEADLIFT                            | 4X5                 | 270      | 270x5 (7.5)                                      |
|                | BAR SHRUG                           | 4X15 @6-8RPE        | 95       | 95x15 (6)  |
| SATURDAY       | SQUAT                               | 2X1                 | 195      | 195x1 (6?)                                       |
|                | INCLINE BENCH                       | 3X12 @7-9RPE        | 95       | 95x12 (7)  |
|                | SEATED BAR MILITARY PRESS           | 3X10 @6-8RPE        | 75       | 75x10 (7.5)                                      |
|                | PREACHER CURL                       | 3X10 @6-8RPE        | bar + 40 | bar + 40x10 (8)                                  |
|                | LYING DB LATERAL RAISE              | 3X10 @6-8RPE        |          |  |
| SUNDAY         | SQUAT                               | 3X4+ (PLUS SET)     | 195      | 195x4 (2nd set - 7)/195x8 (+)                    |
|                | PULLUPS                             | X30                 | bw       | 5/5/5/5/5/5                                      |
|                | LAT PULLDOWN (CLOSE GRIP SUPINATED) | 3X12 @6-8RPE        | 110/97.5 | 110x12 (9)/97.5 x 12 (8)                         |
|                | HYPEREXTENSIONS (GLUTE MACHINE)     | 3X8 @6-8RPE         | 55       | 55x8 (7)   |

All "tenants" are met. Note, the "power" squat day – this is another programming strategy to increase frequency.

This is just one example, of infinite, meet the tenants – but don't be confined to one type of thinking

October 26th - November 7th, 2015

## WEEK 9 (10-26-15)

## WEEK 10 (11-2-15)

| LIFT                             | SETS X REPS                | WEIGHTS                     | LAST SET RPE | SETS X REPS                | WEIGHTS                     | LAST SET RPE |
|----------------------------------|----------------------------|-----------------------------|--------------|----------------------------|-----------------------------|--------------|
| HACK SQUAT                       | 1X12 @7, 4X9 @8            | 4 plates, 4 plates + 10     | 9            | 1X12 @7, 4X9 @8            | 4 plates, 4 plates + 15     | 8.8          |
| INCLINE BENCH                    | 165Xmax reps, 4X10 @8-9RPE | 165 (12), 160               | 8            | 170Xmax reps, 4X10 @8-9RPE | 170 (12), 160               | 9            |
| DEADLIFT                         | 7X5 @340lbs. w/50sec. rest | 340                         | 8            | 7X5 @340lbs. w/40sec. rest | 340                         | 8            |
| SEATED BAR MILITARY PRESS        | 130xmax reps, 3X9 @8-9RPE  | 130 (11), 130               |              | 135xmax reps, 3X9 @8-9RPE  | 135 (10), 135               | 9            |
| DB BENCH                         | 4X8 @8-9RPE                | 80s                         | 9            | 4X8 @8-9RPE                | 80s                         | 8            |
| LEG CURL                         | 3X15 @7RPE                 | 25                          | 7            | 3X15 @7RPE                 | 25                          | 7            |
| PENDLAY ROW                      | 3X8 @8RPE                  | 205                         | 8            | 3X8 @8RPE                  | 205                         | 8            |
| BFR HACK SQUAT                   | 20, 15, 15, 10             |                             |              | 20, 15, 15, 12             |                             |              |
| BAR CURL                         | 3X12 @8RPE                 | 95                          | 8            | 4X12 @8RPE                 | 95                          | 8            |
| SEATED DB ALT. CURL              | 4X10 @8RPE                 | 30s                         | 8            | 4X10 @8RPE                 | 30s                         | 8            |
|                                  |                            |                             |              |                            |                             |              |
| HACK SQUAT                       | 1X10, 3X7@8                | 4 plates + 10, 4 plates +25 | 9            | 1X10, 3X7@8                | 4 plates + 10, 4 plates +25 |              |
| INCLINE BENCH                    | 170Xmax reps, 4X9 @8-9RPE  | 170 (11), 160               | 9            | 175Xmax reps, 4X9 @8-9RPE  | 175 (11), 160               | 9            |
| DEADLIFT                         | 8X4 @435lbs.               | 435                         | 8            | 8X4 @440lbs.               | 440                         | 8.5          |
| SEATED DB MILITARY PRESS         | X9 @9, 3X8 @8-9RPE         | 70s                         | 8            | X8 @9, 3X8 @8-9RPE         | 70s                         | 8            |
| BFR HACK SQUAT                   | 20, 15, 15, 10             |                             |              | 20, 15, 15, 12             |                             |              |
| PULLUPS                          | Weighted Pullups 4X7 @8RPE | 55                          | 9            | Weighted Pullups 4X7 @8RPE | 55                          | 9            |
| PENDLAY ROW                      | 6X9 w/35sec. Rest          | 135                         | 8.5          | 6X10 w/35sec. Rest         | 135                         | 9            |
| UPRIGHT ROW/BAR CURL             | 4X10/4X10 @8RPE            | 80                          | 8.5          | 4X10/4X10 @8RPE            | 80                          | 9            |
|                                  |                            |                             |              |                            |                             |              |
| INCLINE BENCH (Plus Set)         | 175Xmax reps, 5X7 @8-9RPE  | 175 (11), 165               | 8            | 180Xmax reps, 5X7 @8-9RPE  | 180 (11), 165               | 8.5          |
| SEATED BAR MILITARY              | 135Xmax reps, 4X9 @8-9RPE  | 135 (10), 135               | 9            | 140Xmax reps, 4X9 @8-9RPE  | 140 (9), 135                | 9            |
| DB BENCH                         | 85sXmax reps, 2X8@8RPE     | 85s (10), 85s               | 9            | 85sXmax reps, 2X8@8RPE     | 85s (10), 85s               | 9            |
| DB FRONT RAISE/LATERAL RAISE     | 4X10/4X10                  | 30s                         | 9            | 4X10/4X10                  | 30s                         | 9            |
| CLOSE GRIP BENCH                 | 5X9 @7RPE                  | 165                         | 9            | 5X9 @7RPE                  | 165                         | 9            |
|                                  |                            |                             |              |                            |                             |              |
| HACK SQUAT                       | 1X8, 4X6 @8-9              | 4 PPS+10, 4PPS+30           | 9            | 1X8, 4X6 @8-9              | 4 PPS+15, 4PPS+35           | 9            |
| DEADLIFT (PLUS SET CAP AT 8REPS) | 475xmax reps, 4X5 @8-9RPE  | 475 (4), 435                | 8.4          | 475xmax reps, 4X5 @8-9RPE  | 475 (4), 435                | 8.8          |
| WEIGHTED CHINUPS                 | 5X8 @7RPE                  | 45                          | 8            | 5X8 @7RPE                  | 45                          | 8            |
| LEG EXTENSIONS                   | 4X10 @7-8RPE               | 3 plates                    |              | 4X10 @7-8RPE               | 3 plates                    |              |
| PENDLAY ROWS                     | 4X7 @8RPE                  | 195                         | 8            | 4X7 @8RPE                  | 195                         | 8            |
| SEATED ROW                       | 6X7 @7RPE w/30sec. Rest    | 120                         | 7            | 6X8 @7RPE w/30sec. Rest    | 120                         | 7            |
| DB PULLOVER                      | 4X15 @5RPE w/45sec. Rest   | 45                          | 5            | 4X15 @5RPE w/45sec. Rest   | 45                          | 45           |
| BAR CURL                         | 5X7 @8RPE                  | 105                         | 8            | 5X7 @8RPE                  | 105                         | 8            |
| DB INCLINE CURL                  | 3X12 @8RPE, DROP SET: 1X20 | 50, 30                      | 8            | 3X12 @8RPE, DROP SET: 1X20 | 50, 30                      | 8            |

## *Applications and Takeaways*

- Meet the core tenants = *frequency of 2-3 times per week, 10+ sets per muscle group, likely a decent amount more sets for well-trained*
- *Stay short of failure* for the most part, at least early in the week, otherwise you might compromise the “tenants”
- Implement programming strategies where appropriate, *undulation may allow for more volume progression over time, cluster/drop/super sets are time efficient and easy way to add volume, and they’re fun*
- Include some *main lifts to gauge progression*
- You are altering training variables, thus you are *still periodization over time*, just not in the quintessential sense